39-4

虎標萬金油係依照特方精選上乘藥料，以最新科學方法，由專家督製，自問世來，風行世界各地逾五十年，爲家喻戶曉之保健良藥。虎

主治功能

- 筋肉疼痛
- 扭傷抽筋
- 風濕痛患
- 蚊虫螫咬
- 皮膚發癢
- 骨節發炎
- 腰酸背痛
- 頭痛以及鼻塞等症

標萬金油功效神速，藥性溫和，用時將本藥柔力塗擦患處，保持溫暖，即可見功効。

虎豹兄弟國際有限公司監製

TISER BALM

TIGER BALM is specially prepared from an exclusive formula and has been used throughout the world for more than fifty years. This BALM is manufactured from the finest and purest ingredients under the strict supervision of highly trained and qualified pharmacists. It is a safe and reliable treatment for the symptomatic relief of muscular aches and pains, sprains, rheumatism, insect bites, itching, lumbago and headache. Rub gently on the affected parts and keep warm. For external use only.

Made under licence from

HAW PAR BROS. INTERNATIONAL LTD.

BALSEM HARIMAU

BALSEM HARIMAU telah di-chipta khas dari ramuan2 yang terpilah yang telah di-gunakan di-seluroh dunia lebeh dari lima puloh tahun. BALSEM HARIMAU ini di-buat dari rempahratus yang terbaik dan asli di-bawah pengawasan yang teliti oleh ahli2 ilmu pembuat obat yang terlateh dan berjazah. Ini ada-lah pengubatan yang selamat dan boleh di-porchayai untok melegakan sakit2 sendi, salah urat, bisa2 tulang, sakit tulang, di-gigit sarengga, gatal2, sakit pinggang dan sakit kepala, sapukan di-bahagian2 yang sakit dan biarkan ia panas.

Di-perbuat daripada

HAW PAR BROS. INTERNATIONAL LTD.

دهـــان ابونمـــر

موثوق بـــــه للاجيـــال

بلسم ابوالاسد مودوء عائلي صيني قديم مركب من مجموعة الادوية الطبيعية .
يصنع من الطيب وانقى مواد التركيب تحت اشراف دقيق من اقراباذيين ذوى اهلية ومهارة.

ولزيادة من خمسين عاما . بلسم ابوالاسد قد اثبت فاعليته لاجيال غير محدودة لمختلف الاجناس في الشرق الادنى . وهم يتداوون به لمختلف الامراض الجسمية والآلام .

بلسم ابوالاسد يستعمل بسهولة . يلوث قليلا على المكان المصاب .
(مثل الاتى والوجه الامامي للعنق) او ادلك بقدر يسير برفة على الجلد .
بلسم ابوالاسد يبدأ العمل حالا . يدفئ ويرطب المكان ويبعث راحة سريعة .

وهو اكيد المفعول لـ :

- تخفيف آلام الروماتيزم واللمباجو
- وتخفيف آلام في المفاصل والعضلات
- تلطيف وتبريد الجلد الحراق
- شفاء للجروح والخدش
- ازالة البرد والزكام والصداع

يصنع برخصة من

هاو فاربرازس اينترنا شيونل

سنغافوره

டைகர்பாம்

டைகர்பாம் தளிப்பெரும் மருத்துவ முறைப்படி தயாரிக்கப்பட்டது. 50 ஆண்டுகட்கு மேலாக உலக முழுவதிலும் பயன்படுத்தப்படுகிறது. சிறந்த தேர்ச்சியும் தகுதியும் வாய்ந்த மருத்துவர்களின் அனுக்கக் கண்காணிப்பின் கீழ் இது தயாரிக்கப்படுகிறது. தசை வலிகள், குத்தல்கள், சிராய்ப்புகள், ஸ்ப்பிடிப்பு வாதம், பூச்சிக்கடி, அரிப்பு, இருப்பு-முழங்கால் வலிகள், தலைவலி ஆகிய வற்றுக்கு இது பாதுகாப்பானதும் நம்பகமானதுமான ஒளடதம். வலியுள்ள இடங்களில் மிருது வாகத் தேய்த்து கதகதப்பாக்கவும், வெளி உபயோகத்துக்கு மட்டுமே.

ஹாவ் பார் பிரதர்ஸ் இண்டர்நேஷனல் லிமிட்டேட்

அனுமதிபெற்று மேற்கு மலேசியாவில் தயாரிக்கப்பட்டது


虎標萬金油
FOR THE SYMPTOMATIC RELIEF OF MUSCULAR ACHES & PAINS, SPRAINS, RHEUMATISM, INSECT BITES, ITCHING, LUMBAGO AND HEADACHE – RUB GENTLY ON AFFECTED PARTS
虎標
REGISTERED TIGER MARK
ENG AUN TONG, TIGER BALM
TIGER BALSEM
บาบ้านกิมอิ้ว ตราเสือ
TIGER BALM

FOR THE USE OF MEDICAL PRACTITIONER OR A HOSPITAL OR A LABORATORY

DIRECTIONS FOR USE

Clean the affected part gently but thoroughly with warm water. Mop dry with a soft clean cloth. Apply the ointment in a thin even layer.

Homoeopathic ointments are safe and can be applied as often as necessary in a day to keep the affected part constantly covered with beneficial results.

This is yet another ethical homoeopathic product manufactured in the ultramodern laboratories of

BECK & KOLL LABORATORIES PRIVATE LIMITED

37A, Govt. Ind. Estate, Kandivli (W), Bombay-400 067.

39-5

For the use only of Registered Medical Practitioners or a Hospital or Laboratory

PILEN®

HOMOEOPATHIC MEDICINE

This combination hes been tried and proved to be effective in piles of any kind whether internal or external, bleeding or nonbleeding, It helps to reduce agonising pains and to shrink piles. It can also check bleeding in case of bleeding piles. It's benefical effect reduces constipation and further given regular movements to the bowels.

It contains : Nit Acid (200c), Calc floor (200c) & Hamamelis (200c).

ITS INDIVIDUAL DRUGS ACT IN THE FOLLOWING WAY :

NIT ACID 200c : It reduces bleeding, soothes the splinter like pains, regulates bowel movements.

Calt Flour 200c : It acts on bleeding piles, reduces bleeding, stops itching sensation in the anal region, renders stool softer and helps to shrink blind piles, Effectively releaves backache whenever associated with piles complaint.

Hamamelis 200c : It is a very effective drug on the haemorrhagic tendency thus reducing and controlling haemorroidal bleeding in case of bleeding piles.

Complementary : Topical application of Pilen ointment is concomittantly recommended.

DOSE : 6 pillets twise a day.

Side effects : Nil

Presentation : Bottle of 250 Pillets.

®1 Registered Trade Mark

GASGAN®

FOR THE USE ONLY OF REGISTERED MEDICAL PRACTITIONERS OF A HOSPITAL OR LABORATORY

HOMOEOPATHIC MEDICINE

A very effective Homeopathic combination formulated to relive flatulent dyspepsia, eructations, waterbrash, gastralgia & discomforts caused due to Indigestion It contains following medidices which have action to improve the digestive processes,

its individual drugs act iu the following way -

Nux Vomica 200c : Reduces acidity and flatulence, thus relieves pressure on the chest and distress in breathing. Regulates bowel movements therefore promotes healtheir digestion It helps to overcome the digestive disturbances in people who have sedentary habits

Carbo Veg 200c : Acts on flatulence causing distressing eructations, acidity water brash. gastralgia It helps persons who get temporary relief with eructation

Calchicum 200c It relieves constipation and with a peculiar ineffactual urge for passing stools it also reduces flatulence and nausea,

These remedies in combination have a marvellous effect on liver and gastric mucosa reducing the ph of the gastric juice and improving liver activity thus eliminating acidity anad constipation

Dose : 6 pillets half an hour before meals or every three hourly.
In acute pains six pillets dissolved in hot water gives quicker relief

Side effects : Nil

Presentation : Bottle of 15 gms

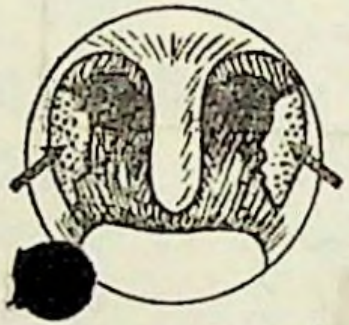
MANUFACTURED IN INDIA BY :
NEW ERA HOMOEOPATHIC PHARMACY PRIVATE LTD. DADAR. BOMBAY 400 028.

For the use only of Registered Medical Practitioners or a Hospital or a Laboratory

TONSILON

HOMOEOPATHIC MEDICINE

HOW **TONSILON** ACTS



tonsilon: the very effective homoeopathic combination for relieving various symptoms like cold, cough, sinusitis which are responsible for causing tonsiller hypertophy & inflammations.

TONSILON

thus tonsilon effects a cure by relieving other factors. It improves the resistance of a person to fight against common cold & improves general health.

NEW ERA HOMOEOPATHIC PHARMACY
OPP. DADAR STN. (W.R.) BOMBAY-28

TONSILON

tonsils enlarged, septic causing fevor & malaise presence of pseudomembrane on the tonsils congestive redness of fauces with painful deglutition (swallowing) uvula oedematous, cough with pain in larynx & hoarse voice.

TONSILON

coryza, sneezing, hay fever, loss of smell, stringy discharge, throbbing headache, worse from jar & shaking pain over eyes worse from pressure.

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory.

WARTEX®

(Oral Pellets & Topical Ointment for Verrucae and Callosities)

COMPOSITION :

Pellets		Ointment	
Thuja	200 C	Calc Fluor	Ix
Causticum	200 C	Thuja	Q
Et al in Homoeopathic Dilutions		Et al in Homoeopathic Tinctures	

DESCRIPTION :

WARTEX, **Oral and topical,** a choice homoeopathic remedy has been designed to satisfactorily treat cases of Verrucae (Warts) and Callosities (Corns); WARTEX is a method to 'expunge warts. While various measures such as electrodessication etc. are possible, the chances of rec-

urrence are not uncommon and in some cases, exceedingly high A dermatologist or a surgeon therefore, still looks for a remedy which could be SAFE, EFFECTIVE PAINLESS, EASY TO ADMINISTER and **MOST IMPORTANT** DOES NOT LEAVE ANY MARKS OR SCARS (particularly on the face as an) after effect. WARTEX largely meets all these requirements and has a sustained result without side effects or reactions.

ACTION :

WARTEX is a combination in homoeopathic dilution of substances known to act on warts & corns. It has been clinically tried and tested in clinics run by New Era Homoeopathic Pharmacy over a long period. It has the property of tackling the affected part and softening the circular bed systemically so that normally, atleast after a few months' treatment of oral pellets and topical ointment, the warts/corns will be gradually eliminated It is very important that WARTEX oral and topical ointment should be concomitantly used.

WARTEX is useful incommon, benign epithelial tumours and areas of painful hyperkeratosis, To name a few :-

WARTS :

1. Common warts; 2. Filiform or "thread warts; 3. Moist or "Venereal" warts; 4. Plantar warts; 5. Flat warts; 6. Unusual types-threadlike or pedunculated or resembling a cauliflower frequently on the neck head, or bearded region.

CORNS :

(Callosities) Both superficial or conical, with or without pain.

DOSAGE :

4-6 pellets t d s, At the same time ointment should be topically applied to the affected parts, as often as possible allowing the medicine to penetrate the area,

PACKING : **Oral :** Bottle of 15 gms.

DISPENSING PACK : 80 Gms.

Ointment : 15 gm ,-in attractive tubes,

DISPENSING JAR-400 gm.

Note : 1) The medicinal concentration of this preparation has a deep seated action but is designed to be safe. Because of this, (depending on the chronicity of the case changes) may occur rather slowly

but will generally give ultimate satisfactory results. Some cases in clinical trials even responded after a gap of time, treatment having earlier been given for several months and then discontinued.

2) The strength and the ingredients have been chosen to suit the median cases of verrucae and callosities. In adamant cases, after standard WARTEX treatment WARTEX FORTE may be tried. This is specially prepared to suit the individual's needs on enquiry to the Consulting Homoeopath of NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD. (Phone : 455060 9-00/12-00 Noon and 5-00/8-00 p. m.) or by post. Enquiries from the prescribing doctors only (and not from patients) will be entertained. Full details of period of Wartex rreatment already given, type of wart/corn, changes if any in site, size and colour and other particulars Including patient's history will be necessary for preparing SPECIAL WARTEX FORTE.

MANUFACTURED BY :

New Era Homoepathic Pharmacy Pvt. Ltd.

Opp. Dadar Rly. Stn. (W. Rly.) Bombay-400 028.

39.7

For the use only of Registrered Medical Practitioners or a Hospital or a Laboratory.

ALFAMALT

ALFAMALT

(MALT Preparation of Alfalfa Tonic)

Composition :

Alfalfa 2x	Calc	gly. Phos 3x
Hydrastis 3x	Farr.	gly. Phos 3x
China 3x	Kali.	gly. Phos 3x
Avena Sat 3x	Magn	gly. Phos 3x
	Nat	gly. Phos 3x

Malt, Syrup & Aromatics q. s.

Indications :

Alfamalt is a Homoeopathic Preparation which is ideally suited for the stimulation and regeneration of both physical and mental processes of the body particularly when the normal capacity of assimilation is retarded as a result of disease. It is therefore particularly recommended in cases of convalescence constant fatigue, nervous exhaustion, irritability sleeplessness, anaemia and chlorosis, It can also be recommended in cases of underweight, malnutrition and undernourishment, concomitantly with enriched food intake.

Action: Homoeopathic tonics have a uniquely eftective action on the body cells. Quite commonly, in modern practice it is seen that tonic are simply not assimilated by the body in weakened state though administered in large quantities. The same substances are seen to be assimilated more readily if it occurs in a food, fruit, or vegetable albeit in minute quantity. It is therefore not the quantity but the size of each individual

particle of the substance that makes one form more effective than the other. In Homoeopathic tonics, each individual component is triturated (ground) to the finest possible, several times reducing the desired ingredient to a molecularly active state. In this state it is promptly assimilated by the body cells.

The individual components act as follows: **

Alfalfa (Lucerne) This beneficial plant has long been known and employed as cattlefeed due to its uniqu property of adding weight of muscle tissue without adding fat, tones up the appetite resulting in greatly improved vigor with gain in weight Disorders characterised by malnutrition are mainly within its therapeutic range e. g. neurasthenia, splanchnic blues, nervousness, insomnia, nervous indigestion etc. Increases quality and quantity of milk in nursing mothers, It commonly induces mental exhilaration, buoyancy and a general feeling of wellbeing.

Avena Sativa (Common oat) Favourably influences the brain and the nervous system, particularly nervous exhaustion, sexual debility, convalescence, nerve tremors, chotea, alcoholism and sleeplessness of alcoholics and many female troubles.

China (Chincona off–Peruvian Bark) Indicated in debility from exhausting discharges and loss of vital fluids. Chronic **gout. Chronic suppurative** pyelitis mental apathy, despondency.

Hydrastis (Golden Seal) Especially active in old,

** ref : Homoeopathic Materia Medica by W. Boericke M. D. (U. S. A.)

easily tired cachectic or greatly debilitated individuals Cerebral effects prominent, with feel sharpened. Tones up weak muscular power, poor digestion and obstinate constripation, In lumbago, emaciation, prostration, and sluggish liver.

The Glycerophosphates of Calcium, Ferrum, Magnesium, Kalium and Natrum :

Calcium : a tissue remedy specially indicated in tardy dentition, bone disease, bone fractures.

Ferrum : (Iron) For first stage of all febrile disturbances and inflammations, anaemias and hemorrages : Increases haemoglobin.

Kalium : (Potassium) A nerve remedy. Want of nerve power, neurasthania depression.

Magnesium : Antispasmodic relleving cramp in muscles, neuralgic pains. For bad digestion. enteralgia and flatulent colic with belching of gas.

Natrum : (Sodium) A good liver toner.

Dosage : Adults two tablespoons, (Children One) before meals and bedtime.

Side Effects : The ingredients in Alfamalt Tonic are naturally occurring vegetable and mineral substances and the side effects are nil. It can consequently be used concomitantly with any other treatment with absolute confidence as there are no contraindicatious.

Presentation : 400 gms & 1000 gms. bottles.

Manufactured in India by :

BECK & KOLL LABORATORIES
PRIVATE LIMITED

37-A, Govt. Ind. Estate, Kandivli (West), Bombay-400067.

EASIDENT ®

For the use only of Registered Medical Practitioners or a Hospital or Laboratory

HOMOEOPATHIC MEDICINE

Dentition causes few symptoms and leads to uneasiness with irritability in the children during this period the dentition diarrhoea and loss of appetite or common cold and fever may also associate.

Easident is a combination of three effective Homoeopathic remedies which have beneficial effect to relieve the dentition disorders such as above.

Its individual drugs act in the following way :

Chamomilla 30c : Acts on mind and soothes irritability, reduces diarrhoea which may have characteristic green colour. It checks increased salivation flatulence & redness of anal orifice.

Calcarea Phos 12c : It is a known dentition tonic, thus included in Easident. It helps in the assimilation of Calcium from the natural source (milk) thus aids Calcium It reduces the dentition diarrhoea, promotes healther digestion prevents vomiting and flatulence.

Lecithine 12c : It influences nutritive conditions, thus increasing the red blood corpuscles and Haemoglobine in dentition diarrhoea it helps to over come general debility and increase appetite

it is found and proved Easident it started at 4th month of age and given regularly helps to prevent the severity of the dentition symptoms & promotes healthier and easier dentition.

DOSE	4 to 6 months	2 pillets three times a day
	6 months to 1 year	3 ,, ,, ,,
	1 year and above	4 ,, ,, ,,

Side Effect : nil Presentation : Bottle of 15 gms. (approx. 250 Pillets)

Manufactured In India by :
NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD. DADAR BOMBAY—400 028.

39.8

TONSILON

Tonsilon Prevents Enlargement of tonsils, oedema of uvula, coryza, throat pain, loss of smell, throbbing headache, pain over eyes etc.

Presentation :Bottles of 250 pillets.

COMPOSITION

Mere Bin lod. Belladonna, Hep. sulph. Kali Bichr Silica, Baryta carb in 200c in Palatable Pillets.

Made in India by:

NEW ERA HOMOEOPATHIC PHARMACY,

OPP: WESTERN RLY. STN. DADAR,
OMBAY-28 DD.

Removing tonsils may weaken kids against polio

NEW DELHI, November 13: Is your child suffering from tonsilitis? Don't rush to a doctor to get his tonsils removed by an operation. It may turn out to be "from the frying pan into the fire" for him.

Dr. P. L. Ogra, associate professor of paediatrics at the State University of New York, says that the removal of tonsils will make the child prone to polio—that dreadful disease which often leaves a child crippled.

Dr. Ogra told UNI that in his study of about 50 children whose tonsils had been removed, he found that all of them partially or completely lacked the antibodies which resisted infection from viruses like polio.

He said the removal of tonsils reduced the antibodies in the human body considerably and made it susceptible to infection.

Dr. Ogra, whose findings were presented at the meeting of the American Paediatric Society this year, is now conducting research in children's diseases at Buffalo, New York State. The United States health service is giving him a grant for the research.

Dr. Ogra said polio was most common among children between the age group of six months and six years. When a child is born it inherits a small percentage of antibodies from its mother. But these soon get exhausted and the body became susceptible to virus infection, he said.—U.N.I.

39.9

Deaf Now
Because of
Tonsils
earlier!

TONSILON

Any ENT Specialist will tell you Tonsils could lead to deafness. It is like one thing leading to another. And a stitch in time could really save nine. So, why take chances with tonsils?

As such there are many other side effects with enlarged and infected tonsils. Chronic indigestion, bodyache, discharge of puss through ears, pain in throat etc.

Homoeopathic Tonsilon strikes at the roots of Tonsils such as cold, cough, sinusitis which cause tonsiller hypertophy and inflammations.

Results: Tonsils are stopped before they start. As simple as that. And just as true

MODE OF ADMINISTRATION:

Adults: 4 to 6 pills twice daily. Children: Half of the above or as prescribed by the physician.

FOR THE USE OF ONLY A REGISTERED MEDICAL PRACTITIONER OR HOSPITAL OR A LABORATORY

RHEUMA -SAJ®

MASSAGE OIL

For muscular or joint pains of any kind this oil is a boon.

Contents :
Tinctures of Arnica, Cantharis, Gaultheria et. al. in electromagnetically activated hydrocarbon and vegetable oil base.

Indication :
Rheumatic pain, arthritis, gout, stiff joints, muscular congestion, pain due to exposure and fatigue, lumbago, stiff neck, backache, bruises, sprains and strains.

Description :
Most massage oils are merely counter-irritants which give only temporary relief. Rheuma-Saj is quite different. The deep acting medicines penetrate right down to the focus of the pain due to the unique properties of the electromagnetically treated oil base. Immediate relief of pain is felt and repeated application in chronic cases will act on the causatory source and effect complete cure.

Presentation :
50 ml. and 450 ml. Bottles.

Manufactured by :
BECK & KOLL LABORATORIES PVT. LTD.,
37-A, Govt. Industrial Estate, Kandivli (West), Bombay-400 067.

FOR THE USE OF ONLY A REGISTERED MEDICAL PRACTITIONER OR HOSPITAL OR A LABORATORY

RHEUMA -SAJ®

MASSAGE OIL

For muscular or joint pains of any kind this oil is a boon.

Contents :
Tinctures of Arnica, Cantharis, Gaultheria et. al. in electromagnetically activated hydrocarbon and vegetable oil base.

Indication :
Rheumatic pain, arthritis, gout, stiff joints, muscular congestion, pain due to exposure and fatigue, lumbago, stiff neck, backache, bruises, sprains and strains.

Description :
Most massage oils are merely counter-irritants which give only temporary relief. Rheuma-Saj is quite different. The deep acting medicines penetrate right down to the focus of the pain due to the unique properties of the electromagnetically treated oil base. Immediate relief of pain is felt and repeated application in chronic cases will act on the causatory source and effect complete cure.

Presentation :
50 ml. and 450 ml. Bottles.

Manufactured by :
BECK & KOLL LABORATORIES PVT. LTD.,
37-A, Govt. Industrial Estate, Kandivli (West), Bombay-400 067.

New Era Homoeopathic Pharmacy Private Ltd.

Dadar, BOMBAY–400 028.

39.10

OINTMENTS COMMONLY USED IN HOMOEOPATHY

Name of the Ointment	Contents	Indications for use
1 Aconite	Aconite external	Acute inflammations
2 Aesculus & Hamamelis	Aesculus & Hamamelis external	Piles, Bleeding or painful
3 Apis Mel	Apis Mel external	Stings and in sectbites for oedematous swellings
4 Arnica	Arnica external	Soreness resulting from injury
5 Belladonna	Belladonna external	Painful inflammations
6 Bryonia	Bryonia external	Rheumatic pains or sprains
7 Calc. Flour	Calc. Fluor 1 x	Glandular and hard swellings also for piles
8 Calendol	Calendula external	Asan antiseptic medicine for quick healing
9 Cantharis	Cantharis external	Burns
10 Dermoline	Echinacea Q and Calendula external	Skin diseases in general for itching
11 Echinacea	Echinacea Q	Ulcer and Eczema
12 Graphitol	Graphitis 1 x	Weeping eczema and psoriasis
13 Hamamelis	Hamamelis external	Bleeding piles
14 Hydrastis	Hydrastis external	Elephantisis a Leprosy
15 Hypericum	Hypericum external	Neuralgia resulting from sharp instruments
16 Ledum Pal	Ledum Pal external	Insect bites, rat bites Punctured Wounds
17 Paeonia	Paeonia Q	Piles and abscasse
18 Pimplene	Berberis Aqui external	Pimples
19 Rhus Tox	Rhus Tox external	Rheumatic Pains
20 Ringoment	Crysarobinum 1 x	Ringworn
21 Ruta G	Ruta G external	Traumatic affections of bones and periosteum
22 Skookum Chuck	Skookum Chuck external	Leprosy Elephantitis or eczema
23 Symphytum	Symphytum external	Bone pain resulting from injury
24 Thuja	Thuja external	Warts

39:12

FOR THE USE ONLY OF A REGISTERED MEDICAL PRACTITIONER
OR A HOSPITAL OR LABORATORY

BECK & KOLL'S

WITCH HAZEL

complexion cream

is a choice Homoeopathic preparation made with *Herbal* ingredients which have been used and tested for several generations for the care and protection of beautiful and clear complexions. The principal ingredients Hamamelis *(Witch Hazel)* and Calendula *(African Marigold)* are best known in Homoeopathic practice as the great vulneraries for the care and protection of sensitive skins. The preparation acts as a *sun screen* to protect the skin from *sunburn* and its regular use helps to lighten sunburnt and over-exposed complexions.

The medication *tones up* the facial skin and muscles to help smooth away *wrinkles, pouches* and *"crows' - feet."* The vulnerary properties of the ingredients help to quickly heal capillary bleeding or damaged blood vessels, thus clearing the complexion of *spots, blotches acne* and *warts*. Being herbal, this cream is *completely free* from noxious, toxic, allergic or immunizing side effects and can be used regularly *with absolute safety*.

Homoeopathy is at your Beck and Call at Beck & Koll

Manufactured by

BECK & KOLL Labs (P) Ltd.

37A, Government Industrial Estate, Kandivli (west), Bombay-400 067

39, 1A

S64134

Dr. VcNally's

JONDILA

(An Homoeopathic Liver Tonic in Syrup or Capsules)

Components :

Kalmegh Ix. Carica p. 2x, Myrica Ix, Chelidon Ix, Chionanth Ix, Syrup and laromatics q. s.

Dr. VcNally's JONDILA is a liver tonic designed to cover a wide spectrum of hepatic complaints. It is specially recommended in cases of jaundice, liver spots, sluggish liver function, worms etc.

Action : Homoeopathic preparations have a uniquely effective action. Very commonly it is seen In modern practice that though large doses of a tonic are administered, it is simply not assimilated by the body, particularly in a weakened state, At the same time, it is seen that if this tonic substance is present in fruit, plant or vegetable, though in minute quantity, it is more easily absorbed by the cells, it is therefore not the amount of the substance that metters but rather the size of each individual particle of the substance It is axiomatic that in order that a particle should be absorbed by the human cell, the particle must be smaller than the cell. Our ancients were aware of this. Hence the common practice of grinding most remedies in a mortar and pestle.

In Homoeopathic preparations all the ingredients are ground several times (triturated) to the finest possible powder in a scientifically postulated manner which releases dynamically the individual molecules of the medicine so that it is absorbed more readily by the human cells, thus helping the patient to speedier recovery.

*It's individual components act as follows :***

Chelionium : A prominent liver remedy covering many of the direct reflex symptoms of biseased conditions of that organ. Jaundiced skin and espacially constant pain under inferior angle of right scapula are certain indications. General lethargy and indisposition to make any effort, serous effusions and bilious complications during gestation are also treated by this.

Chionenthus : A prominent liver remedy. Enlarged spleen, Jaundice (in ladies with arrest of menses). Gallstones, Paroxysmal abdominal pain.

Carica Papaya : Helps digestion, checks acidity. regulates liver function, improves appetite.

Kalmegh : For flatulence and diarrhoea of children, For worm symptoms. In torpidity of liver neuralgia, dyspepsia, general debility, convalescence and in fully developed stage of dysentery.

Myrica : Has a marked action on the liver with jaundice and on mucous membranes, Excellent in the case of persitent sleeplessness as a concommitant symptom.

**Re,: 1) Homoeopathic Materia Medica-Dr. William Boericke M. D. (U.S.A)

2) The Homoeopathic Pharmacoepia of the United States Seventh edition. (1964).

3) Guide to Homoeopathy-New Era Homoeopathic Pharmacy Dadar, Bombay-400 028.

DOSAGE (Adults) :

INDICATIONS	SYRUP	CAPSULES
JAUNDICE	I tea sp/3hrs	I t. d. s.
Other Liver Complaints and for worms (2hr. before meals	I tea sp.b.d.	I b. a. s.

Note : For Children, Syrup $\frac{1}{2}$ teaspoon as above.

Dietic recommedations : No particular dietic restrictions are required for the action of the medicines. However in the case of all liver complaints it is better to avoid "overloading" the function of the organ. Oily, fatty and rich food should be avoided. So also excessively pungent or sour items. During treatment it is better to adopt a bland diet of boiled items.

For jaundice, such dietic moderation is essential.

Side effects : All the ingredients are natural plant/vegetable extracts and are absolutely safe. There are no side effects. This tonic can also therefore be recommended concommittantly with other treatment.

Presentation : Syrup : 100 ml. & 450 ml.
Capsules : 15 Caps. & 100 Caps

Manufactured in India by :
BECK & KOLL LABORATORIES PVT. LTD
37-A, Government Industrial Estate, Kandivli (West),
Bombay–400 067.

For the use only of Registered Medical Practioners
or a Hospital or a Laboratory.

39.17

ALFALFA TONIC

ALFALFA TONIC

Composition :–
Alfalfa 2x, Hydrastis 3x, China 3x, Avena Sat. 2x, Syrup & Aromatics q. s.

Indications :

Alfalfa Tonic is a Homoeopathic preparation which is ideally suited for the stimulation and regeneration of both physical and mental processes of the body particularly when the normal capacity of assimilation is retarded as a result of disease. It is therefore particularly recommended in cases of convalescence, constant fatigue, nervous exhaustion, irritability, sleeplessness, anaemia and chlorosis. It can also be recommended concomitantly with enriched food intake, in cases of underweight. malnutrition and undernourishment.

Action : Homoeopathic tonics have a uniquely effective action on the body cells. Quite commonly, in modern practice it is seen that tonics are simply not assimilated by the body in a weakened state though administered in large quantities. The same substances are seen to be assimilated more readily if it occurs in a food, fruit, or vegetable albeit in minute quantity. It is therefore not the quantity but size of eash individual particle of the substance that makes one form more effective than the other. In Homoeopathic tonic's each individual component is triturated (ground) to the finest possible, several times reducing the desired ingredient to a molecularly active state. In this state it is promptly assimilated by the body cells.

*The individual components act as follows : ***

Alfalfa (Lueerne) This benficial plant has long been known and employed as cattlefeed due to its unique property of adding weight of muscle tissue without adding fat, Alfalfa favourably influences nutritition by toning up the appetite and digestion resulting in greatly improved mental and physical vigor with gain in weight Disorders characterised by malnutrition are mainly within its therapeutic range e. g. neurasthenia, splanchnic blues, nervousness. insomnia, nervous indigestion etc. Increases quality and quantity of milk in nursing mothers Its-pronounced urinary action suggests it clinically in diabetes insipidus and phosphaturia. It is claimed to allay vesical irritibality to prostatic hypertrophy and beneficially influences rheumatic diathesis. It is commonly seen to induce mental exhilaration buoyancy and a general feeling of wellbeing so that all blues are dissipated.

Avena Sativa (Common oat) Has a selective action on the brain and on the nervous system favourably influencing their function. Nervous exhaustion, sexual debility, convalescence after exhausting diseases, nerve tremors of the aged, chorea, paralysis agitans, epilepsy, postdiptheric paralyisis, rheumatism of the heart, alcoholism and sleeplessness of aicoholics, bad effects of morphine habit and nervous states of many female troubles.

China (Chincona off.-Peruvin Bark) Indicated in debility form exhausting discharges and ioss of vital fluids. Chronic gout. Chronic suppurative

ref : Homoeopathic Materia Medida by W. Boericke M. D (U. S. A.)

pyelitis. Post operative gas pain particulary when there is no relief from passing it. Mental apathy, indifference. disobedience, taciturnity, despondency, disposition to hurt others, sudden crying and ideas crowding in mind preventing sleep.

Hydrastis (Golden Seal) Especially active in old, easily tired cachectic or greatly debilitated individuals. Cerebral effects prominent, wits feel sharpened head cleared, facile expression. Tones up week muscular power, poor digestion and obstinate constipation. It is claimed to be effective in Iumbago, emaciation, prostration, sluggish liver, goitre of puberty and pregnancy and in greatly mitigating the consequences of smallpox.

Dosage : Adults two tablespoons, (Children One) before meals and bedtime.

Side Effects : The ingrodients in Alfalfa Tonie are naturally occurring vegetable and mineral substances and the side effects are nil. It can consequently be used concomitantly with any other treatment with absolute. confidence as there are no contraindications.

Presentation : Sweet syrup in 100, 250 and 450 ml.

Note : If the small proportion of alcohol is thought unsuitable for any patients, **ALFAMALT** – (a similar preparation in malt base) is recommended as an alternative.

Manufactured in India by :

BECK & KOLL LABORATORIES
PRIVATE LIMITED

37-A, Govt. Ind. Estate, Kandivli (West) Bombay-400 067

39 · 15

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory.

AQUIFOLIUM®

(Oral tablets and topical cream for treatment of Acne Vulgaris Comedones and similar affections of the skin.)

COMPOSITION

Tablets	Cream
Berberis Aqui Q	Berberis Aqui. Ext.
Kali Brom 30	Thuja Ext.
in Lactose q s.	Calendula Ext.
	in water soluble base

DESCRIPTION

AQUIFOLIUM Oral and topical, is a choice Homoeopathic treatment designed to satisfactorily deal with cases of Acne Vulgaris (pimples) Comedones (blackheads) and similar skin affections.

AQUIFOLIUM expunges pimples and blackheads by the safe and gentle method of Homoeopathy. Various other measures are no doubt possible such as use of topical peeling agents, incision, extraction and drainage. However, the chances of recurrence with such topical treatment is exceedingly high. A Dermatologist or General Practitioner therefore would welcome a remedy which could be SAFE, EFFECTIVE PAINLESS, EASY TO ADMINISTER and MOST IMPORTANT DOES NOT LEAVE ANY MARKS, PITS or SCARS ON THE FACE and also eliminates entirely the risk of extraneous infections as an after effect. AQUIFOLIUM largely meets all these rigorous requirements and has a sustained and permanent result without side effects or reactions.

Etiology and symptoms of Acne Vulgaris and Comedones :

The etiology of Acne Vulgaris and Comedones is largely unknown. Predispcsing causes include hereditary or familial tendencies o disturbances in the metabolic or hormonal balance affecting activity of thc sebaceous glands. Specific exciting factors may include excessive carbohydrates and fats, foods allergies, food rich in lodine. gastro-intestinal dlsturbances, endocrine disorders, psycho-genic factors, ingestion of halogens and contact with chemicals such as tar or chlorinated-hydrocarbons. It is most commonly associated with adolescence. For unexplained reasons the lesions may become worse during the premenstruum.

The symptoms of Acne are often a chronic inflammation of the sebaceous glands and hair follicles of the skin characterised by papules or pustules. Cysts and nodulcs may develop and scarring is common. It is usually associated with Seborrhoea Congestiva (a facial form of affection with elevated patches having red borders and sometimes covered with crusts and scars). Comedones (blackheads) usually result from Acne Vulgaris and is seen as a discoloured sebum plugging an excretory duct of the skin.

PROGNOSIS

Obstinate, persistent and recurrent but amenable to treatment, particularly with AQUIFOLIUM.

TREATMENT

AQUIFOLIUM tablets and cream concomitantly. Systemic treatment consists of AQUIFOLIUM tablets taken orally concomitantly with ocal application of AQUIFOLIUM cream.

ACTION

AQUIFOLIUM tablets are a combination of Homeopathic ingredients known to act on Acne Vulgaris and Comedones. The treatment has been clinically tried and tested over a a long poriod by Beck & Koll Laboratories Pvt. Ltd., It has the effect of tackling the problem systemically to restore the hormonal imbalance and restore the normal activity of the sebaceous glands.

AQUIFOLIUM cream topically applied has the property of softening the papules, pustules, cysts or nodules and gently, but surely extracts and drains the purulent matter in a natural way. It is very important that the oral tablets and topical ointment should be used concomitantly. After about a fortnight's treatment the appearance of new lesions should slow down or cease with a simultaneous improvement in the overall condition After a few months treatment the Acne/Comedones will be gradually but entirely and permanently eliminated.

DOSAGE

1. Tablets : In the beginning two tablets AQUIFOLIUM at a time three times a day. Once improvement sets in, dose may be reduced to one tablet three times a day.

2. The Cream The affected part should be thoroughly washed with mild soap or "besan" (gram flour) and warm water. After thoroughly drying, AQUIFOLIUM cream should be applied over the whole affected area and gently worked into the skin with circular motion of the fingers. The cream should be applied as often as possible but in any case must be applied before retiring at night and left overnight.

DIETIC RESTRICTIONS

1. Refrain from eating or drinking anything (except water) or from use of tobacco for atleast one hour before or after ingestnic AQUIFOLIUM tablets
2. Avoid foods which are known to cause exacerbation particularly fatty foods, deep fried or extremely pungent or sour items, coffee and substances, rich in Bromides or Iodides.

CONTRA - INDICATIONS NIL

SIDE EFFECTS NIL

PRESENTATION :-

1. In a carrier kit containing 20 gms. tablets and 20 gms. cream
2. 20 gms. tablets in separate pack
3. 20 gms. Cream in separate pack.

Manufactured in India by :

BECK & KOLL LABORATORIES PRIVATE LIMITED

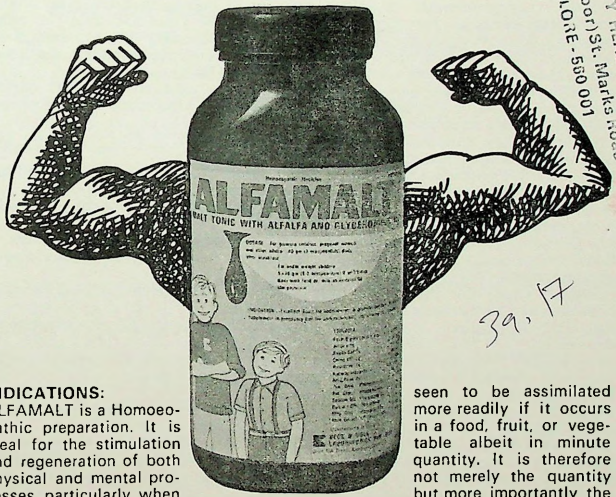
37-A, Govt. Ind. Estate, Kandivli (West)
Bombay-400 067.

39, 17

ALFAMALT

A weight gainer & body builder

For the use only of Registered Medical Practitioners or a Hospital or Laboratories



39, 17

INDICATIONS:
ALFAMALT is a Homoeopathic preparation. It is ideal for the stimulation and regeneration of both physical and mental processes, particularly when the normal capacity of assimilation is retarded as a result of disease. It is particularly indicated in cases of convalescence, constant fatigue, nervous exhaustion, irritability, sleeplessness, anaemia and chlorosis. It can also be recommended concomitantly with enriched food intake, in cases of under weight, malnutrition and undernourishment.

ACTION: Homoeopathic tonics have a uniquely effective action on the body cells. Quite commonly, in modern practice it is seen that doses of the desired chemical or substance are simply not assimilated by the body in a weakened state though administered in large quantities. The same chemical or substance is seen to be assimilated more readily if it occurs in a food, fruit, or vegetable albeit in minute quantity. It is therefore not merely the quantity but more importantly the minuteness of size of each individual particle of the substance that makes one form more effective than the other. In Homoeopathic tonics, each individual component is dynamically ground (triturated) to the finest possible powder several times reducing the desired ingredient to a molecularly active state. In this state it is promptly assimilated by the body cells.

ALFAMALT

A weight gainer & body builder

For the use only of Registered Medical Practitioners or a Hospital or Laboratories

*

The individual components act as follows:

ALFALFA: Long known for its unique property of adding muscle tissue without adding fat. Tones up the appetite, greatly improves vigor and gain in weight. Disorders due to malnutrition, Neurasthenia, splanchnic blues, nervousness, insomnia, nervous indigestion, increases milk in nursing mothers. Induces mental exhilaration, buoyancy and a general feeling of wellbeing.

AVENA SATIVA: Brain and nerve tonic. Nervous exhaustion, sexual debility, canvalescence, nerve tremors, chorea, alcoholism and sleeplessness of alcoholics and many female troubles.

CHINA: Debility, exhausting discharges and loss of vital fluids. Chronic gout. Chronic suppurative pyelitis, mental apathy, despondency.

HYDRASTIS: Especially active in old, easily tired, cachetic or greatly debilitated individuals. Cerebral effects prominent; wits feel sharpened. Tones up weak muscular power poor digestion and obstinate constipation. In lumbago, emaciation, prostration and sluggish liver.

The Glycerophosphates of Calcium, Ferrum, Magnesium, Kalium and Natrum.

CALCIUM: A tissue remedy specially indicated in tardy dentition, bone disease, bone fractures.

FERRUM: (Iron) For first stage of all febrile disturbances and inflammations anaemias and hemorrages. Increases haemoglobin.

KALIUM: (Potassium) A nerve remedy. Want of nerve power, neurasthenia, depression.

MAGNESIUM: Antispasmodic relieving cramp in muscles, neuralagic pains. For bad, digestion, enteralgia and flatulent colic with belching of gas.

NATRUM: (Sodium) A good liver toner.

DOSAGE: Adults two tablespoons (Children one) before meals and at bedtime.

DIETIC RESTRICTIONS: Nil.

SIDE EFFECTS: The ingredients in ALFAMALT Tonic are naturally occuring vegetable and mineral substances and the side effects are nil. *It can also consequently be used concomitantly with any system of medicine with absolute confidence as there are no contra indications.*

PRESENTATION: 100 gm, 400 gm & 1000 gm.

*Ref. : Homoeopathic Pharmacopeia of the United States VII ed
Homoeopathic Materia Medica-Dr. W. Boerike MD (U.S.A.)

Homoeopathy is at your Beck and Call at Beck & Koll

BECK & KOLL LABORATORIES PRIVATE LIMITED
37-A, Government Industrial Estate,
Kandivli (West), Bombay 400 067.
Phone: 695037.

39·15

For the use only of Registered Medical Practitioners or a Hospital or a Laboratory

BEKOMENT OINTMENTS

A THERAPEUTIC INDEX FOR THE GENERAL PRACTITIONER

Mfgd. by

BECK & KOLL LABORATORIES PVT. LTD.

37-A, Govt. Ind. Estate, Kandivli, BOMBAY-400 067.

BEKOMENT OINTMENTS are NON ANTIBIOTIC salves prepared with herbs, which have been successfully used through the ages as remedies for various afflictions with gratifying results.

The treasure of information on these remedies gathered over the centuries has been combined with clinical trials on scientific principles in our Laboratories to determine the most efficacious combination for a particular ailment.

The active ingredients of each herb are extracted by Homoeopathic principles & combined to make the various ointments under the most hygenic conditions at the modern and spacious Beck & Koll Laboratories Pvt. Ltd.

BEKOMENT OINTMENTS will be found particularly useful by the practitioner who seeks topical treatment of a specific nature. It is specially recommended in cases where antibiotic or sulpha – based ointments are not considered suitable. They can be freely employed without any reservations about immunological or allergic side-effects.

FOR MOST CASES, ORAL HOMOEOPATHIC TREATMENT CAN BE EMPLOYED CONCURRENTLY WITH BENEFICIAL RESULTS.

We are at your service for any further guidance.

BEKOMENT No.	Indications	Contents (all external Mother Tinctures in Petroleum jelly q. s.)
BEKOMENT 1	ANTISEPTIC - cuts, wounds, & neuralgia resulting therefrom.	Calendula, Ledum, Hypericum, et. al.
BEKOMENT 2	BITES, & STINGS - of rats, insects, ants, etc.	Apis, Ledum, et. al.
BEKOMENT 3	BOILS, ULCERS, ABSCESSES suppurating, indolent, indurated, slow to heal, also prevents tendency. Hastens suppuration.	Echinacea, Silicea, Paeonia et. al.
BEKOMENT 4	BONE FRACTURES-pain, neuralgia resulting therefrom. Traumatic affection. Aids knitting & healing of the fracture.	Ruta, Symphytum et. al.
BEKOMENT 5	BURNS-to protect from extraneous infection and aid healing.	Cantharis, Calendula et al.

BEKOMENT No.	Indications	Contents (all external Mother Tinctures in Petrolium jelly q. s.
BEKOMENT 6	CHAPPED SKIN - winter skin chapped or cracked lips & cracks around soles of feet	Borax, Pusikava, et. al.
BEKOMENT 7	ITCH & RASH - Allergic or non-specific rash or itching of skin. Urticaria, Herpes simplex.	Urtica Urens, et. al.
BEKOMENT 8	PILES-Haemorrhoids of all types (Blind &/or bleeding or painful).	Hammamelis, Aesculus et. al.
BEKOMENT 9	PSORIASIS-weeping eczema & psoriasis.	Graphities Ix et. al.
BEKOMENT 10	RING WORM, Barber's Itch.	Chrysarobinum Ix et. al.
BEKOMENT 11	SKIN DISEASES-(Scrofula) Any skin disorders. For relief of pruritus, in general.	Calendula, Echinacea, Skookum, et. al.
BEKOMENT 12	INFLAMMATIONS-Due to over-strain, sprains, contusion or injury where the skin is not broken.	Arnica, Belladonna, Hypericum, et. al.
BEKOMENT 13	SCABIES, Dermatitis.	Sulphur, Echinacea, Skookum et. al.
BEKOMENT 14	OEDEMA–Leprous or filariatic affections of skin.	Hydrastis, Skookum, Chaul mogra et. al.
BEKOMENT 15	PARASITES-Pedlculii (Lice) & other skin, hair or body parasites.	Sabadilla, Azadiricta, et. al.
BEKOMENT 16	WARTS & CORNS–of all kinds.	Thuja. Antim Crud, Calc. Flour, et. al.

Presentation:–15 gm, Tube or 100 gm. & 450 gm. Dispensing Jars.

SPECIAL PREPARATIONS

AQUIFOLIUM CREAM	PIMPLES & ACNE – Makes the complexion clear, soft and smooth.	A preparation of Berber mountain grape in a water soluble base.
RHEUMA–SAJ OIL	RHEUMATISM – Or any kind of joint or muscular pain like sciatica etc.	A herbal mixture in a special vegetable and electromagnetically activated oil base.

Presentation : Aquifolium–15 gm. 30 gm. tubes. Rheumasaj–50 ml.

39 · 19

FOR THE USE ONLY OF A REGISTERED MEDICAL PRACTITIONER
OR A HOSPITAL OR LABORATORY

BECK & KOLL'S

CALENDULA

Calendula officinalis. N. O. Compositae. Tincture of leaves and flowers.

General :

Calendula is a *herbal* antiseptic. The plant species belongs to the same family as the other great vulneraries in the Homoeopathic Materia Medica- *Arnica Montana* and *Bellis Perennis*.

The medication in this preparation is the tincture extracted from the leaves and flowers of Calendula. Being herbal, it is *absolutely free from noxious, toxic or allergic side effects.* It is therefore ideally suited even for long term treatment.

Being safe, effective and uncomplicated in use, this preparation is being increasingly favoured and prescribed by practitioners of all systems of medicine and particularly in OPD and post-surgical cases.

Indications :

Calendula, applied locally, is one of Nature's most remarkable healing agents. The special kind of wounds indicating it's use are *lacerated* wounds and *suppurating* wounds. It has been found to be very useful for *open* wounds, wounds *that will not heal fast, ulcers* and *carbuncles.* It has also been usefully employed in cases of *erysipelas* and superficial *burns* and *scalds.*

Action :

Calendula promotes healthy granulation and rapid healing by first intention. **Calendula** further promotes favourable cicatrization with minimum suppuration, slough, proud flesh or raised edges. The entire vulnerary process takes place in a *gentle, safe, natural* but *effective* manner to nurse the traumatised tissues back to normal health.

Contra-indications :	NIL
Side Effects :	NIL
Presentation :	
Calendula *Ointment* :	Calendula Tinct, in petroleum jelly base.
Calendula *Special* :	Calendula Tinct, in a special soothing water-soluble base.
Calendula *Lotion* :	Liquid dispersion of Calendula Tinct. in distilled water, glycerol and alcohol (For cleaning wounds)

Homoeopathy is at your Beck and Call at Beck & Koll

Manufactured by

BECK & KOLL Labs (P) Ltd.

37A, Government Industrial Estate, Kandivli (West), Bombay-400 067.

For the use only of Registered Medical Practitioners or a Hospital or a Laboratory

ALBEKAUL

HOMOEOPATHIC MEDICINE

GENERAL TONIC

39: 21

Manufactured by -

BECK & KAUL Bombay-400 056.

Albekaul is a composition of the 12 mineral salts of Biochemistry each of which has been prepared by potentisation wiih LACTOSE in accordance with Hahnemann's homoeopathic prescription

All these salts are supplied in large quantities in our food but do not in that form help to overcome disease. The biochemical method should not be regarded as a mere substitution method for replacing deficient substances. The essential point is the preparation of these substances into a state which can influence the cells.

The organ relations and indications of each of the Biochemical remedies are given below in a very condensed form. The detailed study of these however constitutes a science in itself which deserves special attention separately and the works of eminent scientists are available with BECK AND KAUL.

Calcarea Fluorica (Calcium fluoride) : aims particularly at the tissue of capsules, ligaments and tendons and at the teeth, bones, veins and lymphatic glands.

Calcarea Phosphorica : (Calcium Phosphate) in its potentised form acts on the whole bony skeletal system, the red marrow, the connective tissues, the lymphatic glands, the mucous membranes and the gastro-intestinal tracts.

Ferrum Phosphoricum : (Ferrum Phosphate) its chief target is the blood (haemoglobin) blood vassels fibrous tissues of muscles and joints gastro-intestinal tract, ovaries.

Kali Muriaticum (Potassium Chloride) : in the potentised form acts particularly on the cornea, the middle and inner ear, the mucous membranes and glands of the lymphoid ring, the lymphatic gland system, the lung, the pleura, the peritonium and the synovial membranes of the joints.

Kali Phosphoricum (Potassium Phosphate) : is present mainly in the brain and nerve cells and its potentised form acts on them.

Kali Sulphuricum (Potassium Sulphate) : is found in the epithelial cells of the skin and the mucous membranes and its potentised form is useful in advanced inflammatory conditions accompanied by yellow slimy exudations.

Magnesia Phosphorica (Magnesium Phosphate) : in its potentised form is an antispasmodic and analgesic and its main targets are the central nervous system, the peripheral nerves and all hollow organs (stomach, intestines, bladder etc.)

Natrum Muriaticum (Sodium Chloride) : in its potentised form acts on autonomic nervous system, the mucosa of the upper respiratory tract, the heart, thyroid, liver, gastro-intestinal tract, the skin and the genitals.

Natrum Phosphoricum (Sodium Phosphate): is a constituent of the blood corpuscles, the muscle nerve and brain cells. and the tissue fluids,

Natrum Sulphuricum (Sodium Sulphate) : acts mainly on the liver, the gall bladder and the gastro-intestinal tracts.

Silicea : (Silicic acid) in its potentised form acts on the connective tissues the bone and lymphoid tissues, the skin, teeth, hair nails and the central nervous system.

Calcerea Sulphurica : (Calcium sulphate) has a favourable influence on ulcers and suppurative processes.

If the case is treatable biochemically one of these cell salts will generally be sufficient to aid recovery, but it is essential to choose the right remedy which is not always easy. Therefore it has been found expedient to combine these medicaments into product.

Albekaul : the constant use of which will furnish any of the cell salts needed to replenish the cells destroyed in the initial stages of the disease itself.

Biochemic medicines are absolutely harmless and there is not the slightest chance of "overdosage". This form is therefore eminently suited for very small children.

Dosage : For adults 2 tablets thrice a day and for children half this dosage, half an hour before or after imbibing food or drinks.

The tablets should be dissolved in the mouth below the tongue. For babies and infants the tablets should be crushed and carefully administered as a powder if necessary dissolved in a teaspoonful of water.

but not under any circumstances in the bottle feed.

Diet : As a general tonic, ALBEKAUL does not need any special diet

Tonic Powder

For the use only of Registered Medical Practitioners or a Hospital or a Laboratory

Homoeopathic Medicine

FOR BABIES DURING DENTITION

Mfg. Lic. No. H/2.

NEW ERA HOMOEOPATHIC PHARMACY

Dadar, Bombay-28 DD.

TONIC POWDER

A TRIED TONIC FOR DEBILITY AND LIVER DISORDERS

INDICATIONS : ANEMIA NEURASTHENIA, LACK OF APPETITE. RETARDED DENTITION, GENERAL LACK OF ASSIMILATION, LIVER DISORDERS. ORGANIC FEBRILE CONDITIONS AND INSOMNIA DUE TO FATIGUE.

ALSO USEFUL TO PREVENT SUMMER DIARRHOEAS AND TENDENCY TO CATCH COLD.

IT IS HIGHLY RECOMMENDED FOR CHILDREN ALONG WITH EASIDENT (TEETHING PILLS) TO ACCELERATE VITALITY.

COMPOSITION ; Calcarea Phosphoricum. Ferrum Phosphoricum Natrum Phosphoricum, Kali Muriaticum. Magnesia Phosphoricum. in 30 x lactose q.s.

DOSAGE : (As per measure spoon enclosed in the carton)

Infants : 1 to 2 spoons
Children : 2 to 3 spoons
Adults : 2 to 4 spoons
cut level 2 to 3 times a day.

SIDE EFFECTS : Thi tonic is a combination of Essential Biochemic Salts required for the tissues of body, They are atomised, hence there will neither be any side effects nor is contraindicated along with any other treatment,

PRESENTATION : Bottle of 25 gms. in the form of Trituration.

Mfgrs : New era homoeopathic pharmacy Dadar, Bom.–28

KOFGAN ®

39-19

For the use only of Registered Medica Practitioners or a Hospital or Laboratory

HOMOEOPATHIC MEDICINE

KOFGAN is a harmless cough remedy which acts effectively like any of New Era's well known Homoeopathic Combinations. It can be given in any cough viz. dry irritating. or wet. smoker's chronic cough and old asthmatic, bronchitic cases. Its dynamic ingredients work within a few hours of its administration.

THE INDIVIDUAL DRUGS ACT IN THE FOLLOWING WAY

Bryonia 200c : Dry hacking cough, hoarse voice, laryngeal soreness, Itching in the throat is relieved.

Antim Sulph 200c: Tickling in larynx dry har dcough, is relieved. Can prevent pneumonia in early stages. It enhances expectoration to relieve the bronchi.

Drosera 200c: Helps in whooping cough or braking type of cough. It reduces vomiting, relieves congestion & asthmatic wet cough.

Squilla Mar 200c Violent cough is ameliorated by this when there is profuse salty expectoration or exhausting dry cough. It also helps in cases where involuntary urination while coughing or sneezing.

IPECAC 200c : For difficult breathing, wheezing asthmatic cough, irritating cough

DOS : Adults : 6 Pillets every three hours. Children (over 1 year) : 3 Pillets every three hours Infants : (below one year) 2 Pillets every three hours.

In acute cases dissolve 6 pillets in half a teacup warm water and administer a teaspoonful every 1/2 hour

Side Effect : nil

Presentation : Bottle of 15 gms. (approx. 250 pillets)

NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD, DADAR BOMBAY-400 028

Phone : 564134

DR. K. E. PETERS
Regd. Homoeo Medical Practitioner (No.313 A)
No. 11, Infantry Road, Bangalore-560 001.
For the use only of Registered Medical Practitioners or a Hospital or a Laboratory

"BIO-COMB" No. 1 To 28
(BIOCHEMIC COMBINATION TABLETS)

OF

BECK & KOLL LABS PVT. LTD.

THE human body is composed of water, organic matter, and inorganic elements. A perfectly balanced quantity of these materials enters into the composition of every one of the billions of cells which make up the complete structure.

Water and organic matter, so far as quantity is concerned, greatly exceed the amount of inorganic salts, iron, lime, potash, sodium, magnesium, silica. The latter, however, may be regarded as *vital elements* in the building process of the myriad of cells.

The life of these cells is of limited duration, millions of them are constantly breaking down, but new ones are just as rapidly being built up again, the necessary material being abstracted from the blood stream.

According to Schuessler, should any of the tissues of the body lack the necessary balance of these vital inorganic salts, a disturbance in the molecular motion of these salts in the living tissues is caused and normal cell-function or metabolism is disturbed. The result is inevitably a disturbance in some part of the body, a condition called "disease" in one of its many and varied forms. *This abnormal condition will persist until the tissues are again enabled to abstract from the blood the necessary, deficient salts.*

DR. S. HAHNEMANN
1755-1843

Dr. Schuessler discovered that deficiencies of these inorganic salts can be corrected with scientific accuracy by the administration of specially prepared remedies, containing the inorganic salts in finely subdivided form.

Thus after years of intensive labor and scientific experiments Dr. Schuessler completed his new system of therapy based strictly upon natural laws, and remarkable for its simplicity. One of its striking features is that it deals only with twelve remedies, each containing one of the important inorganic cell-salts found in the human body.

The therapeutic range of these twelve remedies covers a very wide field of abnormal conditions affecting the human body.

They also offer the noteworthy advantage of being exceptionally pleasant to take and of being entirely free from all undesirable drug effects.

The selection of the required Schuessler remedy simply demands careful observation of the existing symptoms. A brief study of the functions of the twelve Remedies will enable the physician to prescribe correctly, because the symptoms for each remedy are always distinctly characteristic. Schuessler's Biochemistry is in the fullest sense a true constructive science, based on strictly natural laws.

BECK & KOLL LABORATORIES PVT. LTD., through years of untiring efforts in promoting the science of Biochemistry, has earned the reputation as the leading manufacturer of the genuine Schuessler Remedies. Our spacious laboratories are specially equipped for the scientific preparation of these remedies in accordance with the original method of Dr. Schuessler.

Manufactured by
BECK & KOLL Labs (P) Ltd.
37A, Government Industrial Estate,
Kandivli (West), Bombay-400 067.

39.22

Dose—Adults 4 tablets at a time 4 times a day at interval of 3 hours.
Children—Half the dose.

1. **Anaemia and Chlorosis** (Composition) : Calc. phos., Ferrum phos., Nat mur., Kali phos.

Indications: Lack of blood and loss of blood from any part of the body. Cerebral and spinal anæmia; a general wasting of all the tissues; waxy appearance of the skin; chlorosis; palpitation, trembling and weakness; anæmia of the brain from long continued mental strain.

2. **Asthma** (Composition) : Kali. phos., Magn. phos., Natr. mur., Natr. Sulf.

Indications: Nervous asthma, accompanied with cough, gasping for breath, irregular pulse; asthma with troublesome flatulence or spasms, convulsive tickling cough. Bronchial asthma with yellow sputa worse in the evening or in warm room and better in cool air.

3. **Colic** (Composition) : Magn. phos., Calc. phos., Natr. sulf., Ferrum phos.

Indications: Colic of infants with drawing up of legs, during teething; flatulent colic caused by friction or belching of gas. Colic of children and adults due to blockage of intestines caused by flatulence or constipation. Spasmodic pain, patient bends double.

4. **Constipation** (Composition) : Calc. fluor., Kali. mur., Natr. mur., Silicea

Indications: Bowels constipated without apparent cause; liver torpid; stools dry, hard and black; dull headache; foul breath; bad taste in mouth; tongue coated.

5. **Coryza** (Composition) : Ferrum phos., Kali. mur., Natr. mur., Kali. sulf.

Indications: Pain in the head, sneezing and discharge from nose or bronchial tubes due to irritation and inflammation of mucous membranes. Feverishness. Thick white discharge from the nose with white or grey coated tongue.

6. **Coughs, Colds and Catarrh** (Composition) : Ferrum phos., Kali mur., Magn. phos. Natr. mur. Natr. Sulf

Indications : Cold in the head; acute catarrh, rattling hollow cough: difficult respiration, pain in chest, bronchitis.

7. **Diabetes** (Composition) : Calc. phos., Ferrum phos., Kali., phos., Natr. phos. Natr. sulf.

Indications : Excessive discharge of urine, pain in calves, thirst, dryness of the lips, sleeplessness, nervous prostration, all chronic cases with liver disorders. It is recommended as a remedy to support the patient's state of health by assimilating the glucose. Also strengthen the kidneys and nerves impaired by diabetes.

8. **Diarrhoea** (Composition) : Calc. phos., Ferrum phos., Kali. phos., Kali sulf. Natr. sulf.

Indications : Thin watery stools with undigested food, thirst; due to fatty or rich food, white coated tongue Watery stools with prostration.

9. Dysentery (Composition) : Ferrum phos., Kali. mur., Kali. phos., Magn., phos.,

Indications : Pain and urging at the beginning of stools. Stools contain mucous and blood with constant inclination to empty the bowels.

10. Enlarged tonsils (Composition) : Calc, phos., Ferrum phos., Kali., mur.

Indications : Fever, lassitude; throat covered with white coating; tonsils swollen; tongue coated: bad breath: no appetite.

11. Fevers and inflammatory diseases(Composition): Ferrum phos., Kali mur., Nat. Mur; Kali sulf., Natr. sulf.

Indications : Fevers; chills in the initial stages of all the inflammatory diseases; in quick, sudden swellings; in pneumonia. Pleurisy and other inflammatory affections that tend to suppuration.

12. Headache (Composition) : Ferrum phos., Natr. mur, Kali phos., Magn. phos.

Indications : Congestion, rush of blood to the head, neuralgia, relieved by heat and aggravated by cold, nervous, due to worry or sleeplessness, white tongue or sluggish liver; better in the open air, worse in a warm room, or in the evening.

13. Leucorrhoea (Composition) : Calc. phos, Kali sulf., Kali phos, Natr. mur.

Indications : All forms of leucorrhoea at puberty; during pregnancy and at the climacteric; also in general weakness and hysteria.

14. Measles (Composition) : Ferrum phos., Kali mur., Kali sulf.

Indications : Sneezing, eyes and nose waters, fever. Useful in all stages of the disease.

15. Menstruation troubles (Composition) : Calc. phos, Ferrum phos., Kali phos, Magn. phos., Kali sulf.

Indications : Menses painful and irregular, scanty and late in young women, Menses early, lasts too long and profuse in middle aged women.

16. Nervous exhaustion (Composition) : Calc. phos., Ferrum phos., Kali phos., Magn. phos, Natr. mur.

Indications : It is recommended for nervous exhaustion and fatigue from any cause; for general weakness of the heart, stomach and nervous system, sleeplessness.

17. Piles (Composition) : Calc. fluor., Kali phos, Ferrum phos., Kali mur.

Indications : An approved remedy against hemorrhoidal knots, all kinds of piles, external piles with stinging pains, Bleeding piles with or without pain.

18. Pyorrhoea (Composition) : Calc. fluor., Silicea, Calc. sulf.

Indications : Gums spongy, swollen; gums bleeding. Pus in the gums with foul breath.

19. Rheumatism tablets (Composition) : Ferrum phos, Magn. phos, Kali sulf, Natr. sulf,

Indications : Shooting and stabbing pains in the joints of legs or arms, worse at night. Fever; swelling of parts; lumbago; sciatica; muscular rheumatism.

20. Skin diseases (Composition) Calc. fluor, Calc. sulf., Kali sulf., Natr mur., Natr. sulf.

Indications : Scurfy eruptions in head and face of children; eczema from uterine derangements; acne; pemphigus; herpes; erysipelas; crusta lactea; and similar eruptive diseases.

21. Teething troubles (Composition) Calc. phos, Ferrum phos.

Indications : When children are cross and obstinate, crying and weeping, these tablets help the cutting of teeth easily and quickly by supplying necessary salts. The appetite is improved and the digestion is stimulated. Removes griping.

22. Scrophula (Composition) Calc. phos., Ferrum phos., Kali, mur., Silicea.

Indications : Useful both in dry and suppurating scrofulous glandular abscesses. Covers almost all symptoms of the disease.

23. Toothache (Composition) Ferrum phos., Magn. phos., Calc. fluor.

Indications : Specially recommended in all neuralgic cases. Splendid effect in rheumatic toothache.

24. Tonic : Nerve and Brain (Composition) Calc. phos., Ferrum phos. Kali phos. Magn. phos. Natr phos.

Indications : A general tonic in chronic wasting diseases; in anæmia of of young and rapidly growing people; in women weakened by too frequent parturition; general debility and exhaustion with lack of vitality.

25. Acidity, Flatulence and Indigestion (Composition) Natr. phos., Natr. sulf., Silicea.

Indications : Gastric disturbances; acidity; flatulence; dyspepsia; acid, sour risings; feeling of weight in abdomen; bilious vomiting; flatulent colic; headache; jaundice.

26. Easy Parturition (Composition) Magn. phos, Calc. phos, Kali phos, Calc. fluor.

Indications : If these tablets are taken during the entire period of pregnancy, they will greatly relieve the pains of labour. They also greatly benefit the mother s general constitution and greatly assist in the development and the health of the child. These tablets also prevent miscarriage.

27. Vital Weakness (Composition) Natr. mur, Kalt phos, Calc. phos,

Indications: Impotence, depression of sexual instinct; lassitude and general debility; emissions followed by trembling and weakness; prematurely old; tones up the entire sexual system.

28. General Tonic (Composition): All twelve Tissue Remedies,

Indications : These tablets are a combination incorporating the twelve Tissue Remedies found in the human organism. They are of great service to those suffering from consumption and other debilitating diseases, to such as are recovering from fevers, pneumonia, diarrhoea, etc., as they help to build up the system by supplying the requisite nutrition. It may be taken by the weak and the aged as a tonic after meals. Habitual use of these tablets, during health, will keep off disease.

Arnica 30. For injuries, falls, blows & contusions. It is particularly suited to cases when any injury, however remote, has resulted in certain diseased states. A dose every 4 hours

Ipecac 30. Is particularly suited for children. The principal feature of Ipecac is its persistent nausea and vomiting. Hence it is indicated in billious attacks. Also for colds of children when chest seems full of phlegm but does not yield to coughing. A dose every 3 hours.

Nux Vomica 30. Is essentially a Man's remedy. It is pre-eminently the remedy for many of the conditio incident to modern life. It is an excellent remedy for indigestion, dyspepsia and consti. pation. (particularly when the evacuations are small.) A dose every 4 hours.

China 30. Is good for anaemia and gases in the stomach when the entire abdomen is bloated. A dose every 4 to 5 hours.

Pulsatilla 1000. Is pre-eminently a woman's remedy. It sh should be administered in this potency only in chronic complaints. The lower potencies are useful in the lower potencies acute complaints.

&&&&&&&&&&&&&&&

Dosage. For an adult. 5 pills per dose.

For children below 12. 3 pills per dose.

For babies & infants. 2 pills per dose.

&&&&&&&&&&&&&&&

For J. Nux Vomica 30. On the first day take two doses of Nux Vomica 30 one about 5 p.m. and the other at bed-time. For the three succeeding days take one dose of Nux Vomica at bed-time.
Nux Vomica acts best when taken in the evening or at night.

&&&&&&&&&&&&&&&&&

39.22

For L.

China or Cinchona 30. On three successive days take three doses of China daily. There should be an interval of at least 4 hours between the doses. After a break of two to three days take the medicine once again (i.e. three doses a day) and continue in this manner till a cure is effected.

Pulsatilla 1000. Later take one dose (and one dose only) at 10 A.M. in the morning and await results. Do not repeat before 15 to 20 days unless advised by me. A week after the drug has been taken a report should be sent to me.

&&&&&&&&&&&&&&

Gelsemium 30. For influenza and influenza colds. A dose every two to three hours till acute conditio abate. Later lengthen the intervals.

PRODUCTS	INDICATIONS
ALBEKAUL® (Tablets)	Tissue Tonic
ALFALFA Tabs	Tonic Tablets
ALFALFA TONIC	A General Tonic Syrup
ARNIFLOR®	Hair Tonic
ENLACTO® (Baby Tonic)	General Tissue Tonic
GASGAN® / GASGAN FORTE®	Indigestion & Flatulence
KOFGAN® / KOFGAN FORTE®	Cough and Bronchitis
MULLEIN OIL	Eardrops
OVA-TOSTA	Ladies' Complaints
PHYTOLACCA BERRY Tabs	For a Trim Figure
PILEN® / PILEN FORTE®	Internal or External Piles
TONIC POWDER	General Tissue Tonic
TONSILON® / TONSILON FORTE®	Tonsils and Common Cold
WARTEX® (Pills & Ointment)	Warts & Corns
PIMPLENE® Ointment	Pimples & Acne
DERMOLINE® Ointment	Skin Disorders
CALENDOL® Ointment	Antiseptic
GRAPHITOL® Ointment	Eczemas and Psoriasis
RINGOMENT® Ointment	Ringworm
BIOCHEMIC SETS	Mini Dispensary (Tabs. & Powders)
BIOMIX® 1 to 28	See Guide for Treatment of 28 Different Ailments

Do write in for more details or Phone : 45 50 60

39.23

Information for the use only of a Registered Medical Practitioner or a Hospital or Laboratory

NEW ERA'S

Gasgan®

HOMOEOPATHIC MEDICINE

A very effective Homoeopathic combination formulated to relieve flatulence, dyspepsia, eructations, waterbrash, gastralgia & discomforts caused due to indigestion. It contains the following medicines which act to improve the digestive processes.

Its individual drugs act in the following way :

Nux Vomica 200c : Reduces acidity and flatulence, thus relieves pressure on the chest and distress in breathing, regulates bowel movements, therefore promotes healthier digestion. It helps to overcome the digestive disturbances in people who have sedentary habits.

Carbo Veg 200c : Acts on flatulence which causes distressing eructations, acidity, water brash and gastralgia. It helps persons who get temporary relief with eructation.

Colchicum 200c : It relieves constipation and a peculiar ineffectual urge for passing stools. It also reduces flatulence and nausea.

These remedies in combination have a marvellous effect on liver and gastric mucosa reducing the ph of the gastric juice and improving liver activity, thus eliminating acidity and constipation.

Dose : 4 to 6 pills Twice daily. (Children-Half the dose).
In acute pains, six pills dissolved in hot water and administered every 3 hours gives quicker relief.

Contra-indications: Nil **Side effects :** Nil

Presentation : 15 gms. (approx 250 pills), & 100 gms.

® Regd. Trade Mark

NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD.
DADAR (W. R.), BOMBAY-400 028. ..... PHONE : 45 50 60

Please See Overleaf For Our Other Popular Specialities

Protect Yours And Your Childrens' Eyes

From Bad Effects of T. V. 39.25

Wear MAGNETIC SPECTS

CURES EYE TROUBLES

AVAILABLE AT

NEW HOPE CLINIC

THE ONLY DRUGLESS THERAPY CLINIC

DR. I. G. HUKKERI

Magneto Reflexologits

"JOSVEERABAGH" KALPANA ROAD,

BALMATTA-VAS LANE-INTERSECTION

MANGALORE-575 002.

TIME:—

At Mangalore Except Sundays & Wednesdays	8 to 12 Morning 3 to 7 Evening	At Shirva ~~At O. L. of Pillar Church Pillarkatt~~ On Every Wednesday (Saturday) From 10 A. M. to 4 P. M.

SOLVE ALL YOUR HEALTH PROBLEMS

WITHOUT DRUGS

Special treatments for-Arthritis, All kinds of Allergies, (Skin-colds etc) Cracked Heels fully restored to original beauty, Varicose veins, Sexual Disorders, Headaches, Psychological problems, Back pains, Heart problems, Digestion problems and many other complaints can be successfully treated ACT NOW.

Here is the address of the doctor you had asked for when we met in Seva Sadan. Thanks. Sr. Cecily Paul from Providence Convent.

हर्बोफिट

आरोग्य विज्ञान के क्षेत्र में आयुर्वेद की अभूतपूर्व उपलब्धि

शास्त्र के अनुसार कायाकल्प अर्थात् शारीरिक तन्तुओं के पुनर्निमाण और पुनर्विकास द्वारा सदा स्वस्थ रहा जा सकता है.

भारत की प्राचीन चिकित्सा पद्धति आयुर्वेद के अनुसार मानव शरीर की रचना त्रिदोष (वात, पित्त और कफ), सात धातु (रस, रक्त, मांस, मेद, अस्थि, मज्जा और शुक्र) तथा मलमूत्र द्वारा हुई है. इन ही तीन तत्वों में से किसी भी एक का संतुलन बिगड़ने से शरीर अस्वस्थ होता है. इस असंतुलन को रोकने के लिए प्रकृति ने हमें असंख्य जड़ी-बूटियां, फल और खनिज पदार्थ प्रदान किये हैं, किन्तु आजकल जिन्दगी में हर दिन तनाव और व्यस्तता की अधिकता के कारण हम ये जड़ी-बूटियां, फल और खनिज पदार्थ उचित मात्रा में नहीं ले पाते हैं.

हर्बोलॅब आयुर्वेदिक दवाओं का एक अनुसंधान संस्थान है, जिसने पारम्परिक भारतीय चिकित्सा-ज्ञान पर बहुत ही गहरी खोज करके मानव स्वास्थ्य विज्ञान के लिए सफलतापूर्वक एक नया सूत्र खोज निकाला है, **हर्बोफिट**. हर्बोफिट आसानी से लेने योग्य एक कैप्स्यूल है जिस में शक्तिशाली जड़ी बूटियों, फल और खनिज पदार्थों का सत्व भरा हुआ है.

हर्बोफिट आपके लिए कई तरह से गुणकारी है

● यह पाचन शक्ति में सहायक होकर स्वाभाविक भूख जगाती है. ● इससे मल का स्वाभाविक विसर्जन होता है और वायु (gas) पैदा नहीं होती. ● अम्लीयता (hyperacidity) दूर करती है. ● इस से पेशाब सही-सही आता है, जिस से विषैले तत्व बाहर निकल जाते हैं और आप हल्के और स्वस्थ रहते हैं. ● शरीर के स्नायु को सशक्त बनाती है. ● फेफड़ों को शक्तिमान बनाती है और श्वास क्रिया को सुधारती है. ● रक्त वर्धक है, कॉलेस्टेरॉल (cholesterol) प्रमाण में रखती है ● त्वचा को तंदुरुस्त बनाती है और बालोंके आवश्यक पोषण देकर उन्हें तंदुरुस्त बनाती है। ● किशोरावस्था में शरीर की बढ़ान में सहायक होती है. ● सारे दिन की थकान को दूर करती है. ● मानसिक तनाव दूर करती है और रात को गहरी नींद लाने में सहायक होती है.

हर्बोफिट मानव शरीर के सब संस्थानों (human systems) को सही स्थिति में रखती है, मानव शरीरके सभी संस्थानोंको पोषण देती है. और शरीर की प्रतिरोधक शक्ती बढ़ाती है।

मात्रा : १० साल से ऊपर, हरएक के लिए प्रतिदिन १ कैप्स्यूल सुबह नाश्ते के बाद

पैक : १५ या ६० कैप्स्यूल. हरएक कैप्स्यूल पर **हर्बोफिट** छपा है.

हर्बोफिट—आयुर्वेद द्वारा स्वास्थ्य का प्राकृतिक वरदान

हर्बोलॅब

आयुर्वेदिक औषधियों का अनुसंधान-संस्थान

रजि. ऑफिस—बाँसारा, पहली मंजिल, १६, नेपियन सी रोड, बम्बई ४०० ०३६.

For the use only of a registered Medical Practitioner or a Hospital or a laboratory

39·24

HERBOFIT

AYURVEDA ACHIEVES A BREAKTHROUGH IN HEALTH SCIENCE

According to the Shastras, good health is maintained by the continuous process of regeneration and reconstitution of human tissues (Kaya Kalp)

Ayurveda, the ancient medical system of India, has established that the human body is made of **Tridosh** (Vata, Pitta and Kafa), **Saptadhatu** (Ras, Rakta, Med, Mauns, Asthi, Majja & Sukra) and **Malamutra**. Disharmony of these three humours (constituents) leads to diseases. To prevent any inequilibrium, Nature has provided us herbs, fruits and minerals in abundance. The stresses and strains and conditions of today's living, however, prevent us from intake of adequate quantum of such herbs, fruits and minerals.

HERBOLAB, an Ayurvedic Research Foundation, has undertaken sophisticated research into the traditional medical wisdom of India and has successfully developed a new concept in human health science in the form of **'HERBOFIT'**— an easy-to-take Capsule of concentrates of vital herbs, fruits and minerals.

HOW DO YOU BENEFIT FROM HERBOFIT

● It restores normal appetite, helps digestion. ● It clears bowels normally, prevents gas formation. ● Relieves hyperacidity. ● Produces natural diuresis to excrete toxic substances, resulting in a feeling of well-being. ● Tones up muscles of the body. ● Strengthens lung tissues. ● Improves the quality of blood, normalises cholesterol level. ● Tones up the skin. Acts as hair nourisher. ● Stimulates growth in teenagers. ● Prevents fatigue after a day's hard work. ● Relieves tension, produces natural sound sleep at night.

HERBOFIT, in effect helps nourish human systems & increases body resistance. Thus, it helps prevent illnesses and cures ailments by building up the body's resistance. **HERBOFIT** is an excellent Ayurvedic formulation for restoring and maintaining good health.

Dosage : One capsule a day for all above the age of 10 years, preferably after breakfast.

Presentation : 15 and 60 capsule packs. Each capsule imprinted **HERBOFIT**.

HERBOFIT—THE NATURAL WAY TO HEALTH THROUGH AYURVEDA.

HERBOLAB

Ayurvedic Research Foundation

Regd. Office : Baug-E-Sara, 1st floor, 16, Nepean Sea Road, Bombay 400 036.

RINCHEN DANGJOR RILNAG CHENMO

(The Great Precious Cold Compound Black Pill)

" I Prostrate to the Lord of Aquamarine Light,
the Master of Medicine, the Enlightened One,
who cures the ailments caused by the three poisons.

Those who merely hear His Name
are protected from the sufferings
of the evil states of existence,
by virtue of His Compassion.

Praise to the Victorious One,
who has subdued the host of Evil Forces,
for the benefit of all living beings"

This **Great Precious Cold Compound Black Pill**, prepared by fully qualified physicians of the Tibetan Medical and Astro. Institute, is formulated and derived according to the understanding of the Kalachakra Tantra. This sacred knowledge has been passed down in an unbroken lineage directly from the thirteenth century Tibetan scholar and saint, khedrup Ugyen Rinchen Pel.

According to the Gyu-shi, the four basic medical tantras of the traditional Tibetan Medical System, it was predicted that in modern times mankind will suffer from eighteen types of new malignant disorders. The medicine Buddha prophesized that these, and a large number of other contemporary chronic disorders, would result from mankind's misconduct, cruelty and improper behaviour : from an un-wholesome diet : from an abundance of chemical pollutants in food and in the environment. It was also predicted that the appearance of a new micro-organism would bring great suffering to mankind at this time.

This Great Pill is recommended for all types of contagious fever and colic pains. It removes debility, greying of hairs and wrinkles, and strengthens the bones. It is also beneficial in case of allergies, various types of arthritis, and peptic ulcers ; provides physical radiance and clarity of sense organs. It also purifies major organ systems of the body and assists in proper regulation of the body temperature.

This Great Pill is particularly effective against all types of food poisoning, chemical poisoning metal poisoning etc. and chronic illnesses of modern era, especially those caused by the extensive pollutants of our time.

It prevents communicable diseases and protects oneself from the evil spirits.

For a healthy person, this pill is an excellent tonic !

This **Great Precious Cold Compound Black Pill** contains more than one hundred ingredients, including five metals, gold, silver, copper, and iron ; the precious stones sapphire, emarald, turquiose, ruby, and diamond, all in detoxified form : and a great number of herbal ingredients, including Crocus sativus L., Silicious concretion of bamboo, Myristica fragrans Houtt, Phytolacca esculenta Van Houtte, Leciodianthus Franch, Delphinium brunonianum Royle, Oxytropis sp, Frittilaria delavayi Franch, Berberis aristata D. C., Myricaria bracteata Royle, Terminalia Chebula retz, etc.

INSTRUCTIONS :

Except in case of emergencies, the **Great Precious Cold Compound Black Pill** is to be taken on auspicious dates. For maximum benefit, one should try to observe the following dietery restrictions : For a period of atleast two days after taking the medicine, one should avoid eating meat ; eggs ; raw fruits or vegetables ; fried, pungent, sour foods ; and garlic. During this period, one should also refrain from strenous exercise, sexual activity, and cold baths.

The **Great Precious Cold Compound Black Pill** is to be taken early in the morning. On the evening before, remove and crush the Great Pill, and then place it in boiled water, in a clean and unbroken cup. Cover the cup with a clean, white cloth and allow the Pill to soak overnight. On this evening, it is particularly important to dress warmly, and to be warm during sleep.

Early the next morning one should drink the mixture after stirring it thoroughly with the ring finger. This should then be followed by drinking a cup of warm, boiled water.

IT IS IMPORTANT THAT THIS PILL SHOULD NOT BE EXPOSED TO DIRECT SUNLIGHT OR BRIGHT ARTIFICIAL LIGHT. IT SHOULD BE PREPRARED AND TAKEN ONLY IN DIM LIGHT.

Phones : Office 2618
Clinic 2684

TIBETAN MEDICAL & ASTRO. INSTITUTE
Khara Danda Road, Dharamsala
Distt. Kangra H. P. (INDIA)

TIBETAN MEDICAL AND
ASTRO. INSTITUTE
Khara Danda Road,
Dharamsala–176215
Distt. Kangra, H.P. (India)

Phones : Office : 2618
Clinic : 2484

ཅོད་ཀྱང་དཀྲུངས་སྐུར་ཐོས་ཏྲང་།

རིན་ཆེན་ཀུན་ཀྱི་ཆུལ་ཁོ་གང་སྐྱོར་རིམ་ནས་ཀུ་ཚེར་ཁོ།

།༦༣། །ཐུགས་རྗེས་ཀྱིས་ལག་ཏུ་བཏོད་དེའི་སངས་རྒྱས་བདག་ཉིད་ཀྱི་ཞལ་ནས་བཀའ་སྩལ་པ། རྒྱལ་སྲས་ཐམས་ཅད་ཀྱིས་ཀང་ཤེས་པར་བྱ་ཞིང་། ཉོན་མོངས་པ་ཐམས་ཅད་ཀྱི་ཉེས་དམིགས་ཀྱང་ཤེས་པར་བྱ་ཞིང་། ཉོན་མོངས་པ་ཐམས་ཅད་ཀྱི་ཡོན་ཏན་ཡང་ཤེས་པར་བྱའོ། །ཅི་ཞིག་ཅེ་ན། ཤཱ་རིའི་བུ་ཁྱོད་ཀྱིས་ཀང་ཉོན་མོངས་པ་ཐམས་ཅད་ཀྱི་ཉེས་དམིགས་ཤེས་ཤིང་། ཡོན་ཏན་ཡང་ཤེས་ན། ཉོན་མོངས་པ་ཐམས་ཅད་ཀྱི་ཡོན་ཏན་ཡང་ཤེས་པ་ཡིན་ནོ། །

79.27

RINCHEN TSO-TRU DHASHEL

(Precious Purified Moon Crystal)

This Precious Rinchen Tso-tru Dhashel has been compounded from about fifty different ingredients following the exact formula developed by the renowned fifteenth century Tibetan scholar and physician, Surkhar Nyam-Nyi Dorjee.

This precious pill is an anti-dote ; it purifies and helps with the circulation of the blood, it heals stomach ulcers, liver ailments ; it stops severe pains and ailments caused by sudden changes in diet and climate. It heals hidden fevers and chronic ailments after a fever, when one cannot eat well and there is loss of hair and loss of strength and clarity of the teeth and nails. It is excellent for combatting infections and inflammations. It also heals ailments caused by excess of diet and alcohol It is a good tonic for dark, thin persons of weak constitution. This pill clears the senses and restores the memory. It treats inflammations of the chest, including persistent cough with blood and phlegm discharges as well as breathing problems. It also combats retention of water in the body. When one is in good health, this pill will help to better the health, prolong one's life and it is a rejuvenating agent.

Some of the ingredients in this pill are gold, silver, copper, brass, lead and bronze, which are purified of their toxics before being mixed with other herbal ingredients such as gynachum forresti (schitr), saussaure lappa (Clarke), commiphora mukul (Engl), strychonos nux-vomica (linn), myristica fragrans (Houtt) and eugenia caryophyllata (thumb). Many sacred pills and the precious Ngochu–tsothel are also added to this pill.

Detailed instructions for taking this medicine is mentioned in the medical texts, but the following prescription will be sufficient. This pill should be taken on an auspicious date, though at the time of an illness, this pill is taken when needed. Before retiring to bed, take a clean, unbroken cup and put a crushed pill in this cup, adding a small amount of hot water and cover the cup with a clean cloth. Early next morning, take the ring finger of the right hand and stir the mixture in the cup while repeating the mantra of the Medicine Buddha-TADYATHA AUM BHAISHJYA BHAISHJYA MAHA BHAISHJYA BHAISHJYA RAJA SAMUD GATE SVAHA. Drink this mixture followed by a cup of hot water. Retire in bed with this thick coverings for about an hour so that the body prespires.

On the day this medicine is taken and if possible, a couple of days thereafter, refrain from taking meat, eggs, fish, uncooked grains, garlic, onions, alcohol, sour food and drinks. Raw vegetables and fruit, old and pungent food should be refrained also. One should not undertake strenuous exercises nor sleep in the day and one should refrain from sexual intercourse and cold baths. No other medications should be taken on the day this pills taken.

IT IS MOST IMPORTANT THAT THIS PILL SHOULD NOT BE EXPOSED TO DIRECT SUN OR LAMP. IT SHOULD BE PREPARED AND TAKEN IN A DIMMED LIGHT.

Phones : Office 2618
Clinic 2484

TIBETAN MEDICAL INSTITUTE
Khara Danda Road, Dharamsala,
Distt. Kangra H. P. (INDIA)

TIBETAN MEDICAL INSTITUTE
Khara Danda Road,
Dharamsala.
Distt. Kangra H.P. (India)

ཨ་ཡུ།

སྨན་ཆུ་དང་བཅོས་ཐབས་ཀྱི་ལག་རྟས།

།འབའ་ཞིག་སྨན་ཆུ་ཟ་ནས་བའི་ཐུག་ཚོས་རིན་ཆེན་བཅོ་ཐབ་ཀྱི་ཤེལ་ཆ་མི་ དེ་ཁྱོད་ཀྱི་ཁ་བའི་དུག་ཁམས་ཁ་ཤས་ཀྱང་ཟ་ཐུབ་པ་ཡིན་ལ། ཁྱོད་ཀྱི་ཁ་བའི་ཁམས་ཀྱང་ཁྱོད་ཀྱི་ཤ་ཁྲ་ཚོ་ལ་ཡང་ཁ་ཤས་ཀྱི་ཚེ་ཚེ་ཡོད་པ་ཡིན་ཏེ། ཁྱོད་ཀྱི་ཁ་བའི་ཁམས་ཀྱི་ཁ་ཤ

39 28

RINCHEN RATNA SAMPHEL
PRECIOUS WISH FULFILLING JEWEL

Phones : Office : 618
Clinic : 484

The Rinchen Ratna Samphel or the Precious wish Fulfilling Jewel is an antidote ; it combats food poison ; plant, insect and animal poisons, chemical poison and poison from the sun rays etc. It is beneficial for all strokes and paralysis, for trembling and numbness in the body, for lame and dislocated limbs, for all types of nerve disorders. It also combats persistent urination due to nerve disorder, helps those who have difficulty in opening and closing the eyelids, heals deafness, loss of smell, loss of bodily sensation and loss of the control of saliva. It is good for controlling high blood pressure, heart ailments, pulmonary TB, blood clots, ulcers in the body and primary cancer cases. It is also extremely beneficial for relieving pain in advanced cancer patients and it cures sudden ailments caused by different spirits.

Obtaining this Precious Pill is like obtaining a precious jewel from the King of Medicines.

Beside the valuable NGOCHU TSOTHEL, a preparation of purified mercury, sulpher and sixteen different metals and minerals; developed by the thirteenth century Tibetan Scholar, Khedroob Ugen Rinchen Pal, there are seventy other ingredients in this Precious Wish Fulfilling Pill. Some of these ingredients are purified gold, silver, copper, iron, lead and load-stone ; gems such as coral, turquoise, pearls, lapis lazuli and the rare indigenous gem of Tibet, the Zi, cloves, bamboo manna, nutmegs and Terminalia chebula Retz, Terminalia belerica Roxb and Emblica officinalis Linn (fruits). Many ancient sacred pills are mixed in this medicine also.

This pill is to be taken on auspicious dates, though at a time of any emergency, this pill is taken at the moment. For a period of two weeks or for a minimum of three days after taking this pill, one should refrain from eating meat, eggs, garlic, onions spices, raw vegetables and fruits, sour food, sour drinks and alcohol. One should refrain from cold baths, inter-course and strenuous exercises. No other medication should be taken on the day this pill is taken.

Take the pill out of the cloth, powder it and soak it overnight in a small amount of hot water in a clean cup Early the next morning drink this mixture, followed, by a cup of a warm water and get back in bed with thick coverings or keep very warm.

IT IS MOST IMPORTANT THAT THIS PILL SHOULD NOT BE EXPOSED TO DIRECT SUN OR LAMP. IT SHOULD BE PREPARED AND TAKEN IN A DIMMED LIGHT.

TIBETAN MEDICAL INSTITUTE
DHARAMSALA
Distt. Kangra H. P. (INDIA)

 །རིན་ཆེན་རང་བསམ་འཕེལ་སྐབས་སྤྱོར་ཚད་ལྡན་གོག་སྐན་ཆུལ་ཁོང་ནས་ཀྱང་དང་། སྐབ་སྐྱབ་དང་སྤྱོང་དགོངས་ཀྱི་ཚོགས་མེལ་བས་བསྟོན་བསྐྱངས་ནས་ཕལ་ཆེར་ཡིན་ཏེ། སྤྱང་དུག་དང་། ཁྱང་དུག །ཤ་སྟེགས་ཀྱི་རྟ་ཐལ་དུག །རེང་དུག་སོགས་དུག་རིགས་ཀུན་ཏུ་ཡོད་ཅིང་མ་ཟད། སྤྱིའི་ཚེ་ཐུབ་ཀྱི་ཡོན་ཏན་ཡང་ཕལ་ཆེར་ཡོད་ཅིང་། ཁོང་ཚོ་ཁོ་ནས་ཐུབ་པ་ཡིན་ནོ། །རིལ་ཐུར་ཁེ་ཚོགས་ཀྱི་ཐོག་ནས་ཀྱང་། ཁོང་ཚོ་ཁོ་ནས་ཐུབ་པ་ཡིན་ནོ། ཁོང་ཚོ་ཁོ་ནས་ཐུབ་པ་ཡིན་ཏེ། ཁོང་ཚོའི་ཡོན་ཏན་ཡང་ཕལ་ཆེར་ཡོད་ཅིང་

མར་ཆིང་བའི་རིགས། སྮོ་ངད་ཇེན་ཟས་རིགས། ཡུས་བརྡས་ལ་བྱུབ་དྲག་ཤུལ་སོགས་ལ་རོམས་གལ་ཆེ་བ་ཡིན།

སྨན་ཐབས་གཟངས་སྦྱགས་དང་། ཡིག་དྲུག

ཨོཾ་ན་མོ་ཎྜ་གཱ་ཌི་ཏི་ཎྜི་ཏ་ཇྷེ་ཀྵ་ཇེ་ཀྵ་ཏ་ཎྜ་ཏ་ཎྜི་ཏ

བོད་ཀྱི་དཔྱད་རྩལ་སྨན་རྩིས་ཁང་།

TIBETAN MEDICAL INSTITUTE
Khara Danda Road,
Dharamsala.
Distt. Kangra H.P. India

རིན་ཆེན་ལྷགས་རིལ་ཆེན་མོ།

Phone { Offlce: 618 / Clinic: 484

སྨན་ཀྱི་དང་བཅོ་ཐབས་ཀྱི་ལག་རྟལ།

༦།། །།ལྟ་ལྷང་ལ་ཡི་ཁྲད་ཆོས་ཐསལ་ཅེད་ལྷགས་རིལ་ཆེན་མོ་ལི་སྒོར་ལ་འདིར་ལྷགས་ཀྱེ་དང་། འབྲས་བུ་ཁགས་ཤུ་སྐྱེ་ཀྱར་ཀྱས། ཁུ་ཚེ། གི་བུ། ལྷགས་སྒྲུལ། སྡུམ་ཐ་ཏྲིག ཁབས་ཐེན། ལ་ཤ་ཀ། ཉ་ཀྱིས། ཚན་དན་དཀར་དམར། ལྷུབྱལ། ཅ་དེ། ཤར་ནག། བསེ་རྒྱི་རེ། བྲག་ཞུན་སོགས་སྒོ་སྨན་དང་། ཁྲོག་སྨན། དོ་སྨན་བཅས་སྨན་སྒེ་བཞི་བཅུ་ཉག་ཅམ་ཀྱི་སྨན་སྒྲོར་ཤིན་དུ་ཚད་ལོང་ཕུག་ལེན་ཀྱི་རིམ་ལ་མཐོང་ཀྱང་རན་ངག་ཁོས་བཏབ་ཀྱི་ཡིན།

ཕན་ཡོན་མདོར་བསྡུས་

སྨན་འདིས་མིག་གི ཐྱིན་སྐྱིའི་སྡེང་དུ་རླ་ངན་སྐྱ་ཐེག དོན་བའི་ལིང་ དོག་ཁོས་མཆི་མ་མང་དུ་དོན་ ནས་ན་ཟུག་ཁོང་ལ་དང་། དཀར་འོད་མི་བཟོད་བ། མིག་སྒྲིན་ནང་ཁྲག་ཆུས་བ། མིག་རིལ་ཀྱི་ཆུལ་མོ་འདལ་ནས་རབ་རིབ་ཀྱིས་སྐབས་རེ་མཐོང་བ། སྐབས་རེ་མི་མཐོང་བ། ཤུན་འཐེབས་ཆགས་བ། མིག་གི་སྒྲིན་སྐྱིའི་མཐའ་འཁོར་དུ་སྒྲེན་དཀར་ཟེ་ཅུས་ཐུ་ འབྱེལ་ཁྱེ་ཀྱི་ལོང་ན་ཆགས་བ། མཐོང་ཅེད་ཀྱི་ཆ་མདའས་ཅམས་བའི་ནང་འབྱེབ་ཀྱིས་ལོང་བར་འཁྱར་བ། མིག་གི་ནང་མེ་མར་གཡོ་ཅི་ ངལ་ཆུལ་འམ། བར་འབྱེབ

Phone : 618

TIBETAN MEDICAL INSTITUTE
Khara Danda Road,
Dharamsala-176215
H.P. India

RINCHEN YU NYING 25
PRECIOUS OLD TURQUOISE 25

This precious pill is made according to the method developed by pon Tsang Zana. It consists of 25 ingredients, It is prepared from old turquoise, coral, pearl which are purified of it's toxic contents. Other costituents are purified iron filings, asphaitum, crocus satirus linn, muschus moschiferous (musk), the there myrobalans without seeds, two types of sandal wood, euqenia caryphyllata (thumb) saxicus pasumensis marg and addatoda Vasica. Much prayers are recited during and after the pills are made.

Old turquoise is a special pill. It is detoxicating and of a cool nature. It is good for all liver ailments. It cures liver pain, enlargement of the liver, loss of weight due to liver ailment and when there are destruction of the nerves of the liver. it also helps to release the pressure on the upper part of the boday, relieves stiff neck, headaches due to blood pressure, nose bleeding, bloot shot eyes, pain under the airmpits loss of appetite due to stomach disorder. It treats damaged liver which is caused by over consumption of alcohol and food poisoning.

On the day this pill is taken refrain from sour food and beverages, raw vegetables and fruits, garlic, onion, rancid food and one should not indulge in strenuous physical activities.

For healthy persons, to keep in better health, it is good to take this pill sometimes. When one takes this pill, it is good to recite the mantra of the Medicine Buddha : TADYATHA AUM BHAISHJYA MAHA BHAISHJYA RAJA SAMUD GATE SVAHA.

Laj Printers, Dharmsala Phone : 602

བོད་གཞུང་དབུས་སྐྱབ་རྩིས་ཁང་། རིན་ཆེན་གཡུ་རྒྱིང་ཉེར་ལྔ།

སྐྱབ་ཐུབ་དང་བཟོ་ཐབས་ཀྱི་ཡག་རྟགས།

༡། །དེའོ་ཚང་ཐ་རྡ་ཉིའི་ལྷག་ཀྱི་རིན་ཆེན་གཡུ་རྒྱིང་ཉེར་ལྔའི་སྐྱོར་བ་འདིའི་ནང་དུག་འདོན་གཡའ་ཕྱིས་སོགས་ཐུག་ལེན་ཚད་ལྡན་ལས་གྲུབ་བའི་གཡུ་རྒྱིང་བ་དང་། བྱ་ཏེ། ས་ཏིག་བཅས་རིན་ཆེན་མི་བཞུགའི་ཁམས་ཀྱི་ཐབ་བ་དང་། གཞན་ཐུན། ཐུབ་ཐུམ། ཐུར་ཅི། འབྲས་བྱ་གསུམ། ཙཱན་དན་དཀར་དམར། ལི་ཤི། དིག་དུ། བ་ཤ་ཀ་སོགས་སྐྱན་སྟེ་ཉེར་ལྔ་ཡོད་བའི་སྐྱོར་བ་ཤིན་དུ་ནས་ཚད་ལོངས་ཀྱི་རིམ་པ་མཐོང་ཆུང་མཐུད་བག་གིས་བཀྲན་ཏེ་སྐྱེ་སྐྱབ་དང་ལྡན་བའི་རིམ་བྱང་ངོ་མཚར་ཅན་ཞིག་ཡིན།

ཚན་ཡོན་མདོར་བསྡུས།

གཡུ་རྒྱིང་ཉེར་ལྔ་བཅི་མེད་ཁ་ཚར་ཅན། །ཐུང་ཟད་བསིམ་ཞིང་མཚན་ཏེ་དཀར་ནག་དང་། །མཚོན་ནད་ལེ་བརྒན་ལྷེམ་བྱ་དུག་འབབ་ཀྱི། །མཚོན་སྡེང་རྩིལ་ཐུང་གཡས་གཡོན་གཟེར་ཞིང་ན། །ཆུ་ཤོར་ཀྱན་བྱ་འོར་སྐྱངས་ཁ་ཐུལ་དང་། །གཞུང་རིངས་མཚན་བྱམ་ནག་པོ་ཅལ་སྐེམས་སོགས། །ནར་རིགས་སྐྱོ་དང་ཁྲལ་བར་མཚོན་ནར་ཀྱན། །སེལ་བའི་བདུད་ཙི་མངོན་སུམ་ངོ་མཚར་ཐུན། །ཞེས་དང་། གཞན་ཡང་མཚོན་ནད་ཀྱི་ཐུལ་རིམ་ཁས་སྐམ་འགྲོ་བ་དང་། ཐུལ་སྐྱོད་ཆུང་ཞིང་རྐྱེ་རྐྱེ་ཟིངས་བས་མཐིང་བ་དགྱེ་ཀཁ་བ། ངན་ཁྲག་ཆུས་ནས་མགོ་བོ་ན་བ། སྐྱ་ཁྲག་འཛོག་པ། གཉིད་ཆེ་བ། ཁ་སྐམ་བ། མིག་དམར་ཐོ་ཆགས་པ། མཆིན་འོག་གཅེར་ཆུག་པ། ཐོ་ན་ན་ཁྱིང་ཟས་མི་འདོད་པ། ཚང་རབ་འཐུང་ཆེ་བྱགས་པ་དང་བྲག་ཤུལ་ཀྱེན་ཕྱིས་མཆིན་པ་སྐུར་ནས་དུད་ཀྲི་དང་ཁྲག་ཉམ་དང་། ཐལམ་ངན་ཀྱི་སྐྱོར་ཆ་ཤས་འབྲུང་བའི་སྐྱུར་བྱག་སོགས་མི་འབྱོད་པ་བཟོས་པ་ལས་འགྱུར་དུག་དང་། ཐལམ་ངན་ཀྱི་སྐྱོར་བ་ལས་འབྲུང་བའི་སྐྱུར་དུག་སོགས་དུག་རིགས་དང་། ཁྱད་པར་དུ་མཆིན་ནད་ཐཅོས་སྐྱག་ཀིས་ནད་ཀྱིང་ལ་ཡུན་དུ་བསྟེན་ན་ཤིན་ཏུ་ཐབ་རྟེན་ཆེ་བ་ཡིན།

བསྟུང་བྱ་གཟུང་ཚུལ་མདོར་བསྡུས།

རིལ་བྱ་བསྟེན་སྐབས་ཚང་སོགས་སྐྱར་རིགས་དང་། ཕྱོ་ཚལ། ཚྭོག་བཅོང་། ཀྱིང་བའི་ཟ་འཐུང་། ལུས་ངལ་དུབ་འཁྲག་ཀྱིན་སོགས་འཇོས་བ་ཚོགས་དགོས་པ་དང་། ནད་ཅན་ལ་སྐབས་མཚམས་བཞེས་ཀྱང་འགྲིགས།

ནད་གཞི་མེད་པ་རྣམས་ལའང་སྐྱན་བྱའི་གཟུངས་དང་། རིལ་བྱ་བཞེས་ཚུལ། བསྟུང་བྱ་གཟང་ཚུལ་ཀྱས་པ་སྐྱན་གཞུང་འཆི་མེད་ཅོར་ཟེང་སོགས་དང་། རིན་ཆེན་མང་སྐྱོར་སོགས་ཀྱི་ཐན་ཡོད་རྣམས་ལ་གཟེགས་ཏེ་བཞེས་ན་ལུས་ཀྱི་ཟུངས་སྐྱོབས་སྐྱེད་ཆེད་མཆོག་ཏུ་བསྟུགས་པ་ཡིན།

བོད་གཞུང་དབུས་སྐྱན་རྩིས་ཁང་གིས་བཟོ་བསྐྲུན་དང་མཁོ་འདོན་འབྱེམས་སྐྱལ་བཀྲིས་པའོ།།

For the use only of Registered Medical Practitioners or a Hospital or Laboratory

PILEN® HOMOEOPATHIC MEDICINE

This combination hes been tried and proved to be effective in piles of any kind whether internal or external, bleeding or nonbleeding. It helps to reduce agonising pains and to shrink piles. It can also check bleeding in case of bleeding piles. It's benefical effect reduces constipation and further given regular movements to the bowels.

It contains : Nit Acid (200c), Calc floor (200c) & Hamamelis (200c).

ITS INDIVIDUAL DRUGS ACT IN THE FOLLOWING WAY :

NIT ACID 200c : It reduces bleeding, soothes the splinter like pains, regulates bowel movements.

Calt Flour 200c : It acts on bleeding piles, reduces bleeding, stops itching sensation in the anal region, renders stool softer and helps to shrink blind piles, Effectively releaves backache whenever associated with piles complaint.

Hamamelis 200c : It is a very effective drug on the haemorrhagic tendency thus reducing and controlling haemorroidal bleeding in case of bleeding piles.

Complementary : Topical application of Pilen ointment is concomittantly recommended.

DOSE : 6 pillets twise a day.

Side effects : Nil

® Registered Trade Mark

Presentation : Bottle of 250 Pillets.

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory.

WARTEX®

(Oral Pellets & Topical Ointment for Verrucae and Callosities)

COMPOSITION :

Pellets		Ointment	
Thuja	200 C	Calc Fluor	Ix
Causticum	200 C	Thuja	Q
Et al in Homoeopathic Dilutions		Et al in Homoeopathic Tinctures	

DESCRIPTION :

WARTEX, **Oral and topical,** a choice homoeopathic remedy has been designed to satisfactorily treat cases of Verrucae (Warts) and Callosities (Corns); WARTEX is a method to 'expunge warts. While various measures such as electrodessication etc. are possible, the chances of rec-

urrence are not uncommon and in some cases exceedingly high A dermatologist or a surgeon therefore, still looks for a remedy which could be SAFE, EFFECTIVE PAINLESS, EASY TO ADMINISTER and **MOST IMPORTA** DOES NOT LEAVE ANY MARKS OR SCARS (particularly on the face as an) after effect. WARTEX largely meets all these requirements and has a sustained result without side effects or reactions.

ACTION :

WARTEX is a combination in homoeopathic dilution of substances known to act on warts & corns. It has been clinically tried and tested in clinics run by New Era Homoeopathic Pharmacy over a long period. It has the property of tackling the affected part and softening the circular bed systemically so that normally, atleast after a few months' treatment of oral pellets and topical ointment, the warts/corns will be gradually eliminated It is very important that WARTEX oral and topical ointment should be concomitantly used.

WARTEX is useful incommon, benign epithelial tumours and areas of painful hyperkeratosis, To name a few :-

WARTS :

1. Common warts; 2. Filiform or "thread warts; 3. Moist or "Venereal" warts; 4. Plantar warts; 5. Flat warts; 6 Unusual types-threadlike or pedunculated or resembling a cauliflower frequently on the neck head, or bearded region.

CORNS :

(Callosities) Both superficial or conical, with or without pain.

DOSAGE :

4-6 pellets t d s, At the same time ointment should be topically applied to the affected parts, as often as possible allowing the medicine to penetrate the area,

PACKING : **Oral :** Bottle of 15 gms.

DISPENSING PACK : 80 Gms.

Ointment : 15 gm ,-in attractive tubes,

DISPENSING JAR-400 gm.

Note : 1) The medicinal concentration of this preparation has a deep seated action but is designed to be safe. Because of this, (depending on the chronicity of the case changes) may occur rather slowly

but will generally give ultimate satisfactory results. Some cases in clinical trials even responded after a gap of time, treatment having earlier been given for several months and then discontinued.

2) The strength and the ingredients have been chosen to suit the median cases of verrucae and callosities. In adamant cases, after standard WARTEX treatment WARTEX FORTE may be tried. This is specially prepared to suit the individual's needs on enquiry to the Consulting Homoeopath of NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD. (Phone : 455060 9-00/12-00 Noon and 5-00/8-00 p. m.) or by post. Enquiries from the prescribing doctors only (and not from patients) will be entertained. Full details of period of Wartex rreatment already given, type of wart/corn, changes if any in site, size and colour and other particulars Including patient's history will be necessary for preparing SPECIAL WARTEX FORTE.

MANUFACTURED BY :

New Era Homoepathic Pharmacy Pvt. Ltd.

Opp. Dadar Rly. Stn. (W. Rly.) Bombay-400 028.

GASGAN®

FOR THE USE ONLY OF REGISTERED MEDICAL PRACTITIONERS OF A HOSPITAL OR LABORATORY

HOMOEOPATHIC MEDICINE

A very effective Homeopathic combination formulated to relive flatulent dyspepsia, eructations, waterbrash, gastralgia & discomforts caused due to Indigestion. It contains following medidices which have action to improve the digestive processes,

its individual drugs act iu the following way -

Nux Vomica 200c : Reduces acidity and flatulence, thus relieves pressure on the chest and distress in breathing, Regulates bowel movements therefore promotes healtheir digestion It helps to overcome the digestive disturbances in people who have sedentary habits

Carbo Veg 200c : Acts on flatulence causing distressing eructations, acidity water brash. gastralgia It helps persons who get temporary relief with eructation

Calchicum 200c It relieves constipation and with a peculiar ineffactual urge for passing stools it also reduces flatulence and nausea,

These remedies in combination have a marvellous effect on liver and gastric mucosa reducing the ph of the gastric juice and improving liver activity thus eliminating acidity aned constipation

Dose : 6 pillets half an hour before meals or every three hourly.
In acute pains six pillets dissolved in hot water gives quicker relief

Side effects : Nil

Presentation : Bottle of 15 gms

MANUFACTURED IN INDIA BY :
NEW ERA HOMOEOPATHIC PHARMACY PRIVATE LTD. DADAR. BOMBAY 400 028.

For the use of Medical Practitioners or a Hospital or a Laboratory

DIRECTIONS FOR USE

Clean the affected part gently but thoroughly with warm water. Mop dry with a soft clean cloth. Apply the ointment in a thin even layer.

Homoeopathic ointments are safe and can be applied as often as necessary in a day to keep the affected part constantly covered with beneficial results.

OINTMENTS COMMONLY USED IN HOMOEOPATHY

Name of the Ointment	Contents	Indications for use
1. Aconite	Aconite external	Acute inflammations.
2. Aesculus & Hamamelis	Aesculus & Hamamelis external	Piles, Bleeding or painful.
3. Apis Mel	Apis Mel external	Stings and insectbites. for oedematous swellings
4. Arnica	Arnica external	Soreness resulting from injury.
5. Belladonna	Belladonna external	Painful inflammations.
6. Bryonia	Bryonia external	Rheumatic pains or sprains
7. Calc. Fluor	Calc. Fluor 1 x	Glandular and hard swellings; also for piles.
8. Calendula	Calendula external	As an antiseptic medicine for quick healing.
9. Cantharis	Cantharis external	Burns.
10. Echinacea	Echinacea Q	Ulcer and Eczema.
11. Graphitis	Graphitis 1 x	Weeping eczema and psoriasis.
12. Hamamelis	Hamamelis external	Bleeding piles.
13. Hydrastis	Hydrastis external	Elephantisis and Leprosy
14. Hypericum	Hypericum external	Neuralgia resulting from sharpinstruments.
15. Ledum Pal	Ledum Pal external	Insect bites. rat bites. Punctured Wounds.
16. Paeonia	Paeonia Q	Piles and abscesses
17. Rhus Tox	Rhus Tox external	Rheumatic pains.
18. Ruta G	Ruta G external	Traumatic affections of bones and periosteum.
19. Skookum Chuck	Skookum Chuck Q	Leprosy, Elephantisis, or eczema.
20. Symphytum	Symphytum external	Bone pain resulting from injury.
21. Thuja	Thuja external	Warts & Coms.

This is yet another ethical Homoeopathic Product manufactured in the ultramodern laboratories of

BECK & KOLL LABORATORIES PRIVATE LIMITED

37A, Govt. Ind. Estate, Kandivli (W), Bombay-400 067.

FOR OTHER POPULAR SPECIALITIESS, SEE OVERLEAF.

OUR OTHER PRODUCTS

PRODUCT	Short Description
ALFALFA Tonic	General Tonic Syrup.
ALFALFA Tablets	Tab. of Alfalfa Tonic.
ALFAMALT® (Malt Tonic)	For Weight Gain & Body Building.
ANGIOCARD® (Heart Drops)	Cardiac Tonic.
AQUIFOLIUM® (Tablets & Cream)	Treatment Course for Pimples & Complexion.
ARNIKESH® (Medicated Hair Oil)	For Hairfall & Dandruff.
CALENDULA SPECIAL	Antiseptic Cream.
KOFEEZ®	Cough Syrup.
EYEBRIGHT	Euphrasia Eyedrops.
FEMACOL® (Tablets)	Uterine Tissue Tonic.
GRIPKOLL®	Gripe Drops.
JONDILA® (Liver Tonic)	Jaundice & Other Liver Ailments.
KOLLDENT	Medicated Tooth Powder.
Dr.VcNally's LAX-O-LAX®	Laxative Tablets.
MULLERIN®	Eardrops.
PHYTOFIT®	For a Trim Figure.
RECTOLINE®	Rectal Cream for Piles.
RHEUMA-SAJ®	Rheumatic Massage Oil.
UTRONIC®	Uterine Tonic Syrup.
WITCH HAZEL	Complexion Cream.
WORMIN Tabs.®	For Worms.
BECKOMENT® Creams	No. 1 to No.16 (List available).
BIO-COMB Tabs. (Nos. 1-28)	Biochemic Combinations (List available)
HOUSEHOLD KITS	Biochemic Tablet Kit. Homoeopathic Kit. Travelling Mini-Dispensary Kit.

®Regd. Trade Mark.

AND NOW — Cineraria Maritima Succus—Eyedrops Prepared From Specially Imported Juice:

Do Write In For Free Detailed Literature or Phone: 695037

FOR THE USE OF MEDICAL PRACTITIONER OR A HOSPITAL OR A LABORATORY

DIRECTIONS FOR USE

Clean the affected part gently but thoroughly with warm water. Mop dry with a soft clean cloth. Apply the ointment in a thin even layer.

Homoeopathic ointments are safe and can be applied as often as necessary in a day to keep the affected part constantly covered with beneficial results.

This is yet another ethical homoeopathic product manufactured in the ultramodern laboratories of

BECK & KOLL LABORATORIES PRIVATE LIMITED

37A, Govt. Ind. Estate, Kandivli (W), Bombay-400 067.

Makers of:

★ ALFAMALT ® — A Malt Preparation. weight gainer and body builder. All the goodness of Alfalfa Tonic with the added richness of Barley Malt.
Soothes nerves, increases appetite.

★ ALFALFA TONIC — The popular homoeopathic rejuvenating tonic used by millions.

★ JONDILA TONIC ® — For Jaundice, liver spots and all liver complaints.

★ PHYTOFIT ® The Phytolacca formula for weight Watchers and slimming.

★ FEMECOL ® — The ladies tonic. For all menstruation difficulties and uterine complaints.

★ . . AND MANY MORE Literature supplied on request.

® Regd. Trabe MarK

New Era Homoeopathic Pharmacy Private Ltd.

Dadar, BOMBAY-400 028.

OINTMENTS COMMONLY USED IN HOMOEOPATHY

Name of the Ointment	Contents	Indication for use
1 Aconite	Aconite external	Acute inflammation.
2 Aesculus & Hamamelis	Aesculus & Hamamelis external	Piles bleeding or painful.
3 Apis Mel	Apis Mel external	Stings and insect bites, for oedematous swellings.
4 Arnica	Arnica external	Soreness resulting form injury.
5 Belladonna	Belladonna external	Painful inflammations.
6 Bryonia	Bryonia external	Rheumatic pains or sprains.
7 Calc Flour	Calc, Flour 1 x	Glandular and hard swellings, also for piles.
8 Calendol	Calendula external	As an antiseptic medicine for quick healing.
9 Cantharis	Cantharis external	Burns.
10 Dermoline	Echinacea Q and Calendula external	Skin diseases in general. Relieves itching.
11 Echinacea	Echinacea Q	Ulcers and eczema.
12 Graphitol	Graphitis 1 x	Weeping eczema and psoriasis.
13 Hamamelis	Hamamelis external	Bleeding piles.
14 Hydrastis	Hydrastis external	Elephantisis and Leprosy.
15 Hypericum	Hypericum external	Neuralgia due to injury by sharp instruments.
16 Ledum Pal	Ledum Pal external	Insect bites, rat bites, Punctured Wounds.
17 Paeonia	Paeonia Q	Piles and abscesses.
18 Pimplene	Berberis Aqui external	Pimples.
19 Rhus Tox	Rhus Tox external	Rheumatic pains.
20 Ringoment	Crysarobinum 1 x	Ringworm.
21 Ruta G.	Ruta G external	Traumatic affections of bones and periosteum.
22 Skookum chuck	Skookum Chuck external	Leprosy. Elephantitis or eczema.
23 Symphytum	Symphytum external	Bone pain resulting from injury.
24 Thuja	Thuja external	Warts.

39-29

FOR THE USE ONLY OF A REGISTERED MEDICAL PRACTITIONER
OR A HOSPITAL OR LABORATORY

BECK & KOLL'S
CALENDULA

Calendula officinalis. N. O. Compositae. Tincture of leaves and flowers.

General :

Calendula is a *herbal* antiseptic. The plant species belongs to the same family as the other great vulneraries in the Homoeopathic Materia Medica- *Arnica Montana* and *Bellis Perennis*.

The medication in this preparation is the tincture extracted from the leaves and flowers of Calendula. Being herbal, it is *absolutely free from noxious, toxic or allergic side effects.* It is therefore ideally suited even for long term treatment.

Being safe, effective and uncomplicated in use, this preparation is being increasingly favoured and prescribed by practitioners of all systems of medicine and particularly in OPD and post-surgical cases.

Indications :

Calendula, applied locally, is one of Nature's most remarkable healing agents. The special kind of wounds indicating it's use are *lacerated* wounds and *suppurating* wounds. It has been found to be very useful for *open* wounds, wounds *that will not heal fast, ulcers* and *carbuncles*. It has also been usefully employed in cases of *erysipelas* and superficial *burns* and *scalds*.

Action :

Calendula promotes healthy granulation and rapid healing by first intention. **Calendula** further promotes favourable cicatrization with minimum suppuration, slough, proud flesh or raised edges. The entire vulnerary process takes place in a *gentle, safe, natural* but *effective* manner to nurse the traumatised tissues back to normal health.

Contra-indications : NIL

Side Effects : NIL

Presentation :

Calendula *Ointment* : Calendula Tinct. in petroleum jelly base.

Calendula *Special* : Calendula Tinct. in a special soothing water-soluble base.

Calendula *Lotion* : Liquid dispersion of Calendula Tinct. in distilled water, glycerol and alcohol (For cleaning wounds)

Manufactured by
BECK & KOLL Labs (P) Ltd.
37A, Government Industrial Estate, Kandivli (West), Bombay-400 067.

For the use only of Registered Medical Practitioners or a Hospital or Laboratory

Alfalfa Tonic

Made in India

Alfalfa 2x, hydrastis 3x, China 3x, Aswagandha 2x, Aven-Sat. 2x, Calc. Gly. Phos 3x, Ferr. Gly. Phos 3x, Kali Gly Phos 3x, Magn. Gly. Phos 3x, Nat. Gly. Phos 3x, Formic Acid 3x, Syrup & Aromatics QS.

The components of this preparation not only stimulate the general physical and mental efficiency but also support the regenerative processes during and after diseases of an organ, as well as all stages of exhaustion.

Alfalfa Tonic eliminates symptoms of fatigue and leads to an increase in appetite whlie stomach-complaints are improved simultaneously. A general nervous irritability is soon calmed. With juveniles a remarkable improvement of anaemia and chlorosis sets in after prolonged madication.

Alfalfa Tonic essentially supports the convalescence after infections or operations and thus shortens the time of recuperation.

Dose : Adults : 2-3 tablespoonful, Children : 1-2 teaspoonful with equal quantity of water before meals.

NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD.
OPP. DADAR STN. (W. R.) BOMBAY-400 028.

urrence are not uncommon and in some cases exceedingly high A dermatologist or a surgeon therefore, still looks for a remedy which could be SAFE, EFFECTIVE PAINLESS, EASY TO ADMINISTER and **MOST IMPORTANT** DOES NOT LEAVE ANY MARKS OR SCARS (particularly on the face as an) after effect. WARTEX largely meets all these requirements and has a sustained result without side effects or reactions.

ACTION :

WARTEX is a combination in homoeopathic dilution of substances known to act on warts & corns. It has been clinically tried and tested in clinics run by New Era Homoeopathic Pharmacy over a long period. It has the property of tackling the affected part and softening the circular bed systemically so that normally, atleast after a few months' treatment of oral pellets and topical ointment, the warts/corns will be gradually eliminated It is very important that WARTEX oral and topical ointment should be concomitantly used.

WARTEX is useful incommon. benign epithelial tumours and areas of painful hyperkeratosis, To name a few :-

WARTS :

1. Common warts; 2. Filiform or "thread warts; 3. Moist or "Venereal" warts; 4. Plantar warts; 5. Flat warts; 6. Unusual types-threadlike or pedunculated or resembling a cauliflower frequently on the neck head, or bearded region.

CORNS :

(Callosities) Both superficial or conical, with or without pain.

DOSAGE :

4-6 pellets t d s, At the same time ointment should be topically applied to the affected parts, as often as possible allowing the medicine to penetrate the area,

PACKING : **Oral :** Bottle of 15 gms.
DISPENSING PACK : 80 Gms.

Ointment : 15 gm ,-in attractive tubes,
DISPENSING JAR-400 gm.

Note : 1) The medicinal concentration of this preparation has a deep seated action but is designed to be safe. Because of this, (depending on the chronicity of the case changes) may occur rather slowly

but will generally give ultimate satisfactory results. Some cases in clinical trials even responded after a gap of time, treatment having earlier been given for several months and then discontinued.

2) The strength and the ingredients have been chosen to suit the median cases of verrucae and callosities. In adamant cases, after standard WARTEX treatment WARTEX FORTE may be tried. This is specially prepared to suit the individual's needs on enquiry to the Consulting Homoeopath of NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD. (Phone : 455060 9-00/12-00 Noon and 5-00/8-00 p. m.) or by post. Enquiries from the prescribing doctors only (and not from patients) will be entertained. Full details of period of Wartex rreatment already given, type of wart/corn, changes if any in site, size and colour and other particulars Including patient's history will be necessary for preparing SPECIAL WARTEX FORTE.

MANUFACTURED BY :

New Era Homoepathic Pharmacy Pvt. Ltd.

Opp. Dadar Rly. Stn. (W. Rly.) Bombay-400 028.

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory.

WARTEX®

(Oral Pellets & Topical Ointment for Verrucae and Callosities)

COMPOSITION :

Pellets		Ointment	
Thuja	200 C	Calc Fluor	lx
Causticum	200 C	Thuja	Q
Et al in Homoeopathic Dilutions		Et al in Homoeopathic Tinctures	

DESCRIPTION :

WARTEX, **Oral and topical**, a choice homoeopathic remedy has been designed to satisfactorily treat cases of Verrucae (Warts) and Callosities (Corns); WARTEX is a method to expunge warts. While various measures such as electrodessication etc. are possible, the chances of rec-

Etiology and symptoms of Acne Vulgaris and Comedones :

The etiology of Acne Vulgaris and Comedones is largely unknown. Predisposing causes include hereditary or familial tendencies or disturbances in the metabolic or hormonal balance affecting activity of the sebaceous glands. Specific exciting factors may include excessive carbohydrates and fats, foods allergies, food rich in Iodine, gastro-intestinal disturbances, endocrine disorders, psycho-genic factors, ingestion of halogens and contact with chemicals such as tar or chlorinated-hydrocarbons. It is most commonly associated with adolescence. For unexplained reasons the lesions may become worse during the premenstruum.

The symptoms of Acne are often a chronic inflammation of the sebaceous glands and hair follicles of the skin characterised by papules or pustules. Cysts and nodules may develop and scarring is common. It is usually associated with Seborrhoea Congestiva (a facial form of affection with elevated patches having red borders and sometimes covered with crusts and scars). Comedones (blackheads) usually result from Acne Vulgaris and is seen as a discoloured sebum plugging an excretory duct of the skin.

PROGNOSIS

Obstinate, persistent and recurrent but amenable to treatment, particularly with AQUIFOLIUM.

TREATMENT

AQUIFOLIUM tablets and cream concomitantly. Systemic treatment consists of AQUIFOLIUM tablets taken orally concomitantly with ocal application of AQUIFOLIUM crea

ACTION

AQUIFOLIUM tablets are a combination of Homeopathic ingredients known to act on Acne Vulgaris and Comedones. The treatment has been clinically tried and tested over a a long poriod by Beck & Koll Laboratories Pvt. Ltd., it has the effect of tackling the problem systemically to restore the hormonal imbalance and restore the normal activity of the sebaceous glands.

AQUIFOLIUM cream topically applied has the property of softening the papules, pustules, cysts or nodules and gently, but surely extracts and drains the purulent matter in a natural way. It is very important that the oral tablets and topical ointment should be used concomitantly. After about a fortnight's treatment the appearance of new lesions should slow down or cease with a simultaneous improvement in the overall condition. After a few months treatment the Acne/Comedones will be gradually but entirely and permanently eliminated.

DOSAGE

1. Tablets : In the beginning two tablets AQUIFOLIUM at a time three times a day. Once improvement sets in, dose may be reduced to one tablet three times a day.

2. The Cream The affected part should be thoroughly washed with mild soap or "besan" (gram flour) and warm water. After thoroughly drying, AQUIFOLIUM cream should be applied over the whole affected area and gently worked into the skin with circular motion of the fingers. The cream should be applied as often as possible but in any case must be applied before retiring at night and left overnight.

DIETIC RESTRICTIONS

1. Refrain from eating or drinking anything (except water) or from use of tobacco for atleast one hour before or after ingestnig AQUIFOLIUM tablets
2. Avoid foods which are known to cause exacerbation particularly fatty foods, deep fried or extremely pungent or sour items, coffee and substances, rich in Bromides or Iodides.

CONTRA - INDICATIONS NIL

SIDE EFFECTS NIL

PRESENTATION :-

1. In a carrier kit containing 20 gms. tablets and 20 gms. cream
2. 20 gms. tablets in separate pack
3. 20 gms. Cream in separate pack.

Manufactured in India by :

BECK & KOLL LABORATORIES PRIVATE LIMITED

37-A, Govt. Ind. Estate, Kandivli (West)
Bombay-400 067.

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory.

AQUIFOLIUM®

(Oral tablets and topical cream for treatment of Acne Vulgaris Comedones and similar affections of the skin.)

COMPOSITION

Tablets	Cream
Berberis Aqui Q	Berberis Aqui. Ext.
Kali Brom 30	Thuja Ext.
in Lactose q s.	Calendula Ext.
	in water soluble base

DESCRIPTION

AQUIFOLIUM Oral and topical, is a choice Homoeopathic treatment designed to satisfactorily deal with cases of Acne Vulgaris (pimples) Comedones (blackheads) and similar skin affections.

AQUIFOLIUM expunges pimples and blackheads by the safe and gentle method of Homoeopathy. Various other measures are no doubt possible such as use of topical peeling agents, incision, extraction and drainage. However, the chances of recurrence with such topical treatment is exceedingly high. A Dermatologist or General Practitioner therefore would welcome a remedy which could be SAFE, EFFECTIVE PAINLESS, EASY TO ADMINISTER and MOST IMPORTANT DOES NOT LEAVE ANY MARKS, PITS or SCARS ON THE FACE and also eliminatos entirely the risk of extraneous infections as an after effect. AQUIFOLIUM largely meets all these rigorous requirements and has a sustained and permanent result without side effects or reactions.

New Era Homoeopathic Pharmacy Private Ltd.

Dadar, BOMBAY-400 028.

OINTMENTS COMMONLY USED IN HOMOEOPATHY

Name of the Ointment	Contents	Indication for use
1 Aconite	Aconite external	Acute inflammation.
2 Aesculus & Hamamelis	Aesculus & Hamamelis external	Piles bleeding or painful.
3 Apis Mel	Apis Mel external	Stings and insect bites, for oedematous swellings.
4 Arnica	Arnica external	Soreness resulting form injury.
5 Belladonna	Belladonna external	Painful inflammations.
6 Bryonia	Bryonia external	Rheumatic pains or sprains.
7 Calc Flour	Calc. Flour 1 x	Glandular and hard swellings, also for piles.
8 Calendol	Calendula external	As an antiseptic medicine for quick healing.
9 Cantharis	Cantharis external	Burns.
10 Dermoline	Echinacea Q and Calendula external	Skin diseases in general. Relieves itching.
11 Echinacea	Echinacea Q	Ulcers and eczema.
12 Graphitol	Graphitis 1 x	Weeping eczema and psoriasis.
13 Hamamelis	Hamamelis external	Bleeding piles.
14 Hydrastis	Hydrastis external	Elephantisis and Leprosy.
15 Hypericum	Hypericum external	Neuralgia due to injury by sharp instruments.
16 Ledum Pal	Ledum Pal external	Insect bites, rat bites, Punctured Wounds.
17 Paeonia	Paeonia Q	Piles and abscesses.
18 Pimplene	Berberis Aqui external	Pimples.
19 Rhus Tox	Rhus Tox external	Rheumatic pains.
20 Ringoment	Crysarobinum 1 x	Ringworm.
21 Ruta G.	Ruta G external	Traumatic affections of bones and periosteum.
22 Skookum chuck	Skookum Chuck external	Leprosy. Elephantitis or eczema.
23 Symphytum	Symphytum external	Bone pain resulting from injury.
24 Thuja	Thuja external	Warts.

For the use only of Registered Medical Practitioners or a Hospital or a Laboratory

BEKOMENT OINTMENTS

A THERAPEUTIC INDEX FOR THE GENERAL PRACTITIONER

Mfgd. by

BECK & KOLL LABORATORIES PVT. LTD.

37-A, Govt. Ind. Estate. Kandivli, BOMBAY-400 067.

BEKOMENT OINTMENTS are NON ANTIBIOTIC salves prepared with herbs, which have been successfully used through the ages as remedies for various afflictions with gratifying results.

The treasure of information on these remedies gathered over the centuries has been combined with clinical trials on scientific principles in our Laboratories to determine the most efficacious combination for a particular ailment.

The active ingredients of each herb are extracted by Homoeopathic principles & combined to make the various ointments under the most hygenic conditions at the modern and spacious Beck & Koll Laboratories Pvt. Ltd.

BEKOMENT OINTMENTS will be found particularly useful by the practitioner who seeks topical treatment of a specific nature. It is specially recommended in cases where antibiotic or sulpha – based ointments are not considered suitable. They can be freely employed without any reservations about immunological or allergic side-effects.

FOR MOST CASES, ORAL HOMOEOPATHIC TREATMENT CAN BE EMPLOYED CONCURRENTLY WITH BENEFICIAL RESULTS.

We are at your service for any further guidance.

BEKOMENT No.	Indications	Contents (all external Mother Tinctures in Petroleum Jelly q. s.)
BEKOMENT 1	ANTISEPTIC - cuts, wounds, & neuralgia resulting therefrom.	Calendula, Ledum, Hypericum, et. al.
BEKOMENT 2	BITES, & STINGS - of rats, insects, ants, etc.	Apis, Ledum, et. al.
BEKOMENT 3	BOILS, ULCERS, ABSCESSES suppurating, indolent, indurated, slow to heal, also prevents tendency. Hastens suppuration.	Echinacea, Silicea, Paeonia et. al.
BEKOMENT 4	BONE FRACTURES-pain, neuralgia resulting therefrom. Traumatic affection. Aids knitting & healing of the fracture.	Ruta, Symphytum et. al,
BEKOMENT 5	BURNS-to protect from extraneous infection and aid healing.	Cantharis, Calendula et al.

BEKOMENT No.	Indications	Contents (all external Mother Tinctures in Petrolium jelly q. s.
BEKOMENT 6	CHAPPED SKIN - winter skin chapped or cracked lips & cracks around soles of feet	Borax, Pusikava, et. al.
BEKOMENT 7	ITCH & RASH - Allergic or non-specific rash or itching of skin Urticaria, Herpes simplex.	Urtica Urens, et. al.
BEKOMENT 8	PILES-Haemorrhoids of all types (Blind &/or bleeding or painful).	Hammamelis, Aesculus et. al.
BEKOMENT 9	PSORIASIS-weeping eczema & psoriasis.	Graphities Ix et. al.
BEKOMENT 10	RING WORM, Barber's Itch.	Chrysarobinum Ix et. al.
BEKOMENT 11	SKIN DISEASES-(Scrofula) Any skin disorders. For relief of pruritus, in general.	Calendula, Echinacea, Skookum, et. al.
BEKOMENT 12	INFLAMMATIONS-Due to over-strain, sprains, contusion or injury where the skin is not broken.	Arnica, Belladonna, Hypericum, et. al.
BEKOMENT 13	SCABIES, Dermatitis.	Sulphur, Echinacea, Skookum et. al.
BEKOMENT 14	OEDEMA–Leprous or filariatic affections of skin.	Hydrastis, Skookum, Chaulmogra et. al.
BEKOMENT 15	PARASITES-Pediculii (Lice) & other skin, hair or body parasites.	Sabadilla, Azadiricta, et. al.
BEKOMENT 16	WARTS & CORNS –of all kinds.	Thuja. Antim Crud, Calc. Flour, et. al.

Presentation:–15 gm, Tube or 100 gm. & 450 gm. Dispensing Jars.

SPECIAL PREPARATIONS

AQUIFOLIUM CREAM	PIMPLES & ACNE – Makes the complexion clear, soft and smooth.	A preparation of Berber mountain grape in a water soluble base.
RHEUMA–SAJ OIL	RHEUMATISM – Or any kind of joint or muscular pain like sciatica etc.	A herbal mixture in a special vegetable and electromagnetically activated oil base.

Presentation : Aquifolium–15 gm. 30 gm. tubes. Rheumasaj–50 ml.

ALFAMALT

A weight gainer & body builder

For the use only of Registered Medical Practitioners or a Hospital or Laboratories

*

The individual components act as follows:

ALFALFA: Long known for its unique property of adding muscle tissue without adding fat. Tones up the appetite, greatly improves vigor and gain in weight. Disorders due to malnutrition, Neurasthenia, splanchnic blues, nervousness, insomnia, nervous indigestion, increases milk in nursing mothers. Induces mental hilaration, buoyancy and a general feeling of wellbeing.

AVENA SATIVA: Brain and nerve tonic. Nervous exhaustion, sexual debility, canvalescence, nerve tremors, chorea, alcoholism and sleeplessness of alcoholics and many female troubles.

CHINA: Debility, exhausting discharges and loss of vital fluids. Chronic gout. Chronic suppurative pyelitis, mental apathy, despondency.

HYDRASTIS: Especially active in old, easily tired, cachetic or greatly debilitated individuals. Cerebral effects prominent; wits feel sharpened. Tones up weak muscular power poor digestion and obstinate constipation. In lumbago, emaciation, prostration and sluggish liver.

The Glycerophosphates of Calcium, Ferrum, Magnesium, Kalium and Natrum.

CALCIUM: A tissue remedy specially indicated in tardy dentition, bone disease, bone fractures.

FERRUM: (Iron) For first stage of all febrile disturbances and inflammations anaemias and hemorrages. Increases haemoglobin.

KALIUM: (Potassium) A nerve remedy. Want of nerve power, neurasthenia, depression.

MAGNESIUM: Antispasmodic relieving cramp in muscles, neuralagic pains. For bad, digestion, enteralgia and flatulent colic with belching of gas.

NATRUM: (Sodium) A good liver toner.

DOSAGE: Adults two tablespoons (Children one) before meals and at bedtime.

DIETIC RESTRICTIONS: Nil.

SIDE EFFECTS: The ingredients in ALFAMALT Tonic are naturally occuring vegetable and mineral substances and the side effects are nil. *It can also consequently be used concomitantly with any system of medicine with absolute confidence as there are no contra indications.*

PRESENTATION: 100 gm, 400 gm & 1000 gm.

*Ref. : Homoeopathic Pharmacopeia of the United States VII ed
Homoeopathic Materia Medica-Dr. W. Boerike MD (U.S.A.)

Homoeopathy is at your Beck and Call at Beck & Koll

BECK & KOLL LABORATORIES PRIVATE LIMITED
37-A, Government Industrial Estate,
Kandivli (West), Bombay 400 067.
Phone: 695037.

ALFAMALT

A weight gainer & body builder

For the use only of Registered Medical Practitioners or a Hospital or Laboratories

INDICATIONS:
ALFAMALT is a Homoeopathic preparation. It is ideal for the stimulation and regeneration of both physical and mental processes, particularly when the normal capacity of assimilation is retarded as a result of disease. It is particularly indicated in cases of convalescence, constant fatigue, nervous exhaustion, irritability, sleeplessness, anaemia and chlorosis. It can also be recommended concomitantly with enriched food intake, in cases of under weight, malnutrition and undernourishment.

ACTION: Homoeopathic tonics have a uniquely effective action on the body cells. Quite commonly, in modern practice it is seen that doses of the desired chemical or substance are simply not assimilated by the body in a weakened state though administered in large quantities. The same chemical or substance is seen to be assimilated more readily if it occurs in a food, fruit, or vegetable albeit in minute quantity. It is therefore not merely the quantity but more importantly the minuteness of size of each individual particle of the substance that makes one form more effective than the other. In Homoeopathic tonics, each individual component is dynamically ground (triturated) to the finest possible powder several times reducing the desired ingredient to a molecularly active state. In this state it is promptly assimilated by the body cells.

pyelitis. Post operative gas pain particulary when there is no relief from passing it. Mental apathy, indifference. disobedience, taciturnity, despondency, disposition to hurt others, sudden crying and ideas crowding in mind preventing sleep.

Hydrastis (Golden Seal) Especially active in old, easily tired cachectic or greatly debilitated individuals. Cerebral effects prominent, wits feel sharpened head cleared, facile expression. Tones up week muscular power, poor digestion and obstinate constipation. It is claimed to be effective in lumbago, emaciation, prostration, sluggish liver, goitre of puberty and pregnancy and in greatly mitigating the consequences of smallpox.

Dosage : Adults two tablespoons, (Children One) before meals and bedtime.

Side Effects : The ingrodients in Alfalfa Tonie are naturally occurring vegetable and mineral substances and the side effects are nil. It can consequently be used concomitantly with any other treatment with absolute. confidence as there are no contraindications.

Presentation : Sweet syrup in 100, 250 and 450 ml.

Note : If the small proportion of alcohol is thought unsuitable for any patients, **ALFAMALT** – (a similar preparation in malt base) is recommended as an alternative.

Manufactured in India by :

BECK & KOLL LABORATORIES
PRIVATE LIMITED

37-A. Govt. Ind. Estate, Kandivli (West) Bombay-400 067

For the use only of Registered Medical Practioners
or a Hospital or a Laboratory.

ALFALFA TONIC

ALFALFA TONIC

Composition :–

Alfalfa 2x, Hydrastis 3x, China 3x, Avena Sat. 2x, Syrup & Aromatics q. s.

Indications :

Alfalfa Tonic is a Homoeopathic preparation which is ideally suited for the stimulation and regeneration of both physical and mental processes of the body particularly when the normal capacity of assimilation is retarded as a result of disease. It is therefore particularly recommended in cases of convalescence, constant fatigue, nervous exhaustion, irritability, sleeplessness, anaemia and chlorosis. It can also be recommended concomitantly with enriched food intake, in cases of underweight. malnutrition and undernourishment.

Action : Homoeopathic tonics have a uniquely effective action on the body cells. Quite commonly, in modern practice it is seen that tonics are simply not assimilated by the body in a weakened state though administered in large quantities. The same substances are seen to be assimilated more readily if it occurs in a food, fruit, or vegetable albeit in minute quantity. It is therefore not the quantity but size of eash individual particle of the substance that makes one form more effective than the other. In Homoeopathic tonic's each individual component is triturated (ground) to the finest possible, several times reducing the desired ingredient to a molecularly active state. In this state it is promptly assimilated by the body cells.

*The individual components act as follows : ***

Alfalfa (Lucerne) This benficial plant has long been known and employed as cattlefeed due to its unique property of adding weight of muscle tissue without adding fat, Alfalfa favourably influences nutritition by toning up the appetite and digestion resulting in greatly improved mental and physical vigor with gain in weight Disorders characterised by malnutrition are mainly within its therapeutic range e. g. neurasthenia, splanchnic blues, nervousness. insomnia, nervous indigestion etc. Increases quality and quantity of milk in nursing mothers Its-pronounced urinary action suggests it clinically in diabetes insipidus and phosphaturia. It is claimed to allay vesical irritibality to prostatic hypertrophy and beneficially influences rheumatic diathesis. It is commonly seen to induce mental exhilaration buoyancy and a general feeling of wellbeing so that all blues are dissipated.

Avena Sativa (Common oat) Has a selective action on the brain and on the nervous system favourably influencing their function. Nervous exhaustion, sexual debility, convalescence after exhausting diseases, nerve tremors of the aged, chorea, paralysis agitans, epilepsy, postdiptheric paralyisis, rheumatism of the heart, alcoholism and sleeplessness of aicoholics, bad effects of morphine habit and nervous states of many female troubles.

China (Chincona off.-Peruvin Bark) Indicated in debility form exhausting discharges and ioss of vital fluids. Chronic gout. Chronic suppurative

ref : Homoeopathic Materia Medida by W Boericke M. D (U. S. A·)

FOR THE USE ONLY OF A REGISTERED MEDICAL PRACTITIONER
OR A HOSPITAL OR LABORATORY

BECK & KOLL'S
CALENDULA

Calendula officinalis. N. O. Compositae. Tincture of leaves and flowers.

General :

Calendula is a *herbal* antiseptic. The plant species belongs to the same family as the other great vulneraries in the Homoeopathic Materia Medica- *Arnica Montana* and *Bellis Perennis*.

The medication in this preparation is the tincture extracted from the leaves and flowers of Calendula. Being herbal, it is *absolutely free from noxious, toxic or allergic side effects.* It is therefore ideally suited even for long term treatment.

Being safe, effective and uncomplicated in use, this preparation is being increasingly favoured and prescribed by practitioners of all systems of medicine and particularly in OPD and post-surgical cases.

Indications :

Calendula, applied locally, is one of Nature's most remarkable healing agents. The special kind of wounds indicating it's use are *lacerated* wounds and *suppurating* wounds. It has been found to be very useful for *open* wounds, wounds *that will not heal fast, ulcers* and *carbuncles*. It has also been usefully employed in cases of *erysipelas* and superficial *burns* and *scalds*.

Action :

Calendula promotes healthy granulation and rapid healing by first intention. **Calendula** further promotes favourable cicatrization with minimum suppuration, slough, proud flesh or raised edges. The entire vulnerary process takes place in a *gentle, safe, natural* but *effective* manner to nurse the traumatised tissues back to normal health.

Contra-indications : NIL

Side Effects : NIL

Presentation :

Calendula *Ointment :* Calendula Tinct, in petroleum jelly base.

Calendula *Special :* Calendula Tinct, in a special soothing water-soluble base.

Calendula *Lotion :* Liquid dispersion of Calendula Tinct. in distilled water, glycerol and alcohol (For cleaning wounds)

Manufactured by

BECK & KOLL Labs (P) Ltd.

37A, Government Industrial Estate, Kandivli (West). Bombay-400 067.

For the use only of Registered Medical Practitioners or a Hospital or a Laboratory

Tonic Powder

Homoeopathic Medicine

FOR BABIES DURING DENTITION

Mfg. Lic. No. H/2.

NEW ERA HOMOEOPATHIC PHARMACY

Dadar, Bombay-28 DD.

TONIC POWDER

A TRIED TONIC FOR DEBILITY AND LIVER DISORDERS

INDICATIONS : ANEMIA NEURASTHENIA, LACK OF APP[illegible]E. RETARDED DENTITION, GENERAL LACK OF ASSIMILATION, LIVER DISORDERS. ORGANIC FEBRILE CONDITIONS AND INSOMNIA DUE TO FATIGUE.

ALSO USEFUL TO PREVENT SUMMER DIARRHOEAS AND TENDENCY TO CATCH COLD.

IT IS HIGHLY RECOMMENDED FOR CHILDREN ALONG WITH EASIDENT (TEETHING PILLS) TO ACCELERATE VITALITY.

COMPOSITION ; Calcarea Phosphoricum. Ferrum Phosphoricum Natrum- Phosphoricum, Kali Muriaticum. Magnesia Phosphoricum. in 30 x lactose q.s.

DOSAGE : (As per measure spoon enclosed in the carton)

Infants : 1 to 2 spoons
Children : 2 to 3 spoons
Adults : 2 to 4 spoons
cut level 2 to 3 times a day.

SIDE EFFECTS : This tonic is a combination of Essential Bio[illegible]nic Salts required for the tissues of body, They are atomised, hence there will neither be any side effects nor is contraindicated along with any other treatment.

PRESENTATION : Bottle of 25 gms. in the form of Trituration.

Mfgrs : New era homoeopathic pharmacy Dadar, Bom.–28

For the use only of Registered Medical Practitioners or a Hospital or Laboratory

PILEN®

HOMOEOPATHIC MEDICINE

This combination hes been tried and proved to be effective in piles of any kind whether internal or external, bleeding or nonbleeding. It helps to reduce agonising pains and to shrink piles. It can also check bleeding in case of bleeding piles. It's benefical effect reduces constipation and further given regular movements to the bowels.

It contains : Nit Acid (200c), Calc floor (200c) & Hamamelis. (200c).
ITS INDIVIDUAL DRUGS ACT IN THE FOLLOWING WAY :

NIT ACID 200c : It reduces bleeding, soothes the splinter like pains, regulates bowel movements.

Calt Flour 200c : It acts on bleeding piles, reduces bleeding, stops itching sensation in the anal region, renders stool softer and helps to shrink blind piles, Effectively releaves backache whenever associated with piles complaint.

Hamamelis 200c : It is a very effective drug on the haemorrhagic tendency thus reducing and controlling haemorroidal bleeding in case of bleeding piles.

Complementary : Topical application of Pilen ointment is concomittantly recommended.

DOSE : 6 pillets twise a day.

Side effects : Nil

Presentation : Bottle of 250 Pillets.

® Registered Trade Mark

KOFGAN ®

For the use only of Registered Medica Practitioners or a Hospital or Laboratory

HOMOEOPATHIC MEDICINE

KOFGAN is a harmless cough remedy which acts effectively like any of New Era's well known Homoeopathic Combinations. It can be given in any cough viz. dry irritating, or wet. smoker's chronic cough and old asthmatic, bronchitic cases. Its dynamic ingredients work within a few hours of its administration.

THE INDIVIDUAL DRUGS ACT IN THE FOLLOWING WAY

Bryonia 200c : Dry hacking cough, hoarse voice, laryngeal soreness, Itching in the throat is relieved.

Antim Sulph 200c: Tickling in larynx dry har dcough, is relieved. Can prevent pneumonia in early stages. It enhances expectoration to relieve the bronchi.

Drosera 200c: Helps in whooping cough or braking type of cough. It reduces vomiting, relieves congestion & asthmatic wet cough.

Squilla Mar 200c Violent cough is ameliorated by this when there is profuse salty expectoration or exhausting dry cough. It also helps in cases where involuntary urination while coughing or sneezing.

IPECAC 200c : For difficult breathing, wheezing asthmatic cough, irritating cough

DOS : Adults : 6 Pillets every three hours. Children (over 1 year) : 3 Pillets every three hours Infants : (below one year) 2 Pillets every three hours.

In acute cases dissolve 6 pillets in half a teacup warm water and administer a teaspoonful every 1/2 hour

Side Effect : nil

Presentation Bottle of 15 gms. (approx. 250 pillets)

NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD, DADAR BOMBAY-400 [redacted]

EASIDENT®

For the use only of Registered Medical Practitioners or a Hospital or Laboratory

HOMOEOPATHIC MEDICINE

Dentition causes few symptoms and leads to uneasiness with irritability in the children. During this period the dentition diarrhoea and loss of appetite or common cold and fever may also associate.

Easident is a combination of three effective Homoeopathic remedies which have beneficial effect to relieve the dentition disorders such as above.

Its individual drugs act in the following way :

Chamomilla 30c : Acts on mind and soothes irritability, reduces diarrhoea which may have characteristic green colour. It checks increased salivation flatulence and redness of anal orifice.

Calcarea Phos 12c : It is a known dentition tonic thus included in Easident. It helps in the assimilation of Calcium from the natural source (milk) thus aids Calcium. It reduces the dentition diarrhoea promotes healthier digestion, prevents vomiting and flatulence.

Lecithin 12c : It influences nutritive conditions, thus increasing the red blood corpuscles and Haemoglobine in dentition diarrhoea. It helps to overcome general debility and increase appetite.

It is found and proved Easident if started at 4th month of age and given regularly helps to prevent the severity of the dentition symptoms and promotes healthier and easier dentition.

DOSE	4 to 6 months	2 pillets three times a day
	6 months to 1 year	3 ,, ,, ,,
	1 Year and above	4 ,, ,, ,,

Side effect : nil Presentation Bottle of 15 gms. (approx. 250 Pillets)

Manufactured in [redacted]a by :
NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD. DADAR BOMBAY-400 028.

EASIDENT®

For the use only of Registered Medical Practitioners or a Hospital or Laboratory

HOMOEOPATHIC MEDICINE

Dentition causes few symptoms and leads to uneasiness with irritability in the children. During this period the dentition diarrhoea and loss of appetite or common cold and fever may also associate.

Easident is a combination of three effective Homoeopathic remedies which have beneficial effect to relieve the dentition disorders such as above.

Its individual drugs act in the following way :

Chamomilla 30c : Acts on mind and soothes irritability, reduces diarrhoea which may have characteristic green colour. It checks increased salivation flatulence and redness of anal orifice.

Calcarea Phos 12c : It is a known dentition tonic thus included in Easident. It helps in the assimilation of Calcium from the natural source (milk) thus aids Calcium. It reduces the dentition diarrhoea promotes healthier digestion, prevents vomiting and flatulence.

Lecithin 12c : It influences nutritive conditions, thus increasing the red blood corpuscles and Haemoglobine in dentition diarrhoea. It helps to overcome general debility and increase appetite.

It is found and proved Easident if started at 4th month of age and given regularly helps to prevent the severity of the dentition symptoms and promotes healthier and easier dentition.

DOSE	4 to 6 months	2 pillets three times a day
	6 months to 1 year	3 .. .. ..
	1 Year and above	4 .. .. ..

Side effect : nil Presentation Bottle of 15 gms. (approx. 250 Pillets)

Manufactured in India by :

NEW ERA HOMOEOPATHIC PHARMACY PVT. LTD. DADAR BOMBAY-400 028.

GASGAN®

FOR THE USE ONLY OF REGISTERED MEDICAL PRACTITIONERS OF A HOSPITAL OR LABORATORY

HOMOEOPATHIC MEDICINE

A very effective Homeopathic combination formulated to relive flatulent dyspepsia. eructations, waterbrash, gastralgia & discomforts caused due to Indigestion It contains following medidices which have action to improve the digestive processes,

its individual drugs act iu the following way -

Nux Vomica 200c : Reducas acidity and flatulance, thus relieves pressure on the chest and distress in breathing, Regulates bowel movements therefore promotes healtheir digestion It helps to overcome the digestive disturbances in people who have sedentary habits

Carbo Veg 200c : Acts on flatulance causing distressing eructations, acidity water brash. gastralgia It helps persons who get temporary relief with eructation

Calchicum 200c It relieves constipation and with a peculiar ineffactual urge for passing stools it also reduces flatulence and nausea,

These remedies in combination have a marvellous effect on liver and gastric mucosa reducing the ph of the gastric juice and improving liver activity thus eliminating acidity aned constipation

Dose : 6 pillets half an hour before meals or every three hourly.
In acute pains six pillets dissolved in hot water gives quicker relief

Side effects : Nil

Presentation : Bottle of 15 gms

MANUFACTURED IN INDIA BY :
NEW ERA HOMOEOPATHIC PHARMACY PRIVATE LTD. DADAR. BOMBAY 400 028.

FOR THE USE OF MEDICAL PRACTITIONER OR A HOSPITAL OR A LABORATORY

DIRECTIONS FOR USE

Clean the affected part gently but thoroughly with warm water. Mop dry with a soft clean cloth. Apply the ointment in a thin even layer.

Homoeopathic ointments are safe and can be applied as often as necessary in a day to keep the affected part constantly covered with beneficial results.

This is yet another ethical homoeopathic product manufactured in the ultramodern laboratories of

BECK & KOLL LABORATORIES PRIVATE LIMITED

37A, Govt. Ind. Estate, Kandivli (W), Bombay-400 067.

Makers of :

★ ALFAMALT ® — A Malt Preparation, weight gainer and body builder. All the goodness of Alfalfa Tonic with the added richness of Barley Malt.
Soothes nerves, increases appetite.

★ ALFALFA TONIC — The popular homoeopathic rejuvenating tonic used by millions.

★ JONDILA TONIC ® — For Jaundice, liver spots and all liver complaints.

★ PHYTOFIT ® — The Phytolacca formula for weight Watchers and slimming.

★ FEMECOL ® — The ladies tonic. For all menstruation difficulties and uterine complaints.

★ ..AND MANY MORE — Literature supplied on request.

® Regd. Trade Mark

Makers of :

* ALFAMALT ® — A Malt Preparation, weight gainer and body builder. All the goodness of Alfalfa Tonic with the added richness of Barley Malt.
Soothes nerves, increases appetite.

* ALFALFA TONIC — The popular homoeopathic rejuvenating tonic used by millions.

* JONDILA TONIC ® — For Jaundice, liver spots and all liver complaints.

* PHYTOFIT ® — The Phytolacca formula for weight Watchers and slimming.

* FEMECOL ® - The ladies tonic. For all menstruation difficulties and uterine complaints.

* ..AND MANY MORE — Literature supplied on request.

® Regd. Trade Mark

FOR THE USE OF MEDICAL PRACTITIONER OR A HOSPITAL OR A LABORATORY

DIRECTIONS FOR USE

Clean the affected part gently but thoroughly with warm water. Mop dry with a soft clean cloth. Apply the ointment in a thin even layer.

Homoeopathic ointments are safe and can be applied as often as necessary in a day to keep the affected part constantly covered with beneficial results.

This is yet another ethical homoeopathic product manufactured in the ultramodern laboratories of

BECK & KOLL LABORATORIES PRIVATE LIMITED

37A, Govt. Ind. Estate, Kandivli (W), Bombay-400 067.

Dose—Adults 4 tablets at a time 4 times a day at interval of 3 hours.
Children—Half the dose.

1. **Anaemia and Chlorosis** (Composition): Calc, phos., Ferrum phos., Nat mur., Kali phos.

Indications: Lack of blood and loss of blood from any part of the body. Cerebral and spinal anæmia; a general wasting of all the tissues; waxy appearance of the skin; chlorosis; palpitation, trembling and weakness; anæmia of the brain from long continued mental strain.

2. **Asthma** (Composition): Kali. phos., Magn. phos., Natr. mur., Natr. Sulf.

Indications: Nervous asthma, accompanied with cough, gasping for breath, irregular pulse; asthma with troublesome flatulence or spasms, convulsive tickling cough. Bronchial asthma with yellow sputa worse in the evening or in warm room and better in cool air.

3. **Colic** (Composition): Magn. phos., Calc. phos., Natr. sulf., Ferrum phos.

Indications: Colic of infants with drawing up of legs, during teething; flatulent colic caused by friction or belching of gas. Colic of children and adults due to blockage of intestines caused by flatulence or constipation. Spasmodic pain, patient bends double.

4. **Constipation** (Composition): Calc. fluor., Kali. mur., Natr. mur., Silicea

Indications: Bowels constipated without apparent cause; liver torpid; stools dry, hard and black; dull headache; foul breath; bad taste in mouth; tongue coated.

5. **Coryza** (Composition): Ferrum phos., Kali. mur., Natr. mur., Kali. sulf.

Indications: Pain in the head, sneezing and discharge from nose or bronchial tubes due to irritation and inflammation of mucous membranes. Feverishness. Thick white discharge from the nose with white or grey coated tongue.

6. **Coughs, Colds and Catarrh** (Composition): Ferrum phos., Kali mur., Magn. phos., Natr. mur. Natr. Sulf

Indications: Cold in the head; acute catarrh, rattling hollow cough: difficult respiration, pain in chest, bronchitis.

7. **Diabetes** (Composition): Calc. phos., Ferrum phos., Kali., phos., Natr. phos. Natr. sulf.

Indications: Excessive discharge of urine, pain in calves, thirst, dryness of the lips, sleeplessness, nervous prostration, all chronic cases with liver disorders. It is recommended as a remedy to support the patient's state of health by assimilating the glucose. Also strengthen the kidneys and nerves impaired by diabetes.

8. **Diarrhoea** (Composition): Calc. phos., Ferrum phos., Kali. phos., Kali sulf. Natr. sulf.

Indications: Thin watery stools with undigested food, thirst; due to fatty or rich food, white coated tongue Watery stools with prostration.

9. Dysentery (Composition) : Ferrum phos., Kali. mur., Kali, phos., Magn., phos.,

Indications : Pain and urging at the beginning of stools. Stools contain mucous and blood with constant inclination to empty the bowels.

10. Enlarged tonsils (Composition) : Calc, phos., Ferrum phos., Kali., mur.

Indications : Fever, lassitude; throat covered with white coating; tonsils swollen; tongue coated: bad breath: no appetite.

11. Fevers and inflammatory diseases(Composition): Ferrum phos,, Kali mur., Nat. Mur; Kali sulf., Natr. sulf.

Indications : Fevers; chills in the initial stages of all the inflammatory diseases; in quick, sudden swellings; in pneumonia. Pleurisy and other inflammatory affections that tend to suppuration.

12. Headache (Composition) : Ferrum phos., Natr. mur, Kali phos., Magn. phos.

Indications : Congestion, rush of blood to the head, neuralgia, relieved by heat and aggravated by cold, nervous, due to worry or sleeplessness, white tongue or sluggish liver; better in the open air, worse in a warm room, or in the evening.

13. Leucorrhoea (Composition) : Calc. phos, Kali sulf., Kali phos, Natr. mur.

Indications : All forms of leucorrhoea at puberty; during pregnancy and at the climacteric; also in general weakness and hysteria.

14. Measles (Composition) : Ferrum phos., Kali mur., Kali sulf.

Indications : Sneezing, eyes and nose waters, fever. Useful in all stages of the disease.

15. Menstruation troubles (Composition) : Calc. phos, Ferrum phos., Kali phos, Magn. phos., Kali sulf.

Indications : Menses painful and irregular, scanty and late in young women, Menses early, lasts too long and profuse in middle aged women.

16. Nervous exhaustion (Composition) : Calc. phos., Ferrum phos., Kali phos., Magn. phos, Natr. mur.

Indications : It is recommended for nervous exhaustion and fatigue from any cause; for general weakness of the heart, stomach and nervous system, sleeplessness.

17. Piles (Composition) : Calc. fluor., Kali phos, Ferrum phos., Kali mur.

Indications : An approved remedy against hemorrhoidal knots, all kinds of piles, external piles with stinging pains, Bleeding piles with or without pain.

18. Pyorrhoea (Composition) : Calc. fluor., Silicea, Calc, sulf.

Indications : Gums spongy, swollen; gums bleeding. Pus in the gums with foul breath.

19. Rheumatism tablets (Composition): Ferrum phos, Magn. phos, Kali sulf, Natr. sulf.

Indications : Shooting and stabbing pains in the joints of legs or arms, worse at night. Fever; swelling of parts; lumbago; sciatica; muscular rheumatism.

20. Skin diseases (Composition) Calc. fluor, Calc. sulf., Kali sulf., Natr mur., Natr. sulf.

Indications : Scurfy eruptions in head and face of children; eczema from uterine derangements; acne; pemphigus; herpes; erysipelas; crusta lactea; and similar eruptive diseases.

21. Teething troubles (Composition) Calc. phos, Ferrum phos.

Indications : When children are cross and obstinate, crying and weeping, these tablets help the cutting of teeth easily and quickly by supplying necessary salts. The appetite is improved and the digestion is stimulated. Removes griping.

22. Scrophula (Composition) Calc, phos., Ferrum phos., Kali, mur., Silicea.

Indications : Useful both in dry and suppurating scrofulous glandular abscesses. Covers almost all symptoms of the disease.

23. Toothache (Composition) Ferrum phos., Magn. phos., Calc, fluor.

Indications : Specially recommended in all neuralgic cases. Splendid effect in rheumatic toothache.

24. Tonic : Nerve and Brain (Composition) Calc. phos., Ferrum phos. Kali phos, Magn. phos, Natr phos.

Indications : A general tonic in chronic wasting diseases; in anæmia of of young and rapidly growing people; in women weakened by too frequent parturition; general debility and exhaustion with lack of vitality.

25. Acidity, Flatulence and Indigestion (Composition) Natr. phos., Natr. sulf., Silicea.

Indications : Gastric disturbances; acidity; flatulence; dyspepsia; acid, sour risings; feeling of weight in abdomen; bilious vomiting; flatulent colic; headache; jaundice.

26. Easy Parturition (Composition) Magn. phos, Calc. phos, Kali phos, Calc. fluor.

Indications : If these tablets are taken during the entire period of pregnancy, they will greatly relieve the pains of labour. They also greatly benefit the mother s general constitution and greatly assist in the development and the health of the child. These tablets also prevent miscarriage.

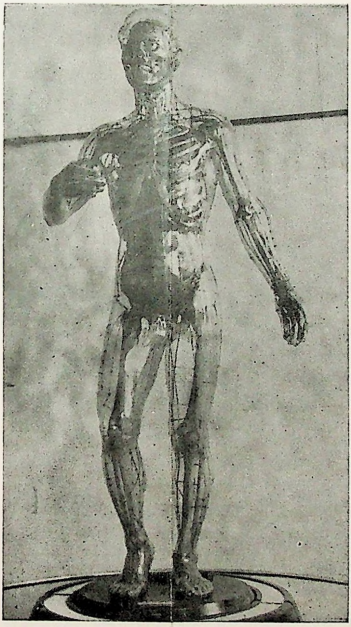
27. Vital Weakness (Composition) Natr. mur, Kali phos, Calc. phos,

Indications: Impotence, depression of sexual instinct; lassitude and general debility; emissions followed by trembling and weakness; prematurely old; tones up the entire sexual system.

28. General Tonic (Composition) : All twelve Tissue Remedies.

Indications : These tablets are a combination incorporating the twelve Tissue Remedies found in the human organism. They are of great service to those suffering from consumption and other debilitating diseases, to such as are recovering from fevers, pneumonia, diarrhoea, etc., as they help to build up the system by supplying the requisite nutrition. It may be taken by the weak and the aged as a tonic after meals. Habitual use of these tablets, during health, will keep off disease.

PRICE LIST



Office

INDIAN TRADING COMPANY

A MANUFACTURING AND SUPPLYING COMPANY OF MEDICAL AND ACUPUNCTURE ARTICLES

170/A, AMARENDRA SARANI (2nd Floor)

UTTARPARA ✪ HOOGHLY

Pin-712 258

CN 30/1/95

DESCRIPTION OF GOODS	QUANTITY	Rs.
Acupuncture Needles :		
1. DELUXE (Copper Handle)	a) Packet of 10	10·00
	b) Set of 20	25 00
2. DELUXE (Brass Handle)	a) Packet of 10	14·00
	b) Set of 20	34 00
3. SUPER (Entirely stainless steel)	a) Packet of 10	15·00
	b) Set of 20	35·00
4. EXTRA SPECIAL (Silver Handle)	a) Packet of 10	40 00
	b) Set of 20	84·00
5. SUPER EXTRA SPECIAL (No.—34 Entirely stainless steel)		
1/2" No.—34—G	a) Packet of 10	16 00
1" No.—34—G	b) Packet of 10	16 00

★ A Set of Contains—with one Plastic (Container)

1/2"	1"	1/5"	2"	2/5"	3"	
Nos. 4	6	6	2	0	2	(Nos, 20)

★ Cost of each Packet of any size is same.

★ A Packet of Contains same size and gauge. Ten Nedles.

Size & Gauge

1/2"	1"	1/5"	2"	2/5"	3"	4"
32 or 30G	30G	30G	30G	28G	28G	28G

Special Gauge Order must be supplied :

Assorted Needles :		Rs.
1. Press Needle Extra Special (Entirely stainless steel)	A Box of 10	11 00
2. Seven Srar Needle (Hammer)	A Set of 2	80 00
3. Coshmetick Needles	A Box of 10	11·00
Moxibustion :		
Moxa Sticks (Length 10 cm × dia 1/5 cm)	A Packet of 12	35·00

Acupuncture Electro Stimulator :

1. Deluxe Mini Model with Three Channels, A/C. D/C. in Battery with D/D Discount Control 6 (Six) Needles 1 (one) Stimulator. Rs. 600·00
2. Deluxe Mini Model with 2 (Two) Channels, A.C. D/C. in Battery with D/D Discount 1 (One) Stimulator. Rs. 450·00
3. Deluxe Special 5 (Five) Channels, A/C. D/C. and Battery with D/D Discount Control Contact 10 (Ten) Needles 1 (One) Stimulator. Rs. 1100 00
4. Special 6 (Six) Channels Stimulator, A/C, D/C and Battery with Discount Control, Contact 12 (Twelve) Needles, One Stimulator. Rs. 1200·00
5. 6 (Six) Channels Stimulator A/C, D/C, and Battety, D/D with Auto Control and with timer, musical and Physiotherapy System Electro-Stimulator (One) Rs. 1500·00
6. 10 (Ten) Channels. Electro Stemulator with A/C, D/C. D/D with Auto Control and with timer, musical and Physiotherapy System Electro-Stimulator with Point Ditacor (One) Rs. 8,000·00
7. Acupuncture Elector Eliminator Rs. 80·00

- Needle Applicator— One Rs. 120·00
- Needle Applicator (Full Set) Rs. 150·00
- Cune Meter One Rs. 130·00
- Deluxe Special Hammer, Seven Star with Plum Blossom—Sigle Set—One Rs. 120 00

8. T. E. N. S. Rs. 200·00

Books and Charts :

1. Non invastive Acupuncture (English) —By DR. MANIK HIRA NANDANI M.B.B.S., D.A.C., M.D , P.H.D. 350·00
2. Clinical Acupuncture (English)—India Pub. —By PROF. DR. L. N. KOTHARI 120 00
3. Anatomical Charts of Acupuncture Points and 14 Meridians (English)—China Pub. 275·00
4. Auricular Points Chart (Ear Points China Printed) 247·00
5. Acupuncture—(Text Book of Bengali) 50·00
6. Modere Acupuncture —By PROF. DR. C. L. NAGPAL 250·00

Medical Instruments

Stethoscope, B. P. Instruments, Glass Van Seriengo, Massager and Hitcum Vivrater Etce. Available.

Terms & Conditions

1. PAYMENT : In advance 25% of the total cost by M. O. or Draft and Balance at the time of delivery.
2. DELIVERY : Within two weeks upon receipt of order.
3. SHIPMENT : a) By V.P.P. or by Representative (within Calcutta and Burdwan)
   b) If paid advance in full, materials will be supplied by Registered Parcel (If order excesds Rs. 100/-)
4. POSTAGE : According to Postal charges of Post Office.
5. PACKING : 1% to 3 % according to volume of the Parcel.
6. All prices are subject to changes without prior notice.
7. All prices quoted here are in Indian Currency.
8. Discount will be given Rs. 2,000/- to above 5 %
9. This Price List becomes effective from 1st October 1994.
10. Discount will be given on Wholesale Purchase write for details.

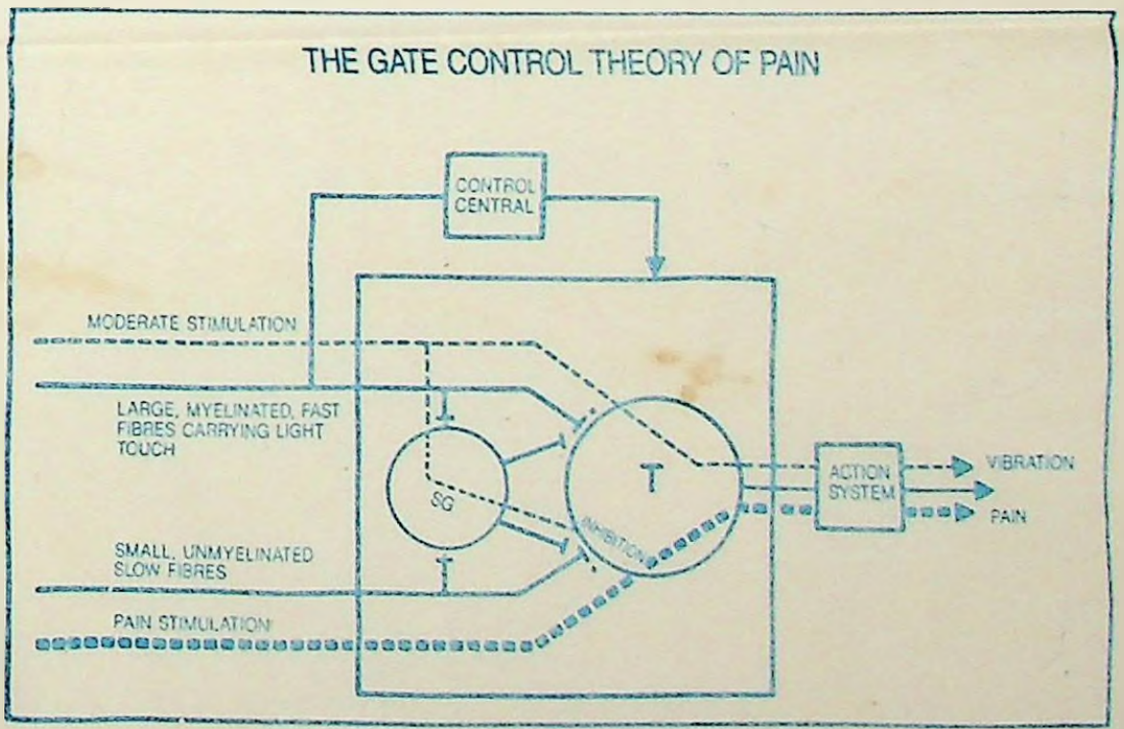
KODYS T.E.N.S.

THE DRUGLESS ELECTRONIC PAIN KILLER

MOST USEFUL IN CHRONIC PAINS

1. T. E. N. S. device stimulates the large diameter afferent A fibers. According to the gate control theory (Melzak and Wall 1965) the stimulation of large diameter afferent A fibers relieves pain.

2. With the proposal of the Gate Control Theory by Melzack and Wall in 1965, a rational basis for electro-analgesia was postulated. They produced evidence which showed the dull, slow, diffuse, burning pain is carried from the periphery by small, primitive, unmyelinated fibers, while the sensation of light touch is carried by large myelinated fibers. The sensory output carried along these two sets of fibers from a given location were modulated in the substantia gelatinosa of the dorsal horns within the spinal cord and acted upon each other as a negative feedback mechanism.



3. By forcing the large A fibers to carry light touch sensation by electrical stimulation of the area, pain signals from the C fibers were blocked even after the electrical stimulation stopped.

1. HOW DOES T. E. N. S. WORK?
2. WHAT IS GATE CONTROL THEORY?
3. WILL THE PAIN BE RELIEVED EVEN AFTER APPLYING T. E. N. S. ?

4. Transcutaneous Electrical Neuro Stimulation has several definite advantages when compared with other tests. It is non-invasive and suffers from few complications. Save for an infrequent occurence of aliergic reactions to electrode contact fluid, the only risk is that of electrical skin burn occuring when excessive electrical stimulation has been applied to a denavated or poorly inervated area of skin.

5. "The T. E. N. S. course of pain management may be much less expensive. Most portable T. E. N. S. units cost approximately $ 400. It is not uncommon for a patient to spend $ 2000 to $ 3000 yearly for the medications required for analgesics to sustain pain relief"

Page 42. Pain Control with T. E. N. S.
Robert A. Ersek M.D.

6. The efficacy of T.E.N.S. treatment depends greatly on the proper selection and placement of electrodes to ensure the most efficient modulation of the peripheral and central nervous system. The basis for proper electrode placement appears to rest in the proper evaluation of the dermatome/s in which the pain exists, so that trigger points within the involved dermatome/s can be coupled with the corresponding spinal cord segment level/s to influence the nervous system most effectively.

Random electrode placement has produced random results. It is important to emphasize that each professional who uses T. E. N. S. should duplicate or create a consistent, logical procedure for selecting electrode placement sites.

7. Electrical stimulation in the postoperative period for the prevention of various complications should become a strong and effective weapon in the hands of the surgeon.

Possibly, in major operations, many serious complications could be prevented by using this method even without additional drug therapy.

Electrical stimulation is very simple and safe to use, and no undersirable side effects were observed, nor are any to be anticipated in the future.

Dr. Roman Kurzbauer, M.D.

4. HOW SAFE IS T. E. N. S. ?
5. WHAT IS THE COST EFFECTIVENESS OF T. E. N. S. ?
6. HOW IMPORTANT IS THE ELECTRODE PLACEMENT?
7. WHAT IS THE STATUS OF T. E. N. S. IN TREATING PAIN DURING POST-OPERATIVE PERIOD ?

8. The effects of the therapy were estimated according to:

a. Decrease on healing of the ulcer.

b. Relief or alleviation from pain due to ulcers.

Decrease of the size of the ulcers was obtained after a few weeks. i.e. 15 to 25 sessions, by approximately 50% reduction in the initial size. This was more evident in men.

Healing of the ulcers was observed in 31 patients (out of 61) after a period of approximately 3 months.

Dr. Roman Kurzbauer, M.D.

9. Success and failure of T.E.N.S. treatment are indicated as relative to injury location and the type of pain perceived. Results indicate that pain at the site of injury is treated more successfully than radiating or central pain.

10. In one study of 20 patients suffering from myofacial pain dysfunction symptoms at Kimbrough Army Hospital, 16 patients reported "excellent". 2 reported "good", zero reported "fair" and 2 reported "poor" pain relief after stimulation. Of those aided by T.E.N.S., 40 percent felt relieved after a single application, while 90 percent were relieved after five applications.

11. During a six-month period in which 35 patients presented in the General Surgical clinic or Surgical Ward with low back strain, all achieved from T. E. N. S. therapy what they described as at least a 50% reduction in their pain. The duration of symptoms ranged from a few hours to 20 years; the degree of injury of trauma varied from pain resulting from vacuum cleaning, to automobile accidents, followed by two laminectomies in previous years. In many cases of low back pain of acute onset, with no previous history, of this type of complaint, the relief of pain was prompt and permanent. In other cases where the low back pain was preceded by a long history of multiple operations and failure of analgesics and tranquilizers, the pain relief would vary between several hours and several days.

When we treated patients with this problem, T. E. N. S. therapy supplanted the previous mode of treatment of one to two weeks of strict bed rest, traction, analgesics and tranquilizers.

Many patients reported that when their pain recurred a few days later, it was less severe than it has been prior to T. E. N. S. treatment. Of those patients who has temporary relief, the minimum duration of reaction was three hours. Those who received relief lasting for hours or days were treated again in the same manner, and many continued to return to the clinic for periodic treatments with the T. E. N. S. unit every three days.

8. HOW EFFECTIVE IS T. E. N. S. IN TREATING VARICOSE ULCER ?
9. WHAT IS THE EFFECT OF T. E. N. S. IN THE MANAGEMENT OF PAIN IN SPINAL CORD INJURED PATIENTS ?
10. WHAT IS THE EFFECT OF T. E. N. S. IN THE TREATMENT OF MYOFACIAL PAIN DYSFUNCTION SYNDROME ?
11. HOW EFFECTIVE T. E. N. S. IS IN LOW BACK PAIN ?

12. When the device was utilized more specifically in the Emergency Department with 36 patients with acuto symptoms (lasting less than three days), six of these with acute pain symptoms were admitted to the hospital for their presenting symptoms of pain or other diagnoses, usually trauma. Only one of these received no pain relief, nine achieved what they reported as between 50-75 percent relief, six estimated between 76 and 89 percent relief, and eight between 90 and 99 percent, while ten attained 100 percent relief of their pain.

13. Seven patients presented with torticolis, or acute cervical strain. One patient with acute cervical pain secondary to an automobile accident experienced an increase in pain as a result of T. E. N. S. treatment. One achieved between 50 to 75 percent relief of pain, two over 90 percent relief, and three experienced 100 percent pain relief.

14. The effect of T. E. N. S. in relieving pain and muscle spasm has often been very prompt and permanent. This is perhaps best shown in the cases of torticollis, where this form of treatment relieves pain, interrupting the pain-spasm-pain vicious cycle, allowing the patient full and voluntary control of his neck within a few seconds. Fifteen patients reporting on the telephone follow-up of this study said that their relief of pain or muscle spasm was permanent. One said the relief lasted 24 hours, and although some soreness returned, the patient still felt there was a 90 percent pain reduction. Another found some pain present on movement. This was a patient who had low back strain following the lifting of boxes, who initially reported a 50 percent reduction in pain after T. E. N. S. treatment. Follow-up five months later revealed this patient still has some pain upon movement.

The patient presenting with shoulder and arm pain after lifting, initially reported 95 percent pain relief, and a follow-up report stated the relief lasted for ten days. One patient with recurring pain in back following a fall, at first reported 80 percent reduction in pain, with relief lasting four days, and after a second treatment, relief was 100 percent and permanent. Another had relief for 48 hours, one for four days, another reported some soreness remaining.

15. According to various reports cited through out the current literature, an appreciable percentage of patients with chronic pain will be treated by this method alone, without the need of any additional therapy.

Boleslaw Rutkowski, M. D.

16. During the stimulation, the Patient feels only a slight pulsatile sensation at the site of the electrodes. A few cases have complained of some slight dizziness of very short duration, just after the session.

Many of our patients stated that their sleep was improved and they usually feel much relieved.

In cases with hypertension, a significant fall of the systolic blood pressure was noted in the majority of observed patients.

12. HOW EFFECTIVE T. E. N. S. IS IN PATIENTS WITH ACUTE SYMPTOMS OF PAIN ?
13. HOW EFFECTIVE T. E. N. S. IS IN TREATMENT OF PAIN DUE TO ACUTE CERVICAL STRAIN ?
14. WHAT IS THE EFFECT OF T. E. N. S. IN RELIEVING PAIN AND MUSCLE SPASM ?
15. WHAT IS THE POSITION OF T. E. N. S. IN THE TREATMENT OF CHRONIC PAIN?
16. WHAT IS THE SIDE EFFECT DURING TREATMENT OF CHRONIC PAIN?

17. 1. Classical Migraine

2. Cephalgia Vasomotorica

3. Cluster headache

4. Cervical syndrome

5. Combined headache

18. This very common disease, with acute attacks of pain, affects one or all three branches of the nerve. With electrical stimulation, the out look for these cases is often favourable.

19. *Pain due to the disease at all levels of the spine*, such as spondylitis or degenerative disc syndrome can be categorized as being potentially aided by electrical stimulation.

Any conditions such as tuberculosis or tumors of the spine were not treated in this manner.

20. The most promising results will be expected in chronic low back pain. When due to degenerative disc syndrome, the outlook could be as favourably high as 70% with good to very good results. The sessions must be continued for weeks or months. Initially, with these patients, we begin first daily, then weekly, with some having twenty-five and more sessions, although the average was twelve to fifteen sessions. Though even dramatic results could be observed, only the final results were evaluated.

Low back pain due to spondylitis is more difficult to be treated, more sessions are necessary, and the treatment may sometimes be continued indefinitely. Nevertheless, some 50% of the cases in our study will not need any more drugs during the treatment.

Patients operated on for herniated disc responded well to the therapy.

21. Any neuralgia is a suitable case for the stimulation. Other conditions can also be treated, such as arterial hypertension, insomnia, neurasthenia, etc., subject to further experiments and investigation. The drop of the systolic blood pressure as observed in hypertonic patients, opens new possibilities in this field. This, as a rule, should be carried out in a ward rather than in outpatient departments.

22. In cases where there is not complete remission of the symptoms, the treatment can be continued indefinitely, usually with intervals between the series of sessions. The physician will decide as to the length of the interval. So long as the patient benefits from the therapy, there is no limit of time and number of sessions to be applied. If relapses of pain should occur, as seen in trigeminal neuralgia or low back pain, the treatment will be performed as before, with the same expectation.

23. Phantom pain and causalgic-like syndromes have been extremely difficult to counteract on a non-invasive basis and their responses to TENS have been encouraging even though variable. It appears that more constant use, of the unit in causalgic and phantom pain syndrome is warranted in view of the persistent pain patterns that have developed possibly within sympathetic chains.

17. WHAT ARE THE KINDS OF HEADACHE THAT ARE TREATED BY T. E. N. S ?
18. HOW EFFECTIVE IS T. E. N. S. PRIMARY TRIGEMINAL NEURALGIA ?
19. HOW EFFECTIVE IS T. E. N. S. IN CASES OF SYMPTOMATIC RADICULITIS ?
20. HOW ABOUT CHRONIC LOW BACK PAIN ?
21. HOW TO TREAT NEURALGIAS OF OTHER SITES AND OTHER CONDITIONS ?
22. HOW LONG AND HOW OFTEN YOU USE T. E. N. S. IN CHRONIC PAIN SITUATION?
23. WHAT IS THE EFFECT OF T. E. N. S. IN PHANTOM PAIN ?

TRANSCUTANEOUS ELECTRICAL STIMULATION FOR ISCHAEMIC PAIN AT REST

Patients with critically ischaemic legs often develop severe continuous pain at rest. Pain relief is often provided with intramuscular injections of opiates, which can lead to excessive drowsiness and respiratory problems before major surgery. Transcutaneous electrical stimulation can provide effective relief in several chronic pain syndromes[1]; furthermore, electrical stimulation of the nervous system may affect blood flow to the extremities.[2] We report our initial findings of electrical stimulation on pain in patients with severe peripheral vascular disease.

PATIENTS, METHODS, AND RESULTS

Twenty consecutive patients who had had two weeks' continuous severe pain at rest in a critically ischaemic foot were allocated randomly (from a table of random numbers) to one of two groups within two hours of admission. One group received transcutaneous electrical stimulation for 48 hours and the other received sham stimulation. Both groups had equal access to intramuscular morphine 10 mg on demand if pain relief was inadequate. An index of ankle brachial systolic arterial pressure was measured with a Doppler probe before treatment. Pain was assessed every 12 hours on a standard 100 mm linear analogue scale[3]; patients were asked to record the average amount of pain experienced over each 12 hour period, and morphine requirements were noted. Two pregelled six inch electrodes were applied longitudinally to the thigh of the ischaemic leg, and transcutaneous stimulation was provided by a Wright Care transcutaneous electrical stimulation system (Dow Corning Wright, Berkshire). All patients had a short demonstration on the use of the device and were told that they might experience a tingling sensation. The light indicator on the stimulation device was covered by an opaque material, and the polarity of the batteries in the device was reversed for the patients receiving sham treatment.

Ten patients (mean age 64, range 44-75) received sham treatment and 10 (mean age 68, range 62-82) transcutaneous stimulation. There were four men and nine smokers in the control group and six men and seven smokers in the treatment group. Four patients in each group had had vascular surgery. In the control group (mean pressure index 0.16, range, 0-0.54) eight patients had severe ischaemic changes in the feet while seven patients in the stimulated group had ulceration of the toes or gangrene (mean pressure index 0.29, range 0-0.54; no significant difference). There was no significant difference in mean analogue scores for pain before randomisation (table). The mean of the four pain scores for each patient during treatment was 52.9 mm (range 15-5-82) in the sham group compared with 34.3 mm (range 11.3-53.5) in the stimulated group ($p = 0.06$, Student's test; 95% confidence interval −1.2 to 38.4). Patients receiving stimulation showed a trend towards lower linear analogue scores, which was significant at 24 and 36 hours (table). Six patients in the sham group compared with two in the stimulated group required supplementary analgesia ($p = 0.1698$, Fisher's exact test). The mean morphine requirements were 3 mg (range 0-20 mg) in the group receiving stimulation compared with a mean of 23 mg (range 0-60 mg) in the control group ($0.05 < p < 0.06$, Mann Whitney U test). No untoward side effects were noted. All patients underwent arteriography at the end of the study and reconstructive surgery during their admission.

Mean (range) linear analogue pain scores in millimetres

	Initial	12 h	24 h	36 h	48 h
Sham group	70 (30-100)	53 (15-100)	58 (20-99)	52 (12-83)	49 (10-91)
Stimulated group	72 (43-100)	44 (27-71)	29 (5-55)	35 (10-55)	30 (3-48)
Mann-Whitney U test	NS	NS	$p<0.02$	$p<0.05$	NS

COMMENT

Urgent revascularisation is essential in patients with critically ischaemic feet. While they are awaiting angiography and assessment of fitness for vascular reconstruction pain relief is often provided by the intramuscular injection of opiates, with the attendant risks of respiratory depression, drowsiness, and bronchopneumonia. Alternative methods of providing analgesia without these side effects—for example, epidural morphine[4]—have not gained widespread acceptance because of the technical skill that is often required. In our study transcutaneous stimulation was found to be simple, safe, non-invasive, and acceptable to both patients and nurses. It may be of value in the treatment of rest pain, producing good pain relief and reducing narcotic requirements for patients awaiting reconstructive surgery.

We thank Mr Gerald Fergusson, consultant surgeon, for allowing us to study patients under their care. Dr Gordon Murray, Lecturer in Medical Statistics, University of Glasgow, kindly gave statistical advice.

1 Miles J: Electrical stimulation for relief of pain. *Ann R Coll Surg Engl* 1984; 66: 108-12
2 Dooley DM, Kasprak M. Modification of blood flow to the extremities by electrical stimulation of the nervous system. *South Med J* 1976; 69: 1309-11.
3 Huskisson EC, Measurement of pain. *Lancet* 1974; ii: 1127-31.
4 Lemberger RJ, Layfield DJ, Hopkinson UR, Makin GS. Epidural morphine for ischaemic rest pain *Br J Surg* 1981;68-367.

(Accepted 29 April 1987)

(FROM BMJ VOL. 295 1 AUG. 1987, 300)

Peripheral Vascular Unit, Royal Infirmary, Glasgow G 31 2 ER

R J CUSCHIERI, CHM, FRCS, senior registrar
J G POLLOCK, MB, FRCS, consultant in administrative charge
C G MORRAN, MB, FRCS, lecturer
Correspondence to: Mr Cuschieri.

Courtesy — Selections from British Medical Journal Vol. 3 November 1987

T. E. N. S. IN SPORTS

T. E. N. S. was approved for use at the Olympic Games in Montreal in 1976. Large companies employ it in their physical therapy department or clinics for analgesia in on the spot job related injuries.

T. E. N. S. USEFUL IN .....

- ☐ Chronic strain and sprain of the cervical
- ☐ Diabetic neuropathy
- ☐ Peripheral neuropathy
- ☐ Phantom limb syndrome
- ☐ Bursitis
- ☐ Intractable migraine
- ☐ Trigeminal neuralgia
- ☐ Low back pain
- ☐ Post operative pain and ileus
- ☐ Hemiplegia
- ☐ Paraplegia
- ☐ Pancreatitis pain
- ☐ Orthopedic procedures of the extremities
- ☐ Thrombophlebities
- ☐ Dental procedure
- ☐ Adhensive capsulitis
- ☐ Intractable cancer pain
- ☐ Sports medicine
- ☐ Job-related injuries

..... AND MULTIPLE NEEDS OF PAIN RELIEF

Kodys Product Range :

- ★ Electrocardiograph (ECG)
- ★ Foetal Doppler
- ★ Vascular Doppler (Blood flow detector)
- ★ Vascular Doppler Recorder (Vaslab)
- ★ ★ Pocket T.E.N.S. (Electronic Pain Killer) Patient Model
- ★ ★ Table Top T.E.N.S. (Electronic Pain Killer) Hospital Model
- ★ Holter Monitor First Ever Solid State Full Disclosure System
- ★ Ambulatory ECG Solid State Silent Ischemia Monitor
- ★ Functional Neuromuscular Stimulator
- ★ Micro-Electro-Therapy apparatus (M.E.T.)
- ★ Spares : Paediatric Electrodes, Clip-on Electrodes Ultrasound Jelly or ECG Jelly.

Kodys Sales & Service Network :

Bangalore, Bhopal, Bombay, Coimbatore, Ernakulam, Hyderabad, Kanpur, Madurai, New Delhi, Vijayawada, Visakhapatnam.

Kody Medical Electronics Ltd.

Central Marketing Division :

No. 2, 12th East Street
Kamaraj Nagar
Thiruvanmiyur
Madras-600 041

Telephone : Off : 410764
Fact : 415960
Telegram : KODYELEC
Telex : 41-6546 KODY IN

Factory :

Type II/37, Second Phase,
Dr. V.S.I. Estate,
Thiruvanmiyur,
Madras-600 041.

T. E. N. S. IN SPORTS
T. E. N. S. USEFUL IN ..... MULTIPLE NEEDS OF PAIN RELIEF
KODYS PRODUCT RANGE
KODYS SALES & ... NETWORK

For SPT

'THENNAMARAKKUDI' OIL.

REGISTER NO. 89873. (EXTERNAL USE.)

METHOD OF USING. In cases of fracture of bones of the arms or the legs, dislocation and crashing of bones, bandage the arms or legs and pour the oil on it. For sprain in the leg, in the hip suppressed breathing and similar diseases, heat the oil in a spoon and give a massage and after three hours give hot water fomentation. For swelling contusion, beginning of swelling in the leg, enlarged testicles, thickening of the nerves, chest pain, side pain, weakness in the legs heat the oil and massage. Give warm boiled rice fomentation. Also give hot water fomentation.

For itches, Boils, ringworm and eczema, clean the portion well. Massage the portion with the oil in the morning. After three hours wash with soapnut powder and take hot water bath. For unhealed cuts or wounds, burns or wounds caused by poisonous bites, cuts, etc., soak a piece of cloth in the oil and apply it to the part.

N. B:- This oil can be used for animals also similarly. In serious cases, drink hot water and take a warm water bath.

Sole Manufacturers :-

R. S. KRISHNA & CO , MAYAVARAM.

తెన్న మరక్కుడి నూనె

రిజిష్టరు నెం 89873.

ఎముకలు విరుగుటకు కీళ్లు తొలగుటకు చేతులు, కాళ్లు బెణకులకు అన్నివిధములైన వాతము నొప్పులకు వూపిరి పట్లు గాయమూచే వాచుట రక్తకురుపులకు కాలువాపు, మూత్రజిబ్బులకు, రొమ్మునొప్పులకు, దొక్కనొప్పులకు, చేతులు, కాళ్లు, నొప్పులకు యీ నూనెను వేడిచేసి, వాగ్గా మర్దనచేసి వేడి అన్నముతో, వా తడము యివ్వవలెను.

అరని రణములు, విషము వలన కలుగు కాటులకు, నిప్పు కాల్పులచే కలుగు పుండ్లుఁ గాయములు, దురదపుండ్లు మొదలగువాటికి నూనెను దూదితో ముంచి రుద్దవలెను; సమస్తవిధములైన తీటగెజ్జి లు, తామర పొడలు, మున్నగువాటికి వుదయమున నూనెను రాచుకొని, సాయంత్రం, వేడినీళ్లలో సబ్బు రుద్ది స్నానము చేయవలెను; పసుపుల సమస్త పుండ్లకును, వుపయోగించిన తక్షణమే గుణము తెలియును. ప్రతి కిరాణా అంగళ్లలోను, మందుల షాపులలోను దొరకును.

తయారుచేయువారు:

ఆర్. యస్. క్రిష్ణా అండుకో,

మాయవరం.

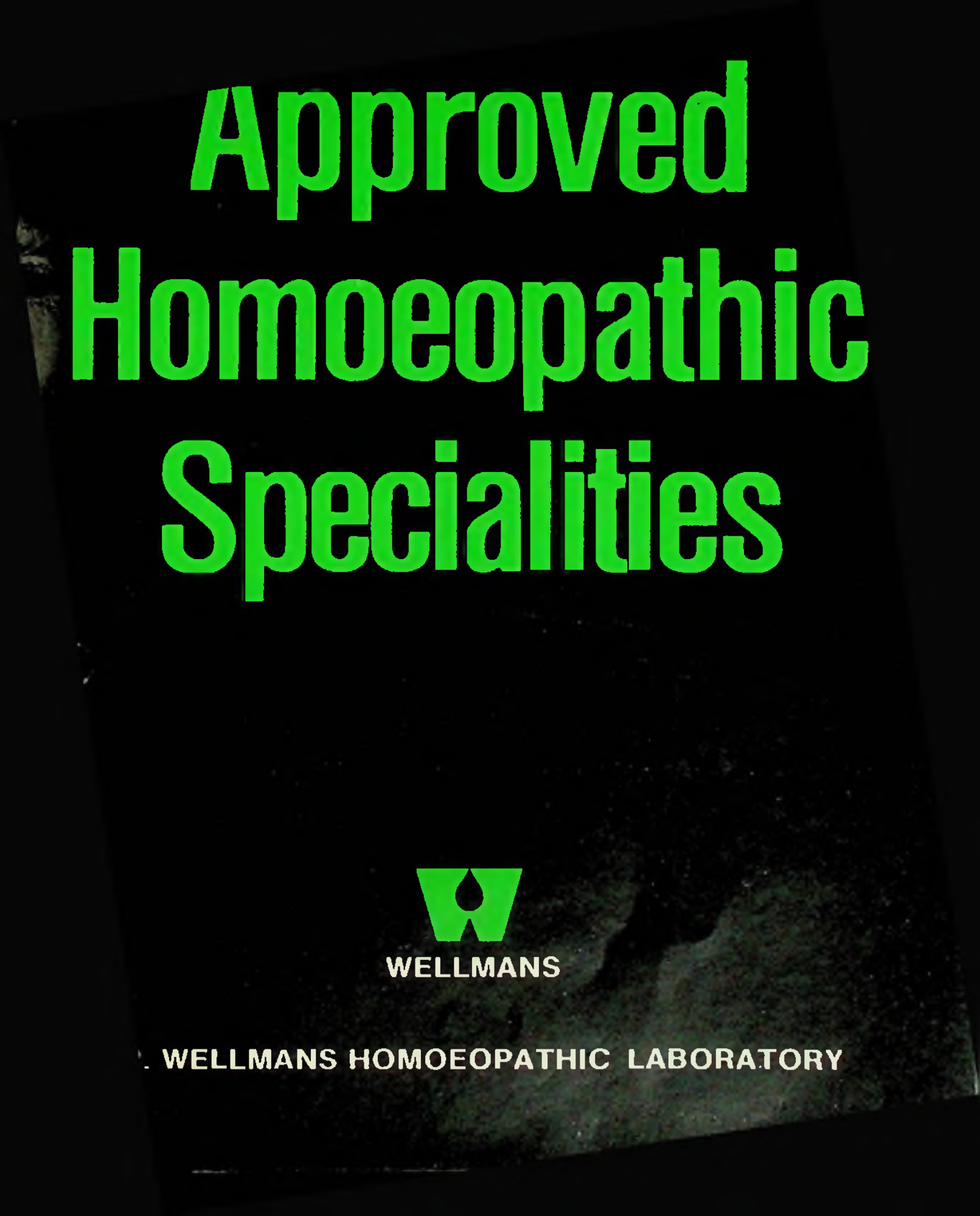
Manufacturers :-

R. S. KRISHNA & Co.

MAYAVARAM.

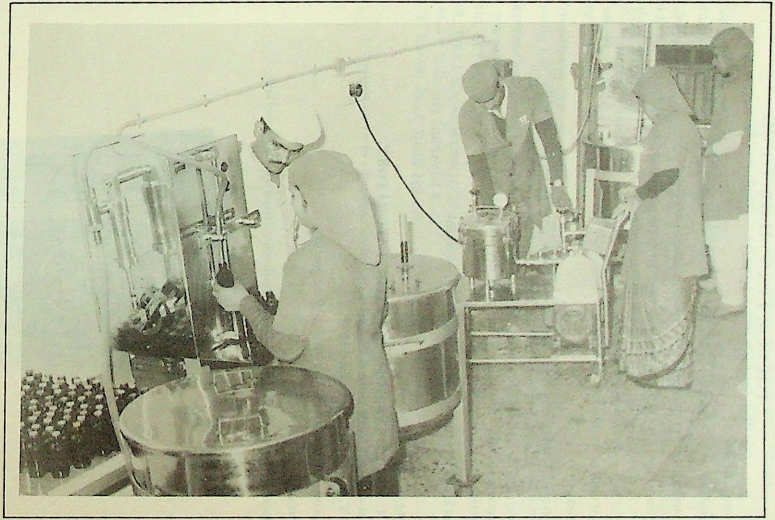
Backiyam Power Press, Mayuram.

Approved Homoeopathic Specialities



WELLMANS

WELLMANS HOMOEOPATHIC LABORATORY



Safe Homoeopathic preparation—No Side Effects

FOLLI—CLEAN : HAIR TONIC

Composition:

Internal: AC. Phos 6x, Lycopodium 3x, Jaborandi 2x, Weisbaden 3x

External: China Q. Arnica Q. Jaborandi Q. Cantharis Q.

Indications: An excellent tonic to help strengthen roots of hair. Prevents hair loss due to mental strain or prolonged illness. Very useful against dry scalp, dandruff split hair and premature greyness. Especially curative in helping to regenerate dead hair roots.

Dosage:

Internal — Children 5 drops diluted with half table spoon of water twice daily.
Adults 10 drops diluted with halftablespoon of water twice daily.

External — Add 15-20 drops of FOLLI-CLEAN in a cup of luke warm water, and massage gently into hair. Wash and dry hair after 10-15 minutes. Use any oil preferably coconut based oil.

Packing: Internal — 30 ml., External — 30 ml.

Mfd. in India by:
DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM—4, Dilkhush Industrial Estate,
G.T. Karnal Road, Delhi-110 033.

Recomended course: Minimum 10-12 weeks

Duration of pack: App. 15 days

Information for use by a Registered Medical Practitioner, Hospital or Laboratory only

Safe Homoeopathic Preparation — No Side Effects

AU–CARE—SKIN CONDITIONER

Composition: Berb. Aqua Q. Kali Brom 2x, Pulsatilla 3x, Calc. Carb 3x, Thuja 5x, Mangifera indi 2x, Excipients q.s.

General Indications: Black heads, Acne, Pimples, Dry skin, Allergic condition, Skin rashes, especially recommended for dark rings around eyes.

Contra-Indications: None.

Dosage: 10 drops diluted with half table spoon water 3 times a day or as directed by the physician.

Precautions: Do not apply any medicated cream or lotion on the affected areas during use of AU—CARE. Clean the skin only with fresh water and a mild soap.

Presentation: 30 ml.

Mfd. in India by:
DR. WELLMANS HOMOEOPATHIC LABORATORY.
AM—4, Dilkhush Industrial Estate,
G.T. Karnal Road, Delhi-110 033.

Information for use by a Registered Medical Practitioner, Hospital or Laboratory only

Safe Homoeopathic Preparation—No Side Effects

IMPROVEX — A PEADIATRIC TONIC

Composition: Calc Phos. 6x, Ferr Phos. 3x, Kali Phos 4x, Chamomilla 5x, China 3x, Iodium 3x, Cup Oxid Nig 3x, Cypripedium 3x, Chelone 3x, Cataria Nepeta 2x, Excipients q.s.

Indications: Griping problems, Diarrhoea, worm infection, Delayed & Problematic dentition, Pyrexia, Nausea, Retarded growth, Intolerance of milk, Weak memory and Iron deficiency.

Infants 6 months to 1 year 5 drops twice daily. 1 year to 3 years 5 drops four times daily. 3 years and above 10 drops four times daily or as prescribed by physician.

Contra-Indications: Nil

Presentation: 30 ml.

Mfd. in India by:
DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM—4, Dilkhush Industrial Estate,
G.T. Karnal Road, Delhi-110 033.

Information for use by a Registered Medical Practitioner, Hospital or Laboratory only

Safe Homoeopathic Preparation—No Side Effects

STIMASIAC

Composition: Testiculus 8D, Prostrate 6D, Damiana Q, Acid Phos 2D, Cydonia Vulgaris 2D , Ginseng Q Selenium 3D, Crataegus 2D, Excipients q.s.

Dr. Wellman's STIMASIAC is a safe non steroid aphrodasiac, especially formulated to give the optimum stimulus to the metabolic activities of the human body. STIMASIAC a research product of Dr. Wellmans Homoeopathic Laboratory, is absolutely free from any side effects. Stimasiac is a well tolerated combination of drugs for functional and idopathic sexual problems.

Indications: Functional impotency, psychic, idiopathic impotency, premature or delayed ejaculation, lack of retention, sexual neurasthenia, sexual and senile debility, lack of libido in male painful coitus and deficient spermatozoa.

Dosage: 15-20 drops diluted with half tablespoon of water taken twice daily preferably evening and night, keeping a time difference of at least one hour between the first and second dose.

Duration of pack approx. 15 days. Recommended course minimum 6 to 8 weeks.

Presentation: 30 ml. concentrated drops.

Mfd. in India by:
DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM—4, Dilkhush Industrial Estate,
G.T. Karnal Road, Delhi-110 033.

Information for use by a Registered Medical Practitioner, Hospital or Laboratory only

Safe Homoeopathic Preparation—No Side Effects

ANTI—TOX

Composition: Strychnium Nit. 3D, Avena Sat. Q, Querecus, Gland Spiritus 2D, kalmegh Caladium 3D, Daphne Indica 2D Excipients q.s.

Dr. Wellman's ANTI-TOX is an ideal homoeopathic formula to reduce the toxic and after effects of nicotine and alcohol. It also acts as an effective antidotal drug to reduce the toxicity generated by other allied strong medications. Regular use of ANTI-TOX has proven to reduce the craving for alcohol and tobacco.

Dosage: 15-20 drops diluted with half tablespoon of water taken twice daily in acute cases to be taken four times daily.

For optimum results use the medicine regularly, two doses a day for at least 3-4 months then reduce the dose to once in a day and gradually to a minimum of two doses in a week. The medication may be discontinued by increasing the period of days without which the patient shows no reversal of state.

Duration of pack approx. 15 days. recommended course minimum 3 to 4 months.

Contra-Indications: Nil

Presentation: 30 ml.

Mfd. in India by:
DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM—4, Dilkhush Industrial Estate,
G.T. Karnal Road, Delhi-110 033.

Information for use by a Registered Medical Practitioner, Hospital or Laboratory only

Safe Homoeopathic Preparation—No Side Effects

ELIXIR VITA-8—RESTORATIVE TONIC FOR ALL AGES

Composition: Avena Sativa Q, China 2x, Ginseng Q. Hydrastis Q. Alfalfa Q. Acid formic 4x, Lecithin 2x, Coca Q. Ashoka 2x, Manganum Acet. 2x Excipients q.s.

Indications: Restorative tonic, recommended in convalesence, lack of appetite, anaemia and especially for conditions of fatigue and impaired digestion.

Dosage: *Adults:* One table spoon full thrice daily preferably 1/2 hour before meals. *Children:* One teaspoon full thrice daily half an hour before meals. Or as directed by the physician.

Presentation: (Syrup base) 180 ml.

Mfd. in India by:

DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM-4, Dilkhush Industrial Estate,
G.T. Karnal Road, Delhi-110 033.

Information for use by a Registered Medical Practitioner, Hospital or Laboratory only

Safe Homoeopathic Preparation—No Side Effects

LEMA—FORTE: SLIMMING DROPS

Composition: Fucus V2x, Phyt, Berry 3x Amm, Brom 2x, Puls Q & Thyroid 6x.

'Lema Forte is the research product of Dr. Wellmans Homoeopathic Laboratory for slimming.

Being over weight is not only a disease but a grave danger to your life. Among the dangers associated with excess weight are heart disease, diabetes, gallstones, respiratory disorders and degenerative changes in the joints especially the hips and knees. Fat men have a higher incidence of certain cancers including those of the colon, rectum and prostrate. Over weight women run a greater risk of developing malignant tumors of the ovaries and uterine lining and after menopause, of the breasts.

When is your weight dangerous: 1) Men: Whose waists are bigger than their hips fall into the danger zone. 2) Women: Whose waist and hip measurement differ by more than 85%.

These are danger zones: You should start being careful not after you come into the danger zone but much before.

Storage of Fat: Men normally carry their extra weight in the upper torso or around the abdomen. Women collect excess weight below the waist in thighs, fannies and hips. Fat deposited in these parts is more difficult to remove Change in body metabolism especially after pregnancy is normally attributed to this.

LEMA—FORTE: Is an ideal combination to fight against the deposition of unwanted fat.

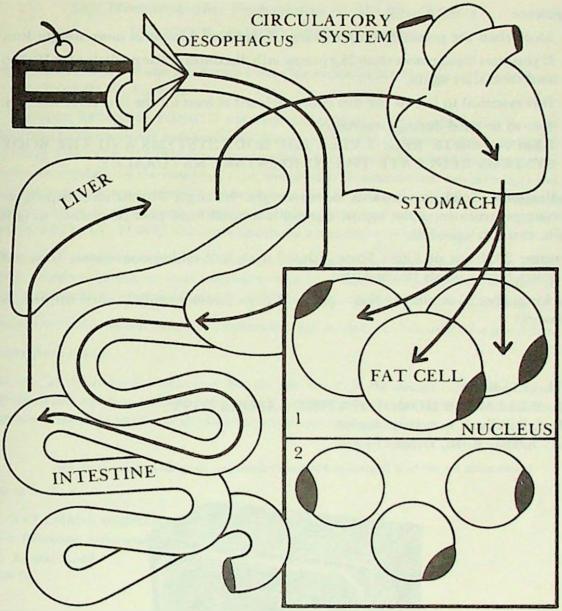
LEMA—FORTE: Exerts a two Pronged attack. First it changes the B.M.R. (Basic Metabolic Rate) to release fat more quickly, secondly it helps to regularise functioning of the thyroid gland which secretes Iodine, malfunctioning of this gland is the root cause of weight gain.

LEMA—FORTE: is thus a complimentary drug combination to remove the excess fat in a natural and safe way — the homoeopathic way.

NO CRASH DIETS—: No strenous exercises, Lema-Forte regulates the body systems in such a way that once a patient reaches the desired weight he/she may discontinue the medication without any reversal of the procedure. The patient is cured almost permanently and may only stick to the recommended Diet Chart enclosed in the Carton as closely as possible. Observe the following instructions during use of LEMA-FORTE:

1. Check your weight only once in a month.
2. Use the same machine every time.
3. Check your weight at about the same time preferably in the morning after breakfast.
4. Check your weight wearing minimum of clothing and without shoes.
5. Do Not TRY & LOSE MORE THAN 1—2kg in a month. The more quickly you lose weight the more the chances are that you will gain it back within a few months. GRADUAL WEIGHT LOSS IS PERMANENT WEIGHT LOSS.

HOW FAT FORMS



Fats stored in the body can be made from any food component (carbohydrates, proteins or fats). When food is eaten, it travels to the stomach and intestines. Enzymes break down the food into glucose,amino acids and minute droplets of fats. The fats travel to the liver, where they are processed. From the liver, fats enter the circulatory system, where they can be used for energy by many organs. Excess fats will be stored in the fat cells 1. When more energy is needed, fats are released. If the need continues, the cells will shrink but the nucleus remains the same 2.

6. TRY and remain physically active—even a small increase in physical activity does much to retard weight gain, a brisk walk for 5-10 minutes in a day is best recommended.

Caution:

1. More than the prescribed use of Lema Forte does not mean more weight loss.
2. If you start losing more than 2kg in a month discontinue the medicine for 10 days and then start again.
3. It is essential to follow the diet chart enclosed at least for the first three months.
4. Not to be used during pregnancy.
   LEMA—FORTE REGULATES THE BODY SYSTEMS AND THE BODY SYSTEMS REGULATE THE FOOD INTAKE NATURALLY.

Indications: Tendency towards excess weight, lethargic disposition, disproportionate protrutions of the figure, especially around hips, post pregnancy weight gain, easily fatigued.

Dosage: 20 drops of Lema Forte; diluted with half tablespoon water. Take ten minutes before meals thrice daily.

Packing: 30cc. Duration of pack approx. 8 days. Recommended-course minimum 12 weeks

Mfd. in India by:
DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM-4, Dilkhush Industrial Estate,
G.T. Karnal Road, Delhi-110 033

Information for use by a Registered Medical Practitioner, Hospital or Laboratory only

Safe Homoeopathic Preparation — No Side Effects

LEUCO F. TONIC - FOR LADIES

Composition: Abroma Radix 3D, Saraca Indica 1D, Helonias 3D, Hydrastis 2D, Viburnum Op. 3D, Pulsatilla 5D, Excip. q.s.

Dr. Wellmans LEUCO F. TONIC is a Homoeopathic Tonic of choice for ladies, removes fatigue and pains associated with hormonal changes in the body; and brings about a feeling of well being. LEUCO F. TONIC is a proven remedy for leukorrhea and related discharges, very effective in regularizing the menstrual cycle and curative in amenorrhea, menorrhalgia and dysmenorrhea. Also acts powerfully to remove sensation of weakness and feeling of dragging, weight in the sacrum and pelvic region and cures backaches associated with metabolic changes. LEUCO F. TONIC also cures spasmodic and congestive affections.

Indications: leukorrhea , menstrual disorders - dysmenorrhea, amenorrhea, pain in pelvic region, diarrhea during or after menses, menopausal disturbances, nervous debility in women, backache and menorrhalgia. An ideal Tonic in conditions of general fatique.

Dosage: One teaspoon full twice daily preferably after meals or as directed by the physician.

Presentation: 125ml.

Caution: 'In the prescribed dosage it has no side effect'. If the dosage is doubled to one tablespoon full and repeated four times daily it may lead to abortion. To be administered to pregnant ladies only under the guidance of a regd. medical practitioner.

Mfd. in India by:

DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM-4, Dilkhush Industrial Estate,
G.T. Karnal Road,
Delhi-33.

Information for use by a registered medical practitioner, hospital or laboratory only.

Safe Homoeopathic Preparation—No Side Effects

RHEUMA-SOL

Composition: Acid Formic 3D, Colchicin 5D, Rhus Tox 3D, Natrum Salicylicum 3D, Ledum Pal 3D, Dulcamara 3D, Lithium Carb 5D, Gelsemium 3D, Ulmus 5D, Excip. q.s.

Dr.Wellmans RHEUMA-SOL exerts an analgesic and anti-inflammatory action. RHEUMA-SOL is very useful for treatment of rheumatoid arthritis, osteoarthritis and allied disorders. RHEUMA-SOL is also specifically indicated in such conditions as spondylitis, arthralgia, myalgia and other non specific conditions requiring mild analgesia.

Indications: Rheumatoid arthritis, osteoarthritis, spondylitis, acute articular and pe articular disorders, pain and muscle spasms associated with truama, lumbago, inflammatory and degenerative processes, neuritic vasomotor pain and sciatica.

Dosage: One teaspoon full diluted with quarter cup of luke warm water twice daily or as directed by the physician.

Presentation: 125 ml.

Contra-Indications: Nil

Mfd. in India by:

DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM-4, Dilkhush Industrial Estate,
G.T. Karnal Road,
Delhi-33.

Information for use by a registered medical practitioner, hospital or laboratory only

Safe Homoeopathic Preparation—No Side Effects

RAUWOLFIA FORTE

Composition: Rauwolfia Serpentina 2D, Viscum Alb 3D, crataegus. 0x 2D, Arnica M 3D, Valeriana 3D, Mellilotus 3D, Cactus 3D, Excip. q.s.

Dr. Wellmans RAUWOLFIA FORTE is an excellent remedy to cure all grades and varieties of hyper tension. RAUWOLFIA FORTE Acts upon the muscles of the heart and arteries and brings about normal constrictions acting effectively in gradually lowering blood pressure. RAUWOLFIA FORTE has a marked effect on violent palpitation of heart and laboured breathing. RAUWOLFIA FORTE also shows effect in insomnia of aortic sufferers, anaemia and irregularity of heart.

Indications: All grades and varieties of hyper tension, chronic coronary insufficiency, follow up treatment of myocardial infarction. Very helpful in gradually lowering blood pressure.

Dosage: One teaspoon full diluted with quarter cup water to be taken twice daily. In acute cases; 5-10 drops to be taken directly without water; or as directed by the physician. The supervision of a physician is most essential in acute cases. RAUWOLFIA FORTE is helpful is sustaining the patient till the doctor arrives.

Presentation: 125 ml.

Contra-Indications: Not to be administered to patients having history of depression or low blood pressure.

Mfd. in India by:

DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM-4, Dilkhush Industrial Estate,
G.T. Karnal Road,
Delhi-33.

Information for use by a registered medical practitioner, hospital or laboratory only

Safe Homoeopathic Preparation—No Side Effects

ASTHA CURE — EXPECTORANT.

Composition: Yerba Senta 3D, Lobelia Inflata 3D, Ephedra Vulgaris 5D, Spongia 3D, Senega 3D, Cactus 3D, Aralia racemosa 5D, Stramonium 5D, Corallium 5D, Excipients q.s.

Dr. Wellmans ASTHA-CURE is a well balanced, clinically tried formula for bronchial asthma, chronic bronchitis and emphysema. ASTHA-CURE is a broncho dilator with mucolytic expectorant action which provides relief from Complicating conditions of allergic alveolitis, allergic rhinitis and bronchospastic disorders. ASTHA-CURE clears dryness of all air passages, hoarseness of speech and short respiration. ASTHA-CURE also removes constant constriction of chest and corrects constant sneezing coryza, whooping cough and wheezing cough.

Indications: A broncho dilator with mucolytic expectorant action, clears viscid purulent sputum in acute and chronic asthma, bronchitis, complicating conditions of bronchial asthma, bronchopneumonia, whooping cough, allergic rhinitis, chronic and obstructive pulmonary emphysema, bronchospastic disorders, hoarseness of speech, wheezing cough and suffocative cough.

Dosage: One teaspoon full twice daily. In acute cases the dosage may be increased to one tablespoon full three times daily or as recommended by the physician.

Presentation: 125ml.

Contra-Indications: Nil

Mfd. in India by:

DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM-4, Dilkhush Industrial Estate,
G.T. Karnal Road,
Delhi-33.

Information for use by a registered medical practitioner, hospital or laboratory only

Safe Homoeopathic Preparation—No Side Effects

DIGE—COM

Composition: Piper Nig. 2D, Nux Vom 3D, Thymus 5D, Asafoetida 3D, Hydrastis 3D, Lycopodium 2D, Corriandum Sativa 5D, Carbo Veg 5D, Excipients q.s.

Dr.Wellmans DIGE-COM is a scientifically developed formula for various types of stomach disorders. DIGE-COM reduces flatulence of both nature, i.e., rolling flatulence and hysterical flatulence. DIGE-COM also reduces distention of stomach, violent gastralgia, burning in stomach and diaphragm region. DIGE-COM removes dyspepsia due to farinaceous and fermentable food regurgitation of food.

Indications: Acidity flatulence, dyspepsia, gastritis, colic, gastro cardiac syndrome, hyper acidity syndromes resulting from erratic food/alcohol intake,distention of stomach and forcible eructation of gas, pulsation in pit of stomach, violent gastralgia, obstinate constipation and related bowel disorders.

Dosage: Adults one teaspoon full, children half teaspoon twice daily after meals or as directed by the physician.

Presentation: 125 ml.

Contra-Indications: Nil

Mfd. in India by:

DR. WELLMANS HOMOEOPATHIC LABORATORY,
AM-4, Dilkhush Industrial Estate,
G.T. Karnal Road,
Delhi-33.

Information for use by a registered medical practitioner, hospital or laboratory only


DR. WELLMANS HOMOEOPATHIC LABORATORY
AM 4, DILKHUSH INDUSTRIAL ESTATE, G.T. KARNAL ROAD, DELHI-33

Dr. WELLMANS
HAIR CARE PRODUCTS

Black K1
ARNICA
HAIR OIL
150 ml

ARNICA AMLA
HERBAL
SHAMPOO
150 ml
300 ml
450 ml

ARNICA
SPECIAL
HAIR OIL
150 ml

CANTHARIDIN
SULPHIDE
SHAMPOO
60 ml
200 ml

LEHER SERIES

PURE
FLOWER
SHAMPOO
100 ml

ARNICA
SHAMPOO
(with Amla)
100 ml

ARNICA
HENNA
SHAMPOO
100 ml

ARNICA
HAIR OIL
(With Vitamin E)
100 ml

ARNICA
BLACK
SHAMPOO
100 ml

Manufactured at :

DR. WELLMANS HOMOEOPATHIC LABORATORY
AM-4, Dilkhush Industrial Estate
G.T. Karnal Road, Delhi-110 033

Marketed by :

DR. WELLMANS
HOMOEOPATHIC LABORATORY LIMITED
AM-2, Dilkhush Industrial Estate
G.T. Karnal Road, Delhi-110 033

Produced by Admon Advertising ph. 7116910

VHAK

Price List

HERBO-MINERAL MEDICINES

MARCH 1983

J.& J.DeChane
Laboratories Private Limited
Hyderabad -500 001, INDIA

TERMS OF BUSINESS

This Price List is issued under the provisions of the Drugs (Price Control) Order 1979.

The Prices to the Retailer are inclusive of excise duty. Sales tax and other imposts will be charged extra. The prices indicated under column 'Retail Price' are those applicable to consumers and are inclusive of excise duty. Sales tax and other imposts will, however, be charged extra.

Prices are liable to be altered without notice.

The Drug Schedule classifications have been made according to the best of our knowledge for the benefit of customers, but no responsibility can be accepted for their correctness.

Parcels are despatched by V.P. Post, lorry or by rail. Please mention the name of your destination clearly. Parcels by V.P.P., Lorry or Rail are sent on receipt of an advance of 25% of the value. Packing and transit charges are extra in all cases.

Goods are carefully packed before they leave our warehouse. No claim for breakage and loss in transit will be entertained. However if expressly authorised, goods will be insured in transit at customer's cost.

Our representatives are not authorised to ask for or receive cash or bearer cheques for any purpose and the company will not accept any responsibility for such payments made.

Booklets on "Restoration of Lost Health" are available in 14 languages at 50 P. each. These booklets are intended to correct certain fallacies of Nutrition and General Principles of life. For details please refer to our Guide which is available in English and 13 other languages.

(THIS SUPERSEDES ALL OUR PREVIOUS PRICE LISTS)

ALLOPATHIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Excise duty Leviable Rs. P.	Price to the Retailer inclusive of Excise duty Rs. P.	Retail Price inclusive of Excise duty Rs. P.
ALBO-SANG* Powder					
Calcium Lactate, Calcium Dibasic Phosphate, Magnesium Phosphate, & Asgandh (Withania somnifera)		170 g 450 g	0-81 1-98	8-05 19-68	9-04 22-09
ALBO-SANG* Tablets					
Calcium Lactate Calcium Dibasic Phosphate, Magnesium Phosphate & Asgandh (Withania somnifera)		bottle of 60 tablets bottle of 250 tablets	0-32 0-95	3-14 9-40	3-52 10-55
DECIL* Tablets					
Acetylsalicylic Acid, Paracetamol & Caffeine		box of 10 strips of 10 tablets 500 tablets	1-17 4-30	11-58 42-76	13-00 48-00
ENTROPS* Liquid					
(For external use only)					
Phenol, Eucalyptus Oil & Camphor		bottle of 30 ml. bottle of 125 ml.	0-36 1-08	3-56 10-69	4-00 12-00
FERROUS FUMARATE Tablets IP		50 tablets 500 tablets	— —	1-76 10-56	2-00 12 00
HEALAN* Powder (For external use only)					
Iodoform, Alum, Boric Acid & Haldi (Curcuma longa)		bottle of 10 g bottle of 110 g.	0-18 0-67	1-79 6-71	2-01 7-53

* Regd. Trade Mark

ALLOPATHIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Excise duty Leviable Rs. P.	Price to the Retailer inclusive of Excise duty Rs. P.	Retail Price inclusive of Excise duty Rs. P.
HORMOPIRIN* Tablets					
Paracetamol, Quinine Sulphate, Salicylamide, Arusha (Adhatoda vasica) Gulancha (Tinospora cordifolla) & Madar (Calotropis gigantea)		box of 10 strips of 10 tablets	0-99	9-84	11-05
		500 tablets	3-60	35-78	40-17
MAGNINE* Tablets					
Magnesium Trisilicate, Dried Alum. Hydrox. Gel. & Ext. Belladonna Dry.		box of 10 strips of 10 tablets	0-58	5-81	6-52
		500 tablets	1-62	16-10	18-08
RUBZON* Ointment (For external use only)					
Menthol, Camphor, Eucalyptus Oil Turpentine Oil & Methyl Salicylate.		tube of 15 g.	0-25	2-46	2-76
SKINMENT* Ointment (For external use only)					
Benzoic Acid, Salicylic Acid, Ichthammol, Dithranol, & Sulphur Sublim.		tube of 15 g.	0-29	2-90	3-26
		tube of 80 g.	0-81	8-05	9-04
TAXINE Tablets					
Ext. Cascara Sagrada (Rhamnus Purshianus), Phenolphthalein, Sana (Cassia angustifolia), & Kaladana (Ipomoea hederacea)		box of 10 strips of 10 tablets	1-08	10-69	12-00
		500 tablets	4-48	44-54	50-00
PIPARID* Tablets					
Piperazine Phosphate & Ext. Senna.		box of 10 strips of 10 tablets	0-81	8-05	9 01

* Regd. Trade Mark

ALLOPATHIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Excise duty Leviable Rs. P.	Price to the Retailer inclusive of Excise duty Rs. P.	Retail Price inclusive of Excise duty Rs. P.
BENZOMONES* Injection	C, E				
Arusha (Adhatoda vasica) Datura (Datura metel) Asgand (Withania somnifera) & Ephedrine hydrochloride		box of 10 x 1 ml. amps.	0-49	4-92	5-52
DIASYN* Injection	C				
Kurchi (Holarrhena antidysenterica) Balaharde (Terminalia chebula) Bael (Aegle marmelos) & Dar-hald (Berberis aristata)		box of 10 x 1 ml. amps.	0-90	8-94	10-04
		box of 50 x 1 ml. amps.	4-05	40-25	45-19
IOBINE* Injection	C				
Madar (Calotropis gigantea) Salsa (Hemidesmus indicus) Chirata (Swertia chirata)		box of 10 x 1 ml. amps.	0-90	8-94	10-04
		box of 50 x 1 ml. amps.	4-05	40-25	45-19
IOQUIN* Injection	C				
Nim (Melia azadirachta) Chirata (Swertia chirata) & Quinine bihydrochloride		box of 10 x 1 ml. amps.	0-49	4-92	5-52
		box of 50 x 1 ml. amps.	2-34	23-26	26-11
NERVOPLEX* Injection	C				
Balatagra (Valeriana wallichii) Methi (Trigonella foenum-graecum) & Asgand (Withania somnifera)		box of 10 x 1 ml. amps.	0-90	8-94	10-04

* Regd. Trade Mark

ALLOPATHIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Excise duty Leviable Rs. P.	Price to the Retailer inclusive of Excise duty Rs. P.	Retail Price Inclusive of Excise duty Rs. P.
REMORIN Injection Chirata (Swertia chirata) Datura (Datura metel) Kurchi (Holarrhena antidysenterica) Rauwolfia (Rauwolfia serpentina)	C, E, H,	box of 10 x 1 ml. amps.	0-90	8-94	10-04
TOOTH POWDER		50 g.	0-24	3-11	3-50

* Regd. Trade Mark

AYURVEDIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Price to the Retailer Rs.	P.	Retail Price Rs.	P.
BIO-SAL* Liquid Dill Oil Pipli (Piper longum) Ind. Valerian (Nardostachys jatamansi) Balaharde (Terminalia chebula) Sonth (Zingiber officinale) Bach (Acorus calamus) Revandchini (Rheum webbianum) Glycyrrhiza (Glycyrrhiza glabra) Ajwan (Ptychotis ajowan) Talisparra (Abeis webbiana)		bottle of 100 ml.	3-52		4-00	
BRAHAMDINE* Tablets Lodhra (Symplocos racemosa) Ashok (Saraca indica) Asgandh (Withania somnifera) Balatagra (Valeriana wallichii) Pila dhatoora (Argemone mexicana)		box of 10 strips of 10 tablets	8-80		10-00	
CHESOL* Oil (For external use only) Rati (Abrus precatorious) Sufedrai (Brassica campestris) Lalmirchi (Capsicum annum) Ghikanvar (Aloe barbadensis)		bottle of 30 ml. bottle of 125 ml.	3-52 10-56		4-00 12-00	
CHINIUMCO* Tablets Dalchini (Cinnamomum zeylanicum) Mainphal (Randia dumetorum) Revandchini (Rheum webbianum) Kalikatuki (Helleborous niger) Babunkephool (Matricaria chamomilla)		box of 10 strips of 10 tablets	8-80		10-00	

* Regd. Trade Mark

AYURVEDIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Price to the Retailer Rs. P.	Retail Price Rs. P.
DANGINE* Tablets Phitkari, Arusha (Adhatoda vasica) Nala (Lobelia nicotianaefolia) Dudhi (Euphorbia pilulifera)		box of 10 strips of 10 tablets	8-80	10-00
DESMA* Tablets Huma (Ephedra gerardiana) Arusha (Adhatoda vasica) Meradu (Polygala chinensis) Nala (Lobelia nicotianaefolia) Dudhi (Euphorbia pilulifera)		box of 10 strips of 10 tablets	8-80	10-00
DIASYN* Tablets Kurchi (Holarrhena antidysenterica) Bael (Aegle marmelos) Sonegeru (Silicate of alumina and Oxide of iron) Balharde (Terminalia chebula) Dar-hald (Berberis aristata)		box of 10 strips of 10 tablets bottle of 250 tablets	8-80 15-84	10-00 18-00
GASTROMONE* Tablets Revandchini (Rheum webbianum) Balaharde (Terminalia chebula) Sounf (Foeniculum vulgare) Aunla (Phyllanthus emblica)		bottle of 50 tablets	3-96	4-50
GRANDI-CO* Tablets Arjuna (Terminalia arjuna) Asgandh (Withania somnifera) Punarnava (Boerhaavia diffusa) Khurasani ajvayan (Hyoscyamus niger)		bottle of 50 tablets	3-96	4-50

* Regd. Trade Mark

AYURVEDIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Price to the Retailer Rs.	P.	Retail Price Rs	P.
HEMOPLEX* Tablets						
Kiryat (Swertia chirata) Salsa (Hemidesmus indicus) Pila dhatoora (Argemone mexicana) Madar (Calotropis gigantea) Asgand (Withania somnifera) Gandak		bottle of 50 tablets	3-96		4-50	
HERBITARS* Tablets						
Chirata (Swertia chirata) Manjit (Rubia cordifolia) Sana (Cassia angustifolia) Saunf (Foeniculum vulgare) Bhringraj (Eclipta alba)		box of 10 strips of 10 tablets 500 tablets	7-04 22-00		8-00 25-00	
HERBITARS* Syrup						
Chirata (Swertia chirata) Manjit (Rubia cordifolia) Sana (Cassia angustifolia) Saunf (Foeniculum vulgare) Bhringraj (Eclipta alba)		bottle of 100 ml.	4-84		5-50	
HERBO-SULPH* Tablets						
Gandak, Haldi (Curcuma longa) Madar (Calotropis gigantea)		box of 10 strips of 10 tablets bottle of 250 tablets	8-80 15-84		10-00 18-00	
IOBINE* Tablets						
Brahmi (Hydrocotyle asiatica) Chirata (Swertia chirata) Salsa (Hemidesmus Indicus) Gandak		box of 10 strips of 10 tablets bottle of 200 tablets	8-80 13-20		10-00 15-00	

*Regd. Trade Mark

AYURVEDIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Price to the Retailer Rs. P.	Retail Price Rs. P.
KOFLYN* Tablets				
Arusha (Adhatoda vasica) Dudhi (Euphorbia pilulifera) Huma (Ephedra gerardiana) Jethimadh (Glycyrrhiza glabra) Meradu (Polygala chinensis) Nala (Lobelia nicotianaefolia)		box of 10 strips of 10 tablets bottle of 250 tablets	8-80 15-84	10-00 18-00
KYNOTOMINE* Tablets				
Revandchini (Rheum webbianum) Balharde (Terminalia chebula) Kalikatuki (Helleborus niger) Punarnava (Boerhaavia diffusa) Bhringraj (Eclipta alba) & Gandak		box of 10 strips of 10 tablets 500 tablets	8-80 28-16	10-00 32-00
KYNOTOMINE* Syrup				
Revandchini (Rheum webbianum) Balaharde (Terminalia chebula) Kalikatuki (Helleborus niger) Punarnava (Boerhaavia diffusa) Bhringraj (Eclipta alba)		bottle of 100 ml.	5-28	6-00
MEDITAB* Tablets				
Arusha (Adhatoda vasica) Lasun (Allium sativum) Nala (Lobelia nicotianaefolia) Dudhi (Euphorbia pilulifera) Kapardika Bhasma (Calcined cowries)		bottle of 20 tablets	1-76	2-00

*Regd. Trade Mark

AYURVEDIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Price to the Retailer Rs. P.	Retail Price Rs. P.
SAL PHOS* Tablets				
Revandchini (Rheum webbianum) Balharde (Terminalia chebula) Jeera (Cuminum cyminum) Sonth (Zingiber officinale) Chitrak (Plumbago zeylanicum) Kanphul (Taraxacum officinale)		box of 10 strips of 10 tablets	8-80	10-00
		bottle of 250 tablets	15-84	18-00
SENZINE* Tablets				
Sonth (Zingiber officinale) Asgandh (Withania somnifera) Lasun (Allium sativum) Pila Dhatoora (Argemone mexicana) Gokhru (Tribulus terrestris)		box of 10 strips of 10 tablets	8-80	10-00
		bottle of 60 tablets	4-84	5-50
SPOLAX* Granules			7-04	8-00
Spogel (Ispaghulae testa) Gum Tragacanth Ext. Sana Saunf (Foeniculum vulgare) Jeera (Cuminum Cyminum)		HD Polythene pack of 75 g.	[illegible]	[illegible]
		HD Polythene pack of 200 g.	[illegible] 16-28	[illegible] 18-50
TOOTH POWDER		[illegible] 50 g.	[illegible]	[illegible]
TURAICO* Tablets				
Turai (Luffa amara) Kababchini (Cubeba officinalis) Punarnava (Boerhaavia diffusa) Gokhru (Tribulus terrestris) Kanphul (Taraxacum officinale)		box of 10 strips of 10 tablets	8-80	10-00
		bottle of 250 tablets	15-84	18-00
VITAL ESSENCE Tablets				
Chotachand Balatagra Asgandh Khurasani ajvayan		box of 10 strips of 10 tablets	8-80	10-00
		bottle of 250 tablets	15-84	18-00
MEDICINE CHEST Tablets				
PEOPLE'S MEDICAL SERVICES (Set of 8 remedies)		box of 8 strips of 10 tablets	7-30	8-30
		8 bottles each of 250 tablets	118-80	135-00

* Regd. Trade Mark

HOMEOPATHIC

Name, Type and Composition	Drug Schedule	Specification of the pack	Price to the Retailer Rs.	P.	Retail Price Rs.	P.
AGARCO* Tablets						
Tr. Agaricus Q, Tr. Aethusa Q & Tr. Lilium Q		bottle of 50 tablets	3	52	4	00
AMYGLIA Tablets						
Tr. Lilium Q, Glonoinum 3 x & Natrum Nitrosum 3 x		bottle of 50 tablets	3	52	4	00
AURATINUM* Tablets						
Aurum muriaticum 3 x Tr. Pulsatilla Q & Tr. Thuja Q		box of 10 strips of 10 tablets	8	80	10	00
ZAHER-CO Tablets						
Lachesis 6 x Tuberculinum 6 x		bottle of 30 tablets	0	88	1	00

* Regd Trade Mark

J.& J.DeChane

Laboratories Private Limited

Hyderabad -500 001, INDIA

Telegram : "Herbomino"
Hyderabad.

Telephone : 57431 (2 lines)
53533
57648

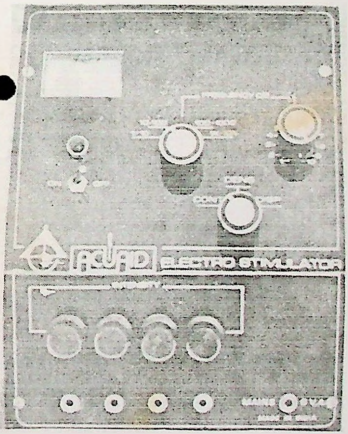
BRANCH OFFICES

Sevaniketan, Sir J. J. Road
Byculla, Bombay-400 008.

22, Netaji Subash Marg,
New Delhi-110 002.

Stockists throughout India.

PRICE LIST



Regd. Office :- Phone : 334551

ACUAID ELECTRONICS

Asarawa Chakla, Ahmedabad-380 016.
Gujarat (INDIA)

1. EIGHT CHANNEL ELECTRO STIMULATOR FITTED IN VIP BRIEF CASE

Electrostimulator is a multipurpose acupuncture therapy apparatus which transmits various kinds of pulsating currents of different frequencies and intensities through the acupuncture needles to human body.
The VIP Stimulator is having ... ...

Point Detector (Acuscope)

It detects the acupuncture point accurately. For detection of points, connect the detector wire plug to the probe socket by plugging the test probe used for tracing points and the metal electrode is to held by patient. When test probe touches Acupuncture points which are low resistant point you can immediately hear the voice Po-Po-Po- in loud speaker. The pilot lamp is also lighted brightly when the acupuncture point is detected.

Eight Channels

This stimulator has got eight seperate channels and it has different eight controls. So that at a time 16 points can be stimulated.

Auto - timer

Imported Mechanical timer - Racer fitted in stimulator, so you can select the time range upto 0 to 60 minutes. And after fix time which you have set, it gives rings so that you can off the stimulator & Treatment. First you have to rotate the knob of timer upto 60 and than set the arrow upto your required time.

Micro - Ampear Meter

By separate keys you can detect how much micro-ampear-Current is passing in patient's body

Battery Indicator

It indicates the life span of Battery.

Eliminator

Stimulator runs on either 4 battery dry cells of 1.5 Volt (total 6 Volt) or you can directly put eliminator cord in mains of 230 Volts and autometically battery connection will disconnects. No scope for short-circuit or current shock.

Frequency of Four Rnages

There are four ranges to selects the frequencies 0 to 10,000. You can adjust it with 2 controls exactly. So you can use the stimulator for various diseases and also for Acupuncture Anaesthesia.

Different Type of Wave Pattern

The stimulator is giving various types of waves like continuous, dense and disperse and saw tooth etc.

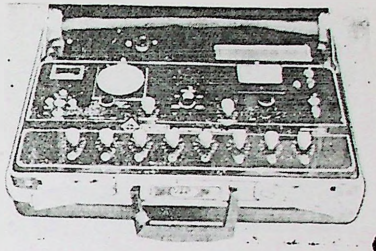
Loud Speaker

which you can hear the constant sound during stimulation. You can also off it.

The most importent feature of the stimulator is nicely fitted in VIP travellite Brief Case (original) so it is portable and there will be the space for putting Electrode wires and needle boxes and spirit bottle.

There are two types of stimulators Eight channel.

'A' Type as mention above ₨3200/=-
'B' Type as above except ₨2500/=-
(Microamper Meter & Eliminator)



2. Six Channel Stimulator With Point Detector ₨1400/= -

Six Channel Stimulator with point detector is having also Battery indicator, Both battery and electric supply facility and loudspeaker.

3. Four Channel Stimulator ₨1000/=

This is 8"X6"X3" in size having battery indicator and also having both supply mains & battery.

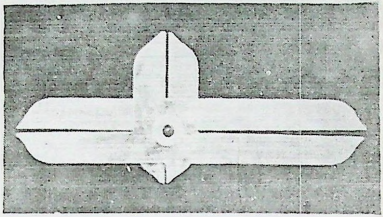
4. Point Detector (Acuscope) Rs. 250/-

With battery indicator, sound and light arrangement for detection of acupuncture point exactly.

5. Cunometer (Can Caliper) ₨ 40/=

This is very useful device for finding out 'exact' location of acupuncture point. As you know in acupuncture the unit of measurement is "T-Sun", or "bodyinch" which is variable in every patient and measurement to be taken according to patient's own body. This device is made in such a fashion that if you measure one T-Sun distance with width of patient's thumbs, you will have four different types of measurements by other ends of device that is 0.5 T-Sun, 1.5 T-Sun and 2.0 T-Sun

German Silver needle = Rs 2/ Pc



Acupuncture Needles

We are supplying all type of acupuncture needles having pure stainless steel (SS Japan) surgical wire of gause 28 and 30 sizes which are unbreakable and the sharpness of the point of needles are of very high quality which are diamond polished and checked at high temperature.

1. Pure Silver Needles
   All the sizes from 0.5 to 5.0 T-Sun and with or without head — Rs. 3.75/pc.
2. Copper Handle Needle — Rs. 1.00/pc.
3. Brass Needle — Rs. 1.25/pc.
4. Stainless Steel Needle (from single wire) — Rs. 2.25/pc.
5. Silver Coated (Original Copper) Needle — Rs. 2.00/pc.
6. Body Press Needle — Rs. 2.00/pc.
7. Ear Press Needle (Thron type) — Rs. 2.00/pc.
8. Cosmatic Needle — Rs. 2.00/pc.
9. Seven Star Needle — Rs. 45.00/Pair
   (1 Pair) Mainly used for the skin disease, Bronchial asthma, Scalp acupuncture, etc.
10. Moxa Rolls (4.5" long) — Rs. 5.00/each

☐ We are also supplying all kinds of acupuncture books, charts etc. of India and abroad.

☐ Please ask for any detail regarding acupuncture. We are giving minimum 1 years complete gaurentee of 'acuaid' products on manufacturing side.

☐ Coloured photographs of 'acuaid' products are available for the training centres or for the hospitals.

☐ We can held exhibition and demonstration of acuaid products during period of training batch, Acupuncture Diagnosis and treatment camp, seminar or conferences.

☐ Our all products are being used and recognised by many doctors and Training Centres in India and abroad.

TERMS AND CONDITION

1. Payment

In advance 25 % of total amount by M. O. or Bank Draft in favour of 'Acuaid Electronics' Ahmedabad-380 016. (Gujarat) and balance at the time of delivery.

2. Delivery

Maximum within 15 days after booking the order.

3. Shipment

By Regd. Post, Parcel or by V.P.P.
Bank through or by Road transport (if facilities is available at Doctor's place)
Bank through is convient & cheaper on both the sides.
By our representative if convinent.

4. Postage

Exactly according to the postal charges of post-offices.

5. Packing

1. to 3 % according to the volume of parcel
Write for details

We are at your service and thankful to you.

Acuaid Electronics

KALPATARU

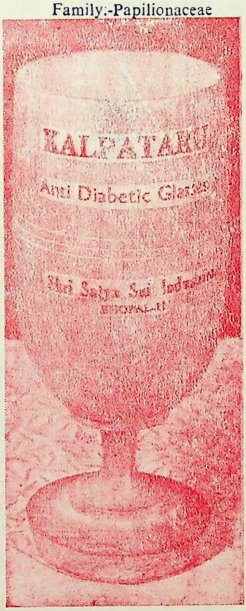
ANTI-DIABETIC

GLASSES

Made from :

Pterocarpus Marsupium Roxb

Family:-Papilionaceae



Marketed by : (For : South India & Goa)

SONA ENTERPRISES

484, I block 2nd cross

3rd Stage, West of Chord Road

BANGALORE-79 (KARNATAKA)

Mfg. By: **Shri SATYA SAI INDUSTRIES**

BHOPAL 462011 (M. P.)

Gram—**KALPATARU**

Registered with :

D. I. C. Govt. of M. P. No. 10/44/01865

M. P. S. H. C. Board. S. H. B./WA/33/79

Kalpataru Glasses

An aqueous infusion of this wood is said to be of use in Diabeties and water stored in vessels made of this wood is reputed to have antidiabetic qualities. Tests on mice and rabbits with alcohol and aqueous extracts of heart wood are said to have shown hypoglycaemicaction probably by hindering the absorption of glucose in the intestine (Trotter 1944, 150. Ojha, Indian Journel phan 1949, 11, 188, Gupta J med 1963, 51, 716, shah Ibid 1967, 55, 167. Joglekar Indian phisiology 1959, 3, 76. Vanoshadhi Nirdeshika 254 Dr. Ram Sushil Shingh, Medicinal plants-118 Dr. S K. Jain Director-incharge Botonical Survey of India Calcutta.)

Instructions :

(1) Keep water in the glass for minimum 18 to 24 hours before use.

(2) Drink the water early in the morning empty stomach regularly for two months.

(3) Before actually starting the use of **Kalpataru** glass, it would be proper to have the blood and urine sugar examined and results recorded. Then continue the use of glass for two months recording the results of blood & urine sugar weekly. This would assure you that the percentage of sugar is going down steadily to normal. If the diabeties is in the preliminary stage the glass can be used only once a day. If [illegible] in advanced stage it should be used twice daily.

(4) This is purely an Ayurvedic remedy for the treatment of Diabeties and there should be no gap, left once the use of this **Kalapataru** glass is started and it can be used throughout the year in all seasons.

(5) It would be safe to keep the glass inside in an almirah always to ensure freedom from atmospheric influences and also to avoid cracks in the surface of the glass.

(6) After 15 days the internal surface of the **Kalpataru** glass should be scrapped weekly by knife and it would be fit to change the glass after using for two months.

Note :- Avoid heavy non-vegetarian food during the period of use for quicker relief.

ADVERSE DRUG REACTION MONITORING OF CIPROFLOXACIN IN PEDIATRIC PRACTICE

S.C. Karande
N.A. Kshirsagar

ABSTRACT

Ciprofloxacin, a fluoroquinolone antibacterial agent, is not recommended in pediatric population on account of its possible adverse effect on growing cartilage. It is being commonly used for variety of infections in children in our country and very little information is available on the risks involved in its use.

A questionnaire was sent to 750 pediatricians in the last week of November 1990, to retrospectively judge over the previous 2 month period the extent of its use and identify the adverse drug reactions (ADRs). One hundred and fifty-four pediatricians replied, of which 147 had prescribed ciprofloxacin in a total of 3341 patients under 18 years of age, enteric fever being the commonest indication for its use. One hundred and fifty-nine ADRs were reported in 104 (3.1%) patients. They were: gastrointestinal in 50% of these 104 patients, CNS in 23%, skin and allegic in 19.1%, musculoskeletal in 8.6%, hematological in 3.8%, CVS in 2.9% and nephrological in 0.9% cases. Of 159 ADRs, 8 (5%) were severe, 76 (47.8%) were moderate and 75 (47.2%) were mild. Therapy needed discontinuation in only 9 (0.3%) patients. Two new ADRs were identified, viz., sudden death after intravenous ciprofloxacin and sinus nodal arrest causing bradycardia.

Key words: *Ciprofloxacin, Adverse Drug Reactions, Enteric Fever.*

The Drug Controller of India, Ministry of Health and Family Welfare, has recently started 6 Adverse Drug Reaction Monitoring (ADR) Centres, ours being the only one in Maharashtra. Unfortunately, the concept of ADR reporting is still new in India, inspite of its immense need(1). One of the main objective of this project is to identify ADRs occurring to new drugs being used in our own population for diseases endemic in India(1).

With the recent emerging problem of multiple drug resistant enteric fever(2), ciprofloxacin (CF) is being used widely, even in pediatric patients. Concern over possible joint damage is the reason that quinolones, *viz.*, nalidixic acid, norfloxacin are not recommended for rountine therapy of infections in children(3). Ciprofloxacin (CF) has been used for treating enteric fever(4) and its use in children may be ethically justified for multiple drug-resistant enteric fever as a life-saving measure.

Material and Methods

This was a retrospective survey of CF use and ADRs to CF in pediatric practice in Western India (Maharashtra). The mode of survey was a questionnaire printed on a self-addressed inland letter sent to 750 pediatricians in medical colleges and private practice in the last week of November 1990. A letter which was enclosed with the question-

From the ADR Monitoring Centre, Department of Pharmacology, Seth G.S. Medical College and K.E.M. Hospital, Parel, Bombay 400 012.

Reprint requests: Dr. (Mrs) N.A. Kshirsagar, Associate Professor of Pharmacology, Seth G.S. Medical College, Parel, Bombay 400 012.

Received for publication: February 26, 1991; Accepted: October 17, 1991

naire explained the need to identify ADRs to CF in actual clinical practice. A short list of common ADRs to CF were also supplied, *viz.*, (*a*) nausea, abdominal discomfort, headache, and dizziness, (*b*) skin rashes, photosensitivity reactions, (*c*) arthropathy in immature animals, and (*d*) inhibition of theophylline metabolism.

The survey was intended to collect retrospective data and to be practicable, and to get a good response it was kept simple. The information sought for included (*a*) Number of cases treated with CF in last 2 months, (*b*) Indications for using CF (*e.g.,* enteric fever.....cases, PUO..... cases any other.....cases), (*c*) Did any ADRs occur to CF ?, (*d*) If ADRs did take place, further details, were asked for, *viz.*, diagnosis of illness, age/sex of child, description of ADR; whether ADR was certain, probable or possible; and whether ADR was mild, moderate or severe. The terms, certain (*i.e.,* ADR reappeared on rechallenge with drug after initially stopping drug), probable (*i.e.,* ADR disappeared on stopping drug, but rechallenge not done) and possible (*i.e.,* ADR suspected but did not disappear on stopping drug or when follow up was inadequate) were clearly explained in the questionnaire.

This retrospective survey on extent of use and ADRs occurring to CF has been analyzed and rare ADRs noted. Whenever an interesting and rare ADR was reported, further details were asked for from the concerned pediatrician.

Results

By the end of January 1991, of 750 pediatricians 154 (20.5%) filled in the questionnaire and mailed the inland letter back to us. Of 154 pediatricians, 147 (95.5%) had prescribed CF and only 7 (4.5%) had not used this new drug. One hundred and one (68.7%) reported no ADRs with CF in their clinical practice, while 46 (31.3%) did report ADRs to CF.

CF was prescribed to treat 3341 patients, under 18 years of age. Their clinical diagnosis were enteric fever (2792 patients), PUO (278 cases), bacillary dysentry (134 cases), pneumonia (24 cases), multiple abscesses (18 cases), UTI (15 cases), pyogenic meningitis (6 cases), septicemia and upper respiratory tract infection (5 cases each), neonatal septicemia, malignancy with neutropenia and acute non-tuberculous cervical lymphadenitis (4 cases each), osteomyelitis (3 cases), burns (2 cases), and septic arthritis, cholera, chronic diarrhea, and ventriculitis (1 case each). In 43 patients treated with CF no diagnosis was mentioned.

Of 3341 patients treated with CF, ADRs were observed in 104 patients, *i.e.,* in only 3.1% of patients. In these 104 patients who developed ADRs, the adverse reactions noted were: gastrointestinal in 52 (50%), CNS complaints in 24 (235), skin and allergic manifestations in 20 (19.1%), musculoskeletal in 9 (8.6%), hematological in 4 (3.8%), CVS manifestations in 3 (2.9%) and 1 (0.9%) developed a nephrological adverse reaction (*Table I*).

A total of 159 ADRs were reported in 104 patients, of which 11 (6.9%) were certain, 103 (64.7%) probable and 44 (22.7%) possible (*Table I*). One neonate had a sudden death immediately after a dose of intravenous ciprofloxacin. This severe ADR, like an anaphylactic reaction, could not be labelled as certain, probable or possible. Of the total 159 ADRs reported 8 (5%) were severe, 76 (47.8%) moderate and 75 (47.2%) were mild in their clinical intensity (*Table I*). Therapy with CF needed discontinuation in only 9 (0.27%) patients, *viz.*, in 2 due to severe vomiting and diarrhea, 1 due to marked nausea, severe epistaxis in 1,

TABLE I—*Summary of ADRs to Ciprofloxacin Reported*++

System	Certain	Probable	Possible	Severe	Moderate	Mild
(A) *GIT*						
Nausea	1	19	7	1	16	10
Vomiting	–	20	1	2	13	6
Diarrhea	–	6	1	2	1	4
Abdominal discomfort	–	10	19	–	5	24
Hematemesis	–	–	1	–	–	1
Abdominal distention	1	2	1	–	2	2
GI Bleeding	1	1	–	–	1	1
(B) *CNS*						
Headache	2	9	2	–	6	7
Dizziness	1	2	2	–	3	2
Irritability/Restlessness	1	4+2 *	–	–	4	3
Tremors	–	1 *	–	–	–	1
Depersonalization	1	2	–	–	3	–
Insomnia	–	3	–	–	3	–
(C) *Skin & allergic*						
Rash	1	3	6	–	5	5
Pruritic rash	–	3	–	–	–	3
Photosensitive rash	–	2	–	–	2	–
Anaphylaxis	?	–	–	1	–	–
Angioneurotic edema	–	1	–	–	–	1
Hot flushes	–	1 *	–	–	–	1
Rigors and itching after IV dose	1	–	–	–	1	–
(D) *Musculoskeletal*						
Arthralgia	–	5	2	–	4	3
Myalgia (cramps)	–	1	–	–	1	–
Generalized weakness	–	1	–	1	–	–
(E) *Hematological*						
Drop in Hb	–	1	–	–	1	–
Epistaxis	1	–	2	1	2	–
(F) *CVS*						
Cardiac failure	–	1	–	–	1	–
Sinus nodal arrest	–	1	–	–	1	–
Phlebitis at IVsite	–	1	–	–	1	–
(G) *Kidney*						
Nephritis	–	1	–	–	–	1

N.B.: * Patients also on aminophyline.

++ 104 patients experienced at least one ADR, but many experienced more than one, hence total number of ADRs is 159.

moderate pain in hip joint in 1, angioneurotic edema in 1, cardiac failure in 1, and in 1 who developed sinus nodal arrest.

Discussion

The problem of chloramphenicol resistant strains of *S. typhi* has been reported since 1972 from different parts of the world(5). Unfortunately, due to indiscriminate use of chloramphenicol, ampicillin and cotrimoxazole for trivial infections like common cold and gastroenteritis, this new problem of multiple drug-resistant *S. typhi* has emerged(2). Recently, similar experience has been reported from Shanghai, China, and Wang *et al.*, have reported resistance in 80% strains of *S. typhi* to commonly used drugs such as chloramphenicol, ampicillin and cotrimoxazole(6).

Ciprofloxacin (CF) is a new, second generation fluoroquinolone: norfloxacin, enoxacin and ofloxacin also belong to the same group. All are 6-fluorine derivatives of the quinolone nalidixic acid(7). CF is a broad spectrum antibacterial drug and the most potent of the new quinolones, active against most aerobic Gram-positive and Gram-negative bacteria, particularly *Enterobacteriaceae, E. coli (Klebsiella, Proteus, Salmonella, Shigella)* and *Pseudomonas aeruginosa*(8). It can be given in a convenient oral 12 hourly dosage and has good tissue penetration(8). The side effects are usually transient and subside without discontinuation of therapy(8). This drug is not recommended for use in patients under 18 years of age and in pregnant women due to its possible toxicity to growing cartilage at the ends of long bones(8). However, use of CF to treat life threatening illnesses caused by multiple drug resistant organisms, even in children, may be ethically justified(9).

Data showing that CF is a relatively safe antimicrobial drug has been gathered from extensive clinical trials with this drug(10,11). In comparative trials, ADRs generally occurred less often than with cotrimoxazole or amoxicillin and no more often than with cefotaxime(8). ADRs to CF occur in 9 to 16% patients(10,11); predominantly mild gastrointestinal symptoms like nausea, vomiting, abdominal discomfort and diarrhea in 4 to 8% patients; CNS, symptoms like headache, restlessness in 1.5 to 3.5% patients and skin rash in 1.1% patients. In our survey, ADRs reported are much lower than those by information gathered from clinical trials (*Table II*). Probably, this could be explained due to under-reporting by the pediatricians. Also known ADRs like mild transient alterations in laboratory values, *viz.*, eosinophilia, neutropenia, prolonged prothrombin time, elevated SGOT and SGPT, elevated serum creatinine, blood urea were not searched for, unlike in clinical trials. A similar survey done by sending questionnaire in Germany(12) enlisting 12,205 patients treated with CF between February 1987 and January 1989, of which only 1.1% were less than 18 years of age, revealed a lower rate of ADRs (8.3%) than the ADRs seen in clinical trials.

Seven children developed pain in various joints of the body. No objective findings were seen in any of these children. Five were followed up for 2 weeks after discharge and in all of them symptoms had disappeared. Concern over possible joint damage is the reason that quinolones are not recommended for therapy of infections in those under 18 years of age and in pregnant women(3). Schluter(3) studied the effect of 4 orally administered quinolones, *viz.*, nalidixic acid, norfloxacin, ofloxacin and ciprofloxacin at very high doses of 100 to 500 mg/kg over 4 weeks on immature rats. Nalidixic acid caused highest percentage of cartilage alterations and ciprofloxacin the

TABLE II—*Comparison of Our Data with Two Extensive Clinicial Trials*

	Reference 10	Reference 11	Our Survey
1. Total No. of patients	9473	2829	3341
2. No. of patients who developed ADR	881	457	104
3. Per cent of patients who developed ADR	9.3	16.2	3.10
4. *ADR involving (% of patients)*			
(*a*) Gastrointestinal	4.	7.8	1.56
(*b*) CNS	1.	3.3	0.70
(*c*) Skin and allergic	1.	1.8	0.59
(*d*) Musculoskeletal	0.1	0.2	0.26
(*e*) Hematological	0.9	1.0	0.12
(*f*) CVS	0.2	0.9	0.01
(*g*) Kidney	0.8	1.0	0.03
(*h*) Special senses	0.2	0.8	—
(*i*) Respiratory	0.1	0.4	—
5. *Severity of ADR (%)*			
(*a*) Severe	6	6.8	5
(*b*) Mild or moderate	94	93.2	95

N.B.: Some patients experienced ADR in more than one system.

least. Also, there is a clear-cut species difference in the effect of quinolones on cartilage(3). A pilot study of immature beagles given 100 mg/kg of CF for 3 weeks, with one leg bandaged for lessening weight-bearing has postulated that, joint damage can probably be minimized by keeping the joint pressure-free during treatment(3). Whether such animal studies wherein minimum 5 times the recommended dose in humans were given, can conclusively predict permanent joint damage in young children given CF, is open to speculation. A study of adults given nalidixic acid in childhood revealed no evidence of arthritis(13). Recent studies have also shown that the original assumption that joint damage occurs only in juvenile animals is not true, as arthropathogenic effects have also been found in adult dogs(4). Mc Ewan *et al.*(15) have reported tenosynovitis occurring in a 67-year-old man within 3 days of starting CF.

To date, the vast majority of patients treated with CF have been adults and there is little clinical evidence to either confirm or dispute the development of articular changes in young children. Stutman(16) treated 35 patients of cystic fibrosis under 18 years of age with CF, and only 1 developed arthropathy during the 4 weeks of treatment. Alfaham *et al.*(17) have reported arthropathy of both knees in a 15-year-old girl suffering from cystic fibrosis treated with CF. The arthropathy developed after 3 weeks of CF and completely resolved within 2 weeks of stopping the drug. It has been suggested that Magnetic Resonance Imaging studies could be used in children treated with CF as a method to monitor arthropathogenic effects, if any, even in the early stages of treatment and even subsequently on long-term follow up(14).

Rare ADRs that occur in less than 1% of CF courses(18) such as gastro-intestinal

bleeding, hematemesis, abdominal distention, dizziness, insomnia, tremors, depersonalization, pruritic rash, hot flushes, rigors and itching after intravenous administration, myalgia (cramps), generalized weakness, epistaxis, and phlebitis at intravenous site of drug administration were reported to us (*Table I*). Other interesting rare ADRs such as angioneurotic edema (1 case); photosensitive rash (2 cases); nephritis with edema face and feet, microscopic hematuria and mild hypertension (1 case); unexplained drop in Hb (1 case); cardiac failure (1 case) and sinus nodal arrest with bradycardia (1 case) were also reported to us (*Table I*). Davis *et al.* have reported anaphylactoid reactions to CF in 15 cases(19). But, none of their patients died during therapy. In the present series, a 7-day-old baby reported to us died immediately after receiving ciprofloxacin. The exact cause of death could not be ascertained.

In our survey, 2 patients who developed restlessness and irritability, and 1 patient who developed hot flushes and tremors during CF therapy (*Table I*), were also on aminophylline prophylaxis for bronchial asthma. In this context, the drug interaction of ciprofloxacin with theophylline, wherein CF inhibits theophylline metabolism by approximately 30% is worth remembering(20). Five patients on CF therapy, without any simultaneous aminophylline also developed irritability and restlessness as an ADR to CF (*Table I*). The safety of intravenous ciprofloxacin is comparable to that of the oral formulation of the drug(21), though intravenous administration can cause phlebitis and rigors(10). We received 1 report each of phlebitis and rigors after intravenous ciprofloxacin.

On further enquiry from pediatricians who reported these rare and interesting ADRs, we were informed that CF dosage used was the recommended(22) one (7.5 to 15 mg/kg/day orally and 5 to 10 mg/kg/day intravenous in 12 hourly divided doses) for a duration of 7 to 10 days or lesser whenever the drug required to be omitted.

Our survey was specific to identify ADRs to CF in patients below 18 years of age. A thorough review of literature could not locate a similar study. Also, we could not find any literature describing ADRs to CF in Indian patients. Hence, after comparing our results with known literature on ADRs to CF(10-12,18) we conclude that incidence of ADRs to CF in children is no greater than in adults, including musculoskeletal reactions. The ADRs observed in our study were only during the course of treatment and for a short period thereafter, of 1 to 2 weeks. However, the long term effect of CF on linear growth and joint structure integrity, or any other structure or organ can only be judged by follow up over many years. We do not advocate or even remotely justify shotgun therapy with CF for enteric fever or PUO, without culture and sensitivity studies done on the isolates. Inappropriate and random use of CF for short-term benefit of quick cure and to avoid hospitalization is reprehensible.

Only use of CF for multiple drug resistant enteric fever or other serious infections, as a life-saving measure, can be ethically justified, as the benefit from CF use will outweigh the potential risk of damage to juvenile cartilage. It would be interesting to know that CF has been used even in premature infants with multi-resistant *Enterobacter cloacae* septicemia with no evidence of adverse effects(23).

Acknowledgements

The authors wish to thank their Dean, Dr. (Mrs) P.M. Pai for granting them permission to publish this article. They also

wish to thank the Drug Controller of India for his constant encouragement and all the pediatricians who participated in this survey. The study was supported by a grant from the Drug Controller of India and ADR Monitoring Project of the Government of India, under the Union Ministry of Health and Family Welfare.

REFERENCES

1. Kshirsagar NA, Karnade SC, Potkar CN. ADR Monitoring in India. *In:* Selected Topics in Clinical Pharmacology Eds Kshirsagar NA, Gupta KC. Bombay, Akshar Pratiroop, 1990, pp 60-64.
2. Khadilkar VV, Khubchandani RP, Amdekar YK, Mehta KP, Anand RK. Drug resistant typhoid fever–an emerging problem. Indian Pediatr 1990, 27: 1227-1228.
3. Schluter G. Ciprofloxacin: Review of potential toxicologic effects. Am J Med 1987; 82 (Suppl 4A): S91-S93.
4. Keusch GT. Antimicrobial therapy for enteric infections and typhoid fever: State of the art. Rev Infect Dis 1988, 10 (Suppl 1): S199-S205.
5. Guerrant R. Salmonella infections. *In:* Harrison's Principles of Internal medicine, 11th edn. Eds Braunwald E, Isselbacher KJ, Petersdorf RD, Wilson JD, Martin JB, Fauci AS. New York, McGraw Hill Book Co, 1987, pp 592-599.
6. Wang F, Gu XJ, Zhang MF, Tai TY. Treatment of typhoid fever with ofloxacin. J Antimicrob Chemother 1989, 23: 785-788.
7. Stahlmann R. Fluoroginolones–a new class of antimicrobial agents. Drugs Today 1988, 24: 529-536.
8. Fass RJ. Coprofloxacin. Best use of this new broad spectrum antibiotic. Postgrad Med 1990, 87: 117-131.
9. Adam D. Use of quinolones of pediatric patients. Rev Infect Dis 1989, 11 (Suppl 5): S113-S116.
10. Schacht P, Arcieri G, Hullmann R. Safety of oral ciprofloxacin. An update based on clinicial trial results. Am J Med 1989, 87 (Suppl 5A): S98-S102.
11. Arcieri G, Griffith E, Gruenwaldt G, *et al.* Ciprofloxacin: An update on clinicial experience. Am J Med 1987, 82 (Suppl 4A): S381-S386.
12. Reiter C, Pfeiffer M, Hullman RN. Brief reports: Safety of ciprofloxacin based on Phase IV studies ("Anwendungsbeobachtung") in the Federal Republic of Germany. Am J Med 1989, 87 (Suppl 5A: S103-S106.
13. Schaad UB. Wedgwood-Krucko J. Nalidixic acid in children: Retrospective matched controlled study for cartilage toxicity. Infection 1987, 15: 165-168.
14. Schluter G. Ciprofloxacin: Toxicologic evaluation of additional safety data. Am J Med 1989, 87 (Suppl 5A): S37-S39.
15. Mc Ewan SR, Davey PG. Ciprofloxacin and tenosynovitis. Lancet 1988, 2: 900.
16. Stutman HR. Summary of a workshop on ciprofloxacin use in patients with cystic fibrosis. Pediatric Infect Dis J 1987, 6: 932-935.
17. Alfaham M, Holt ME, Goodchild MC. Arthropathy in a patient with cystic fibrosis taking ciprofloxacin. Br Med J 1987, 295: 699.
18. Rahm V, Schacht P. Safety of ciprofloxacin: A review. Scand J Infect Dis 1989, 60 (Suppl): S120-S128.
19. Davis H, MC Goodwin E, Reed TG. Anaphylactoid reactions reported after treatment with ciprofloxacin. Ann Intern Med 1989, 111: 1041-1043.
20. Schwartz J, Jaurequi L, Lettieri J, Backmann K. Impact of ciprofloxacin on theophylline clearance and steady state concentrations in serum. J Antimicrob Chemother 1988, 32: 75-77.

21. Neu HC. New oral and parenteral quinolones: A summary. Am J Med 1989, 87 (Suppl 5A): S283-S287.

22. Paulsen O. The antibacterial activity, pharmacology and therapeutic application of ciprofloxacin. Drugs Today 1988, 24: 361-401.

23. Bannon MJ, Stutchfield PR, Weindling AM, Damjanoic V. Ciprofloxacin in neonatal *Enterobacter cloacae* septicemia. Arch Dis Child 1989, 64: 1388-1391.

PAPERS PRESENTED ON ALTERNATIVE SYSTEMS OF MEDICINE

Team Member	Title	Workshop/Seminar
Dr. Shirdi Prasad Tekur	1. State Health Policy - Alternative Systems of Health Care	VHAK, 1993.
	2. Problems of present Health Systems and Alternatives	Workshop on "Sustainability & Development" -ECC, Whitefield
	3. Herbal Medicine & Home Remedies	CHAI, Secunderabad.
	4. Alternative Systems & Holistic Health Care	Faith & Healing Cell (Background paper).
	5. Disability & Alternative Medicine	Karnataka Welfare Association for the Blind.
	6. Alternative Health Care Systems : Another point of View	MADHYAM
	7. Acupuncture, Acupressure & Related Drugless Therapies	Health Action, Vol.4, No.3, March 1991.
	8. The Philosophy of Homoeopathy	------ " ------
	9. Traditional Medicine: What & Why	FEVORD-K AGBM - 1990.
	10. Alternatives in Health Care	NAVADARSHANAM: Indian Institute of World Culture (1994).
	11. Integrating Allopathic & Alternative Systems of Medicine	VHAK - AGBM, June 1995.
	12. Practising Pluralism	CMJI
	13. Cosmopolitan Medicine	Sent to Dr. Balasubramanian for publication (TTK, Madras)
	14. Alternative Medicine: Myth & Reality	NTTC-JIPMER, December 1993.
	15. Medical Health Care Systems : Attempting Integration - Problems & Perspectives	April 1993. Background paper for Bronchial Asthma Study Circle.
	16. Handbook of Acupressure Points	VHAK, 1993.
	17. Health for All and the Role of Media	Madhyam, 1991.

Team Member	Title	Workshop/Seminar
Drs. Ravi Narayan & Dhruv Mankad	18. Medical Pluralism I: A case for Critical Attention	mfc Bulletin, No.155, 156 September-October 1989.
	19. Medical Pluralism II: Towards Integration	mfc Bulletin, No.155, 156 September-October 1989.
	20. Medical Pluralism - Editorial	mfc Bulletin, No.155, 156 September-October 1989.
	21. Non-Allopathic Systems of Medicine - A Journey through 148 mfc Bulletins	mfc Bulletin, No.155, 156 September-October 1989.

Measures for Rationalisation, Quality Control and Growth of Drugs & Pharmaceutical Industry in India

Government of India
Ministry of Industry
Department of Chemicals and Petrochemicals

MEASURES FOR RATIONALISATION, QUALITY CONTROL AND GROWTH OF DRUGS & PHARMACEUTICAL INDUSTRY IN INDIA.

Bhaskar Narayan Rao
B 3, 23rd, 4th.
J. P. Nagar 2nd Phase,
BANGALORE-560 078

INTRODUCTORY

1.1. Health is a fundamental human right. The Constitution of India directs the State to regard the improvement of public health as among its primary duties. The Five Year Plants have been providing the framework within which the Centre and States have developed their health services infrastructure and programmes. Since the attainment of Independence considerable progress has been achieved in the promotion of health status of the people - as refleced in the eradication/control of diseases like small-pox, malaria etc., reduction in mortality rate, rise in life expectancy, creation of a fairly extensive network of health care institutions and the availability of a large stocks of medical and health personnel.

1.2 The National Health Policy of 1983 marks a significant step in the national endeavour to improve public health. It reiterates India's commitment to the goal of "Health for all by the year 2000 A.D." through the universal provision of comprehensive primary health care service. The attainment of this goal requires an accelerated development of all inputs to the health care system, including essential and life saving drugs and vaccines of proven quality. Drugs alone are not sufficient to provide health care. However, if rationally used, they do play an important role in protecting maintaining and restoring the health of the people and in controlling population. The Indian Pharmaceutical Industry has, therefore, a vital role in serving the basic health needs of the poeple.

1.3 The Report of the Hathi Committee (1975) is an important landmark in the development of the Indian Pharmaceutical Industry. The Hathi Committee emphasized the achievement of self-sufficiency in medicines and of abundant availability at reasonable prices of essential medicines. Since 1975, the Indian Pharmaceutical Industry has grown to be the most diversified and vertically integrated pharmaceutical industry in the entire Third World. The country has achieved self-sufficiency in formulations and also in a large number of bulk drugs. In 1984-85, imports of formulations were only Rs.10.17 crores or about 0.5% of the total formulation production in the country and imports of 49 bulk drugs were neglible. Technologies for the production of several bulk drugs, including antibiotics like Ampicillin, Amoxycillin, Erythromycin, Anti-infectives like Sulphamethaxazole and Trimethoprim., anti-TB drugs like Ethambuto-Cardio Vascular drugs like Methyl Dopa; Analgesics like Ibuprofen and Isopropyl antipyrine; anti-amoebics like Metronidazole and Tinidazole, anti-cancer drugs like Vinblastine, Vincristire and Cisplatin were indigenously developed. The trade balance in pharmaceuticals is also improving as a result of increasing exports. In 1984-85, exports of drugs and formulations were Rs.217.49 crores while imports were Rs.215.62 crores. A wide range of bulk drugs and formulations

are being exported to several countries, including the U.S. and the West European countries. Some Indian firms have also set up production facilities in other countries and are also engaged in the sale of turnkey plants and technical services. The diverse production and technological capabilities developed by the Indian Pharmaceutical Industry are valuable assets in achieving the goals of the National Health Policy and in fully harnessing the export potential.

1.4 While these achievements are impressive by themselves, there are many areas where the industry has to reorient itself if it has to effectively serve the health needs of the people. The present production pattern does not adequately reflect the genuine requirements of the health care needs of the country. The proliferation of formulations and packs without adequate therapeutic rationale is a matter of concern. While many firms in the organised as well as small scale sector have excellent internal testing facilities and a good record of quality control and adoption of good manufaturing practices, the same cannot be said of a large number of firms manufacturing formulations. The present institutional and statutory arrangements for enforcing quality control for registration of new formulations, for monitoring adverse reactions and for dissemination of unbiased information about the safety and efficacy of products marketed in the country are far from being adequate.

1.5 Abundant availability on a continuous basis, at reasonable prices, of essential, life saving and prophylactic medicines of good quality, is the corner stone of the new measures. It shall be the endeavour of the Government to ensure that the above objective, which is in consonance with the Government's Policy of reaching Health-care facilities to the common masses and with that of ensuring Health for all by the year 2000 A.D., is achieved. In order to subserve this objective, changes have been brought about in the system of price control of drugs as well as in the licensing and approval procedures. Experience gained in the implementation of the Drugs (Prices Control) Order, 1979 has clearly shown that the pricing system needs to be simplified and rationalised, if the benefits of the price control are to be effectively realised by the consumer, particularly the weaker sections of the society for safeguarding whose interests the Government is committed. The span of price control at present is impracticably large covering 347 bulk drugs and over 4,000 formulations marketed in about 20,000 packs. It is proposed to reduce to a considerable extent this span of control and to make the price control system less cumbersome but more effective.

1.6 As prices of drugs are also determined by the cost effectiveness of domestic production, it is imperative to impart a technological and productivity thrust to the Indian Pharmaceutical Industry which would also enable it to harness export opportunities. The objective of ensuring abundant availability of medicines

at reasonable prices, will be best served by promoting competition and economic scales of production and also by removing unnecessary barriers to growth. To this end, licensing and approval procedures have been simplified and greater flexibility given in order to encourage investment and production in the desired areas, specially those of essential and life saving drugs. The validity of this premise has already been estanlished by the experience, in recent years, with the market prices of bulk drugs being lower than the statutory prices whenever a bulk is produced by a good number of manufacturers. At the same time, FERA companies will continue to be regulated by Government to ensure that their operations are in consonance with the national objectives and priorities.

1.7 . It is against this backdrop that the Government has reviewed the functioning of the Drug Policy and now restructured the policy in the light of the experience gained and keeping in mind the objective of achieving "Health for All by the Year 2000 A.D."

PART II - OBJECTIVES

2. The new measures aim at:

(a) ensuring abundant availability, at reasonable prices, of essential life saving and prophylactic medicines of good quality;

(b) strengthening the system of quality control over drug production and promoting the rational use of drugs in the country;

(c) creating an environment conducive to channelising new investment into the pharmaceutical industry, to encouraging cost-effective production with economic sizes and to introducing new technologies and new drugs, and

(d) strengthening the indigenous capability for production of drugs.

PART - III - RATIONAL USE OF DRUGS

3.1 Registration of new formulations, rationalisation of existing formulations and creation of a National Drug Authority.

New formulations based on drugs already approved for use in the country would not be allowed to be manufactured unless their therapeutic efficacy and rationality are adequately tested and proved. A machinery to be called the National Drug & Pharma-

ceutital Authority would be established at the Central level, with a permanent secretariat.

3.2 Registration of new drugs

With a view to exercise closer scrutiny over the introduction of new drugs in the country, the Drugs and Cosmetic Rules will be amended to define clearly a new drug and to give statutory basis to the detailed guidelines which would be drawn up for the scrutiny and approval of new drugs.

3.3. Standardisation of packaging

With a view to ensuring the proper dispensing and use of drugs, statutory guidelines for packaging instructions would be laid down. Colour coding of packs would be insisted upon to differentiate products according to the degree of hazard. Packs would also be standardised.

3.4. Monitoring of adverse reaction

During the VII Five Year Plan, Central and peripheral units would be set up to monitor adverse drug reactions. It is also proposed to develop a Central Information Bank on the safety. efficacy, prescription and use of all drugs.

3.5. Use of generic name

Pending a final decision by the Supreme Court, permission is being granted for marketing single ingredient formulations of new drugs subject to the following conditions that the generic (Proper) name should be displayed in double the size of the trade (brand)name both in equally bold letters. Generic names will be progressively adopted in the case of all drugs included in the list of essential drugs.

3.6 Apart from the allopathic system of medicine, it is also proposed to encourage and improve upon the traditional system of medicine with a view to widening the coverage of health care schemes of the government. It is a recognised fact that large portions of our population, specially those in the rural areas, prefer to use the traditional Indian system of medicine, both for reasons of faith as also lack of access to the modern medicines; Ayurveda, Unani and Siddha systems of medicines have been practised in this country for several centuries. However, there is no uniformity in

the methods of preparation of the compound drugs in use in these systems, identification of ingredients and their composition. In order to bring about some uniformity and standardisation, Ayurvedic, Siddha and Unani Pharmacopoeial Committee constituted by the Government of India are bringing out "National Formularies". The Formularies indicate the ingredients with their scientific names, the proportions in which these drugs are used and the method of preparation. This is the first phase for the standardisation work before finalising pharmacopoeial standards. The Pharmacopoeial Committees have now simultaneously taken up the work of evolving of standards in respect of single ingredient drugs used in these systems.

3.7 It is proposed to speedily evolve pharmacopoeial standards in respect of the drugs in these systems and also to enlarge and reactivate drugs testing facilities in each State in order to ensure quality control. It is also proposed to take steps for ensuring steady and regular availability of raw material for the growing pharmaceutical industry in the Indian systems of medicine both to meet internal as well as export demands.

PART - IV - QUALITY CONTROL

4.1 Strengthening infrastructural facilities

It is decided to step up the Central and State infrastructural facilities for quality control in a phased manner during the VII and VIII Five Year Plan periods. The progress made in the provision of these infrastructural facilities and the effect on enforcing quality control would be reviewed at the end of the VII Five Year Plan with a view to make the necessary corrections and to strengthen the machinery for ensuring quality control.

4.2 Internal Testing Facilities

During the VII Five Year Plan period, it will be ensured, through intensive inspection and corrective action, that all manufacturers have internal testing facilities.

4.3 Good Manufacturing Practices

Statutory effect would soon be given to the good manufacturing practices which lay down the minimum requirements to be observed in terms of accommodation, equipment, qualified personnel, testing facilities and hygiene in a manufacturing unit.

4.4 Loan Licensing

It is decided to discontinue the loan licensing system in a phased manner before the end of the VII Five Year Plan.

4.5 Certification Scheme

With a view to promote quality-consciousness in the field of drugs both among the manufacturers and user-agencies and to simultaneously reduce the workload on the statutory Drug Controller Agencies, efforts will be made to introduce a certification system under which recognised institutions with proven expertise and testing facilities can certify the adoption by formulators of good manufacturing practices and the quality of formulations manufactured.

PART V - PRICING

5.1 Basic Approach

The Hathi Committee was of the view that more selectivity in the system of price regulation with a view to ensuring fair prices of drugs and formulations would be desirable. In the case of formulations (other than generic), selectivity could be in terms of (a) size of the units; (b) selection of items, and (c) controlling the prices only of market leaders, in particular, of products for which price control is contemplated. An appropriate combination of these criteria is also feasible. The new pricing regulation would be in conformity with the principle of selectivity commended by the Hathi Committee.

5.2 Coverage

It is decided to rationalise the present categorisation of bulk drugs and formulations keeping in view the following objectives:

(a) To stimulate production of drugs and formulations which are essential to the needs of large majority of the people of the country;

(b) To make the price control system less cumbersome but more effective, by reducing the span of control;

(c) To ensure a reasonable return to the producers of essential drugs, while at the same time restricting undue increase in their price.

Keeping this objective in view, it is now decided to have 2 categories of formulations and bulk drugs required in place of 3 categories which exist at present. Category I would consist of drugs required for the National Health Programme and the MAPE (maximum allowable post manufacturing expense incurred from the stage of manufacuring to retailing and manufacturers' margin) allowed for drugs in this category would be 75%; category II would consist of drugs other than those in category I but which are also considered essential for the health needs and a MAPE of 100% for formulations would be allowed while fixing the prices for this category of drugs.

The list of drugs in Category II on the basis of these guidelines would be drawn up within 3 months, by a committee consisting of representatives of Department of Chemicals & Petro-chemicals, Ministry of Health, Bureau of Industrial Costs and Prices and some State Governments. Till such time as this is finalised the existing Drug Price Control Order will continue to be in operation. In the proposed Drugs (Price Control) Order which would be announced after the list of drugs in each category is finalised, there would be a stipulation to the effect that Government will have the right to bring within the ambit to control any drug in the de-controlled category at any point of time. should it be considered necessary to do so.

With a view to encourage production of drugs which are more essential to the needs of the country, incentives, other than the MAPE, would also be considered. Government would at the same time strictly monitor the prices of drugs of de-contrrolled category and for this purpose an effective monitoring machanism shall be developed.

5.3 Norms of Pricing

It is decided to have a uniform norm for all bulk drugs falling in the controlled category I and II and the manufacturers will be given the following three options

i) 14% post tax return on net worth; or

ii) 22% return on capital employed; or

iii) Long term marginal costing with 12% internal rate of return in the case of new plants.

The maximum retail price of domestically produced items excluding excise duty and local taxes, if any, would not be higher than ex-factory cost by more than 75% in the case of category I formulations and by more than 100% in the case of category II formulations. This is to say, MAPE would be 75% and 100% respectively for category I and II formulations, of the ex-factory cost.

In respect of imported formulations, selling and distribution expenses, including interest and importers' margin, shall not exceed 50% of the landed cost.

5.4 Drug Price Equalisation Account (DPEA)

The DPEA was set up essentially to encourage domestic production of bulk drugs through a system of retention pricing; However, in actual practice the operation of DPEA is giving rise to intractable administrative problems, with anticipated accruals to the DPEA being thwarted by disputes and claims on the DPEA put forth promptly. It is, therefore, decided to discontinue the system of retention and pooled pricing. Protection for indigenous productio of bulk drugs, wherever necessary, would be provided through the tariff machanism. However, provision would be made in the new Drug Price Control Order to ensure that amounts which have already accrued to the DPEA and those which are likely to accrue as a result of action in the past, are protected and used for the purpose stipulated in the existing DPCO.

PART VI - LICENSING

6.1 FERA Companies

The business operations of FERA companies would have to be in accord with national objectives and priorities. FERA companies would be eligible for entry mainly in those areas where the entry is desirable from the objectives of better health care. The list of bulk drugs open to all sectors has been revised accordingly. FERA companies would be eligible for licenses mainly in respect of these bulk drugs, subject to a phased manufacturing programme, and related formulations in order to encourage higher bulk drug production, the ratio between the value of production of bulk drugs to that of formulations (hereinafter referred to as ratio parameter) would be reduced from 1:5 to 1:4 for FERA companies. The definition of "drugs and pharmaceuticals" listed at Entry 14 of Appendix I of the Industrial Licensing Policy, would now read as in Annexure I.

6.2 Companies other than FERA Companies

These companies would continue to be eligible for industrial approvals in respect of all bulk drugs which are approved for use in the country and related formulations, subject to sectoral reservations for public and small scale sectors.

6.3 Role of Public Sector

Public Sector will continue to have an important role particularly in the production of basic bulk drugs which are central to the needs of the National Health Programme. However, the Goovernment recognise the fact that the public sector units will have

to function at optimum levels of efficiency, in production as well as marketing, in order to fulfil the role that has been assigned to them in the new policy, namely, that of making available essential bulk drugs at reasonable prices. Keeping in view the crucial role of the public sector in achieving the objectives of National Health Programme, indepth exercises have already been initiated to prepare an action plan of steps to improve performance of each of the public sector units.

Rehabilitation and restructuring plans for these public sector undertakings are expected to be finalised very shortly. These plans shall include changing management cultures and values, improvement of management system; improvement in product strategy; internal generation of cash; savings in fixed costs; reduction in line wastage and batch rejection; improvement in technology; reduction in expenses on utilities; reduction in inventory levels; better and more sensitive marketing strategy; higher capacity utilisation; better utilisation of R&D facilities etc.

It is decided to continue, to a substantial extent, the present policy of reservation for manufacture by the public sector of certain important bulk drugs. At present 17 bulk drugs including Pencillins and Polio Vaccines are exclusively reserved for production by the public sector units. Considering the projections of requirement of Penicillins, it is decided to expand the capacity of Penicillin in the existing public sector units along with induction of more advanced technology. However, it is felt that even with these measures the public sector units will by themselves not be in a position to meet the entire requirements of the country of these two basic and essential drugs. The 1989-90 demand of Penicillin is estimated to be as high as 2470 mmu as against the existing installed capacity of 637 mmu inclusive of 390 mmu in the public sector. Thus the present gap in the demand and production of this crucial drug would further widen by the end of 7th Plan period unless corrective steps are taken to narrow it. At present, in order to meet the requirements of this essential drug, imports are also resorted to which result in an outgo of foreign exchange to a substantial extent, this outgo being of the order of Rs.24 crores in the year 1985-86. Similarly Polio vaccine which is an extremely important input in the immunisation programme of the Government is yet to be produced in the country. A capacity of 10 million doses is being installed by M/s.Halfkine, a Maharashtra Government undertaking. However, the 1989-90 demand is estimated to be 80 million doses taking into account the requirement of the Expanded Immunisation Programme. Keeping in view the large gap between the capacities created and the 1989-90 demand for Penicillin and Polio Vaccine, the need to reach self-sufficiency in these two vital products, it is decided to open these two products for production by all sectors. The demand for these essential drugs would continue to be met through imports also till such time as indigenous production has reached a level where imports become unnecessary. However 15 other bulk drugs

which are presently reserved for the public sector would continue to be so reserved (Annexure - II).

6.4 DGTD Registration

DGTD registration would continue to be available to non-FERA and non-MRTP companies, in respect of proposals which satisfy the criteria for DGTD registration.

6.5 Delicensing

The scheme of de-licensing has already been extended to 94 bulk drugs including all anti-cancer drugs, all new bulk drugs developed through indigenous research, and related formulations as well as two drug intermediates. The scheme, would progressively be extended subject to the following criteria:

(a) bulk drugs whose imports are allowed on OGL.

(b) bulk drugs, whose production is limited to three producers or less in the organised sector.

(c) bulk drugs whose formulations are of essential and mass consumption nature.

(d) formulations and drug intermediates related to bulk drugs which are delicensed.

The scheme of delicensing would be available for non-FERA and non-MRTP companies only excepting for new drugs which would be cleared for use in the country and would not include bulk drugs reserved for public and small scale sector.

The capacities to be set up under the delicensing scheme will, however, conform to the economic scales of production.

6.6. Encouragement of new drugs

Introduction in the country of formulations based on new bulk drugs require the approval of the Drug Controller (India). In order to establish the safety and efficacy of the new drugs proposed to be introduced detailed information has to be furnished. This information amongst others, should include toxicity data on animals, pharmacological studies and results of clinical trials in Indian conditions, which may extend over several years. Once a firm obtains the approval other firms are not required to obtain approval in respect of that drug again. In order to encourage introduction of new drugs in the country, all new bulk drugs and related formulations would be brought under the scheme of de-licensing. If approval for the introduction of the new drug is based on the clinical trials conducted by a MRTP or FERA company, such a company can also avail the scheme of delicensing in respect of such new bulk drug and related formulations. Exemption under Section 22A of the MRTP Act would also be available in such cases.

6.7 **Phased Manufacturing Programme**

To encourage cost-effective indigenisation and to ensure that bulk drug production does not remain confined to processing of later intermediates only, it has been decided to introduce system of a phased manufacturing programme (PMP). This will be applicable to all manufacturers and to all types of industrial approvals (licence, registration with the DGTD and registration under the Delicensing Scheme). Where the import content is 20% or more of the value of production, import licenses for bulk drug manufacturers would be granted only in accordance with the approved PMP which would specify the indigenisation to be achieved annually as a percentage of the value of production. The viability of PMP would be examined in terms of the domestic resources cost of production, with a suitable shadow rate of foreign exchange. All companies manufacturing bulk drugs would be required to submit to the Department of Chemicals and Petro-chemicals their PMP proposals and the existing companies which import drug intermediates or other raw materials from their principals or their associated companies would be required to inform the Government of the details of such transactions within a month of such import.

6.8 **Broadbanding**

In order to provide greater manufacturing flexibility, broadbanding would be extended to the pharmaceutical industry, taking into account the technical factors like plant design, process and production facilities. To begin with 31 groups of bulk drugs (Annexure III) would be covered by broadbanding. Products, other than bulk drugs, would be broadbanded into the following categories:-

(a) Formulations based on bulk drugs in Annexure III.

(b) Surgical ancillaries like sutures, catguts, bandages,

(c) Seras and Vaccines.

(d) Diagnostics of all types.

(e) Allergins.

(f) Transfusion solutions

The facility of broad banding would be available only in respect of products which are approved for use in the country by the Drug Controller(India). For domestic production, companies in the organised sector would be eligible for broad banding only in respect of items open to them.

The procedure to be followed for this is as laid down in the press note No.33 (1986 series) of the Department of Industrial Development dt.26.9.1986. The scheme of broad banding will also be subject to the conbditions laid therein.

6.9 Export production

For export production, all companies would have total flexibility to produce any product with their existing facilities. They need only inform the Government of the details of such production and export.

6.10 Revised Ratio Parameters

In order to encourage higher production of bulk drugs in the country, the ratio parameter between the ex-factory value of bulk drug production to that of formulation has been revised. The ratio parameter would be related to the size of a company, which in turn has a relationship with its ability to invest in and develop/procure technology for production of bulk drugs. For FERA companies ratio parameter would now be 1:4. For other companies the ratio parameters would be related to the ex-factory value of production of bulk drugs and formulations as follows:

	Ex-factory value of production of bulk drugs and formulations	Ratio parameter
1.	Upto Rs.10 crores	1:10
2.	For production in excess of Rs.10 crores and upto Rs.25 Crores.	1:7
3.	For production in excess of Rs.25 crores.	1:5

The following activities would continue to be excluded in computing the ratio parameters:

(a) Drug Intermediates.

(b) Empty hard gelating capsules
(c) Surgical ancillaries

(d) Seras and Vaccines

(e) Diagnostics of all types

(f) Allergins

(g) Transfusion solutions

The companies in the organised sector are required to submit a production programme, including the production of new drugs, so that they can reach the new ratio parameters within a period of 3 years. As and when a Company moved from one category

to another, it would be allowed a period of 3 years to reach the new ratio parameter.

In order to encourage production of bulk drugs in the country the formulation turnover of all companies in the organised sector would continue to be based on a ratio of 2:1 between the value of consumption of indigenously produced bulk drugs and that of imported bulk drugs.

6.11 Supply of Bulk Drug to Non-Asociated Formulators

FERA and MRTP companies would continue to supply 50% of the bulk drug production to non-associated formulators and other companies, including public sector, 30% of the bulk drug production to non-associated formulators.

6.12 R&D/Import of Know-how

R&D would gain an impetus from the various measures proposed in the policy such as the extension of delicensing to companies which conduct clinical trials and obtain the approval of the Drug Controller (India) for introduction of new drugs. However, wherever necessary, import of know-how would continue to be favourably considered on merits.

6.13 Regularisation of production

A very large number of formulations are being produced ranging from one to two decades with industrial approvals which are being questioned. Majority of these drugs are claimed to be covered under registration certificates issued under Section 10 of the Industries (Development and Regulation) (IDR) Act. According to the practice then in vogue, these registration certificates did not mention individual items and capacities but merely permitted production of "drugs and pharmaceuticals". Another major category comprises of items claimed to be covered under notification issued in the 1960s and 1970s, under Section 298 of the IDR Act, announcing exemption from industrial licensing, subject to some conditions. However, COB licences could not be issud in many cases because of non-fulfilment of one or more of the conditions subject to which the exemptions were granted. Having regard to the fact that the infraction in most cases are technical and that the products have been accepted by the medical profession, Government have decided to regularise the production of all such formulations and surgical aids.

6.14 Re-endorsement of capacity

Government's industrial policies in regard to re-endorsement of capacity, and recognition of additional capacities as a result of replacement/modernisation/ renovation of equipment, as announced

from time to time, would be applicable to the pharmaceutical industry.

7.1 PART VII - DUTY RATIONALISATION

The measures in the areas of licensing and pricing policies would also be complemented by appropriate fiscal policy measures designed to progressively reduce import and excise duties to the minimum possible levels and to ensure that the cumulative incidence of duty on the bulk drugs is higher than that on the inputs and drug intermediates. Duty rationalisation is intended to encourage cost efficient production of bulk drugs and of high quality formulations.

PART VII -CO-ORDINATION BETWEEN HEALTH AND INDUSTRY MINISTRIES.

8.1 With a view to achieve better integration between the Health policies and the industrial policies in the Pharmaceutical sector, an inter-ministerial Standing Committee would be constituted in the Ministry of Industry Department of Chemicals and Petrochemicals with Secretary, Ministry of Health and officials of the other Departments and agencies concerned as members. In the first instance, the Committee would oversee the implementation of the new measures and other related decisions such as revision of the National Formulary, stregthening of the institutional and statutory arrangements for enforcing quality control, dissemination of information regarding safety and efficacy of drugs to medical and paramedical personnel, centralisation of drug registration, retionalisation of formulations and monitoring of adverse reactions.

PART IX - REVIEW

9.1 The implementation and parameters of these measures would be reviewed at the end of the 7th Five Year Plan. Appraisal at short intervals will also be made to ascertain the progress of implementation and the trends emerging from time to time.

(ANNEXURE I)
(See para 6.1)

APPENDIX - I

Industry Policy-Government Decision -

Press Note dated 2nd Dec., 1973.

X X X X X X X X X

14. **Drugs & Pharmaceuticals**

For FERA Drug Companies

Following bulk drugs subject to a phased manufacture programme, and formulations based thereon with an overall ratio of bulk drug consumption (from own manufacture) to formulations from all sources of 1:4.

(1) Rifampicin
(2) Verapamil
(3) Cephalexin
(4) Pantothenate
(5) Bacitracin
(6) Neomycin
(7) Cephaloridine
(8) Alkaloids of Ergot
(9) Thiopentone
(10) Propoxyphenazone
(11) Pyrantal Pamoate
(12) Norethisterone
(13) Oxethazine
(14) Pentazocine
(15) Norgestral
(16) Dipyridemol
(17) Tolnaftate
(18) Triprolidine
(19) Naproxen
(20) Nalidixic Acid
(21) Chlorpromazine
(22) Chlorpheniramine
(23) Betamethazone
(24) Dexamethazone
(25) Chloramphenicol
(26) Vitamic A
(27) Digoxin
(28) Dapsone
(29) Allopurinol
(30) Vitamin B12
(31) Prednizolone

(32) Baralgan Ketone
(33) Isulin
(34) Primaquine
(35) Amodiaquine
(36) Succinyl Cholinechloride
(37) Clofazamine
(38) Thiabendazole
(39) Tetramisole
(40) Framycetin
(41) Cyclophosphamide
(42) Mepacrine
(43) Triamcinolone
(44) Phenuylephrine
(45) Oxytecin

(46) Vitamin P(Rutin)
(47) Prenylamine Lacate
(48) Thioridazine
(49) Phenolthiazine
(50) Penicillins
(51) Mianserin Hydrochloride
(52) Aminoglutethimid
(53) Cinnarizine
(54) Becampicillin
(55) Captopril
(56) Prazinuantel
(57) Tobramycin
(58) Timolol
(59) Cafazoline sodium
(60) Atenolol
(61) Nimustine
(62) Prithyldone
(63) Isosorbidemonoitrate
(64) Any new drug for which the company conducted clinical trials and obtained Drug Controller's approval.
(65) Polio Vaccine
(66) Measles Vaccine

For non-FERA MRTP companies the existing definition would continue i.e. all bulk drugs and formulations subject to the ratio parameters applicable on the basis of turnover and subject to reservation for the public and small scale sectors.

(ANNEXURE - II)

(See para 6.3.)

LIST OF BULK DRUGS RESRVED FOR PUBLIC SECTOR

(1) Streptomycin
(2) Tetracycline
(3) Oxytetracycline
(4) Gentamycin
(5) Sulphaguanidine
(6) Sulphadimidine
(7) Sulphamethoxy-pyridazine
(8) Sulphadimethoxine
(9) Vitamin B1
(10) Vitamin B2
(11) Folic Acid
(12) Quinine
(13) Analgin
(14) Phenobarbitone
(15) Morphine

N.B. Bulk drugs would include salts, esters and derivatives, if any.

(ANNEXURE - III)

(See para 6.8)

GROUP OF BULK DRUGS COVERED BY BROAD-RANGING

GROUPS

1. All types of Penicillins
(2) Erythromycin, Griseofulvin, Rifampicin
(3) Chloramphenicol and its intermediates namely L-Base.
(4) 6-APA and 7-ADCA from Potassium Pencillin G
(5) Semi-synthetic Penicillins like Ampicillin, Amoxicillin etc.
(6) All types of Cephalsporins
(7) Sulpha Drugs other than those reserved for Public Sector
(8) Steroids & Hormones including the following

Prednisolone, Prednisone, Hydrocortisone, Betamethasone, Ethinyl Oestradiol, Norethisterone, Norgestrel, Testosterone, Progesterons etc.

(9) Theophylline, Aminophylline, Hydroxyethyl-Theophylline Xanthinol Nicotinate and Synthetic Caffeine
(10) All Barbiturates other than Phenobabarbitone
(11) Analgin , Isopropylantipyrine
(12) Chlorpromazine
Prochloroperazine
Promethazine
Trifluoperazine
Triflupromazine
(13) Chloroquine
Amodiaquine
(14) Oxphenbutazone
Phenylbutazone
(15) Diphenydramine
Bromodiphenhydramine
(16) Hydrocholorothiazide
Cyclopentazide
(17) Chlorophenesin
Mephenesin
(18) Xylocaine
Procaine
Benzocaine
Prilocaine
(19) Metronidazole
Tinidazole
(20) Tobutamide
Chlorpramamide
(21) Acetazolamide
Thiacetazone

(22) Diazepam
Chlordiazepoxide
Oxazepam
Nitrazepam
Lorazepam

(23) Pheniramide
Chlorpheniramine

(24) Ibuprofen
Ketoprofen
Flurbiprofen
Naproxen

(25) Salbutamol
Terbutaline

(26) Furazolidine
Nitrofuratoin
Nitrofurazone
Furaitadone

(27) Chlorcyclizine
Cyclizine
Meclozine
Buclizine
Diethyl Carbam Zine Citrate

(28) Propranolol
Atenolol
Metroprolol
Oxprerolol
Pindolol

(29) Mebendazole
Thiabendazole
Benbendazole

(30) Drubs obtained by extraction from plant material such as Belladonna, Hyocymine, Sennosides, Digoxin, Ammalicine, Pesperpine, Vincristine, Vinblastine, Quinine, Quinidine, Emetine, Strychnine, Brucine etc.

(31) Drugs of animal origin other than Insulin, such as Liver extract, Heparin, Pancreatin, Immunoglobulin etc.

N.B. Bulk drugs would include salts, esters and derivatives if any.

MARTINDALE, THe Extra Pharmacopoeia, Thirteenth Ed. (1994)

ANNEXURE A

...synovial fluid was about 70% of that for plasma in a study involving 60 patients with arthritis. Analysis of diflunisal in the biliary secretion of 4 patients suggested a biliary elimination and subsequent enterohepatic circulation ranging between 2.4 and 15.1%. Diflunisal was not detected in the cerebrospinal fluid of any of 28 patients undergoing myelographic radiological assessment for vertebral disc prolapse. Studies indicate that elimination of diflunisal is faster in men and in women taking oral contraceptives than in control women. Smoking results in only a moderate increase in diflunisal clearance.

1. Loewen GR, et al. Effect of dose on the glucuronidation and sulphation kinetics of diflunisal in man: single dose studies. Br J Clin Pharmacol 1988; 26: 31–9.
2. Verbeeck RK, et al. The effect of multiple dosage on the kinetics of glucuronidation and sulphation of diflunisal in man. Br J Clin Pharmacol 1990; 29: 381–9.
3. Scharpe S, et al. Pharmacokinetics of diflunisal in patients. Pharmacotherapy 1991; 20: 41–4.
4. Macdonald JI, et al. Sex-difference and the effects of smoking and oral contraceptive steroids on the kinetics of diflunisal. Eur J Clin Pharmacol 1990; 38: 175–9.

Uses and Administration

Diflunisal is a salicylic acid derivative with analgesic, anti-inflammatory, and antipyretic properties; it inhibits cyclo-oxygenase. Diflunisal is used in the acute or long-term management of mild to moderate pain, osteoarthritis, rheumatoid arthritis, and for primary dysmenorrhoea. The usual initial dose for pain relief is 1000 mg; the initial dose may be followed by a maintenance dose of 500 mg every 12 hours. Maintenance doses greater than 1500 mg daily are not recommended. The usual dose for arthritis is 500 to 1000 mg daily; this dose may be given as a single dose or as 2 divided doses.

Proprietary Names

[illegible] Citidol; Didonic; Diflucol; Dillunit; Diflu[illegible]; Dolobid; [illegible]; Donorid; Flunisel; [illegible]; Flustar; Ilacen; [illegible]; Noaldol; Reutlos; [illegible].

Preparation details are given in Part 3.

Dimethadione [illegible]

[illegible]

$= 234.3$

[illegible] is an analgesic that has been used in the [illegible] in doses of 2 [illegible] 400 mg three times daily by mouth.

Proprietary Names

Multi-ingredient preparations. [illegible]

Preparation details are given in Part 3.

Dipyrocetyl [illegible]

[illegible]

[illegible] Acid; [illegible] O,O-Diacetylpyrocatechol... carboxylic acid; 2,3-Diacetoxybenzoic acid.

$C_{11}H_{10}O_6 = 238.2$.

CAS — [illegible]

Pharmacopoeias. In Cz.

Dipyrocetyl is an analgesic, anti-inflammatory, and antipyretic agent.

Dipyrone [illegible]

Dipyrone (BAN, USAN).

Aminopyrine-sulphonate Sodium; Analginum; Metamizole; Metamizole Sodium (rINN); Methampyrone; Natrium Noraminsulfonicum; Noraminazophenum; Noraminophenazonum; Novaminsulfon; NSC-73205; Sodium Noramidopyrine Methanesulphonate; Sulpyrine; Sodium N-(2,3-dimethyl-5-oxo-1-phenyl-3-pyrazolin-4-yl)-N-methylaminomethanesulphonate monohydrate.

$C_{13}H_{16}N_3NaO_4S.H_2O = 351.4$

CAS — [illegible] (anhydrous); 5907-38-0 (monohydrate).

Pharmacopoeias. In Aust., Braz., Chin., [illegible], Egypt, [illegible], Jpn, Mex., [illegible], Rus., Swiss, [illegible], and Yug.

Adverse Effects and Precautions

Administration of dipyrone is associated with an increased risk of agranulocytosis and with shock.

Effects on the blood. The International Agranulocytosis [illegible] [illegible]

risk of agranulocytosis. Data collected from 8 population groups in Europe and Israel revealed that there was a significant regional variability in the rate-ratio estimate for agranulocytosis and dipyrone (0.9 in Budapest to 33.3 in Barcelona). Although a large relative increase in risk between agranulocytosis and use of dipyrone was found, the incidence was less than some previous reports had suggested.— The International Agranulocytosis and Aplastic Anemia Study. Risks of agranulocytosis and aplastic anemia: a first report of their relation to drug use with special reference to analgesics. *JAMA* 1986; 256: 1749–57.

Effects on the skin. Dipyrone had been responsible for a case of drug-induced toxic epidermal necrolysis.— Roujeau J-C, *et al.* Sjogren-like syndrome after drug-induced toxic epidermal necrolysis. *Lancet* 1985; i: 609–11.

Hypersensitivity. Cross-sensitivity between aspirin and dipyrone occurred in one patient. Dipyrone produced an exacerbation of dyspnoea, cyanosis, and respiratory arrest.— Bartoli E, *et al.* Drug-induced asthma. *Lancet* 1976; i: 1357.

See also under Effects on the Skin, above.

Porphyria. Dipyrone was considered to be unsafe in patients with acute porphyria because it has been shown to be porphyrinogenic in animals or in vitro systems.— Moore MR, McColl KEL. Porphyria. [illegible] Glasgow: Porphyria Research Unit, University of Glasgow, 1991.

Uses and Administration

Dipyrone is the sodium sulphonate of amidopyrine (see p.[illegible]) and has similar properties. Because of the risk of serious adverse effects its use is justified only in serious situations where no alternative is available or suitable. It has been given by mouth in doses of 0.5 to 1 g up to three times daily. It has also been given by intramuscular or intravenous injection in doses of 0.5 to 4 g daily in divided doses. Dipyrone is also used as the magnesium salt, when it is known as metamizole magnesium.

Proprietary Names

Adolkin; [illegible]; Baralgin M; Dolemicin; Huberdor; [illegible]; Minalgine; [illegible]; Neuro-Brachont N; Neuro-Fortamin S; Nolotil; Novalgin; Novalgina; Novaminsulfon; Optalgin; Pirenil Rectal; Pyretnane; Tinalgina.

Multi-ingredient preparations. [illegible]-Buscopan; Artrocur; Avafortan; Baralgan; Baralgin; Baralgina; Baralgine; Buscapina Compositum; Buscopan Compositum; [illegible]-Pyrazole; [illegible]; Dolo-Neurobion; Duo-Norgesic N; [illegible]; Neuro-Brachont N; Neuro-Fortamin; Nolotil Compositum; Novotenan; [illegible] Noramidopyrine; [illegible] Rectopyrine; [illegible] noramidopyrine; Salai [illegible]; Scopex [illegible]; [illegible] Compositum; Soma Compositum; [illegible] Compositum; Spondylon; Syntaverin; [illegible].

Preparation details are given in Part 3.

Ditazole [illegible]

Ditazole (rINN).

Diethamphenazole; S-222; 2,2'-(4,5-Diphenyloxazol-2-ylimino)diethanol.

$C_{19}H_{20}N_2O_3 = 324.4$

CAS — 18471-20-8.

Ditazole is an anti-inflammatory agent with an inhibitory effect on platelet aggregation. It has been used in the treatment of thrombo-embolic disorders in doses of 400 mg two or three times daily.

Proprietary Names

Agerobias.

Preparation details are given in Part 3.

Droxicam [illegible]

Droxicam (rINN).

5-Methyl-3-(2-pyridyl)-2H,5H-1,3-oxazino[5,6-c][1,2]benzothiazine-2,4(3H)-dione 6,6-dioxide.

$C_{16}H_{11}N_3O_5S = 357.3$

CAS — 90101-16-9.

Droxicam is a non-steroidal anti-inflammatory agent. It has been given by mouth in a dose of 20 mg daily.

References.

1. Bori D, *et al.* A clinical trial comparing a new NSAID droxicam and piroxicam in spinal osteoarthritis. [illegible] *Res Clin* [illegible] 1990; 28: [illegible].

Emorfazone [illegible]

Emorfazone (rINN).

[illegible] 4-Ethoxy-2-methyl-5-morpholino-3(2H)-pyridazinone.

$C_{11}H_{17}N_3O_3 = 239.3$

CAS — [illegible]

Emorfazone is an analgesic that has been used in [illegible] about 100 to 200 mg.

Epirizole [illegible]

Epirizole (USAN, rINN).

DA-398; Mepirizole. 4-Methoxy-2-(5-methoxy-3-methylpyrazol-1-yl)-6-methylpyrimidine.

$C_{11}H_{14}N_4O_2 = 234.3$.

CAS — 18694-40-1

Pharmacopoeias. In Jpn.

Epirizole has analgesic and anti-inflammatory properties. It has been used by mouth in doses of up to 600 mg daily in divided doses.

Proprietary Names

Mebron.

Preparation details are given in Part 3.

Etenzamide [illegible]

Etenzamide (BAN).

Aethoxybenzamidum; Ethenzamide (rINN); Ethoxybenzamide; Ethylsalicylamide; HP-209; 2-Ethoxybenzamide.

$C_9H_{11}NO_2 = 165.2$.

CAS — 938-73-8.

Pharmacopoeias. In Aust. and Jpn.

Etenzamide has analgesic, anti-inflammatory, and antipyretic properties. It has been given in doses of up to [illegible] daily in divided doses by mouth.

Proprietary Names

Ecitext; Trancalgyl.

Multi-ingredient preparations. Allukin; Algopyrin; [illegible]; Antipanin N; Ascorbin-Chinin-Dragees [illegible]; [illegible]; Doppel-Spalt N; Dorcenopin S; Dristan Fingrine; [illegible]; ergo sanol spezial; Ergosanol N; Ergosanol spezial; Etoell Calleina; Etocil Pirina; Eu-Med S; Giulisal; [illegible]; Kanovenol; Kolton [illegible] N; Melabon; Melabon [illegible]; Neuro-Europan; [illegible]; Octadon; [illegible]; Pectocedin; [illegible]; Temagin; [illegible]; Toximer N; [illegible].

Preparation details are given in Part 3.

Etersalate [illegible]

Etersalate (rINN).

Eterstate; Eterysalate; Ethersalate; 2-(4-Acetamidophenoxy)ethyl salicylate, acetate (ester).

$C_{19}H_{19}NO_6 = 357.4$

CAS — 62992-61-4.

Etersalate has analgesic and anti-inflammatory properties. It has been given in doses of 750 mg three or four times daily by mouth as an analgesic and in doses of [illegible] three times daily by mouth in rheumatic disorders. It has also been given like aspirin as an antiplatelet agent.

Proprietary Names

Daital.

Preparation details are given in Part 3.

Ethyl Salicylate [illegible]

Ethyl 2-hydroxybenzoate.

$C_9H_{10}O_3 = 166.2$.

CAS — 118-61-6.

Ethyl salicylate has been used topically in concentrations of up to 4% for rheumatic and muscular pain.

Proprietary Names

Multi-ingredient preparations. Alginex; Aspellin; Cintrenzma-Gel forte; Deep Heat; Deep Heat Spray; Dubam; Rareex Rems; Teroinn.

Preparation details are given in Part 3.

Etodolac [illegible]

Etodolac (BAN, USAN, rINN).

AY-24236; Etodolic Acid. 1,8-Diethyl-1,3,4,9-tetrahydropyrano[3,4-b]indol-1-ylacetic acid.

$C_{17}H_{21}NO_3 = 287.4$.

CAS — 41340-25-4.

Adverse Effects and Precautions

As for Ibuprofen, p.17.

The presence of metabolites of etodolac in the urine may give rise to a false-positive reaction for bilirubin.

[illegible]

Consolidated list of products whose consumption and/or sale have been banned, withdrawn, severely restricted or not approved by Governments (1987)

PHARMACEUTICALS (MONOCOMPONENT PRODUCTS)

ANNEXURE B

Product name : MERCURIC DERIVATIVES (TOPICAL)

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
JPN	1969	AMINOMERCURIC CHLORIDE BANNED DUE TO SKIN DISORDERS ASSOCIATED WITH LONG-TERM USE. (REFERENCE: (JNPAB) NOTICE BY DIRECTOR GENERAL OF PHARMACEUTICAL AFFAIRS BUREAU 562 , , 23 JULY 1969)
PHL	NOV. 1983	MERCURY-BASED PRODUCTS FOR TOPICAL USE ARE BEING PHASED OUT DUE TO DUBIOUS EFFICACY AND SAFETY.
ITA		WITHDRAWN FROM THE MARKET OWING TO AN UNFAVOURABLE RISK-BENEFIT RATIO AND THE LACK OF SUBSTANTIAL EVIDENCE OF EFFICACY. WHO COMMENT: PREPARATIONS CONTAINING MERCURIC DERIVATIVES FOR TOPICAL USE HAVE BEEN WITHDRAWN IN MANY COUNTRIES SINCE THEY MAY PRODUCE HYPERSENSITIVITY AND ALLERGY. SYSTEMIC ABSORPTION HAS RESULTED IN CHRONIC MERCURY POISONING AND ACRODYNIA (PINK DISEASE) IN INFANTS

Product name : METAMIZOLE SODIUM
C.A.S number : 68-89-3

Scientific and common names, and synonyms :

ANALGIN
DIPYRON
DIPYRONE
NORAMIDOPYRINE METHANESULFONATE SODIUM
SULPYRIN
SULPYRINE

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
AUS	1965	THE DEPARTMENT OF HEALTH HAS PROHIBITED THE IMPORTATION OF NORAMIDOPYRINE METHANESULFONATE SODIUM.
NOR	JULY 1976	WITHDRAWN FROM THE MARKET.
PHL	1977	BY ADMINISTRATIVE ORDER NO.330, USED ONLY AS A LAST RESORT IN SERIOUS AND LIFE-THREATENING SITUATIONS WHEN OTHER LESS TOXIC ANTIPYRETIC DRUGS AND OTHER MEASURES HAVE FAILED AND ARE NOT TOLERATED, AND ONLY WITH PROPER SUPERVISION AND MONITORING. THE PACKAGE INSERTS ARE REQUIRED TO CARRY EXTENSIVE WARNING INFORMATION, ESPECIALLY REGARDING THE RISK OF FATAL AGRANULOCYTOSIS WITH THE USAGE OF THIS DRUG. THE DRUG IS AVAILABLE ONLY ON PRESCRIPTION. (REFERENCE: (PHADO) ADMINISTRATIVE ORDER NO. 330 , , 1977)
USA	JUNE 1977	AN ANALGESIC ANTIPYRETIC DRUG, FOUND TO BE EFFECTIVE AT REDUCING FEVER BUT WITHDRAWN FROM THE MARKET AND PROHIBITED FOR EXPORT BY THE FOOD AND DRUG ADMINISTRATION ON THE BASIS OF REPORTS OF AGRANULOCYTOSIS, A SOMETIMES FATAL BLOOD CONDITION, ASSOCIATED WITH ITS USE. THE DIRECTOR OF THE BUREAU OF DRUGS FOUND THAT AGRANULOCYTOSIS CANNOT BE EFFECTIVELY PREVENTED BY FREQUENT EXAMINATION OF TREATED PATIENTS SINCE THIS CONDITION CAN OCCUR WITHIN A FEW HOURS FOLLOWING ADMINISTRATION OF THE DRUG TO A SENSITIVE INDIVIDUAL. IN ITS DECISION THE FDA CITED THE AVAILABILITY OF EFFECTIVE ORALLY ADMINISTERED DRUG PRODUCTS (EG. ASPIRIN AND ACETOMINOPHEN) AND CONCLUDED THAT THE RISKS ASSOCIATED WITH THIS DRUG FAR OUTWEIGH ANY BENEFIT DERIVED FROM ITS USE, INCLUDING USE IN HODGKIN'S DISEASE AND SIMILAR MALIGNANT DISEASES.
ITA	1979	INJECTABLE PREPARATIONS WITH DOSAGES HIGHER THAN 1 GRAM AND INTRAVENOUS PREPARATIONS IN COMBINATION WITH OTHER COMPOUNDS HAVE BEEN WITHDRAWN. THE LABEL FOR CURRENTLY MARKETED PREPARATIONS NOW CARRIES A WARNING REGARDING FATAL ACCIDENTS DUE TO HYPERSENSITIVITY.
DNK	APR. 1979	PREPARATIONS CONTAINING METAMIZOLE WERE BANNED FOR SYSTEMIC USE DUE TO THE POTENTIAL RISK OF FATAL AGRANULOCYTOSIS. (REFERENCE: (UGLAAO) UGESKRIFT FOR LAEGER 1873 MAR. 1979)
SAU	1980	PROHIBITED FOR INTRAVENOUS OR INTRAMUSCULAR INJECTION DUE TO SEVERAL REPORTS OF ANAPHYLACTIC SHOCK.

...(Continued)

PHARMACEUTICALS (MONOCOMPONENT PRODUCTS)

Product name : METAMIZOLE SODIUM ...(Continued)
C.A.S number : 68-89-3

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
BGD	JUNE 1982	BANNED IN ORAL DROPS AND TABLET FORM DUE TO HIGH INCIDENCE OF ADVERSE EFFECTS AND AVAILABILITY OF SAFER ALTERNATIVES. A SINGLE INGREDIENT INJECTION REMAINS AVAILABLE FOR TERMINAL CARE AS A RESTRICTED DRUG FOR SPECIALIZED USE.
DEU	JAN. 1983	INDICATIONS FOR USE HAVE BEEN RESTRICTED. THE LABEL MUST BEAR A BOXED WARNING STATING THAT THERE IS A SLIGHT RISK OF LIFE THREATENING SHOCK OR AGRANULOCYTOSIS AND THAT PATIENTS WITH KNOWN HYPERSENSITIVITY TO PYRAZOLONE DERIVATIVES SHOULD NOT TAKE THIS DRUG.
EGY	JULY 1983	FOLLOWING REPORTS OF ANAPHYLACTIC SHOCK NO REGISTRATION LICENCE IS TO BE GRANTED FOR INJECTABLE PREPARATIONS CONTAINING MORE THAN 1 GRAM OF THIS COMPOUND.
ISR	01 DEC. 1985	FIXED DOSE COMBINATIONS OF METAMIZOLE SODIUM ARE NOT APPROVED FOR REGISTRATION. PARENTAL PREPARATIONS OF METAMIZOLE SODIUM (SINGLE-DOSE PRODUCT) MAY BE ADMINISTERED ONLY IN HOSPITALS AND CLINICS WHERE THERE ARE SUITABLE FACILITIES FOR RESUSCITATION (IN CASES OF ANAPHYLACTIC SHOCK). ENTERAL PREPARATIONS OF METAMIZOLE SODIUM (SINGLE-DOSE PRODUCT) MAY BE DISPENSED WITHOUT PRESCRIPTION.
GRC		PREPARATIONS CONTAINING METAMIZOLE HAVE BEEN WITHDRAWN FROM THE MARKET, WITH THE EXCEPTION OF INJECTABLE PREPARATIONS CONTAINING UP TO 1 GRAM, BECAUSE OF CONCERN ABOUT AGRANULOCYTOSIS ASSOCIATED WITH THE DRUG'S USE.
MEX		DUE TO TOXICITY NOT ACCEPTED FOR USE IN PEDIATRIC PREPARATIONS (ELIXIR, SOLUTION, SUSPENSION, SUPPOSITORIES). OTHER ALTERNATIVES (ASPIRIN, PARACETAMOL) MUST BE SOUGHT.
PER		THE PACKAGE AND/OR LABEL FOR THIS PRODUCT ADVISES THAT THE DRUG IS INTENDED FOR PRESCRIPTION USE ONLY AND MAY CAUSE AGRANULOCYTOSIS.
SGP		METAMIZOLE SODIUM AND RELATED SALTS AND SULPHONATES OF NORAMIDOPYRINE HAVE BEEN BANNED FOR IMPORTATION.
SWE		PREPARATIONS CONTAINING METAMIZOLE WERE WITHDRAWN FROM THE MARKET BY THE MANUFACTURERS AFTER MUTUAL DISCUSSIONS DUE TO ADVERSE REACTIONS SUCH AS AGRANULOCYTOSIS.
VEN		NOT APPROVED FOR USE AND/OR SALE. WHO COMMENT: METAMIZOLE SODIUM, A LONG-ESTABLISHED ANALGESIC AND ANTIPYRETIC, HAS BEEN ASSOCIATED, LIKE SOME OTHER PYRAZOLONES, WITH BLOOD DYSCRASIAS AND PARTICULARLY AGRANULOCYTOSIS. THE INCIDENCE OF THESE REACTIONS IS DISPUTED. A LARGE INTERNATIONAL COLLABORATIVE STUDY OF THIS QUESTION HAS RECENTLY BEEN COMPLETED, BUT THE RESULTS ARE NOT AS YET AVAILABLE.

Product name : METHAMPHETAMINE
C.A.S number : 537-46-2

Scientific and common names, and synonyms :
(+)-2-METHYLAMINO-1-PHENYLPROPANE

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
TUR	AUG. 1982	BANNED FOR PRODUCTION, IMPORT, EXPORT, SALE AND USE. WHO COMMENT: METHAMPHETAMINE IS CONTROLLED UNDER SCHEDULE II OF THE 1971 CONVENTION ON PSYCHOTROPIC SUBSTANCES. (REFERENCE: (UNCPS) UNITED NATIONS CONVENTION ON PSYCHOTROPIC SUBSTANCES . . . 1971)

following topical application. Significant toxicity has been found in burns treated with 3% clioquinol topical preparation for 2 days. The Committee on Drugs of the American Academy of Pediatrics considered that there was a potential risk of toxicity in infants and children from clioquinol and dichloroxyquinoline applied topically. Since alternative effective preparations are available for dermatitis the Committee recommended that products containing either of these compounds should not be used.

1. Fischer T, Harries P. Skin absorption of hydroxyquinolines. *Lancet* 1977; i: 643.
2. Stoltz SJ, *et al.* Percutaneous absorption of iodochlorhydroxyquin in humans. *J Invest Dermatol* 1982; 82: 156–8.
3. Eszeredy FW, *et al.* Percutaneous absorption and distribution of iodochlorhydroxyquin in dogs. *J Pharm Sci* 1982; 71: 1366–72.
4. Kaufman RE, *et al.* Clioquinol, iodochlorhydroxyquin, Vioform, and iodoquinol (diiodohydroxyquin): blindness and neuropathy. *Pediatrics* 1966; 38: 767–74.

Abnormal coloration. Green discoloration of the tongue, urine and faeces and yellow discoloration of the nails have been recognised with clioquinol. Topical application of a clioquinol-containing corticosteroid preparation was associated with intense red discoloration of white hair in 2 patients with generalised dermatitis — Bandmann H-J, Speer C. Red hair after application of chinoform. *Contact dermatitis* 1979; 5: 333.

Hypersensitivity. Over the 2-year period 1975–1977 primary irritant dermatitis was noted in 7 patients compared with contact allergy in 35, following the topical application of clioquinol. Irritant dermatitis was associated with clioquinol concentration rather than crystal size — Kero M, *et al.* Primary irritant dermatitis from topical clioquinol (chinoform). *Contact dermatitis* 1979; 5: 154–7.

Classification of clioquinol as a mild irritant which can commonly cause sensitisation, especially when applied to eczematous skin, chloroquinol can also cause sensitisation, but less frequently. It is important to include clioquinol and chloroquinol in routine patch testing since the clinical reaction may be relatively mild and sensitivity easily missed, particularly in the presence of a corticosteroid which suppresses the irritation from the [illegible] — Fisher AA. Contact dermatitis to clioquinol (Vioform) and chloroquinol (Sterosan). *Cutis* 1979; 24: 47–8.

Absorption and Fate

Much of a dose of clioquinol passes through the gastrointestinal tract without being absorbed, but a variable degree of absorption does occur.

Some absorption occurs through the skin when clioquinol is applied topically (see Adverse Effects).

Uses and Administration

Clioquinol, a halogenated hydroxyquinoline, is a luminal amoebicide formerly given by mouth in the treatment of intestinal amoebiasis. It was also formerly used for the prophylaxis and treatment of traveller's diarrhoea and similar infections but was of doubtful value. Oral preparations have now been withdrawn because of neurotoxicity (see Adverse Effects).

Clioquinol has antibacterial and antifungal activity and is used in creams and ointments, usually containing 3%, in the treatment of skin infections. It is also applied topically with a corticosteroid in inflammatory skin conditions complicated by bacterial or fungal infection.

For a discussion of the risks from topical application of clioquinol, see Adverse Effects, above.

Proprietary Names

Linoleinsept, Silic C, Vioform.

Multi-ingredient preparations. Amibile: Euzem; Antiviolorm; Barnolind HC; Betnesate-C; Betnoval med chinoform; Betnovate-C; Celestoform; Celeston Valerat med chinoform; Cuatroderm; Dermades Chinoiniico; Diprolorm; Diprosept; First Aid Antiseptic Powder; Hetian-C; Hyoriform; Iodoformiles; Iodoform Continet; Locacortene-Viotorme; Locacortene Viotorm; Locacortene-Viotorm; Lacortec; Locortene Viotorme; Locortene-Viotorm; Locortien-Viotormic; Menaderm Cite; Menaderm Otiologico; Milicortien-Viotorm; Neo-Varex; Oraicer; Phenoris; Prenaderm-C Quadriderm; Quadriderme; Quinacaine Retec Menaderm; Retecs Antimicotico; Sermatorm; Sinaral C; Synalar med chinoform; Synorel; Tinaforme; UAD Cream or Lotion Violeta; Viocidina Viotorm-Hydrocortisone.

Preparation details are given in Part 3.

Cl=18.6%; N=7.3%.
$C_{11}H_6ClNO$ = 192.0
CAS — 2477-89-9.

Clioquinol is an antiprotozoal and antifungal agent used topically in the treatment and prevention of infections.

Decoquinate (12626-e)

Decoquinate (*BAN, USAN, rINN*)
HC-1852b; M&B-15497; Ethyl 6-decyloxy-7-ethoxy-4-hydroxyquinoline-3-carboxylate.
$C_{24}H_{37}NO_4$ = 417.5.
CAS — 18507-89-6.

Pharmacopoeias. In *B.P. Vet.*

A cream to buff-coloured, odourless or almost odourless, microcrystalline powder. Insoluble in water; practically insoluble in alcohol; very slightly soluble in chloroform and ether.

Decoquinate is an antiprotozoal agent used in veterinary practice for the control of coccidiosis in poultry and sheep.

Dehydroemetine Hydrochloride (12627-m)

Dehydroemetine Hydrochloride (*BAN*)
BT-2450; 2,3-Dehydroemetine Hydrochloride; DHE 9332; 2,3-Didehydro-6,7,10,11-tetramethoxyemetan dihydrochloride; 3-Ethyl-1,6,7,11b-tetrahydro-9,10-dimethoxy-2-(1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolylmethyl)-4H-benzo[a]quinolizine dihydrochloride.
$C_{29}H_{38}N_2O_4.2HCl$ = 551.6.
CAS — 2912-67-9 (dehydroemetine); 3225-[illegible]-6 (dehydroemetine hydrochloride).

NOTE. The name D.H.E. 45 has been used for mixtures of dihydroergotamine mesylate.

Pharmacopoeias. In *Aust., Br., Ind.,* and *Mex.*

Dehydroemetine, a synthetic derivative of emetine, [illegible] is a tissue amoebicide with similar [illegible] but has also been used as an antihelmintic, [illegible] schistosomiasis and fasciolosis.

Dehydroemetine is reported to be [illegible] from the lungs than emetine, the [illegible] than emetine and is probably less [illegible]. For this reason dehydroemetine may be [illegible] time in the treatment of severe intestinal [illegible] hepatic amoebiasis, although both [illegible] placed by metronidazole which is less toxic.

In the treatment of amoebiasis dehydroemetine dihydrochloride is given by deep subcutaneous or intramuscular injection in a dose of 1 to 1.5 mg per kg body-weight daily, but no more than 90 mg daily, generally for up to 5 days. In children it should be given in 2 divided doses daily.

Amoebic infections. Dehydroemetine, though an effective tissue amoebicide is also cardiotoxic, and is generally reserved for cases of amoebiasis in patients. Where there is hepatic abscess then chloroquine should also be given. Needle aspiration is recommended when penetration of the [illegible] likely to be reduced by the size of the [illegible] when rupture is imminent — WHO Technical Report Series 201, 1961, p. 39; see also p. 20.

Fasciolasis. A brief report of the treatment of fascioliasis in 15 children with praziquantel, bithionol or dehydroemetine. Praziquantel was not effective in the 2 adults given it. Bithionol and dehydroemetine were both effective in some children and the latter might be preferred since it was easier to administer if its unpleasant taste was to be [illegible] bithionol by mouth. The dose of dehydroemetine was 1 mg per kg body-weight daily for 10 days by intramuscular injection — Farid Z, *et al.* Treatment of acute hepatic fascioliasis. *Trans R Soc Trop Med Hyg* 1977; 71: 82–290.

Diaveridine (12643-h)

Diaveridine (*BAN, USAN, rINN*)
BW-39-210; NSC-408735; 5-Veratrylpyrimidine-2,4-diylamine.
$C_{13}H_{16}N_4O_2$ = 260.3.
CAS — 5355-16-8.

Pharmacopoeias. In *B.P. Vet. Fr.* and *Cz.* include Diaveridine for veterinary use.

ANNEXURE C

Diloxanide furoate is available in 500-mg tablets from the Parasitic Diseases Division, Centers for Disease Control.

Pharmacological Effects. Diloxanide is directly amebicidal when tested *in vitro*. The furoate ester is active at 0.01 to 0.1 μg/ml, and it is thus considerably more potent than emetine. Little is known of its mechanism of action.

Absorption, Fate, and Excretion. In experimental animals, 50 to 90% of an oral dose of diloxanide furoate is excreted in the urine within 48 hours. More than half of this appears within 6 hours. Excretion in the feces accounts for 4 to 9% of the dose. Peak concentrations appear in the blood within 1 hour but fall to a fraction of this within 6 hours. Hence, a major part of an oral dose is rapidly absorbed from the gastrointestinal tract and is rapidly excreted in the urine. The ester is largely hydrolyzed in the lumen or mucosa of the intestine, so that only diloxanide appears in the systemic circulation (Wilmshurst and Cliffe, 1964). The drug appears in the urine largely as the glucuronide.

Route of Administration and Dosage. Diloxanide furoate is given only orally. The recommended dosage is 500 mg three times daily for 10 days. If necessary, a second course may be given immediately following the first. Children should be given 20 mg/kg per day in three divided doses for 10 days.

Toxicity and Side Effects. Side effects are mild. Flatulence is most commonly reported; vomiting, pruritus, and urticaria occur occasionally (see Beale, 1973).

Therapeutic Uses. Diloxanide furoate is the drug of choice in the treatment of asymptomatic passers of cysts (administered alone) (Krogstad *et al.*, 1978) or in the treatment of invasive and extraintestinal amebiasis (administered with an appropriate systemic or mixed amebicide). It is ineffective when administered alone in the treatment of extraintestinal amebiasis. There is controversy about its efficacy when used alone in the treatment of intestinal amebiasis with frank dysentery. While good results have been reported from some areas, other studies have been less successful (see Suchak *et al.*, 1980; Walmot *et al.*, 1962). In trials carried out primarily on asymptomatic subjects passing trophozoites or cysts, or on patients with nondysenteric, symptomatic intestinal amebiasis, treatment with diloxanide furoate resulted in a high percentage of cures (Woodruff and Bell, 1960; Wolfe, 1973). In all cases the drug was well tolerated. The relatively low cost of this compound is also an advantage, particularly in underdeveloped countries.

EMETINE AND DEHYDROEMETINE

Emetine is an alkaloid obtained from ipecac root (*Cephaelis ipecacuanha*). It is also prepared semisynthetically by methylation of cephaeline, another alkaloid in ipecac. The use of this compound as a direct-acting systen 1912, when Vedder showed that the drug killed amebae *in vitro*. Since then, emetine has been one of the most widely used agents in the treatment of severe invasive *intestinal amebiasis*, *amebic hepatitis*, and *amebic abscesses*. Dehydroemetine is a close structural analog of emetine that has similar pharmacological properties, but it is considered to be less toxic. Both drugs are being replaced by mixed amebicides of the *nitroimidazole class*, which are as effective but far safer (see below). Thus, emetine and dehydroemetine should not be used unless the nitroimidazoles are ineffective or contraindicated. Disadvantages of these alkaloids are as follows: (1) Both compounds require parenteral administration by subcutaneous or deep intramuscular injection; local reactions ranging from pain to abscess formation are not uncommon. (2) Particularly after prolonged administration, both agents may produce systemic toxic reactions, some of which can be serious or fatal; adverse effects primarily involve the heart and cardiovascular system, the neuromuscular system, the central nervous system, and the gastrointestinal tract. (3) Although their use can occasionally be lifesaving because of direct amebicidal action, neither compound can be used alone for curative purposes. (4) Patients receiving either agent require close medical supervision. (5) Use of either drug is contraindicated in patients who are pregnant or in those who have cardiac, renal, or neuromuscular disease.

Details of the pharmacology and toxicology of emetine and dehydroemetine are presented in *earlier editions* of this textbook (see also Yang and Dupras, 1980; Harries, 1982). The dosage for dehydroemetine in adults is 1 to 1.5 mg/kg per day, to a maximal daily dose of 90 mg. This regimen is continued for up to 5 days. The daily pediatric dose is the same, except that one half of it is given every 12 hours. Emetine hydrochloride is available as an injection (65 mg/ml); dehydroemetine is available from the Parasitic Diseases Division, Centers for Disease Control.

8-HYDROXYQUINOLINES

A number of halogenated 8-hydroxyquinolines have been synthesized and utilized clinically as luminal amebicides, particularly to treat asymptomatic passers of cysts. Such direct-acting amebicidal agents have also been used in combination with metronidazole to treat intestinal forms of amebiasis; *iodoquinol* (*diiodohydroxyquin*) and *clioquinol* (*iodochlorhydroxyquin*) are the best known of this class of compounds. They have been widely and all too often indiscriminately employed for the treatment of diarrhea. The use of these drugs, particularly at high doses for long periods, is unfortunately associated with significant risk. The most important toxic reaction, which has been ascribed primarily to clioquinol, is *subacute myelo-optic neuropathy* (SMON). This disease is a myelitis-like illness that was first described in epidemic form (thousands of afflicted patients) in Japan; only sporadic cases have been reported elsewhere, but the actual prevalence is unknown. While SMON in

Hydroxyquinolines

ANNEXURE E

Abstract

Halogenated hydroxyquinolines are widely used for the routine treatment of diarrhoea, a disorder for which they have not been shown to be effective. Used alone, they are ineffective in the treatment of symptomatic amoebiasis. Severe neurological disorders such as optic neuritis and subacute myelo-optic neuropathy have been associated with their use. Considering their lack of efficacy and the availability of less toxic, more effective amoebicides, the use of halogenated hydroxyquinolines in acute diarrhoea cannot be justified and there is thus no rationale for their production and sale.

1. Formulations

Halogenated hydroxyquinolines have been advocated for the treatment of intestinal amoebiasis in many pharmacopoeias; however, they are currently widely promoted and used for all types of diarrhoea. A number of different products are available on the market, the most popular of which are clioquinol (iodochlorhydroxyquinoline) and iodoquinol (diiodohydroxyquinoline); also available are broxyquinoline (dibromohydroxyquinoline) and chlorquinaldol (dichloromethylhydroxyquinoline) (*1*). These are marketed under various trade names, either as individual agents or, more commonly, combined with a wide variety of vitamins, antibiotics, or other agents (*2, 3*). Clioquinol is also commonly marketed as an antibacterial/antifungal agent in dermatological preparations (*4*).

2. Pharmacology

Systemic absorption of the hydroxyquinolines was originally thought to be minimal, but it is now evident that they are absorbed in substantial quantities (*5*). Though most of the drug is excreted in the faeces, up to 25% of an oral dose is conjugated in the liver and can be recovered in the urine (*6, 7*). A green chelate of clioquinol and ferric iron found on the tongue and in the urine of patients taking clioquinol is further evidence of systemic absorption (*4*).

3. Mechanism of action

The mechanism of action of the hydroxyquinolines is unknown (*8*). They are active against both motile and cyst forms of amoeba and have

Consolidated list of products whose consumption and/or sale have been banned, withdrawn, severely restricted or not approved by Governments (1987).

PHARMACEUTICALS (MONOCOMPONENT PRODUCTS)

Product name : CLIOQUINOL (SEE ALSO OXYQUINOLINE DERIVATIVES) . ANNEXURE F
C.A.S number : 130-26-7

Scientific and common names, and synonyms :
- CHINOFORM
- CHLORIODOQUIN
- IODOCHLORHYDROXYQUIN
- IODOXYQUINOLINE
- 7-IODO-5-CHLOROXINE

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
JPN	1970	THE MINISTRY OF HEALTH AND WELFARE PROHIBITED THE SALE OF CLIOQUINOL AND BROXYQUINOLINE AND PREPARATIONS CONTAINING THEM. FOLLOWING REPORTS THAT CLIOQUINOL MIGHT BE ONE OF THE CAUSES OF SUBACUTE MYELO-OPTIC NEUROPATHY (SMON). (REFERENCE: (JAPAN) NOTICE BY DIRECTOR GENERAL OF PHARMACEUTICAL AFFAIRS BUREAU , 787 , , 08 SEP. 1970)
NOR	JAN. 1974	WITHDRAWN FROM THE MARKET.
SWE	JUNE 1975	WITHDRAWN BY THE MANUFACTURER AFTER MUTUAL DISCUSSIONS DUE TO NEUROLOGICAL ADVERSE REACTIONS. IT REMAINS ON THE MARKET FOR EXTERNAL USE.
DDR	1978	DURATION OF TREATMENT AND DOSAGE ARE RESTRICTED DUE TO THE POTENTIAL HAZARD OF SMON.
DNK	1978	PRODUCTS HAVE BEEN WITHDRAWN FROM THE MARKET. (REFERENCE: (UGLAAD UGESKRIFT FOR LAEGER , 140 , 1181 , 1978))
BEG	JUNE 1982	BANNED AS A SINGLE INGREDIENT OR IN COMBINATION DUE TO ITS IMPLICATION IN SUB-ACUTE MYELO-OPTIC NEUROPATHY.
PHL	AUG. 1982	THIS DRUG, USED TO TREAT INFECTIOUS DIARRHEA, HAS BEEN WITHDRAWN FROM THE DOMESTIC MARKET DUE TO REPORTS OF NEUROLOGICAL DISORDERS (SMON) WITH ITS USE IN JAPAN.
ITA	1983	WITHDRAWN FROM THE MARKET.
NPL	1983	ALL PREPARATIONS CONTAINING THIS SUBSTANCE HAVE BEEN BANNED.
DOM	FEB. 1983	PROHIBITED FOR USE AND/OR SALE AFTER AUTHORITIES WERE INFORMED OF THE MANUFACTURER'S INTENT TO GRADUALLY REPLACE THIS INGREDIENT IN ALL PREPARATIONS CURRENTLY MARKETED WORLDWIDE.
ZWE	FEB. 1983	USE OF CLIOQUINOL IS PROHIBITED BECAUSE OF ITS PROPENSITY TO CAUSE NEUROLOGICAL DISORDERS. (REFERENCE: (ZWDCD DRUGS CONTROL COUNCIL . NEWS BULLETIN . , 1 , 1983))
ZMB	07 DEC. 1983	PREPARATIONS OF CLIOQUINOL FOR INTERNAL USE MAY ONLY BE IMPORTED OR EXPORTED ON A LICENCE ISSUED BY THE DIRECTOR OF MEDICAL SERVICES. (REFERENCE: (ZMBSD STATUTORY INSTRUMENT NO. , 164-167 , , DEC. 1983))
MWI	26 OCT. 1985	THE IMPORTATION, MANUFACTURE AND SALE OF PRODUCTS CONTAINING CLIOQUINOL HAVE BEEN PROHIBITED HAVING REGARD TO THE DRUG'S POTENTIAL TO CAUSE SMON.
CHE		ORAL PREPARATIONS OF CLIOQUINOL HAVE BEEN SUBJECTED TO PRESCRIPTION CONTROL AND THE APPROVED INDICATIONS RESTRICTED TO INTESTINAL AMOEBIASIS AND DIARRHOEA CAUSED BY SENSITIVE ORGANISMS FOLLOWING CASES OF SUB-ACUTE MYELO-OPTIC NEUROPATHY (SMON) IN SWITZERLAND.
CUB		USE RESTRICTED TO TREATMENT OF PARASITIC INFECTIONS.
DEU		PREPARATIONS CONTAINING CLIOQUINOL INTENDED FOR INTERNAL USE HAVE BEEN PLACED UNDER PRESCRIPTION CONTROL BECAUSE OF A PROPENSITY TO CAUSE NEUROLOGICAL DISORDERS.
ESP		THE MINISTRY OF HEALTH AND CONSUMER PROTECTION HAS WITHDRAWN APPROVAL FOR CLIOQUINOL.
FRA		CLIOQUINOL HAS BEEN PLACED UNDER SCHEDULE A OF THE POISONOUS SUBSTANCES REGULATIONS.
NLD		PREPARATIONS CONTAINING CLIOQUINOL HAVE BEEN WITHDRAWN FROM THE MARKET.

...(Continued)

PHARMACEUTICALS (MONOCOMPONENT PRODUCTS)

Product name : CLIOQUINOL (SEE ALSO OXYQUINOLINE DERIVATIVES) _(Continued)
C.A.S number : 130-26-7

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
SAU		FOLLOWING REPORTS OF SUBACUTE MYELO-OPTIC NEUROPATHY (SMON) IN PATIENTS TREATED WITH THIS DRUG, THE DRUG COMMITTEE HAS PROHIBITED ITS IMPORT. PROHIBITION OF DOMESTIC USE AND WITHDRAWAL FROM THE MARKET ARE UNDER CONSIDERATION.
VEN		SUBJECT TO RESTRICTED USE AND/OR SALE. WHO COMMENT: CLIOQUINOL HAS BEEN SHOWN TO BE NEUROTOXIC IN ANIMAL EXPERIMENTS. IT HAS ALSO BEEN IMPLICATED AS A CAUSE OF SUBACUTE MYELO-OPTIC NEUROPATHY (SMON) IN JAPAN. ELSEWHERE RELATIVELY FEW SUCH CASES HAVE BEEN DOCUMENTED. CLIOQUINOL WAS SUBSEQUENTLY WITHDRAWN FROM USE IN SOME COUNTRIES AND PLACED UNDER PRESCRIPTION CONTROL IN MANY OTHERS. IT WAS PHASED OUT WORLDWIDE BY THE MAJOR MANUFACTURER BETWEEN 1983 AND 1985 ON GROUNDS OF OBSOLESCENCE. NO ADEQUATELY CONTROLLED EVIDENCE WAS EVER GENERATED THAT CLIOQUINOL IS EFFECTIVE IN BACTERIAL AND VIRAL DIARRHOEA. HOWEVER PRODUCTS CONTAINING CLIOQUINOL AND RELATED HYDROXYQUINOLINES CONTINUE TO BE USED IN SOME TROPICAL AND SUBTROPICAL COUNTRIES WHERE AMOEBIASIS REMAINS AN ENDEMIC PROBLEM AND WHERE THE RELATIVELY LOW COST OF THESE PRODUCTS IS AN IMPORTANT CONSIDERATION. (REFERENCE: (WHODI) WHO DRUG INFORMATION BULLETIN . 4 . 8 . 1977) ; (REFERENCE: (WHODI) WHO DRUG INFORMATION BULLETIN . 1 . 5 . 1978)

Product name : CLOFIBRATE
C.A.S number : 637-07-0

Scientific and common names, and synonyms :
ETHYL alpha-(4-CHLOROPHENOXY)-alpha-METHYLPROPIONATE
ETHYL CLOFIBRATE
ETHYL 2-(p-CHLOROPHENOXY)ISOBUTYRATE
PROPANOIC ACID,2-(p-CHLOROPHENOXY)-2-METHYL, ETHYL ESTER

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
DNK	1978	INDICATIONS FOR USE HAVE BEEN RESTRICTED.
ISR	1979	WITHDRAWN FROM THE MARKET FOLLOWING REPORTS OF INCREASED MORTALITY ASSOCIATED WITH USE
NOR	1979	WITHDRAWN FROM THE MARKET FOLLOWING REPORTS OF INCREASED MORTALITY ASSOCIATED WITH USE.
PHL	1980	SEVERELY RESTRICTED IN USE TO CERTAIN PATIENTS ONLY. THIS COMPOUND HAS BEEN SHOWN TO CAUSE HEPATIC TUMOURS IN RODENTS. THERE IS AN INCREASED RISK OF MALIGNANCY AND CHOLELITHIASIS WITH USE IN HUMANS. A WARNING STATEMENT IS REQUIRED TO BE PLACED ON THE LABELS OF ALL PRODUCTS.
ITA	1981	CURRENTLY MARKETED IN ITALY WITH LIMITED THERAPEUTIC INDICATIONS (CERTAIN HYPERPROTEINEMIAS WITH ASCERTAINED DIAGNOSES; DIABETIC EXUDATIVE RETINOPATHY; XANTHOMES).
SWE	JAN. 1981	USED ONLY IN CASES OF SEVERE HYPERLIPOPROTEINEMIA DUE TO INCREASED MORTALITY CONNECTED WITH LONG-TERM TREATMENT.
[illegible]		UNDER THE PROVISIONS OF THE DRUGS(CONTROL) ORDINANCE, THIS DRUG HAS BEEN BANNED SINCE IT INCREASES THE INCIDENCE OF GALLSTONES AND CHOLECYSTITIS, DRUG-INDUCED CARDIAC ARRHYTHMIAS, CARDIOMEGALY, ANGINA, CLAUDICATION AND THROMBOEMBOLIC PHENOMENA. IT ALSO ENHANCES THE EFFECTS AND TOXICITY OF OTHER ACIDIC DRUGS AND IT IS IMPLICATED IN THE INCIDENCE OF VARIOUS TUMOURS. (REFERENCE: (BGDCO) THE DRUGS (CONTROL) ORDINANCE . . . 1982)
CHE		INDICATIONS ARE RESTRICTED TO TREATMENT OF PATIENTS WITH HYPERLIPIDAEMIA REFRACTORY TO DIETARY MEASURES.
CHL		INDICATIONS ARE RESTRICTED TO TREATMENT OF PATIENTS WITH HIGH PLASMA LIPID LEVELS, RESISTANT TO DIETARY CONTROL. (REFERENCE: (BMCHL) BOLETIN INFORMATIVO SOBRE MEDICAMENTOS . 1(1) . . 1985)

_(Continued)

azone. The net result may be increased pharmacological or toxic effects of the displaced drug, depending upon the drug and its disposition being displaced. The well-documented increased risk of bleeding associated with concurrent phenylbutazone-warfarin medication involves such displacement, but phenylbutazone also modifies the action of the oral anticoagulant and influences platelet function. The gastrointestinal effects of phenylbutazone also contribute to the hazard. Displacement of plasma protein–bound thyroid hormone complicates the interpretation of *thyroid function tests.*

Phenylbutazone may cause induction of hepatic microsomal enzymes, and it may also inhibit inactivation of other drugs that are hydroxylated by the microsomal system. It has been said to increase the effect of *insulin.*

Adverse Effects. Phenylbutazone is poorly tolerated by many patients. Some type of side effect is noted in 10 to 45% of patients, and medication may have to be discontinued in 10 to 15%. Nausea, vomiting, epigastric discomfort, and skin rashes are the most frequently reported untoward effects. Diarrhea, vertigo, insomnia, euphoria, nervousness, hematuria (enhanced by concomitant administration of an anticoagulant), and blurred vision have also been observed. In addition, water and electrolyte retention and edema formation occur.

More serious forms of adverse effects include ulcer (or its reactivation) with hemorrhage or perforation, hypersensitivity reactions of the Stevens-Johnson type, ulcerative stomatitis, hepatitis, serositis, hemolytic anemia, leukopenia, agranulocytosis, and thrombocytopenia. *A number of these adverse reactions, especially from aplastic anemia and agranulocytosis,*

When phenylbutazone is given, the patient should be closely supervised and his blood should be examined frequently; weight should also be followed to warn of undue retention of sodium. The drug should only be given for short periods (not more than 1 week). Even then, the incidence of side effects is about 10%. The patient must be told to discontinue the drug and promptly report to a physician if he develops fever, sore throat or other oral lesions, skin rash, pruritus, jaundice, dark urine, or tarry stools. The drug is contraindicated in patients with hypertension; cardiac, renal, or hepatic dysfunction; or a history of peptic ulcer or hypersensitivity to the drug. The toxic effects of the drug are more severe in elderly persons, and its use in this group is inadvisable.

Dosage, Route of Administration, and Preparations. *Phenylbutazone* (AZOLID, BUTAZOLIDIN) is available in 100-mg coated tablets and capsules for oral administration. Daily doses of 300 to 400 mg for brief periods provide maximal therapeutic effects; higher doses only increase toxicity), but patients may subsequently be adequately controlled by doses of 100 to 400 mg per day. The drug should be taken with meals to lessen gastric irritation.

Therapeutic Uses. Phenylbutazone is used for the therapy of *acute gout* and for the treatment of *rheumatoid arthritis and allied disorders.* Acute exacerbations of these conditions respond particularly well to the drug, and its use should be reserved for such episodes. Phenylbutazone should be employed only after other drugs have failed and then only after careful consideration of the risks involved as compared with the advantage to the patient. Indiscriminate use of phenylbutazone in the therapy of trivial acute or chronic *musculoskeletal disorders* can only be condemned.

Phenylbutazone is an effective alternative to colchicine in *acute gout.* Excellent relief can be attained with a brief course of medication, and about 85 to 95% of acute attacks are controlled within 24 to 36 hours. Phenylbutazone causes fewer gastrointestinal side effects than does colchicine and is more reliable when initiation of medication has been delayed. Dosage recommendations have varied: 800 mg daily for 2 days; 800 mg the first day, followed by 300 mg daily for 3 days; or an initial dose of 400 mg, followed by 100 mg every 4 hours until articular inflammation subsides. The relative merits and dangers of phenylbutazone, compared with colchicine, have been discussed by Yü (1974). The drug should not be used prophylactically nor as a uricosuric agent.

Phenylbutazone has a *limited* role in the therapy of *rheumatoid arthritis,* primarily for relief of acute exacerbations of the disorder that are not relieved by other measures. Synovitis is often reduced by a brief regimen (600 mg on the first day, followed by 300 mg daily for 3 days). Because of the high incidence of adverse effects, long-term therapy is not recommended. Brief courses of the drug, *if justified,* may be of similar benefit for acute exacerbations of *ankylosing spondylitis* and *osteoarthritis.*

Oxyphenbutazone

Oxyphenbutazone is a *p*-hydroxy analog of phenylbutazone (on the N-1 phenyl group) and one of the active metabolites of the parent drug. Various aspects of its pharmacology and metabolism are discussed above, in comparison with phenylbutazone. Oxyphenbutazone has the same spectrum of activity, therapeutic uses, interactions, and toxicity as the parent compound, and it shares the same indications, dangers, and contraindications for clinical use. Oxyphenbutazone is said to cause somewhat less gastric irritation.

Oxyphenbutazone (OXALID, TANDEARIL) is marketed in 100-mg tablets. It should be taken in three or four divided portions after meals to lessen gastric irritation. Dosage of oxyphenbutazone is the same as that of phenylbutazone.

Antipyrine and Aminopyrine

Antipyrine (phenazone) and *aminopyrine (aminophenazone)* were introduced into medicine in the late nineteenth century as antipyretics and subsequently were also widely used as analgesics and anti-inflammatory agents. However, clinical use of aminopyrine was sharply curtailed after its potenti-

Pharmacopoeias. In *Aust., Br., Cz., Eur., Fr., Ger., Gr., Hung., Int., Neth., Nord., Port., Rom., Rus., Swiss, Turk., U.S.,* and *Jpn.*

Colourless, odourless crystals or white crystalline powder. Very soluble in water; freely soluble to very soluble in alcohol, and in chloroform; sparingly soluble in ether. Store in airtight containers.

Phenazone and Caffeine Citrate (2683-b)

Antipyrine-Coffeinum Citricum; Migrenin.

Pharmacopoeias. In *Aust., Cz., Hung.,* and *Jpn.*

A powder usually containing phenazone 90%, caffeine 4%, and citric acid monohydrate 19%.

Phenazone Salicylate (2682-m)

Antipyrin Salicylate; Salipyrin.

$C_{11}H_{12}N_2O.C_7H_6O_3 = 322.4$

US — 520-07-0.

Pharmacopoeias. In *Aust., Fr.,* and *Rom.*

Adverse Effects and Precautions

Phenazone is liable to give rise to skin eruptions and in susceptible individuals even small doses may have this effect. Hypersensitivity reactions and neutropenias have been reported. Large doses by mouth may cause nausea, drowsiness, coma, and convulsions.

Phenazone affects the metabolism of some other drugs and its metabolism is affected by other drugs that increase or reduce the activity of liver enzymes.

Effects on the blood. Phenazone had been shown to cause haemolytic anaemia in certain individuals with a deficiency of glucose-6-phosphate dehydrogenase.—Report FAI. Hemolytic effects of drugs and chemical agents. *Clin. Chem. Toxicol.* 1963; 4: 33–50.

Effects on the kidneys. Phenazone is considered nephrotoxic but only limited clinical information on phenazone is available because it has been mainly used in association with phenacetin.— Prescott LF. Analgesic nephropathy: assessment of the role of phenacetin and other analgesics. *Drugs* 1980; 20: 34–54.

Effects on the skin. A summary of 77 cases of fixed drug eruption. Fourteen cases were severe generalised reactions and phenazone derivatives were considered the causative drugs in 9 of these cases.— Shepp S, *et al.* Fixed drug eruptions. 77 cases from 1961 to 1985. *Br. J. Dermatol.* 1989; 120: —.

Hypersensitivity. Immediate allergic reactions to phenazone have been reported. In one patient leucopenia was detected 3 weeks later.

Kasan H, Salem W. Acute and latent leukopenic reaction to antipyrine. *Clin Pharmacol Ther* 1968; 9: 520–22.
Weiss AB, *et al.* Allergic reaction to antipyrine, a marker for hepatic enzyme activity. *JACP Ann Pharmacother* 1989; 23: —.

Porphyria. Phenazone was considered to be unsafe in patients with acute porphyria because it has been shown to be porphyrinogenic in *animals* or *in vitro* systems.— Report MR, McColl KEL. *Porphyria and Skin.* Glasgow: Porphyria Research Unit, University of Glasgow, 1981.

Absorption and Fate

Phenazone is virtually completely absorbed from the gastrointestinal tract and is distributed throughout the body fluids. Less than 10% is bound to plasma proteins and it has a half-life of about 12 hours. Phenazone is metabolised in the liver to 3 major metabolites 3-hydroxymethylphenazone, 4-hydroxyphenazone, and norphenazone. Norphenazone, 4-hydroxyphenazone, and glucuronidated metabolites are all excreted in the urine. A small portion may be eliminated via the bile.

Uses and Administration

Phenazone has analgesic and antipyretic properties and has been given by mouth; phenazone and caffeine citrate or phenazone salicylate have similarly been given by mouth as analgesics.

Topically, solutions containing 5% of phenazone have been used locally as ear drops in disorders such as acute otitis media.

Phenazone is used as a test for the effect of other drugs or the effect of a disease state on the activity of drug-metabolising enzymes in the liver.

Pharmacokinetics, and testing. Review of normal plasma-phenazone pharmacokinetics, urinary metabolite disposition, and body clearances of phenazone in the presence of cirrhosis, fatty liver, hepatitis, and cholestasis.— St Peter A, *et al.* Quantifying hepatic function in the presence of liver disease with phenazone (antipyrine) and its metabolites. *Clin Pharmacol Ther (Mosby)* 20; 5–63.

Culture media. A report commenting that there seems to be no reason for the inclusion of phenazone in yeast nitrogen base.

arations used in treating acute otitis media. It is presumably included in such preparations because it is believed to have a local anti-inflammatory and therefore analgesic action. It would, however, seem unlikely that phenazone would have any action on the skin of the intact tympanic membrane and therefore on the pain which is due primarily to the stretching and distention of the membrane.— Carlin WV. Is there any justification for using phenazone in a local application prescribed for the treatment of acute otitis media? *Br Med J* 1987; 294: 1333.

Proprietary Names

Aurone, Dentigoa N, Eu-Med mono, Oto-Phen, Spondylon N, Tropet.

Multi-ingredient preparations. AB FE, Atroted, Auraltair Otic, Auralean, Auralgicin, Auraltone, Auraset, Aurone Forte, Ballotyl, Blephamide, Breezeezy, Brulex, Conteemed N, Cornéo-Nervacit-S, Cosavil, Covancaine, Creera Antisolar Evanescé, Doppel-Spalt N, Efisalin N, Emocicatrex, Epistaxol Eu-Med SC, Felsol, Felsol Neo, Furacin-Otalgesum, H.E.C., Hemostatico Antisep Asen, Hyaluroctal, Ilvico, Kolfazon, Mentalgina, Migranex, Migranin, Migralgine, Nervalgon N, Noric, Otetrelures, Oftalmo, Otalgan Otipax, Otitex Otocaina, Otocaina Hidrocort, Otodolor, Oto-Fleature, Oto-Phen Forte, Otoscool, Otosmo, Otothricinol, Otulex, Seco-Hémostatiques du Docteur Jouve (suffamides), Pancrealine, Pavision, Pascodor, Pomada Heridas, Puenoine, Quimocaïne, Radolor, Sanatrant-S, Sedaural, Unpro, Solfamin, Spalt N, Spasmosyl, Spondylon, Spondylon B, Spondylon N, Spondylon S, Tabletas Quimpe, Theinol, Tympanalgesic, Tympatrex, Universal Earache Drops, White Knus.

Preparation details are given in Part 3.

Phenazopyridine Hydrochloride (2685-n)

Phenazopyridine Hydrochloride (*rBAN, rJAN, rINNM*). Chlordrato de Fenazopiridina; NC-150; NSC-1879; W-1655. 3-Phenylazopyridine-2,6-diyldiamine hydrochloride.

$C_{11}H_{11}N_5.HCl = 249.7.$

CAS — 94-78-0 (phenazopyridine); 136-40-3 (phenazopyridine hydrochloride).

Pharmacopoeias. In *Braz., Mex.,* and *US.*

A light or dark red to dark violet crystalline powder, odourless or with a slight odour.

Soluble 1 in 300 of cold water, 1 in 20 of boiling water, 1 in 59 of alcohol, 1 in 331 of chloroform, and 1 in 1000 of glycerol; very slightly soluble in ether. Store in airtight containers.

Solubility in DMSO. Phenazopyridine stains may be removed from fabric by soaking in a solution of sodium dithionite in 25% ethanol.

Adverse Effects

Phenazopyridine hydrochloride has caused gastro-intestinal side-effects, headache, and rashes. Abnormalities in liver function, haemolytic anaemia, methaemoglobinaemia, and acute renal failure have also been reported, generally associated with overdosage of with therapeutic doses in patients with impaired renal function. Crystal deposits of phenazopyridine have formed in the urinary tract. Abnormal coloration of body tissues or fluids may occur. Staining of contact lenses has occurred.

Effects on the CNS. Aseptic meningitis, characterised by distinct episodes of fever and confusion, in a patient was associated with the administration of phenazopyridine.— Herlihy TE. Phenazopyridine and aseptic meningitis. *Ann Intern Med* 1987; 106: 172–3.

Precautions

Phenazopyridine hydrochloride is contra-indicated in patients with impaired renal function. Phenazopyridine may interfere with urinalysis based on colour reactions or spectrometry.

Absorption and Fate

Phenazopyridine hydrochloride is absorbed from the gastro-intestinal tract. It is excreted mainly in the urine; up to 65% may be excreted as unchanged phenazopyridine.

Uses and Administration

Phenazopyridine exerts an analgesic effect on the mucosa of the urinary tract and is used to provide symptomatic relief of pain and irritability in conditions such as cystitis, prostatitis, and urethritis. It is given by mouth in usual doses of 200 mg three times daily after food. If given in conjunction with an antibacterial agent for the treatment of urinary tract infections it is recommended that phenazopyridine should be given for not more than 2 days. During administration the urine is tinged either orange or red and underclothes are apt to be stained.

Proprietary Names

Phenazo, Pyridium, Pyridium, Spasmosyl.

Multi-ingredient preparations. Azo-Gantanol, Azo-Gantrisin, Azo-Mandelamine, Mictasan Sodium, Pyridium Plus, Spasmosyl, Uvertrin, Spasmosyl Cocillana, Thiosyl, Urotrisin, Urotrisin Forte.

Binotal, Urobiotic-250, Urogan, Urosphan, Urospasmon.

ANNEXURE H

Preparation details are given in Part 3.

Phenicarbazide (2689-w)

Phenicarbazide (*rINN*).

Phenylsemicarbazide, 1-Phenylsemicarbazide.

$C_7H_9N_3O = 151.2.$

CAS — 103-03-7.

Phenicarbazide has analgesic properties. It has been given by mouth.

Proprietary Names

Multi-ingredient preparations. Polypinne.

Preparation details are given in Part 3.

Phenylbutazone (2686-q)

Phenylbutazone is a non-steroidal anti-inflammatory agent used for ankylosing spondylitis. Adverse effects include agranulocytosis and aplastic anaemia and limit its use.

Phenylbutazone (*rBAN, rINN*).

Butadione; Fenilbutazona; Phenylbutazonum; 4-Butyl-1,2-diphenylpyrazolidine-3,5-dione.

$C_{19}H_{20}N_2O_2 = 308.4.$

CAS — 50-33-9.

Pharmacopoeias. In *Aust., Br., Braz., Chin., Cz., Eur., Fr., Ger., Gr., Hung., Ind., It., Jpn, Mex., Neth., Nord., Port., Rom., Rus., Swiss, Turk., U.S.,* and *Yug.* Also in *B.P.Vet.*

A white or off-white odourless or almost odourless crystalline powder. *B.P.* solubilities are: practically insoluble in water; sparingly soluble in alcohol; soluble 1 in 1.25 of chloroform and 1 in 15 of ether; soluble in aqueous solutions of alkali hydroxides. *U.S.P.* solubilities are: very slightly soluble in water; freely soluble in acetone and ether; soluble in alcohol. Store in airtight containers. Protect from light.

Adverse Effects

Nausea, vomiting, epigastric distress, diarrhoea, oedema due to salt retention, skin rashes, vertigo, headache, and blurred vision may occur. More serious reactions include gastric irritation with ulceration and gastro-intestinal bleeding, ulcerative stomatitis, hepatitis, jaundice, haematuria, nephritis, renal failure, pancreatitis, ocular toxicity, and goitre. Phenylbutazone may precipitate heart failure and may also cause an acute pulmonary syndrome with dyspnoea and fever. Salivary gland enlargement, hypersensitivity reactions, and severe generalised reactions including erythema multiforme (Stevens-Johnson syndrome), toxic epidermal necrolysis, and exfoliative dermatitis have been reported.

The most serious adverse effects of phenylbutazone are related to bone-marrow depression and include agranulocytosis and aplastic anaemia. Leucopenia, pancytopenia, haemolytic anaemia, and thrombocytopenia may also occur. These adverse haematological reactions have resulted in the indications for use of phenylbutazone being restricted in recent years (see under the uses and administration section, below). Blood disorders may develop soon after starting treatment or may occur suddenly after prolonged treatment and regular haematological monitoring should be carried out as discussed under Precautions.

Effects on the blood. Both phenylbutazone[1] and oxyphenbutazone[1] are well known for their adverse effects on the blood and especially for fatal agranulocytosis and aplastic anaemia. Some indication of the extent of this toxicity can be obtained from the records of the UK Committee on Safety of Medicines which showed that between 1964 and 1982 it had received reports of 458 deaths due to bone marrow damage associated with these 2 drugs.

1. Anonymous. Phenylbutazone and oxyphenbutazone. Time to withdraw? *Drug Ther Bull* 1984; 22: 5–6.
2. Bottiger LE, Westerholm B. Drug-induced blood disorders in Sweden. *Br Med J* 1973; 3: 339–43.
3. The International Agranulocytosis and Aplastic Anaemia Study. Risks of agranulocytosis and aplastic anemia. A first report of the Boston Collaborative Drug Surveillance Program. *JAMA* 1986; 256: 1749–57.

PHARMACEUTICALS (MONOCOMPONENT PRODUCTS)

ANNEXURE I

Product name : PHENTERMINE
C.A.S number : 122-09-8

Scientific and common names, and synonyms :
alpha,alpha-DIMETHYLPHENETHYLAMINE

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
SWE	JAN. 1981	PHENTERMINE CONTAINING APPETITE SUPPRESSANTS HAVE BEEN WITHDRAWN FROM THE MARKET. THERE IS A LACK OF EVIDENCE OF THEIR VALUE IN LONG-TERM MANAGEMENT OF OBESITY. THEY HAVE THE POTENTIAL FOR ABUSE AND DESPITE WARNINGS THEY ARE FREQUENTLY USED OVER UNACCEPTABLY PROLONGED PERIODS.
MLS	MAR. 1982	UNDER THE PHARMACY AND POISONS (PROHIBITIONS OF HARMFUL DRUGS) REGULATIONS, PHENTERMINE IS DEEMED "HARMFUL" BY THE MINISTRY OF HEALTH AND IS PROHIBITED FOR IMPORT, MANUFACTURE, STORAGE, DISTRIBUTION, SALE, POSSESSION, USE, EXPORT OR OTHER TRANSACTION.
YEM		PHENTERMINE IS NOT APPROVED FOR USE AND/OR SALE. WHO COMMENT: PHENTERMINE IS CONTROLLED UNDER SCHEDULE IV OF THE 1971 CONVENTION ON PSYCHOTROPIC SUBSTANCES. (REFERENCE: (UNCPS) UNITED NATIONS CONVENTION ON PSYCHOTROPIC SUBSTANCES . . . 1971)

Product name : PHENYLBUTAZONE
C.A.S number : 50-33-9

Scientific and common names, and synonyms :
4-BUTYL-1,2-DIPHENYL-3,5-PYRAZOLIDINEDIONE

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
DDR	FEB. 1983	INDICATIONS ARE RESTRICTED TO ACUTE INFLAMMATORY EXACERBATIONS OF RHEUMATIC DISEASE AND ACUTE ATTACKS OF GOUT. PHENYLBUTAZONE MAY BE USED AS AN URICOSURIC PREPARATION, BUT DOSAGE AND DURATION OF APPLICATION ARE RESTRICTED.
ARE	1984	BY DECISION OF THE MINISTER OF HEALTH, PHENYLBUTAZONE AND OXYPHENBUTAZONE WILL BE WITHDRAWN FROM USE WITH IMMEDIATE EFFECT HAVING REGARD TO THEIR POTENTIAL TO CAUSE SERIOUS ADVERSE REACTIONS.
HUN	1984	INDICATIONS ARE RESTRICTED TO ANKYLOSING SPONDYLITIS AND RELATED DISEASES, ACUTE GOUT ATTACKS, ACUTE EXACERBATIONS OF RHEUMATOID ARTHRITIS AND INFLAMED OSTEOARTHRITIS. THE DURATION OF TREATMENT IS RESTRICTED TO 14 DAYS. (REFERENCE: (BNIPH) BULLETIN OF THE NATIONAL INSTITUTE OF PHARMACY . 24/6 . 186-7 . 1984)
IRL	1984	APPROVED INDICATIONS FOR PHENYLBUTAZONE AND OXYPHENBUTAZONE REVISED: NOW RESTRICTED TO CASES OF ACUTE GOUT, ANKYLOSING SPONDYLITIS, AND CHRONIC ARTHRITIS IN PATIENTS UNSUITED TO ALTERNATIVE THERAPY. TREATMENT OF ACUTE GOUT SHOULD NOT EXTEND BEYOND 7-10 DAYS AND THE LOWEST EFFECTIVE DOSE SHOULD BE USED. TREATED ARTHRITIC PATIENTS SHOULD REMAIN UNDER REGULAR SURVEILLANCE AND SPECIALIST SUPERVISION. DOCTORS ARE ADVISED NOT TO PRESCRIBE THESE DRUGS FOR CHILDREN OR PREGNANT WOMEN AND TO REDUCE THE DOSE IN ELDERLY PATIENTS. CERTAIN CONTRAINDICATIONS INCLUDE PREVIOUS OR EXISTING GI DISEASE, BLOOD DYSCRASIAS, HEPATIC OR RENAL DYSFUNCTION, CARDIAC OR PULMONARY INSUFFICIENCY, THYROID OR SALIVARY GLAND DISORDERS OR HYPERSENSITIVITY. COMBINATION PRODUCTS WITH OTHER ACTIVE INGREDIENTS HAVE BEEN WITHDRAWN FROM USE.
TUR	1984	INJECTABLE AND TOPICAL PREPARATIONS ARE PROHIBITED. TABLETS AND SUPPOSITORIES ARE RESTRICTED TO THE TREATMENT OF ANKYLOSING SPONDYLITIS AND GOUT.
TUR	FEB. 1984	USE FOR MORE THAN SEVEN DAYS IS PROHIBITED HAVING REGARD TO SERIOUS ADVERSE REACTIONS.
BRB	25 JUNE 1984	INDICATIONS FOR PHENYLBUTAZONE ARE LIMITED TO ACTIVE ANKYLOSING SPONDYLITIS, GOUT AND PSEUDO-GOUT. IT MAY ALSO BE USED TO TREAT ACUTE EXACERBATIONS OF RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS AND ACUTE NON-ARTICULAR RHEUMATOID DISEASE UNRESPONSIVE TO OTHER NON-STEROIDAL ANTIINFLAMMATORY DRUGS.

...(Continued)

PHARMACEUTICALS (MONOCOMPONENT PRODUCTS)

Product name : PHENYLBUTAZONE ...(Continued)
C.A.S number : 50-33-9

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
SWE	JULY 1984	APPROVED INDICATIONS ARE RESTRICTED TO ANKYLOSING SPONDYLITIS. THE DURATION OF THERAPY SHOULD NOT EXCEED SEVEN DAYS. LABELLING MUST CONTAIN A WARNING THAT ADVERSE HAEMATOLOGICAL EFFECTS MAY OCCUR AND THAT THE BLOOD COUNT SHOULD BE MONITORED BEFORE AND DURING THERAPY. TOPICAL PRODUCTS HAVE BEEN WITHDRAWN. (REFERENCE: (SWEDISH DRUGS CONTROL COUNCIL , NEWS BULLETIN . , , AUG. 1985)
ESP	15 JULY 1984	APPROVED INDICATIONS HAVE BEEN RESTRICTED TO INFLAMMATORY ARTHRITIC CONDITIONS, ACTIVE ANKYLOSING SPONDYLITIS AND OTHER INFLAMMATORY SPONDYLOPATHIES, ACUTE ATTACKS OF GOUT AND PSEUDO-GOUT, ACUTE EXACERBATIONS OF RHEUMATOID ARTHRITIS AND OTHER POLYARTHRITIC CONDITIONS. PARENTERAL PREPARATIONS HAVE BEEN RESTRICTED TO HOSPITAL USE ONLY.
COG	01 AUG. 1984	INDICATIONS FOR PHENYLBUTAZONE HAVE BEEN RESTRICTED TO ANKYLOSING SPONDYLITIS.
JOR	31 OCT. 1984	REGISTRATION OF ALL PHARMACEUTICAL PRODUCTS CONTAINING PHENYLBUTAZONE HAS BEEN WITHDRAWN. (REFERENCE: (JORMH) MINISTRY OF HEALTH RESOLUTION NO. , 4/2/1659 . , APR. 1984)
BGD	NOV. 1984	USE HAS BEEN BANNED DUE TO REPORTED SEVERE ADVERSE REACTIONS.
AUS	1985	INDICATIONS ARE RESTRICTED TO ACTIVE ANKYLOSING SPONDYLITIS , ACUTE GOUTY ARTHRITIS, ACTIVE RHEUMATOID ARTHRITIS AND ACUTE ATTACKS OF OSTEOARTHRITIS IN PATIENTS IN WHOM OTHER THERAPEUTIC MEASURES, INCLUDING OTHER NON-STEROIDAL ANTI-INFLAMMATORY DRUGS, HAVE BEEN TRIED AND FOUND UNSATISFACTORY.
MLD	01 JAN. 1985	PARENTERAL DOSAGE FORMS AND COMBINATION PRODUCTS CONTAINING PHENYLBUTAZONE HAVE BEEN WITHDRAWN FROM THE MARKET. THE APPROVED INDICATIONS HAVE BEEN RESTRICTED TO THE TREATMENT OF SPONDYLOARTHRITIS UNRESPONSIVE TO OTHER NON-STEROIDAL ANTIINFLAMMATORY AGENTS. (REFERENCE: (NETJANI NEDERLANDS TIJDSCHRIFT VOOR GENEESKUNDE , 128 . 50 . 1984)
SWE	FEB. 1985	INDICATIONS FOR USE HAVE BEEN RESTRICTED TO ACUTE GOUT AND MORBUS BECHTEREW ON THE GROUNDS OF SERIOUS BLOOD DYSCRASIAS ASSOCIATED WITH ITS USE.
NZL	APR. 1985	INDICATIONS FOR PHENYLBUTAZONE HAVE BEEN RESTRICTED.
OMN	22 SEP. 1986	PHENYLBUTAZONE IS AVAILABLE IN SMALL QUANTITIES ONLY IN GOVERNMENT HOSPITALS FOR THE TREATMENT OF PATIENTS UNRESPONSIVE TO OTHER THERAPY. (REFERENCE: (OMAMN) MINISTRY OF HEALTH DECISION NO. , 3 , 1985)
AUT		INDICATIONS ARE RESTRICTED TO EXACERBATIONS OF GOUT AND OTHER ARTHRITIC CONDITIONS. TREATMENT SHOULD NOT EXCEED SEVEN DAYS AND DOCTORS ARE ADVISED NOT TO PRESCRIBE THIS DRUG TO CHILDREN UNDER 14 YEARS OF AGE OR ELDERLY PATIENTS. (REFERENCE: (WIMAND WICHTIGE MITTEILUNG UEBER ARZNEIMITTEL , , 1 , 1984)
CHL		THE MAXIMUM RECOMMENDED PERIOD OF TREATMENT HAS BEEN REDUCED TO SEVEN DAYS. USE IS CONTRAINDICATED IN CHILDREN UNDER 14 YEARS OF AGE AND PRODUCTS INTENDED FOR PEDIATRIC USE HAVE BEEN WITHDRAWN. COMBINATION PRODUCTS CONTAINING PHENYLBUTAZONE HAVE BEEN WITHDRAWN.
CYP		ALL COMBINATION PRODUCTS WITHDRAWN FROM THE MARKET DUE TO THE POTENTIAL TO CAUSE SERIOUS ADVERSE REACTIONS. THE INDICATIONS FOR MONOCOMPONENT PRODUCTS HAVE BEEN RESTRICTED TO ANKYLOSING SPONDYLITIS.
DEU		INDICATIONS HAVE BEEN RESTRICTED TO EXACERBATIONS OF RHEUMATISM AND ACUTE GOUT. DURATION OF ORAL TREATMENT SHOULD NOT EXCEED ONE WEEK. PARENTERAL PREPARATIONS ARE INDICATED ONLY FOR INITIATING THERAPY. A SINGLE INJECTION ONLY IS RECOMMENDED BECAUSE LOCAL TISSUE DAMAGE MAY OCCUR. PREPARATIONS ARE CONTRAINDICATED IN CHILDREN UNDER 14 YEARS OF AGE.
GBR		APPROVED INDICATIONS ARE RESTRICTED TO ANKYLOSING SPONDYLITIS. USE IS RESTRICTED TO HOSPITALS.
ISR		THE PHARMACEUTICAL ADMINISTRATION OF THE MINISTRY OF HEALTH HAS NOTIFIED THE WORLD HEALTH ORGANIZATION OF ITS INTENTION TO WITHDRAW FROM USE ALL PREPARATIONS CONTAINING OXYPHENBUTAZONE AND TO RESTRICT THE APPROVED INDICATION FOR PREPARATIONS CONTAINING PHENYLBUTAZONE TO ANKYLOSING SPONDYLITIS.

...(Continued)

Product name : PHENYLBUTAZONE ...(Continued)
C.A.S number : 50-33-9

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
ITA		INDICATIONS HAVE BEEN RESTRICTED TO ACUTE PHASE OF ANKYLOSING SPONDYLITIS, ACUTE GOUT AND ACUTE PHASE OF PELVISPONDYLITIS AND PSORIATIC POLYARTHRITIS. USE SHOULD ONLY BE CONSIDERED WHEN ALTERNATIVE TREATMENT IS INEFFECTIVE OR INAPPROPRIATE. NO COURSE OF TREATMENT SHOULD EXCEED SEVEN TO TEN DAYS.
JPN		INDICATIONS ARE RESTRICTED TO ACUTE EXACERBATIONS OF RHEUMATOID ARTHRITIS, ANKYLOSING SPONDYLITIS AND ACUTE GOUT. DOCTORS ARE ADVISED TO PRESCRIBE THESE DRUGS ONLY TO ADULTS AND FOR PERIODS OF NO LONGER THAN ONE WEEK.
PHL		PHENYLBUTAZONE RECOMMENDED FOR USE ONLY WHEN OTHER AGENTS FAIL DUE TO RISK OF TOXICITY. WHO COMMENT: PHENYLBUTAZONE AND OXYPHENBUTAZONE - PYRAZOLONE ANTIINFLAMMATORY AGENTS WHICH ALSO HAVE ANALGESIC AND ANTIPYRETIC ACTIVITY - HAVE EACH BEEN ASSOCIATED WITH SERIOUS AND SOMETIMES FATAL ADVERSE REACTIONS, NOTABLY CASES OF APLASTIC ANAEMIA AND AGRANULOCYTOSIS. MANY NATIONAL DRUG REGULATORY AUTHORITIES CONSIDER THAT MORE RECENTLY INTRODUCED DRUGS OFFER A SAFER ALTERNATIVE FOR MOST, IF NOT ALL, PATIENTS REQUIRING ANTIINFLAMMATORY AGENTS. OXYPHENBUTAZONE HAS THUS BEEN WIDELY WITHDRAWN AND PHENYLBUTAZONE HAS BEEN EITHER WITHDRAWN OR RETAINED WITH RIGOROUSLY RESTRICTED INDICATIONS FOR PATIENTS UNRESPONSIVE TO OTHER THERAPY.

Product name : PHTHALYLSULFATHIAZOLE
C.A.S number : 85-73-4

Scientific and common names, and synonyms :
6'-(THIAZOLYLAMINOSULFAMOYL)PHTHALANIC ACID

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
BGD		UNDER THE PROVISIONS OF THE DRUGS(CONTROL) ORDINANCE, THIS PRODUCT HAS BEEN BANNED. IT HAS BEEN FOUND TO BE OF LITTLE OR NO THERAPEUTIC VALUE, ITS SIDE EFFECTS CAN BE HARMFUL, AND IT IS SUBJECT TO MISUSE. (REFERENCE: (BGDCOI THE DRUGS (CONTROL) ORDINANCE . . . 1982) WHO COMMENT: THIS COMPOUND SLOWLY RELEASES THE SULFONAMIDE SULFATHIAZOLE IN THE LARGE INTESTINE. IT IS STILL WIDELY USED IN MANY COUNTRIES IN THE TREATMENT AND PREVENTION OF BACILLARY DYSENTERY, AND BEFORE AND AFTER SURGERY ON THE LARGE INTESTINE; IN MANY OTHER COUNTRIES IT HAS BEEN SUPERSEDED BY MORE RECENTLY INTRODUCED ANTIBIOTICS.

Product name : PIPAMAZINE
C.A.S number : 84-04-8

Scientific and common names, and synonyms :
10-(3-(4-CARBAMOYLPIPERIDINE)PROPYL)-2-CHLOROPHENOTHIAZINE

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
USA	JULY 1988	WITHDRAWN FROM THE MARKET AND PROHIBITED FOR EXPORT BY THE FOOD AND DRUG ADMINISTRATION DUE TO THE LACK OF PROOF OF EFFICACY AND SAFETY FOR USE AS AN ANTINAUSEANT AND ANTIEMETIC FOR PREGNANT WOMEN. WHO COMMENT: PIPAMAZINE, WHICH HAS GENERAL PROPERTIES SIMILAR TO THOSE OF CHLORPROMAZINE, REMAINS AVAILABLE IN SOME COUNTRIES AS AN ANTIEMETIC AND ANTINAUSEANT.

PHARMACEUTICALS (MONOCOMPONENT PRODUCTS)

Product name : NORETHISTERONE ENANTATE (INJECTABLE) ...(Continued)
C.A.S number : 3858-23-5

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
DEU	1983	THE USE OF INJECTABLE STEROID PREPARATIONS FOR CONTRACEPTIVE PURPOSES HAS BEEN RESTRICTED TO USE BY WOMEN WITH A NORMAL MENSTRUAL CYCLE WHO DO NOT TOLERATE OTHER FORMS OF CONTRACEPTION. PARTICULAR STRESS IS LAID UPON THE IMPORTANCE OF EXCLUDING PREGNANCY BEFORE TREATMENT IS STARTED, AND USE DURING LACTATION IS ALSO CONTRAINDICATED. KNOWN ADVERSE EFFECTS, INCLUDING MENSTRUAL DISTURBANCES AND HEADACHES, MUST BE DESCRIBED IN DETAIL ON THE LABELLING. THE REGULATORY STATEMENT TAKES NOTE OF THE FACT THAT ELSEWHERE, AND PARTICULARLY WITHIN DEVELOPING COUNTRIES, THESE DRUGS ARE USED WIDELY FOR CONTRACEPTIVE PURPOSES. THE FEDERAL HEALTH OFFICE, HOWEVER, DOES NOT CONSIDER THAT SUCH A POLICY IS JUSTIFIABLE UNDER CONDITIONS OBTAINING IN THE FEDERAL REPUBLIC OF GERMANY. WHO COMMENT: INJECTABLE PREPARATIONS OF NORETHISTERONE ENANTATE ARE REGISTERED IN MANY COUNTRIES. RISK-BENEFIT JUDGEMENT DIFFERS SIGNIFICANTLY FROM COUNTRY TO COUNTRY HAVING REGARD TO DIFFERING NATIONAL CIRCUMSTANCES. (REFERENCE: (WHODI) WHO DRUG INFORMATION BULLETIN . 2 . 7 . 1984) ; (REFERENCE: (WHODD WHO DRUG INFORMATION BULLETIN . 3 . 7 . 1984)

Product name : OPIUM IN ANTITUSSIVE PREPARATIONS
C.A.S number : 8008-60-4

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
BGD	JUNE 1982	BANNED IN TINCTURE AND SPIRIT FORM DUE TO ITS LIABILITY FOR ADDICTION AND MISUSE.
ITA		THIS SUBSTANCE FOR USE AS AN ANTITUSSIVE HAS BEEN REMOVED FROM THE MARKET OWING TO AN UNFAVOURABLE RISK-BENEFIT RATIO AND LACK OF SUBSTANTIAL EVIDENCE OF EFFICACY.- WHO COMMENT: OPIUM IS CONTROLLED UNDER SCHEDULE I OF THE 1961 SINGLE CONVENTION ON NARCOTIC DRUGS. (REFERENCE: (UNSNCD UNITED NATIONS SINGLE CONVENTION ON NARCOTIC DRUGS . . . 1972)

Product name : OXYPHENBUTAZONE
C.A.S number : 129-20-4

Scientific and common names, and synonyms :
BUTANOVA
HYDROXYPHENYLBUTAZONE
OXAZOLIDIN
4-BUTYL-1-(p-HYDROXYPHENYL)-2-PHENYL-3,5-PYRAZOLIDINEDIONE

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
ARE	1984	BY DECISION OF THE MINISTER OF HEALTH, PHENYLBUTAZONE AND OXYPHENBUTAZONE WILL BE WITHDRAWN FROM USE WITH IMMEDIATE EFFECT HAVING REGARD TO THEIR POTENTIAL TO CAUSE SERIOUS ADVERSE REACTIONS.
CYP	1984	WITHDRAWN FROM THE MARKET DUE TO THE POTENTIAL TO CAUSE SERIOUS ADVERSE REACTIONS. EXEMPTION APPLIES FOR PRODUCTS INTENDED FOR LOCAL OPHTHALMIC USE.
FIN	1984	ORAL AND RECTAL PREPARATIONS HAVE BEEN WITHDRAWN FROM THE MARKET.

...(Continued)

PHARMACEUTICALS (MONOCOMPONENT PRODUCTS)

Product name : OXYPHENBUTAZONE ...(Continued)
C.A.S number : 129-20-4

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
IRL	1984	APPROVED INDICATIONS FOR PHENYLBUTAZONE AND OXYPHENBUTAZONE REVISED: NOW RESTRICTED TO CASES OF ACUTE GOUT, ANKYLOSING SPONDYLITIS, AND CHRONIC ARTHRITIS IN PATIENTS UNSUITED TO ALTERNATIVE THERAPY. TREATMENT OF ACUTE GOUT SHOULD NOT EXTEND BEYOND 7-10 DAYS AND THE LOWEST EFFECTIVE DOSE SHOULD BE USED. TREATED ARTHRITIC PATIENTS SHOULD REMAIN UNDER REGULAR SURVEILLANCE AND SPECIALIST SUPERVISION. DOCTORS ARE ADVISED NOT TO PRESCRIBE THESE DRUGS FOR CHILDREN OR PREGNANT WOMEN AND TO REDUCE THE DOSE IN ELDERLY PATIENTS. CERTAIN CONTRAINDICATIONS INCLUDE PREVIOUS OR EXISTING GI DISEASE, BLOOD DYSCRASIAS, HEPATIC OR RENAL DYSFUNCTION, CARDIAC OR PULMONARY INSUFFICIENCY, THYROID OR SALIVARY GLAND DISORDERS OR HYPERSENSITIVITY. COMBINATION PRODUCTS WITH OTHER ACTIVE INGREDIENTS HAVE BEEN WITHDRAWN FROM USE.
TUN	1984	ALL PREPARATIONS OF OXYPHENBUTAZONE HAVE BEEN BANNED FOR USE.
JOR	10 JAN. 1984	REGISTRATION OF ALL PHARMACEUTICAL PRODUCTS CONTAINING OXYPHENBUTAZONE HAS BEEN WITHDRAWN. (REFERENCE: (JORMH) MINISTRY OF HEALTH RESOLUTION NO. , 4/2/1559 , , APR. 1984)
BRB	25 JUNE 1984	INDICATIONS FOR OXYPHENBUTAZONE ARE LIMITED TO ACTIVE ANKYLOSING SPONDYLITIS, GOUT AND PSEUDO-GOUT. IT MAY ALSO BE USED TO TREAT ACUTE EXACERBATIONS OF RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS AND ACUTE NON-ARTICULAR RHEUMATOID DISEASE UNRESPONSIVE TO OTHER NON-STEROIDAL ANTIINFLAMMATORY DRUGS.
ZWE	JULY 1984	THE DRUGS CONTROL COUNCIL REQUESTED MANUFACTURERS TO WITHDRAW PREPARATIONS CONTAINING OXYPHENBUTAZONE FROM THE MARKET AND TO EXHAUST STOCKS BY JUNE 1985. (REFERENCE: (ZWDCC) DRUGS CONTROL COUNCIL , NEWS BULLETIN , , AUG. 1985)
ESP	15 JULY 1984	APPROVED INDICATIONS HAVE BEEN RESTRICTED TO INFLAMMATORY ARTHRITIC CONDITIONS: ACTIVE ANKYLOSING SPONDYLITIS AND OTHER INFLAMMATORY SPONDYLOPATHIES; ACUTE ATTACKS OF GOUT AND PSEUDO-GOUT; ACUTE EXACERBATIONS OF RHEUMATOID ARTHRITIS AND OTHER POLYARTHRITIC CONDITIONS. PARENTERAL PREPARATIONS HAVE BEEN RESTRICTED TO HOSPITAL USE ONLY.
BGD	NOV. 1984	USE HAS BEEN BANNED DUE TO REPORTED SEVERE ADVERSE REACTIONS.
NLD	01 JAN. 1985	PARENTERAL DOSAGE FORMS AND COMBINATION PRODUCTS CONTAINING OXYPHENBUTAZONE HAVE BEEN WITHDRAWN FROM THE MARKET. THE APPROVED INDICATIONS HAVE BEEN RESTRICTED TO THE TREATMENT OF SPONDYLOARTHRITIS UNRESPONSIVE TO OTHER NON-STEROIDAL ANTIINFLAMMATORY AGENTS. (REFERENCE: (NETJAN) NEDERLANDS TIJDSCHRIFT VOOR GENEESKUNDE , 128(50) , , 1984)
SWE	01 JAN. 1985	WITHDRAWN FROM THE MARKET AFTER JOINT DISCUSSIONS BETWEEN THE NATIONAL BOARD OF HEALTH AND WELFARE AND THE IMPORTER ON THE GROUNDS OF SERIOUS BLOOD DYSCRASIAS ASSOCIATED WITH ITS USE.
NZL	APR. 1985	VOLUNTARILY WITHDRAWN.
OMN	1986	OXYPHENBUTAZONE FOR INTERNAL USE (TABLETS, INJECTIONS, SYRUPS AND SUPPOSITORIES) SHOULD NEITHER BE IMPORTED OR MARKETED AFTER THE STOCK IN THE LOCAL MARKET HAS BEEN USED. (REFERENCE: (OMAMH) MINISTRY OF HEALTH DECISION NO. , 3 , , 1985)
TUR	01 MAR. 1986	THE MINISTRY OF HEALTH HAS PROHIBITED THE MANUFACTURE AND SALE OF PREPARATIONS CONTAINING OXYPHENBUTAZONE FOR ORAL, RECTAL AND TOPICAL USE.
AUT		INDICATIONS ARE RESTRICTED TO EXACERBATIONS OF GOUT AND OTHER ARTHRITIC CONDITIONS. TREATMENT SHOULD NOT EXCEED SEVEN DAYS AND DOCTORS ARE ADVISED NOT TO PRESCRIBE THIS DRUG TO CHILDREN UNDER 14 YEARS OF AGE OR ELDERLY PATIENTS. (REFERENCE: (WIMAM) WICHTIGE MITTEILUNG UEBER ARZNEIMITTEL , , 1 , 1984)
CHL		THE MAXIMUM RECOMMENDED PERIOD OF TREATMENT HAS BEEN REDUCED TO SEVEN DAYS. USE IS CONTRAINDICATED IN CHILDREN UNDER 14 YEARS OF AGE AND PRODUCTS INTENDED FOR PEDIATRIC USE HAVE BEEN WITHDRAWN. COMBINATION PRODUCTS CONTAINING OXYPHENBUTAZONE HAVE BEEN WITHDRAWN. (REFERENCE: (BMCHL) BOLETIN INFORMATIVO SOBRE MEDICAMENTOS , 1(2) , , 1984)
COG		INJECTABLE PREPARATIONS HAVE BEEN WITHDRAWN FROM THE MARKET. ORAL PREPARATIONS HAVE INDICATIONS RESTRICTED TO THE TREATMENT OF ANKYLOSING SPONDYLITIS, GOUT AND PERIARTICULAR RHEUMATISM.

...(Continued)

Product name : OXYPHENBUTAZONE ...(Continued)
C.A.S number : 129-20-4

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
DEU		INDICATIONS ARE RESTRICTED TO SEVERE EXACERBATIONS OF RHEUMATISM AND ACUTE GOUT. DURATION OF ORAL TREATMENT SHOULD NOT EXCEED ONE WEEK. PARENTERAL PREPARATIONS ARE INDICATED ONLY FOR INITIATING THERAPY. A SINGLE INJECTION ONLY IS RECOMMENDED BECAUSE LOCAL TISSUE DAMAGE MAY OCCUR. PREPARATIONS ARE CONTRAINDICATED IN CHILDREN UNDER 14 YEARS OF AGE.
GBR		ALL PRODUCT LICENCES FOR PREPARATIONS CONTAINING OXYPHENBUTAZONE HAVE BEEN REVOKED WITH THE EXCEPTION OF THOSE FOR EYE OINTMENTS.
HUN		INDICATIONS ARE RESTRICTED TO ANKYLOSING SPONDYLITIS AND RELATED DISEASES, ACUTE GOUT ATTACKS, ACUTE EXACERBATIONS OF RHEUMATOID ARTHRITIS AND INFLAMED OSTEOARTHRITIS. THE DURATION OF TREATMENT IS RESTRICTED TO 14 DAYS.THERE IS ONLY ONE REGISTERED PREPARATION CONTAINING OXYPHENBUTAZONE. ITS DISPENSING IS RESTRICTED TO INDIVIDUAL CASES AUTHORIZED BY THE MINISTRY OF HEALTH AT SPECIAL REQUEST.
ISR		THE PHARMACEUTICAL ADMINISTRATION OF THE MINISTRY OF HEALTH HAS NOTIFIED THE WORLD HEALTH ORGANIZATION OF ITS INTENTION TO WITHDRAW FROM USE ALL PREPARATIONS CONTAINING OXYPHENBUTAZONE AND TO RESTRICT THE APPROVED INDICATION FOR PREPARATIONS CONTAINING PHENYLBUTAZONE TO ANKYLOSING SPONDYLITIS.
JPN		INDICATIONS ARE RESTRICTED TO ACUTE EXACERBATIONS OF RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS. DOCTORS ARE ADVISED TO PRESCRIBE THIS DRUG ONLY TO ADULTS AND FOR PERIODS OF NO LONGER THAN ONE WEEK.
		WHO COMMENT: PHENYLBUTAZONE AND OXYPHENBUTAZONE - PYRAZOLONE ANTIINFLAMMATORY AGENTS WHICH ALSO HAVE ANALGESIC AND ANTIPYRETIC ACTIVITY - HAVE EACH BEEN ASSOCIATED WITH SERIOUS AND SOMETIMES FATAL ADVERSE REACTIONS, NOTABLY CASES OF APLASTIC ANAEMIA AND AGRANULOCYTOSIS. MANY NATIONAL DRUG REGULATORY AUTHORITIES CONSIDER THAT MORE RECENTLY INTRODUCED DRUGS OFFER A SAFER ALTERNATIVE FOR MOST, IF NOT ALL, PATIENTS REQUIRING ANTIINFLAMMATORY AGENTS. OXYPHENBUTAZONE HAS THUS BEEN WIDELY WITHDRAWN AND PHENYLBUTAZONE HAS BEEN EITHER WITHDRAWN OR RETAINED WITH RIGOROUSLY RESTRICTED INDICATIONS FOR PATIENTS UNRESPONSIVE TO OTHER THERAPY.

Product name : OXYPHENISATINE ACETATE
C.A.S number : 115-33-3

Scientific and common names, and synonyms :

ACETOPHENOLISATIN
BISATIN
DIACETOXYDIPHENYLISATIN
DIACETYLDIPHENOLISATIN
DIASATIN
DIPHESATIN
ISAPHENIN
OXYPHENISATIN DIACETATE
PHENLAXIN

Legislative or regulative action :

Country	Effective date	Description of action taken/grounds for decision
CUB	1970	BANNED FOR USE FOLLOWING REPORTS OF HEPATOTOXICITY.
AUS	1972	THE DEPARTMENT OF HEALTH OF THE COMMONWEALTH WITHDREW FROM THE MARKET ALL PREPARATIONS CONTAINING OXYPHENISATINE ACETATE (DIACETOXYDIPHENOLISATIN) AND TRIACETYLDIPHENOLISATIN. THIS RECOMMENDATION WAS BASED ON AN INCREASING NUMBER OF REPORTS, INCLUDING ONE FATALITY, IMPLICATING THESE COMPOUNDS AS A CAUSE OF ACUTE AND CHRONIC LIVER DISEASE.
JPN	1972	BANNED BY PHARMACEUTICAL AFFAIRS BUREAU IN OVER-THE-COUNTER DRUGS, DUE TO HEPATIC DAMAGE (E.G. JAUNDICE) OBSERVED WITH LONG-TERM USE.

...(Continued)

ANNEXURE J

Main list	Complementary list	Route of administration, dosage forms, and strengths[a]
17. Gastrointestinal Drugs *(continued)*		
17.6 *Diarrhoea, Drugs used in* (continued)		
17.6.2 *Replacement solution* oral rehydration salts (for glucose-salt solution)		
	g/litre	
sodium chloride	3.5	
trisodium citrate dihydrate[b]	2.9	
potassium chloride	1.5	
glucose	20.0	
18. Hormones		
18.1 *Adrenal hormones and synthetic substitutes*		
[ ] dexamethasone		tablet, 0.5 mg, 4 mg
		injection, 4 mg (sodium phosphate) in 1-ml ampoule
hydrocortisone		powder for injection, 10 mg (as sodium succinate) in vial
[ ] prednisolone		tablet, 5 mg
	hydrocortisone (c)	tablet, 0.1 mg (acetate)
18.2 *Androgens*		
testosterone (2)		injection, 200 mg (enantate) in 1-ml ampoule
		injection, 25 mg (propionate) in 1-ml ampoule
18.3 *Contraceptives*		
[ ] ethinylestradiol + [ ] levonorgestrel		tablet, 0.03 mg + 0.15 mg, 0.05 mg + 0.25 mg
[ ] ethinylestradiol + [ ] norethisterone		tablet, 0.05 mg + 1.0 mg
	depot medroxyprogesterone acetate (n) (7, 8)	injection, 150 mg in 3-ml vials
	[ ] norethisterone (n)	tablet, 0.35 mg
	norethisterone enantate (n) (7, 8)	injection, 200 mg in vial
18.4 *Estrogens*		
[ ] ethinylestradiol		tablet, 0.05 mg

[a] When the strength is specified in terms of a selected salt or ester, this is mentioned in brackets; when it refers to the active moiety, the name of the salt or ester in brackets is preceded by the word "as"

[b] May be replaced by sodium bicarbonate (sodium hydrogen carbonate), 2.5 g/litre, when citrate salt is not available

Main list	Complementary list	Route of administration, dosage forms, and strength
18. Hormones *(continued)*		
18.5 *Insulins and other antidiabetic agents*		
insulin injection (soluble)		injection, 40 IU/ml in 10-ml vial, 80 IU/ml in 10-ml vial
intermediate acting insulin		injection, 40 IU/ml in 10-ml vial, 80 IU/ml in 10-ml vial (as compound insulin zinc suspension or isophane insulin)
glibenclamide		tablet, 5 mg
18.6 *Ovulation inducers*		
	[ ] clomifene (c) (2, 8)	tablet, 50 mg (citrate)
18.7 *Progestogens*		
norethisterone		tablet, 5 mg
18.8 *Thyroid hormones and antithyroid drugs*		
levothyroxine		tablet, 0.05 mg, 0.1 mg (sodium salt)
potassium iodide		tablet, 60 mg
[ ] propylthiouracil		tablet, 50 mg
19. Immunologicals		
19.1 *Diagnostic agents*		
tuberculin, purified protein derivative (PPD)		injection
19.2 *Sera and immunoglobulins*		
anti-D immunoglobulin (human)		injection, 0.25 mg/ml
antirabies hyperimmune serum		injection, 1000 IU in 5-ml ampoule
antivenom sera		injection
antiscorpion sera		injection
diphtheria antitoxin		injection, 10 000 IU, 20 000 IU, in vial
immunoglobulin, human normal (2)		injection
tetanus antitoxin		injection, 50 000 IU, in vial
tetanus antitoxin (human)		injection, 500 IU in vial

All plasma fractions should comply with the WHO Requirements for the Collection, Processing, and Quality Control of Human Blood and Blood Products[b]

[a] When the strength is specified in terms of a selected salt or ester, this is mentioned in brackets; when it refers to the active moiety, the name of the salt or ester in brackets is preceded by the word "as"

[b] WHO Technical Report Series, No. 626, 1978, Annex 1.

prescribers should be provided with a cross-index of nonproprietary and proprietary names.

(3) Concise, accurate, and comprehensive drug information should be prepared to accompany the list of essential drugs.

(4) Quality, including stability and bioavailability, should be assured through testing or regulation, as discussed in section 5. Where national resources are not available for this type of control, the suppliers should provide documentation of the product's compliance with the required specifications.

(5) Local health authorities should decide the level of expertise required to prescribe individual drugs or a group of drugs in a therapeutic category. Consideration should be given, in particular, to the competence of the personnel to make a correct diagnosis. In some instances, while individuals with advanced training are necessary to prescribe initial therapy, individuals with less training could be responsible for maintenance therapy.

(6) The success of the entire essential drugs programme is dependent upon the efficient administration of supply, storage, and distribution at every point from the manufacturer to the end user. Government intervention may be necessary to ensure the availability of some drugs in the formulations listed, and special arrangements may need to be instituted for the storage and distribution of drugs that have a short shelf-life or require refrigeration.

(7) Efficient management of stocks is necessary to eliminate waste and to ensure continuity of supplies. Procurement policy should be based upon detailed records of turnover. In some instances, drug utilization studies may contribute to a better understanding of true requirements.

(8) Research, both clinical and pharmaceutical, is sometimes required to settle the choice of a particular drug product under local conditions.

3. CRITERIA FOR THE SELECTION OF ESSENTIAL DRUGS

Essential drugs are those that satisfy the health care needs of the majority of the population; they should therefore be available at all times in adequate amounts and in the appropriate dosage forms.

The choice of such drugs depends on many factors, such as the pattern of prevalent diseases; the treatment facilities; the training and experience of the available personnel; the financial resources; and genetic, demographic, and environmental factors.

Only those drugs should be selected for which sound and adequate data on efficacy and safety are available from adequate clinical studies and for which evidence of performance in general use in a variety of medical settings has been obtained.

Each selected drug must be available in a form in which adequate quality, including bioavailability, can be assured; its stability under the anticipated conditions of storage and use must be established.

Where two or more drugs appear to be approximately similar in the above respects, the choice between them should be made on the basis of a careful evaluation of their relative efficacy, safety, quality, price, and availability. In cost comparisons between drugs the cost of the total treatment, and not only the unit cost of the drug, must be considered. In some cases the choice may also be influenced by other factors, such as comparative pharmacokinetic properties, or by local considerations such as the availability of facilities for manufacture or storage.

In the great majority of cases essential drugs should be formulated as single compounds. Fixed-ratio combination products are acceptable only when the dosage of each ingredient meets the requirements of a defined population group and when the combination provides a proven advantage over single compounds administered separately in therapeutic effect, safety, or compliance.

4. GUIDELINES FOR THE SELECTION OF PHARMACEUTICAL DOSAGE FORMS

The purpose of selecting dosage forms and strengths for the drugs in the model list is to provide guidance to countries wishing to standardize or minimize the number of preparations in their own drug lists. As a general rule, pharmaceutical forms are selected on the basis of their general utility and their wide availability internationally. In many instances, a choice of preparations is provided, particularly in relation to solid dosage forms. Tablets are usually less expensive than capsules, but, while the cost factor should be taken into account, the selection should also be based on a consideration of pharmacokinetics, bioavailability, stability under ambient climatic conditions, availability of excipients, and established local preference.

CLINICAL PHARMACOLOGY, D.R. Laurence and P.N.Bennett, Fifth Edition. (1980)

4. *Maximum tolerated dose* is used where the ideal therapeutic effect cannot be achieved because of the occurrence of unwanted effects (anti-cancer drugs: some antimicrobials).

A usual way of finding this is to increase the dose until unwanted effects begin to appear and then to reduce it slightly.

5. *Minimum tolerated dose.* This concept is not so usual as the above, but it applies to long-term adrenocortical steroid therapy against inflammatory or immunological conditions, e.g. in asthma or rheumatoid arthritis the dose that provides symptomatic relief may be so high that serious adverse effects are inevitable if it is continued indefinitely. The patient must be persuaded to accept incomplete relief on grounds of safety. This can be difficult to achieve.

FIXED-RATIO DRUG COMBINATIONS

This section refers to *combinations of drugs in a single pharmaceutical formulation.* It does not refer to concomitant drug therapy, e.g. in infections and in cancer, where several drugs are given separately to obtain increased therapeutic effect or range, or to treat more than one disease.

Combinations should not be prescribed unless there is good reason to consider that the patient needs *all* the drugs in the preparation, that the doses are appropriate and will not need to be adjusted separately.

Advantages of fixed-dose drug combinations

Convenience, with improved *patient compliance* so that there is:

(i) *Reliability and enhancement of therapeutic response,* where the drugs are synergistic, have a narrow dose range and, usually, a similar time-course of effect: e.g. oral contraceptives; isoniazid plus PAS; co-trimoxazole (Septrin, Bactrim); thiazide plus reserpine; Aspirin, Paracetamol and Codeine Tabs have sanction of time rather than of clinical science.

(ii) *Minimisation of unwanted effects* (*a*) *by including antidotes:* the combination in one tablet of potassium with a thiazide diuretic has obvious theoretical advantage. However, hypokalaemia is a less important disadvantage of thiazides used as antihypertensives than when used to produce fluid loss in oedema. In the latter case amounts of K larger than those generally included in the combined preparation are likely to be needed.

Combinations of oral broad spectrum antimicrobials with a fungicide are unnecessary for routine therapy but may be useful in patients specially at risk from suprainfection (those taking immunosuppressives: the very old).

Narcotic plus narcotic/antagonist combinations have not been shown to be safer than the narcotic alone, and the combination of methionine with paracetamol to reduce toxicity in overdose is an example of an ingenious idea.

same therapeutic effect but different adverse effects so that there is synergism for therapeutic but not for adverse effects, e.g. thiazide plus reserpine: A
Codeine Tabs.

ANNEXURE L

Disadvantages of fixed-dose drug combinati

1. *Impracticability of providing individualised multi-drug preparations* because of the amount of labour and the complex pharmaceutical technology required.

2. *Dosage of one drug cannot be altered without altering that of others.* Drugs with a wide range of dosage that must be adjusted to suit the patient's response (adrenergic neurone blockers) are best not combined with a drug for the same disease with a narrow dose range (thiazide, reserpine). Adrenocortical steroids should *never* be combined in one tablet with other drugs.

3. *Time course of drug action often demands different intervals* between administration.

4. *Irregularity of administration,* e.g. in response to a symptom, pain, cough, may be desirable for some drugs, but not for others.

5. *Confusion of therapeutic aims:* routine use of combinations of iron with folic acid and cyanocobalamin are hazardous as they may delay diagnosis of pernicious anaemia. The fact that iron plus a little folic acid is properly used in pregnancy for routine anaemia prophylaxis simply confirms that combinations must be rationally thought out and adjusted to meet particular needs.

Combinations of antimicrobial drugs may be essential for particular situations, but they should be specially critically considered before prescribing.

Conclusions

A great many marketed combinations are open to criticism, some are positively desirable and some have the sanction of time alone. Occasionally, an advantage can be justified in theory but may be insignificant in practice. Some combinations are marketed to fulfil a commercial purpose rather than a medical need.

Before prescribing a combination the doctor should pause to consider whether any of the ingredients is unnecessary; if it is, the combination should not be prescribed. It can never be justifiable to give a patient a drug he does not need in order to provide him with one that he does need. The fact that doctors sometimes prescribe combinations in ignorance of the exact ingredients, which are commonly not indicated by the name, and are then surprised to find the patient is taking an undesired drug provides a sad criticism of the medical profession, as does the fact that some of the available combinations are prescribed at all.

loss of central vision. The patient may exhibit delusions, hallucinations, or even an overt psychosis. Since the neurological damage can be dissociated from the changes in the hematopoietic system, especially by the administration of pharmacological doses of folic acid, vitamin B_{12} deficiency must be considered as a possibility in elderly patients with psychosis. However, it is unusual to see patients who are routinely followed by their physicians develop severe neurological complications. The sensitivity of methods for evaluation of the hematopoietic system, the ease of measurement of the concentration of vitamin B_{12} in plasma, and the awareness of the medical profession of the causes of vitamin B_{12} deficiency have made possible an earlier and more accurate diagnosis of B_{12}-deficient states, early and adequate therapy, and hence avoidance of neurological complications.

Preparations, Dosage, and Routes of Administration. Vitamin B_{12} is available in pure form for injection or oral administration or in combination with other vitamins and minerals for oral administration. The choice of a preparation must always be made with recognition of the cause of the deficiency. Whole oral preparations may be used to supplement deficient diets or to prevent vitamin B_{12} deficiency in situations where there is increased utilization, *they are of little value in the treatment of patients with deficiency of intrinsic factor or ileal disease.* Even though small amounts of vitamin B_{12} may be absorbed by simple diffusion, the oral route of administration cannot be relied upon for effective therapy in the patient with a marked deficiency of B_{12} and abnormal hematopoiesis or neurological deficits. Therefore, the preparation of choice for treatment of a vitamin B_{12}–deficiency state is cyanocobalamin, and it should be given by intramuscular or deep subcutaneous injection.

Cyanocobalamin injection (REDISOL, RUBRAMIN PC, others) is a clear aqueous solution with a characteristic red color. The aqueous solution is available in concentrations of 30, 100, and 1000 μg/ml. Cyanocobalamin injection is extremely safe when given by the intramuscular or deep subcutaneous route, but it should never be given intravenously. There have been rare reports of transitory exanthema and anaphylaxis following injection. Therefore, if a patient reports a previous sensitivity to injections of vitamin B_{12}, an intradermal skin test should be carried out before the full dose is administered.

Cyanocobalamin is administered in doses of 1 to 5 μg. Tissue uptake, storage, and utilization depend on the availability of transcobalamin II (*see above*). Doses in excess of 100 μg are rapidly cleared from plasma into the urine. Administration of larger amounts of vitamin B_{12} result in greater retention of the vitamin. Administration of 1000 μg is of value, however, in the performance of the Schilling test. Following oral administration of isotopically labeled vitamin B_{12}, the compound that is absorbed can be quantitatively recovered in the urine if 1000 μg of cyanocobalamin is administered intramuscularly. This unlabeled material saturates the transport system and tissue binding sites, so that more than 90% of the labeled and unlabeled vitamin is excreted during the next 24 hours.

A number of multivitamin preparations are marketed either as nutritional supplements or for the treatment of anemia. Many of these contain from 5 to 100 μg of cyanocobalamin without or with intrinsic factor concentrate prepared from the stomachs of hogs or other domestic animals. Purified preparations of intrinsic factor are standardized according to their ability to promote vitamin B_{12} absorption in patients with pernicious anemia. One oral unit of intrinsic factor is defined as that amount of material that will bind and transport 15 μg of cyanocobalamin. Most multivitamin preparations supplemented with intrinsic factor contain 0.5 oral unit per tablet. While the combination of oral vitamin B_{12} and intrinsic factor would appear to be ideal for patients with an intrinsic factor deficiency, *such preparations are not reliable.* Antibodies to human intrinsic factor may effectively counteract absorption of vitamin B_{12}. With prolonged therapy, some patients develop refractoriness to oral intrinsic factor, perhaps related to production of an intralumenal antibody against the hog protein (Ramsey and Herbert, 1965). All oral preparations of vitamin B_{12} and intrinsic factor thus carry a warning that patients must be reevaluated at 3-month intervals for recurrence of pernicious anemia.

Hydroxocobalamin given in doses of 100 μg intramuscularly has been reported to have a more sustained effect than cyanocobalamin, a single dose maintaining plasma vitamin B_{12} concentrations in the normal range for up to 3 months. However, a number of patients show reductions of the concentration of B_{12} in plasma within 30 days, similar to that seen after cyanocobalamin. Furthermore, the administration of hydroxocobalamin has resulted in the formation of antibodies to the transcobalamin II–vitamin B_{12} complex (Skouby *et al.*, 1971). *Hydroxocobalamin* (ALPHAREDISOL, others) is thus not recommended.

General Principles of Therapy. Vitamin B_{12} has an undeserved reputation as a health tonic and has been used for a number of diverse disease states. Effective use of the vitamin depends on accurate diagnosis and an understanding of the following general principles of therapy:

1. Vitamin B_{12} should be given prophylactically only when there is a reasonable

ANNEXURE N

indication. Dietary deficiency in the strict vegetarian, the predictable malabsorption of vitamin B_{12} in patients who have had a gastrectomy, and certain diseases of the small intestine constitute such indications. When gastrointestinal function is normal, an oral prophylactic supplement of vitamins and minerals, including vitamin B_{12}, may be indicated. Otherwise, the patient should receive monthly injections of cyanocobalamin.

2. The relative ease of treatment with vitamin B_{12} should not prevent a full investigation of the etiology of the disease. Usually, the initial diagnosis of a deficiency state is made from the characteristic defect in hematopoiesis: a full understanding of the etiology of the disease state involves studies of dietary supply, gastrointestinal absorption, and transport.

3. Therapy should always be as specific as possible. While a large number of multivitamin preparations are available, the use of "shotgun" vitamin therapy in the treatment of vitamin B_{12} deficiency can be dangerous. *With such therapy, there is the danger that sufficient folic acid will be given to result in a hematological recovery; however, this may mask continued vitamin B_{12} deficiency, and neurological damage will develop or progress if already present.*

4. While a classical therapeutic trial with small amounts of vitamin B_{12} can help confirm the diagnosis, the acutely ill, elderly patient may not be able to tolerate the delay in the correction of a severe anemia with resultant tissue hypoxia. Such patients require supplemental blood transfusions and immediate therapy with both folic acid and vitamin B_{12} to guarantee recovery.

5. Long-term therapy with vitamin B_{12} must be evaluated at intervals of 6 to 12 months in patients who are otherwise well. If there is an additional illness or a condition that may increase the requirement for the vitamin (*e.g.*, pregnancy), assessment of treatment should be performed more frequently. The concentration of vitamin B_{12} in plasma should be monitored: peripheral blood counts and parameters of macrocytosis must be evaluated.

Treatment of the Acutely Ill Patient. The therapeutic approach depends on the severity of the patient's illness. The individual with an uncomplicated pernicious anemia, in which the abnormal is restricted to a mild or moderate anemia without leukopenia, thrombocytopenia, or neurological signs or symptoms, will respond quite well to the administration of vitamin B_{12} alone. Moreover, therapy may be delayed until other causes of megaloblastic anemia have been ruled out and sufficient studies of gastrointestinal function have been performed to reveal the underlying etiology of the disease. In this situation, a therapeutic trial with small amounts of parenteral vitamin B_{12} (1 to 10 μg per day) can be extremely valuable in confirming the presence of an uncomplicated vitamin B_{12} deficiency.

In contrast, patients with neurological changes or severe leukopenia or thrombocytopenia associated with infection or bleeding require emergency treatment. The older individual with a severe anemia (hematocrit less than 20%) is likely to have tissue hypoxia, cerebrovascular insufficiency, and congestive heart failure. Effective therapy must not wait for detailed diagnostic tests. Once the megaloblastic erythropoiesis has been confirmed and sufficient blood collected for later measurements of concentrations of vitamin B_{12} and folic acid, the patient should receive intramuscular injections of 100 μg of cyanocobalamin and 1 to 5 mg of folic acid. For the next 1 to 2 weeks the patient should receive daily intramuscular injections of 100 μg of cyanocobalamin, together with a daily oral supplement of 1 to 2 mg of folic acid. Since an effective increase in red-cell mass will not occur for 10 to 30 days, the patient with a markedly depressed hematocrit and tissue hypoxia should also receive a transfusion of 2 to 3 units of packed red cells. If congestive heart failure is present, phlebotomy to remove an equal volume of whole blood can be performed or diuretics can be administered. Disorders of hemostasis secondary to thrombocytopenia should be treated with platelet transfusions (daily or every other day) until the platelet count has increased, and any ongoing infection should be treated aggressively with appropriate antibiotics. However, such patients should not receive chloramphenicol, since this antibiotic can prevent recovery of granulocytes (*see* Chapter 52).

The therapeutic response to vitamin B_{12} is characterized by a number of subjective and objective changes (Figure 57–4). Patients usually report an increased sense of well-being within the first 24 hours after the initiation of therapy. Objectively, memory and orientation can show dramatic improvement, although full recovery of mental function may take months or, in fact, may never occur. In addition, even before there is an obvious hematological response, the patient may report an increase in strength, a better appetite, and an improvement in the soreness of the mouth and tongue.

The first objective hematological change is the disappearance of the megaloblastic morphology of the bone marrow. As the ineffective erythropoiesis is corrected, the concentration of iron in plasma falls dramatically as the metal is used in the formation of hemoglobin. This usually occurs within the

EXTRINSI ... INTRINSIC FACTORS IN PERNICI... ANÆMIA

In 1925 Castle performed classical experiments demonstrating ... two factors were required to cure pernicious anæmia. He showed ... beef muscle and normal human gastric juice were ineffective when g... separately by mouth, but that when they were given *together* a ... reticulocyte response was obtained. "Consequently it was assumed ... some unknown but essential interaction between beef muscle a... extrinsic (food) factor and normal human gastric juice as an intrinsic ... tor appeared to be required for the restoration of normal hematopoie... the patient with pernicious anemia".* During the succeeding 20 ye... many successful attempts were made to isolate both the extrinsic and ... trinsic factors from various sources. Soon after crystalline cy... cobalamin (vitamin B_{12}) was isolated in 1948 it was generally accepted ... be the extrinsic factor. Intrinsic factor (secreted by the gastric mucosa) ... a glycoprotein and relatively crude preparations from animal stomac... have been used in the oral therapy of pernicious anæmia. Intrinsic fac... acts solely as a vehicle for carrying the important extrinsic factor into ... body, but if large oral doses of cobalamins are given they are absorbed ... dependently of intrinsic factor.

VITAMIN B_{12} (THE COBALAMINS)

The cellular coenzyme B_{12} is formed in the body from cobalam... (different forms of vitamin B_{12}). Hydroxocobalamin is preferred ... clinical use.

Pure crystalline cyanocobalamin was prepared from liver ... taneously and independently in the U.S.A. and in England in 1948, ... years after Minot and Murphy first demonstrated the effectiveness of ora... liver therapy in pernicious anæmia. The delay was mainly due to th... great difficulties of assay of the vitamin. Assay of different fractions is ob... viously essential during any purification procedure, and for many years ... the production of a reticulocyte response in patients with pernicious ... anæmia was the only method. Research has been greatly helped by the ... discovery that some micro-organisms (Lactobacillus casei, Euglena ... gracilis) require vitamin B_{12} as a growth factor, and this has been used to ... develop a relatively simple microbiological assay which is interfered with ... if the patient is taking antimicrobials; radioimmunoassay now eliminates ... this inconvenience. Vitamin B_{12}, as prepared, was soon shown to contain ... cobalt and a cyanide radicle and so was given the chemical name ... cyanocobalamin, which is now the official name. Its structural formula ... has been elucidated by crystallographic analysis. Cyanocobalamin is now ... made from cultures of streptomyces.

* Castle, W. B. (1953). *New Engl. J. Med.*, 249, 603.

...$_{12}$ in the body leads to:

...megaloblastic anæmia (Addisonian, or pernic...

...Degeneration of the brain, spinal cord and peripheral nerves (sub-... combined degeneration): symptoms may be psychiatric or physical.

...Abnormalities of epithelial tissue, particularly of the alimentary ... (e.g. sore tongue and malabsorption).

The exact mechanism of action of vitamin B_{12} in megaloblastosis ...ains uncertain, but it is known to be a coenzyme for an essential stage ... folate metabolism and may affect folate transport into cells.

...Requirements of cobalamins are about 1 μg daily. Absorption takes ...e mainly in the ileum. After absorption it is carried in plasma bound ... proteins (transcobalamins). It is not significantly metabolized, and ...retion is via the bile (there is enterohepatic circulation) and via the ...ney. Several years' supply are normally stored throughout the body; in ...the liver and half-life is about a year. Most animals cannot synthesise ...balamin and so are directly or indirectly dependent upon micro-...ganisms for it. Man gets most of his cobalamin from meat; organisms ...in the human colon synthesise it but it is not absorbed from this part of ...the intestine, and if rabbits in the wild did not eat their own fæces they ...would suffer from pernicious anæmia.

Cobalamin does not occur in plants (except in legumes in which it is ...made by bacteria in root nodules) and dietary deficiency occurs ...amongst people who have not enough money to buy meat as well as ...amongst the Vegans, who are a sect of particularly uncompromising ...vegetarians.* A rare form of dietary deficiency is due to Scandinavian fish ...tape worms which live in the gut and take up all the cobalamin before the ...host has a chance to absorb it.

The fate of cobalamin has been studied by labelling it with radioactive ...cobalt.

Indications for vitamin B_{12}

Indications for administration are the prevention and cure of con-...ditions due to its deficiency, which commonly presents as megaloblastic ...anæmia, though neurological or mental disorder (without anæmia) can ...occur.

In pernicious (Addisonian) anæmia the gastric mucosa is unable to produce intrinsic factor and so vitamin B_{12} deficiency occurs. A pentagastrin-fast achlorhydria is invariably present. Despite its name, the prognosis of a patient with uncomplicated pernicious anæmia, properly treated, is little different from that of the rest of the population. The neurological complications, particularly spasticity, are often permanent, although there may be considerable improvement under treatment. Total removal of the stomach, or atrophy of the mucous membrane in a post-

* Smith, A. D. M. (1962). *Brit. med. J.*, 1, 1655.

gastrectomy remnant may, after several years, lead to a similar anæmia.

Malabsorption syndromes. In cœliac disease and idiopathic steatorrhœa vitamin B_{12} and folic acid deficiency is common although megaloblastic anæmia occurs only relatively late.

A variety of drugs can cause malabsorption including neomycin, colchicine, metformin, slow-release KCl and antiepileptics.

Deprivation of vitamin B_{12} by abnormal bowel flora occurs in tropical sprue, multiple jejunal diverticula, bowel fistulæ and blind-loop syndrome. This can be remedied by a broad-spectrum antibiotic, e.g. tetracycline.

Cyanocobalamin has been tried empirically, sometimes in enormous doses, without striking success, in a variety of neurological conditions. In some types of peripheral neuritis, especially the diabetic, it has been thought to give benefit, but controlled trials are lacking. Hydroxocobalamin is worth giving in **tobacco amblyopia** where it is possible there is an element of cyanide intoxication from the tobacco, and cyanocobalamin may be formed.

Diagnostic use. Large doses of hydroxocobalamin may induce an incomplete response in pure folic acid deficiency, but response to a tiny dose (2 to 4 μg) is diagnostic of cobalamin deficiency.

In addition, the *Schilling test* of vitamin B_{12} absorption may be used. A small *oral* dose of radioactive vitamin B_{12} is given (followed by a large flushing *injected* dose of non-radioactive vitamin B_{12}) and excretion of radioactivity in the urine is measured. In pernicious anæmia absorption and therefore urinary excretion is negligible. If the test is repeated plus oral intrinsic factor, and the patient has pernicious anæmia, absorption will occur and urinary excretion of radioactivity will rise.

Contraindication: *undiagnosed anæmia*; therapy of pernicious anæmia must be both adequate and life-long, so that accurate diagnosis is essential. Even a single dose interferes with diagnosis by blood picture for weeks, although the Schilling Test remains abnormal. Inclusion of small amounts of cyanocobalamin in oral tonics is probably harmless but implies an irresponsible attitude in both promoter and prescriber. It is a bad thing that a patient's health should ever depend on his not absorbing his physician's inadequate therapy.

Preparations and dosage: hydroxocobalamin is bound to plasma protein to a greater extent than *cyanocobalamin*, with the result that there is less free to be excreted in the urine after an injection so that rather lower doses at longer intervals are adequate. This is why it is preferred to cyanocobalamin, though the latter can give satisfactory results (except in tobacco amblyopia).

The initial dose in cobalamin deficiency anæmias, including uncomplicated pernicious anæmia, is hydroxocobalamin, 250 to 1,000 μg, i.m., on alternate days for 1 to 2 weeks, then 250 μg weekly until the blood count is normal (single large doses are mostly lost in the urine), to induce remission and to replenish stores. Maintenance may be 1,000 μg

2–4 monthly, but some prefer higher doses for increased assurance. Higher doses should probably be used in renal and hepatic disease (due to defects in conversion to the active coenzyme and excretion).

The initial stimulation of hæmoglobin synthesis often depletes the *iron* and *folate* stores and supplements of these may be needed. **Hypokalæmia** may occur at the height of the erythrocyte response in severe cases. It is attributed to uptake of K by the rapidly increasing erythrocyte mass. Oral K should be given.

Failure to respond implies inaccurate diagnosis, or the presence of other disease such as carcinoma, hypothyroidism or chronic infection. If neurological complications have occurred the dosage can be doubled, though this probably does no good, but some would give all cases milligram doses initially as hydroxocobalamin is non-toxic.

Because of increased urinary excretion where high blood levels are achieved, inadequate response should be treated by increased frequency of injections as well as increased amount.

Hæmoglobin estimations are necessary at least every 6 months to check adequacy of therapy and for early detection of iron deficiency anæmia due to carcinoma of the stomach which occurs in about 5% of patients with pernicious anæmia.

Where injections are refused or are impracticable (rare allergy), administration as snuff or aerosol has been effective, but these routes are potentially less reliable. Large daily oral doses (300 μg) are probably preferable. Monitoring of the blood must be close.

Adverse reactions virtually do not occur, but its use as a "tonic" is an abuse of a powerful remedy for it may obscure the diagnosis of pernicious anæmia which is a matter of great importance in a disease requiring life-long therapy, and prone to serious neurological complications.

Liver extracts contain folic acid and cyanocobalamin. The introduction of pure cobalamins has made them obsolete. They were the mainstay of therapy for pernicious anæmia for about 20 years.

In pernicious anæmia folic acid is incomplete therapy and must not be used. Although it will improve the anæmia it allows progression of subacute combined degeneration of the nervous system. A patient with pernicious anæmia who has been given folic acid is in a dangerous situation.

There are oral preparations containing a miscellany of substances necessary for blood formation, including iron, folic acid, cyanocobalamin and other vitamins, liver, stomach extracts, etc, generally in doses insufficient to cure anæmias, but often sufficient to interfere with diagnosis.

They are promoted to preserve the aged in health, for anæmia and as tonics.

Both their indiscriminate promotion by commercial interests and their use by physicians in undiagnosed cases shows a disregard for patients' interests that is inconsiderate at best and callous at worst.

Barbiturates may be used in large doses in the management of acute maniacal states, delirium, and certain psychoneurotic disorders, although they are being superseded by newer agents.

The era when barbiturates (particularly phenobarbital) were virtually the only drugs recommended for daytime sedation has long passed, and they have largely been replaced by benzodiazepines and other compounds. However, phenobarbital and butabarbital are still available as sedatives in a host of inefficacious combinations for the treatment of functional gastrointestinal disorders, urethral inflammation, hypertension, asthma, and coronary artery disease. They are also included in analgesic combinations, possibly counterproductively. Although they may effectively decrease hyperactivity in hyperthyroidism, benzodiazepines are preferred. The barbiturates still have valid uses as sedatives to decrease restlessness during illnesses in children such as colic, whooping cough, pylorospasm, and nausea and vomiting of functional origin, to suppress excitement of various abnormal origins, and to decrease apprehension preparatory to minor medical and dental procedures.

Barbiturates are sometimes used to antagonize unwanted CNS-stimulant effects of various drugs, such as ephedrine, oxtriamphetamine, and theophylline; butabarbital and phenobarbital are most commonly used for such purposes. In these uses, they are probably superior to benzodiazepines.

Barbiturates are still employed for their rapid onset of action in the *emergency treatment of convulsions*, such as occur in tetanus, eclampsia, status epilepticus, cerebral hemorrhage, and poisoning by convulsant drugs; however, benzodiazepines are generally superior in these uses. Some representative dose ranges for intravenous administration are as follows: phenobarbital sodium, 100 to 300 mg; pentobarbital sodium, 100 to 500 mg; amobarbital sodium, 65 to 500 mg; thiopental sodium, 100 to 200 mg. The injection should be made slowly, with the usual precautions necessary for intravenous administration. Phenobarbital sodium is frequently used because of its anticonvulsant efficacy; however, even when administered intravenously, 15 minutes or more may be required for it to attain peak concentrations in the brain. Thus, the practice of continuing to administer phenobarbital until convulsions stop results in brain concentrations that continue to rise and may eventually exceed that required to control the seizures. The subsequent barbiturate-induced depression may summate with postictal depression. Administration of phenobarbital requires restraint and patience until the anticonvulsant effect develops before deciding whether a second dose is necessary. While the rapidity of onset of the ultrashort- and short-acting barbiturates would seem to have appeal, these drugs have a low ratio of anticonvulsant to hypnotic action. Diazepam offers many advantages for the emergency treatment of certain convulsive disorders, particularly for *status epilepticus*. The use of phenobarbital and mephobarbital in the symptomatic therapy of epilepsy is discussed in Chapter 20.

The barbiturates are being replaced by benzodiazepines for preanesthetic medication and basal anesthesia. The ultrashort-acting agents continue to be employed as intravenous anesthetics (Chapter 14). Short- and ultrashort-acting barbiturates are occasionally used as adjuncts to other agents in the production of obstetrical anesthesia. Although several studies have failed to affirm gross depression of respiration in the neonate at birth, evaluation of the effects on the fetus and neonate is difficult; it is prudent to avoid the use of barbiturates in obstetrics.

The barbiturates are employed as diagnostic and therapeutic aids in psychiatry, in *narcoanalysis* and *narcotherapy*. They are used to activate latent abnormalities in the EEG. In low concentrations, amobarbital has been administered directly into the carotid artery as a means of identifying the dominant cerebral hemisphere for speech prior to neurosurgery.

Anesthetic doses of barbiturates attenuate cerebral edema resulting from surgery, head injury, or cerebral ischemia, and they decrease infarct size and increase survival. The death rate from head injuries among juveniles and adults has been reported to be reduced by 80% and 50%, respectively. General anesthetics do not provide protection. The procedure is not without serious danger, however, and the ultimate benefit to the patient has been questioned (*see* Marshall and Bowers, 1982; Michenfelder, 1982; Steer, 1982).

Hepatic Metabolic Uses. Because hepatic glucuronyl transferase and the bilirubin-binding Y protein are increased by the barbiturates, phenobarbital has been successfully used to treat *hyperbilirubinemia* and *kernicterus* in the neonate; complete failure of this treatment can probably be attributed to premature discontinuation of the drug. The nondepressant barbiturate phetharbital (5-phenylbarbital) works equally well. Phenobarbital may improve the hepatic transport of bilirubin in patients with hemolytic jaundice. The effect of phenobarbital on bile salt metabolism and excretion has been employed in the treatment of selected cases of *cholestasis*.

Preparations and Dosage. Barbiturates are marketed in a vast array of preparations. In the United States, phenobarbital is an ingredient in more than 25 proprietary remedies, which are best ignored in favor of nonproprietary preparations. Extended-release forms are pointless and potentially dangerous in view of the long half-lives among available barbiturates, and they are disadvantageous in hypnotic use.

The hypnotic and sedative doses of the barbiturates are listed in Table 17–4.

CHLORAL DERIVATIVES

The pharmacology and uses of the chloral derivatives that are employed clinically are essentially the same, because they are all converted in the body to the same active intermediate. Two such com-

ANNEXURE Q

ANNEXURE R

can be useful in management pr
this is done a full hypnotic dose may cause restlessness and mental confusion.

There is also evidence that barbiturates can antagonise analgesics and this may be borne in mind when they are used in patients with pain.

Respiration. A hypnotic dose of a barbiturate in a patient with marked respiratory insufficiency, e.g. severe pulmonary emphysema or asthma, will depress respiratory minute volume and arterial oxygen saturation. Benzodiazepines, paraldehyde and chloral are less objectionable in this respect.

Cardiovascular function. Barbiturates lower blood pressure at hypnotic and anaesthetic doses by reducing cardiac output, probably by reducing venous return to the heart due to peripheral venous pooling. Compensatory vascular reflexes are depressed.

Toxic doses may depress the myocardium and also reduce the peripheral resistance by blocking the sympathetic nerves.

Alimentary tract. Prolonged barbiturate sedation constipates.

Tolerance. When eighteen former addicts were given 0·4 g pentobarbitone or quinalbarbitone daily for 90 days tolerance began to develop within 14 days. They showed significant decrease in hours of sleep, in signs of clinical intoxication and in performance in psychomotor tests. Tolerance probably occurs to all hypnotics, but it is less marked than with opiates. With barbiturates and meprobamate the tolerance is at least partly due to **enzyme induction,** and this can enhance adrenal steroid metabolism enough to reduce efficiency of steroid therapy.

Emotional and physical dependence occur with regular dosage of 0·4 g/day, or more, of barbiturate. If the dose exceeds 0·6 g/day the subject generally shows clinical signs of intoxication—impairment of mental ability, regression, confusion, emotional instability, nystagmus, dysarthria, ataxia and depressed somatic reflexes.

The withdrawal syndrome begins in 8 to 36 hrs and passes off over 8 to 14 days. It comprises, in approximate order of appearance, anxiety, twitching, intention tremor, weakness, dizziness, distorted vision, nausea.

There is now enough evidence that the traditional classification of barbiturates as long, medium and short acting, derived from experiments on animal anæsthesia, does not apply to their clinical use and so it should be abandoned. However, for overdose, rates of metabolism and excretion do have some relevance (see below). Duration of hypnotic effect is similar for drugs previously classified into each group, being about 8 hrs. Incidence of hangover is similar, and it is common after a placebo, being more closely related to the patient than to the drug.

Pharmacokinetics. Absorption after oral administration is rapid: plasma protein binding is variable, those with longer half-lives being less protein bound than those with shorter half-lives (surprisingly). Plasma half-lives are the result of renal excretion and of metabolism in those used as hypnotics and sedatives. For those used as i.v. anæsthetics (which see),

ma half-life of initial doses.

Examples. 50–100 hrs: phenobarbitone, barbitone, allobarbitone.
20–40 hrs: pentobarbitone, quinalbarbitone,
amylobarbitone, butobarbitone, cyclobarbi

Distribution is throughout the body with rather more in the CNS elsewhere.

Metabolism and excretion. For most barbiturates metabolism is chiefly hepatic with a little urinary excretion and, from the point of view of safety, the more rapidly metabolized barbiturates may be preferred. Those most rapidly metabolized are quinalbarbitone, pentobarbitone and cyclobarbitone, followed by amylobarbitone and butobarbitone. The most persistent are phenobarbitone (about 25% excreted unchanged by the kidney) and barbitone, the only member wholly excreted unchanged by the kidney.

The reason why there is little renal excretion of most barbiturates is not that they do not appear in the glomerular filtrate, but because barbiturate that appears in the glomerular filtrate, if unionised, diffuses back into the circulation through the renal tubule. This diffusion will be less if the drug is ionised, and, being weak organic acids, ionisation will be maximal at a high (alkaline) pH.

Renal excretion of barbiturate can therefore be enhanced both by making the urine alkaline to pH 8 with a sodium bicarbonate or lactate* infusion, and by hastening the passage of glomerular filtrate through the tubule by inducing a diuresis. This has been used successfully in the treatment of poisoning.

Forced *alkaline* diuresis is useful only in the case of phenobarbitone (see pH, pKa) (and aspirin); for other barbiturates nothing useful is achieved by doing more than ensuring profuse urine volume. The alkaline diuresis treatment is not itself life-saving and so is never essential. Its benefit consists in reduction of duration of coma by up to two-thirds; therefore the complications of prolonged unconsciousness are less; but it needs skilful handling and it should not be begun until the clinical condition (respiration, circulation) is under control. The same remarks apply to dialysis. A detailed account is included here because anyone in a hospital may find himself involved in it.

Indications for forced alkaline diuresis (F.A.D) in phenobarbitone poisoning†: patient unrousable, hypoventilating and hypotensive, plasma concentration above 550 μmol/l (10 mg/100 ml) of phenobarbitone itself (excluding metabolites).

* In the past sodium lactate has been preferred to sodium bicarbonate (lactate is metabolized, and the sodium is freed to take up bicarbonate ion made available by dissociation of H_2CO_3) because of difficulty in sterilising bicarbonate by heat without chemical change. But this has been overcome and sterile sodium bicarbonate solution is now generally available.

† Boulton-Jones, J. M. (1971). *Prescr. J.* **11**, 146 with revisions 1978. By permission of the author and the editor.

change in mortality with the combination (Korzeniowski *et al.*, 1982).

Synergistic antibiotic combinations have been recommended in the therapy of infections with *Pseudomonas* in neutropenic patients. *In vitro*, antipseudomonal penicillins plus an aminoglycoside are synergistic against most strains of *Pseud. aeruginosa*. Studies in animals support the superiority of the combination over either drug alone, and clinical studies suggest improved survival with the combination. Despite the fact that the microorganism is sensitive to gentamicin *in vitro*, administration of gentamicin alone frequently does not cure the infection and may even allow sustained bacteremia. The addition of carbenicillin markedly increases the cure rate, a phenomenon that correlates with a more rapid bactericidal effect *in vitro*. This success may be a reflection of the importance of the use of antibiotics that produce bactericidal effects rapidly when infection occurs in the neutropenic patient (Klastersky and Staquet, 1982).

Sulfonamides combined with trimethoprim are synergistic *in vitro* and are effective against infections caused by microorganisms that may be resistant to sulfonamides alone. A fixed combination of trimethoprim and sulfamethoxazole is available for clinical use and has emerged as an effective treatment of recurrent urinary tract infections, *Pneumocystis carinii* pneumonia, typhoid fever, shigellosis, and certain infections due to ampicillin-resistant *H. influenzae*.

There is considerable interest in the application of a new concept in combination chemotherapy—the use of an inhibitor of beta-lactamase, which has no intrinsic antimicrobial activity, in combination with a beta-lactam antibiotic that is susceptible to beta-lactamase. The prototypical enzyme inhibitor is clavulanic acid; other derivatives are currently being evaluated. This approach may allow successful treatment of infections by microorganisms that produce beta-lactamase. For example, infections caused by beta-lactamase-producing *H. influenzae* may be treatable with ampicillin plus the beta-lactamase inhibitor. Thus, the utility of time-tested antibiotics (e.g., penicillin G and ampicillin) may be restored in infections for which they had become ineffective.

Advances have also been made by combination of synergistic agents in the antimicrobial therapy of fungal infections. The most significant clinical advance to date is in the therapy of cryptococcal meningitis. A combination of flucytosine and amphotericin B has been shown to be synergistic *in vitro* and in animal models of infection. In the therapy of cryptococcal meningitis a comoination of flucytosine and a low dose of amphotericin B for 6 weeks was as effective as therapy with a higher dose of amphotericin B for 10 weeks with less renal toxicity (Bennett *et al.*, 1979).

4. *Prevention of the Emergence of Resistant Microorganisms.* The use of combinations of antimicrobial agents was first proposed as a method to prevent the emergence of resistant mutants during therapy. If spontaneous mutation were the predominant means by which microorganisms acquired resistance to antibiotics, combination chemotherapy would, in theory, be an effective means of prevention. For example, if the frequency of mutation for the acquisition of resistance to one drug is 10^{-7} and that for a second drug 10^{-6}, the probability of independent mutation to resistance to both drugs in a single cell is the product of the two frequencies, 10^{-13}. This makes the emergence of such mutant resistant strains statistically unlikely. In practice, however, this method has received extensive use only in the treatment of tuberculosis, where the concomitant use of two or more appropriate agents strikingly reduces the development of drug resistance by the tubercle bacillus.

Disadvantages of Combinations of Antimicrobial Agents. It is important that physicians understand the potential negative results of the use of combinations of antimicrobial agents. The most obvious are the risk of toxicity from two or more agents, the selection of microorganisms that are resistant to antibiotics that may not have been necessary, and increased cost to the patient. In addition, as noted above, antagonism of antibacterial effect may result when bacteriostatic and bactericidal agents are given concurrently. The clinical significance of antibiotic antagonism is not fully understood. Although antagonism of one antibiotic by another has been a frequent observation *in vitro*, well-documented clinical examples are relatively rare. The most notable of these involves the therapy of pneumococcal meningitis.

In 1951, Lepper and Dowling reported that the fatality rate among patients with pneumococcal meningitis who were treated with penicillin alone was 21%, while those patients who received the combination of penicillin and chlortetracycline had a fatality rate of 79%. This study was supported by Mathies and colleagues (1967), who treated children with bacterial meningitis of multiple etiologies with either ampicillin alone or with the combination of ampicillin, chloramphenicol, and streptomycin. The mortality rate among those treated with ampicillin was 4.3%, while those treated with the combination was significantly greater—10.5%.

Antagonism between antibiotics is probably relatively unimportant in *most* infections. If an antagonistic interaction between two antibiotics is

occur in germ-free guinea-p… non-absorbed antibiotics th… penicillin, by interfering with normal gut flora, allows an enormous proliferation (10 million-fold) of coliform bacteria in the cæcum, with enterocolitis and fatal bacteræmia. This condition may be analogous to the enterocolitis that occurs in man during broad spectrum antibiotic treatment.*

Treatment Failure

Treatment failure may be due to drug resistance, natural or acquired. Where the organism is sensitive to the drug used, failure is usually due either to the way the drug is used or to some factor peculiar to the patient. Sabath† lists six causes:

1. Treatment begun too late to save the patient,
2. Suboptimal use of drug,
   (a) dose too small,
   (b) intervals between doses too long,
   (c) duration of course too short,
   (d) unsuitable route,
   (e) adjuvant medications not used.
3. Organisms present in altered state (dormancy, variant forms).
4. Substances antagonising effect of drug present in the patient, e.g. pus, or unsuitable pH.
5. "Barriers" to adequate access of drug to organism,
   (a) natural, e.g. poor entry into eye, cerebrospinal fluid,
   (b) pathological, e.g. abscess, fibrosis.
6. Reduced host defences,
   (a) disease, e.g. congenital agammaglobulinæmia, reticuloses, leukæmia, old age, diabetes, cystic fibrosis.
   (b) immunosuppression, e.g. anticancer drugs and adrenal steroids: bacteri*cidal* drugs to be used here.

Combinations of Antimicrobials

A critical attitude is essential towards the use of two or more antimicrobials, whether prescribed separately to suit the patient and his infection (concomitant therapy) or as a fixed-dose combined formulation.

The indications for use of two or more antimicrobials are four:

1. *To obtain synergism*, i.e. an effect unobtainable with either drug alone, e.g. co-trimoxazole; penicillin plus gentamicin (in enterococcal endocarditis).

* Farrar, W. E., *et al.* (1965). *Amer. J. Path.*, 47, 629.
† Sabath, L. D. (1969). *New Engl. J. Med.*, 280, 91

…ice, especially in chronic infec-…tions, e.g. …

3. *To broaden the spectrum of antibacterial activity* in a kno… infection or where treatment is essential before a diagnosis is reached; full doses of each drug are needed.
4. *To reduce severity or incidence of adverse reactions* where the organism is fully sensitive to each drug, but only if doses liable to cause adverse reactions are used; here lower therapeutic doses of each drug are used. This use is uncommon.

The attitude "if one drug is good, two should be better, and three should cure almost anybody of almost anything"* is naive and irrational.

When combined therapy is used to treat an infection due to a single organism the result may be:

1. *Indifference:* this is common.
2. *Synergism:* uncommon except in certain specific situations, e.g enterococcal endocarditis, tuberculosis and Gram-negative bacillus infections.
3. *Antagonism:* also uncommon but most likely when minimally active doses of a bacteristatic and of a bactericidal drug are used together: the timing as well as the dose is important in this complex situation.

Clinical demonstration of antagonism has been made for penicillin + chlortetracycline in pneumococcal meningitis and in Group A streptococcal infection; for penicillin + erythromycin in Group A streptococcal infection.

Bactericidal drugs act most effectively on rapidly dividing organisms. Thus a bacteristatic drug, by reducing multiplication, may protect the organism from the bactericidal drug. When a combination must be used blind, it is best to use two bacteristatic or two bactericidal drugs. But this is not a firm rule, since it is known that penicillin plus sulphonamide is a synergistic combination.

Jawetz* makes the following important points:

1. A particular combination cannot be specified as generally synergistic, but only as synergistic in relation to a particular microorganism.
2. The need for combinations of antimicrobials arises only infrequently.
3. Drug combinations must never take the place of proper diagnosis or specifically directed antimicrobial therapy.
4. Fixed-dose combinations are unsuitable for general clinical use.

* Jawetz, E. (1968) *Ann. Rev. Pharmacol.*, 8, 151

Disadvantages of combined therapy include:

1. False sense of security, discouraging efforts towards accurate diagnosis.
2. Increased incidence of adverse reactions.
3. Increased variety of adverse reactions.

Drugs between which there is cross-resistance should obviously not be used together.

There are difficulties with even the few rational fixed-dose combinations, e.g. co-trimoxazole. Sulphonamide resistant organisms are common and so use of this combination could be equivalent to exposure to trimethoprim alone thus encouraging development and spread of trimethoprim resistant organisms.

pH and Antimicrobial Activity

The efficacy of some antimicrobials is greatly affected by pH and this has three aspects of practical importance:

1. Most laboratory sensitivity tests are conducted at pH 7·2–7·4.
2. Whilst the pH of the body cannot be altered to suit the drug, the pH of the urine often can be, over a range of 4·6 to 8·2.
3. Since the pH effect increases antimicrobial activity without increasing toxicity to the host, it is possible to use some of the potentially toxic antimicrobials (streptomycin, gentamicin, kanamycin) at lower doses, obtaining therapeutic efficacy with less risk of toxicity; e.g. in alkaline urine the renal clearance of sulphonamides is generally increased so that the renal tract is exposed to more drug; alkalinity also increases solubility of sulphonamides which reduces the risk of crystalluria.

Duration of Antimicrobial Therapy

Too brief therapy fails to cure.

Unnecessarily prolonged therapy leads to adverse reactions, and promotes emergence of resistant strains and suprainfection.

Evidence of cure may be hard to get, and empirical experience must sometimes be the sole guide. The variations in conduct of therapy, e.g. between sore throat, typhoid and urinary infections are due to the different characteristics of the infecting organisms and to the differences in pathology of the host. In general, do not change therapy until 3 days trial has been given; if an infection deserves treatment it deserves at least 5 days. Further notes will be found under *general principles* and under the individual diseases.

Administration of Antimicrobials

Oral administration is convenient, less unpleasant than parenteral administration and is commonly adequate. Publish[illegible] studies on plasma

concentrations in relation to dose give results of administration on an empty stomach. Food retards absorption and peak plasma concentrations are therefore less. In general antimicrobials should be taken between meals or at least one hour before a meal. In the case of cloxacillin the timing in relation to food can make the difference between success and failure.

Intravenous (or i.m.) administration is used for its increased certainty in urgent situations or where vomiting or malabsorption are feared. For therapeutic efficacy it is probably immaterial whether the drug is given intermittently (about 4 hrly) or in a continous infusion.* But continuous infusion introduces risks of incompatibility and drug instability; though this may be more convenient to doctors, especially at night, where nurses are not permitted to give i.v. injections even into the tubing of an infusion.

Some drugs are given by routes decided by their chemical or biological (e.g. irritant) properties.

Chemoprophylaxis and Suppressive Therapy

It is sometimes assumed that what a drug can cure it will also prevent, but this is not necessarily so.

The basis of effective true chemoprophylaxis is the use of a drug against one organism of virtually uniform susceptibility, e.g. penicillin against group A streptococci.

But the term chemoprophylaxis is commonly extended to include prevention of *disease* as well as prevention of *infection*.

The main categories of chemoprophylaxis may be summarised as follows:

1. true prevention of infection: rheumatic fever†, urinary tract infection.

2. suppression of existing infection before it causes overt disease (tuberculosis, malaria, animal bites).

3. prevention of exacerbations of a chronic infection (bronchitis, cystic fibrosis).

4. prevention of opportunistic infections due to commensals getting into the wrong place (bacterial endocarditis after dentistry and peritonitis

* But a dose that gives peak concentrations well above the minimum inhibitory concentration (MIC) for the organism when given intermittently, may be too low to reach this concentration in the blood if infused continuously over 4 to 6 hrs.

† Rheumatic fever is caused by a large number of types of group A streptococci. But immunity is type specific so that recurrent attacks are commonly due to infection with different strains. All strains are sensitive to penicillin and so chemoprophylaxis is used.

Acute glomerulonephritis is also due to group A streptococci. But only a few types cause it, so that natural immunity is more likely to protect and, in fact, second attacks are rare. Therefore chemo[illegible]ylaxis is not used.

f weeks with an average of about four weeks. For most acute nfections a good general rule is to continue therapy for 2 to 3 days after the temperature has returned to normal and all signs of infection have subsided. However, fever can continue for weeks from sterile effusions complicating pneumonia and cerebrospinal fluid abnormalities can persist for considerable periods in bacterial meningitis, leading to a continuation of chemotherapy for much longer than is necessary. Empiricism needs to be tempered with reason and experience, and in actual practice the guidelines for duration of therapy must be sufficiently flexible to be appropriate for the patient being treated.

ALLERGY AND TOXICITY The patient's allergic history should always be explored before prescribing antimicrobial agents. In addition to allergic manifestations in general, a record of previous drug allergies is of particular importance, and agents that have caused clear-cut reactions should be avoided. Unfortunately, no reliable test is available to determine the presence of allergy to the penicillins, and they may or may not be well tolerated by patients with a history of a previous reaction. The possibility of a severe anaphylactic reaction can be mainly excluded by skin tests containing major and minor determinant mixtures, but only the major mixture is commercially available. When administration of a penicillin is considered essential, one approach is to begin with a very small dose intravenously and increase the amount every few minutes until it is learned whether the patient can tolerate the antibiotic. Specifically, with an intravenous infusion running 1 unit penicillin diluted in 3 to 5 ml saline or glucose solution is injected slowly into the tubing, and 5 min is allowed to elapse to see if an untoward reaction occurs. A solution of epinephrine is available in another syringe to be injected if needed. If no reaction occurs, 2, 5, 10, 25, and 50 units, etc., are injected at 5-min intervals, and within an hour or so it either becomes apparent that the patient can tolerate a full therapeutic dose, or evidences a reaction that is readily controlled by epinephrine. If a reaction occurs, administering another antibiotic is usually best although in mild reactions, continuing the penicillin alone with antihistamines and/or steroids is possible in some instances. Such a program can be quite troublesome as well as risky, requiring frequent adjustments to suppress urticaria and itching. The number of alternative antibiotics available is large enough that switching to another agent is usually the best course to follow.

Drug toxicity related to renal function is of particular importance. Some antimicrobials, such as the penicillins, cephalothin, chloramphenicol, erythromycin, and lincomycin, are relatively safe at normal or only slightly reduced dosage in the presence of impaired renal function. Other agents, such as the aminoglycosides, are potentially quite toxic but can be administered safely at reduced dosage if proper guidelines, based on serial determinations of the serum creatinine, are followed, and particularly if blood levels can be monitored. Certain toxic agents should be avoided if at all possible in the presence of renal insufficiency. These include most of the tetracyclines, streptomycin, cephalordine, the sulfonamides, the nitrofurans, and nalidixic acid. One of the long-acting tetracyclines, doxycycline, has the same half-life in healthy and uremic subjects, and can be administered to patients with impaired renal function either orally or intravenously. Many patients with chronic renal failure are being maintained on dialysis programs and many require antimicrobials for a variety of infections. Table III-1 summarizes adult dosage schedules for various antibiotics for patients with renal failure, on or off dialysis.

SITE OF INFECTION Soft-tissue infections in sites with a good blood supply and a minimum of tissue necrosis are, in general, easily treated. In meningitis and endocarditis, on the other hand, penetration into the site of the infection presents formidable problems and is not infrequently responsible for treatment failures. Penetration across the blood-brain barrier is a complex phenomenon involving protein binding, lipid solubility, and ionization of the drug being administered. In addition, the permeability of this barrier to drugs depends on the degree of inflammation. Because of their low toxicity the penicillins can be administered in doses large enough to provide therapeutic concentrations in the spinal fluid, whereas more toxic drugs such as the aminoglycosides and polymyxins must be injected intrathecally to be effective clinically in meningitis. On the other hand, agents such as the sulfonamides, chloramphenicol, and the tetracyclines appear in the spinal fluid in amounts adequate for the treatment of some types of meningitis when they are given in doses appropriate for the treatment of systemic infections.

Other examples of problems of penetration, and of the influence of localized physiologic conditions, may be cited. The sulfonamides are excreted in the saliva in amounts adequate to eradicate the meningococcal carrier state, whereas most penicillins and tetracyclines are not. However, most of the strains of meningococci encountered at the present time are sulfonamide-resistant. In urinary infections, erythromycin and the aminoglycosides are relatively ineffective at an acid pH, whereas a pH at less than 5.5 is essential for the activity of methenamine mandelate (Mandelamine). The lack of efficacy of sulfonamides in the presence of pus, due to the competition for binding sites by the large amounts of *p*-aminobenzoic acid present, greatly limits the usefulness of this class of drugs.

Foreign bodies, abscesses, and obstruction to normal pathways of drainage almost always interfere with the response to chemotherapy and usually prevent cure until they are removed, drained, or relieved. Suture materials, prostheses, sequestrations, and calculi are examples of foreign bodies that interfere with drug therapy and usually, but not always, need to be removed. In many abscesses, bacteria tend to be in a metabolically inactive state in which they are not actively synthesizing cell wall and are not susceptible to the damaging effects of some antimicrobial drugs; hence drainage plus chemotherapy is necessary to eradicate the infection. Obstruction to bronchial, biliary, and renal drainage interferes seriously with the response of bacterial infections to antibiotics, and these infections generally cannot be cured with drugs until the obstruction is relieved. A thorough knowledge of the mechanical, metabolic, and physiologic factors is essential in planning therapy that will bring about optimal results in infections located in different parts of the body.

COMBINATION THERAPY, SYNERGISM, ANTAGONISM Once the etiologic agent is known or can be anticipated, most bacterial infections can be treated successfully with a *single* antimicrobial agent. Combination therapy is used frequently, however, to broaden the antibacterial spectrum while awaiting the results of cultures, and also to cover the possibility that a polymicrobial infection might be present. For example, in a hospitalized patient who suddenly becomes ill with presumed sepsis, cephalothin and gentamicin may be given empirically to provide antibacterial activity against a variety of gram-positive and -negative pathogens that might be fatal if therapy were delayed (Chap. 109). Over 100 fixed-dose combinations were once available commercially in the United States for oral or parenteral therapy, but virtually all have been ordered off the market by the Food and Drug Administration on the grounds that it has not been shown in controlled studies that both

agents contribute to the claimed therapeutic effects, that the amounts of each agent present were often not appropriate, and that patients were often being exposed to the potential hazards of two drugs when only one was needed. When combination therapy is indicated, it is most rational to prescribe separately the indicated drugs in doses that take into the account the patient's age, weight, and physiologic status.

A clinically significant enhancement of antibacterial activity from exposing microorganisms to two or more drugs is rare. Usually, the drugs have an indifferent effect in vitro; sometimes an additive action is observed, but this is difficult to demonstrate in patients.

True synergism occurs between penicillins and aminoglycosides with a number of gram-positive and gram-negative pathogens. The classic example is enterococcal endocarditis; penicillins (G, V, ampicillin, carbenicillin) disrupt the cell wall, permitting streptomycin to gain access to the ribosomes where their action is lethal. About one-third of enterococci are ribosomally resistant to streptomycin, but few if any strains are resistant to gentamicin and tobramycin, and so these aminoglycosides are replacing streptomycin in treating this disease. Of the penicillinase-resistant penicillins, only nafcillin is synergistic against most strains of enterococci. In contrast, with vancomycin streptococci streptomycin is synergistic with penicillin against virtually all strains, and it is probable that, in bacterial endocarditis due to viridans streptococci, there are fewer relapses with combined therapy than with penicillin G alone (Chap. 243).

Gentamicin and tobramycin are synergistic with carbenicillin against *Pseudomonas* and some other gram-negative bacilli. Theoretically, it would be possible to reduce doses of the aminoglycosides, but in severe *Pseudomonas* infections full doses are usually given so as not to risk compromising the therapeutic result.

Trimethoprim-sulfamethoxazole, another synergistic combination, will be described below.

Clinically, significant antagonism between antimicrobial agents is also rare, a prime example being a higher mortality rate in pneumococcal meningitis with penicillin and tetracycline than with penicillin alone. The rate of killing by penicillin

TABLE 111-1
Dosages of antimicrobials in renal failure

Drug	Normal dose	Normal dose interval	Dose interval for degree of renal failure: Mild (C_{cr}* 50–80 ml/min)	Moderate (C_{cr}* 10–50 ml/min)	Severe (C_{cr}* 10 ml/min)	Hemodialysis: Significant dialysis out of urine	Hemodialysis: Add at end of each dialysis	Peritoneal dialysis: Significant dialysis out of urine	Peritoneal dialysis: Add parenterally during dialysis	Alternative and/or maximum after loading parenterally using dose
Ampicillin	0.5–3 g	Every 6 h	6 h	8 h	12–15 h (1 g)	Yes	0.5–1 g	No		50 μg/ml
Amoxicillin	0.25–1 g PO	Every 8 h	8 h	12 h	16 h (0.5 g)	Yes	0.5 g	No		
Penicillin G	0.25–4 million U	4 h	4 h (2 million U)	4 h (1.5 million U)	6 h (1 million U)	No		No		
Methicillin, oxacillin, nafcillin	1–2 g	4 h	4 h	4 h	8–12 h (1 g)	No		No		
Cloxacillin, dicloxacillin	0.5–1 g PO	6 h	6 h	6 h	6 h	No		No		
Carbenicillin	4–5 g	4 h	4 h	6–8 h (2 g)	12 h (2 g)	Yes	1–2 g	No	1 g every 6 h	200 μg/ml
Cephalexin, cephradine	0.25–1 g	4 h	4 h	6 h	Every 6 h (0.25 g)	Yes	0.25–0.5 g	Yes	0.25 g PO every 6 h	
Cephalothin, cephapirin	1–2 g	4 h	4 h	6 h	8–12 h (1 g)	Yes	1 g	Yes	1 g every 6 h	50 μg/ml
Cefazolin	0.5–1 g	8 h	12 h	12 h (0.5 g)	24 h (0.5 g)	No	0.5 g	No		75 μg/ml
Cefamandole, cefoxitin	0.5–2 g	6 h	8 h	12 h (1 g)	12 h (1 g)	No	0.5 g	No		50 μg/ml
Gentamicin,†,‡ tobramycin	1–1.7 mg/kg	8 h	8–12 h	12–24 h	48–72 h	Yes	1.5 mg/kg	No		8 μg/ml
Amikacin,†,‡ kanamycin	7.5 mg/kg	12 h	24 h	24–72 h	72–96 h	Yes	3.5 mg/kg	No		20 μg/ml
Streptomycin	0.5 g	12 h	24 h	24–72 h	72–96 h	Yes	0.25 g	Yes	?	
Chloramphenicol	0.25–1 g	6 h	6 h	8 h	8 h	No		No		
Erythromycin	0.25–1 g	6 h	6 h	8 h	8–12 h	?		?		
Clindamycin	0.3–0.6 g	6–8 h	8 h	8 h	12 h (0.3 g)	No		No		
Vancomycin	0.25–0.5 g	6 h	24 h	48–72 h	7 days	No		No		15 μg/ml
Tetracycline	0.25–0.5 g	6 h	8–12 h	Avoid	Avoid	No		No		
Doxycycline	0.1–0.2 g	12–24 h	12–24 h	24 h	24 h	No		No		
Sulfisoxazole	1 g	6 h	6 h	8–12 h	Avoid	Yes	?			

* C_{cr} = creatinine clearance rate.
† Frequency of the dose can be estimated more accurately by multiplying the serum creatinine by 8 for gentamicin and tobramycin or by 9 for amikacin and kanamycin.
‡ An alternate method is to give smaller doses at 8- to 12-h intervals by relating the elimination constants of the drugs to the patient's creatinine clearance. A dosing chart applicable to all the aminoglycosides has been described by Sarubbi and Hull.

~~COM H 1317~~
DRA-1

Com H

ISSUES FOR DEBATE ON PEOPLES SCIENCE IN HEALTH CARE

(C.P. Bijoy, Pathanjalipuri- P.O., Thadagam, Coimbatore-641108)

The dominant health care system of our country is essentialy based on the modern Allopathic system. The state and the market have organised health care to promote the development of this dominant health care system. A well established institutional network consisting of educational institutions, pharmaceutical companies, medical equipment manufacturers, marketing network, medical establishments - hospitals, nursing homes, clinics and private practice, the huge monolith of a health care structure established by the state withits hospitals Primary Health Centres and Sub centres have penetrated into the most remote areas. Yet this dominant health care system is not accessible nor affordable to most of our people. It is highly exclusivist, expensive, generates over use of unnecessary drugs, creates dependancy upon a class of medical/health care practitioner through the mediation of scientific mystification. It does not reach the majority of our people and oppresses the majority of those who approach it. The dominant perspective sees the modern health care system as a legitimate and logical conclusion to meeting the health needs of the people. It persists by further establishment of an even more elaborate system with an even more efficient network of infrastructural facilities, developing ever more informations, programmes, manpower and services that bulldozes amongst our people to provide them with "benefits" of the modern world in the manner they choose and under the assumption that they are desirable, beneficial, apolitical and inevitable.

The reactions to such a state of health care system are efforts to reform within the present system of health care using modern medicine through stress on primary health care, extension of health care facilities to the rural and tribal areas, protection of consumer rights, opposition to continued marketing of banned and bannable drugs, pressure against the continued hospital - doctor - disease - drug approach to health care, a more, a more rational drug and health policy, increase in professional and managerial abilities of the health personnel and efforts at promotion of people's participation and their

.....2

self reliance where promotion of traditional systems of medicine, folk, herbal and home remedies and local health practices have an important role.

One stream of thinking is that the existing socio-economic and political system is responsible for the evils of the present health and medical system. The problem is seen as arising out of an elite, urban bias in the priorities of policy makers, commercialisation of medical profession, the capitalist distortion of modern medical science and technology and its mystification. The counter stream looks critically at the ideological and conceptual basis of modern society. The societies in which modern health S & T evolved are imperialistic and the propogation of this S & T itself is part of colonisation of third world, both intellectually and materially. The sickness and limitations of the industrial culture, of which this science is a part, in the countries of origin is too evident now. Alternative life style and culture is seen as a way out. Indigenous science and technologies, including that of health and disease, in the context of indigenous life styles and practices is to be the basis for evolving a truly appropriate need based democratic and participative (health care) system.

This alternative and counter stream is to be seen in the following contexts:-

- extremely limited access of modern health system and the escalating loss of whatever benefits from traditional systems;

- minority enjoying access to all types of health and medical care including grudging and condescending incorporation of traditional systems of medicine;

- the failure of the western ethno-centric approach to meet the needs and aspirations of the people even after four decades of independance;

- the development process that increases disparities in the control and use of resources;

- the social process where market forces determine what constitutes knowledge and practice;

- the cooption of the state by the market;

- the health of an individual or community defined in terms of the political state implies the power of individual and community to control decisions that affect their physical, mental and environmental state.

.....3.

Some basic notions:

1. Different communities perceive different resources in the same environment. The same resources are moreover perceived and put to use differently by different communities. The evolution of knowledge and practice, of science and technology is a cultural construct and is based on the specific social formation and the mode of production of that particular community at that point of time. The existence of heirarchy of cultures is founded on the ideology of the oppressive classes and is also used as a tool against the oppressive classes by the oppressed in a liberative process.

2. Culture is built upon complex interactions involving physical, Environmental, Ideological, political and Economic dimensions. The relations of production, exchange and consumption find expression in cultural and social responses. Traditions is the vestiges of earlier cultural trends ideologically influencing the present and future trends.

3. Traditional science and technologies are the emperical results of socio-cultural and environmental demands rather than mere economic imperatives. It is characterised by its localised expressions suited to locally available resources evolving local skills, are ecologically sound, suited to renewable forms of energy, low capital outlays and high labour content. The ensuing products are 'Unsophisticated' and geared to serve limited and specific markets and are based on agrarian economies.

4. Modern science and technologies are based on the economic imperatives of industrial economies rather than the socio-cultural and environmental demands. It is characterized by centralised production requiring newer skills utilising non-renewable sources of energy, with high capital outlays and low labour content and are generally ecological disasters. The ensuing products are sophisticated and geared to serve a broad market through the creation of homogeneous consumption behaviour.

5. The health care system is always articulated in a given social formation and the mode of production of that social formation gives rise to its corresponding health care system. The present social formation is that of dominance and control exercised to maintain the exploitative relations of production.

.....4.

6. The aspects of mystification and professionalism is rooted in the economic base, and has nothing to do with the systems of medicine, and is the expression of these systems in the given social formation.

7. The traditional systems of medicine is closer to the indigenous socio-cultural pattern, peoples consciousness of health and disease, local skills and resources.

On a peoples science movement in health care:

The traditional systems of medicine has a comprehensive body of knowledge in health science, with a well developed theoretical foundation based on empirical data, scientific methodology and a materialist philosophy. It developed in its practice in heterogenous forms catering to the needs of people according to the then social formation of specific communities. But with the advent of the market with its modern science and technology and the state as a mechanism to create conditions for the development of the market, the common properties, resources and rights of communities to it are being expropriated from the people. Consequently, the knowledge base, practices, the science and technology and skills are pushed out of the control, accessibility, affordability and suitability of the communities. The state delegitimises the right of communities to this knowledge and practices of communities by the development of the process of institutionalisation.

The inability of modern health care system of the state and the market to satisfy the health needs and aspirations of the people and the inability of the modern medicine to exclusively provide a safe and satisfactory solution to all health problems has led to the increasing respectability of the traditional systems of medicine by the state and the market. The chopra committee of 1948, the WHO forage into traditional systems of medicine, ICSSR - ICMR report of 1981, the National Health policy, 1982 etc, provides sanctity to this process. The state now sets itself to increase the patronage to traditional systems of medicine under the garb of virtues as rich heritage, glorious achievements and cultural compatability. The present form of health care system has meanwhile made inroads into traditional systems of medicine developing institutions of learning, skills and production suited to the mode of production and social formation of the day. Incorporation in the modern health care system on the basis of testing done primarily with modern medicine rather than the framework of folk knowledge, keeping with the assumption and logic of that science is the trend considered to be valid. As the market incorporates the products of traditional systems of medicine, the resources base of communities and their rights over it is further expropriated. The crisis in

the forms of knowledge, practice and organisation of indigenous peoples health care deepens further.

A peoples science movement in health care should seek to legitimise the rights of people to common properties and to increase the space for individuals and communities to take care of their health with available resources and skills.

(Paper presented at the seminar on "People's Science Movement", Coimbatore, Tamilnadu, 26-27 December, 1987).

DRA-1.

International Health News

Your Gateway to Better Health!

The popularity of alternative and complementary medicine is growing rapidly. This report investigates the reasons why acupuncture, homeopathy, herbal medicine, vitamin therapy and other modalities are flourishing

Alternative Medicine: Why So Popular?

With complete references for researchers

by Hans R. Larsen, MSc ChE

Get Acrobat Reader | Download in .pdf Format | Get Acrobat Reader

In 1997 Americans made 627 million visits to practitioners of alternative medicine and spent $27 billion of their own money to pay for alternative therapies. In contrast, Americans made only 386 million visits to their family doctor. It is estimated, by none other than the Harvard Medical School, that one out of every two persons in the United States between the ages of 35 and 49 years used at least one alternative therapy in 1997. That is a growth of 47.3 per cent since 1990. This is spectacular by any means and of great concern to conventional (allopathic) medicine especially since the people using alternative medicine are primarily well-educated, affluent baby boomers(1).

The trend to alternative medicine is repeated throughout Western society. In Australia 57 percent of the population now use some form of alternative medicine, in Germany 46 percent do, and in France 49 percent do. The growth of some types of alternative medicine is indeed astounding. Between 1991 and 1997 the use of herbal medicines in the United States grew by 380 per cent and the use of vitamin therapy by 130 per cent. These are impressive numbers by anyone's standard(1-3).

What it is and isn't

So why do people increasingly prefer alternative to conventional medicine? The reasons are pretty simple - it is safe and it works! While there is little doubt that allopathic medicine works well in the case of trauma and emergency (you don't call your herbalist if you get hit by a car), it is much less effective when it comes to prevention, chronic disease, and in addressing the mental, emotional, and spiritual needs of an individual. These are precisely the areas where alternative medicine excels. To most of the world's population, over 80 per cent to be precise, alternative medicine is not "alternative" at all, but rather the basis of the health care system. To Western-trained physicians alternative medicine is "something not taught in medical schools" and something that allopathic doctors don't do and, one could add, generally know nothing about. Alternative medicine actually encompasses a very large array of different systems and therapies ranging from ayurvedic medicine to vitamin therapy.

Ayurvedic medicine has been practiced in India for the past five thousand years and has recently undergone a renaissance in the West due, in no small measure, to the work and lectures of Dr. Deepak Chopra, MD. Ayurvedic medicine is a very comprehensive system that places equal emphasis on body, mind, and spirit and uses a highly personalized approach to return an individual to a state where he or she is again in harmony with their environment. Ayurvedic medicine uses diet, exercise, yoga, meditation, massage, herbs, and medication and, despite its long lineage, is as applicable today as it was 5000 years ago. For example, the seeds of the Mucuna pruriens plant

have long been used to treat Parkinson's disease in India; it is now receiving attention in conventional circles as it is more effective than l-dopa and has fewer side effects(4).

Traditional Chinese medicine has been practiced for over 3000 years and over one quarter of the world's population now uses one or more of its component therapies. TCM combines the use of medicinal herbs, acupuncture, and the use of therapeutic exercises such as Qi Gong. It has proven to be effective in the treatment of many chronic diseases including cancer, allergies, heart disease and AIDS. As does Ayurvedic medicine, TCM also focuses on the individual and looks for and corrects the underlying causes of imbalance and patterns of disharmony.

Homeopathy was developed in the early 1800s by the German physician Samuel Hahnemann. It is a low-cost, non-toxic health care system now used by hundreds of millions of people around the world. It is particularly popular in South America and the British Royal Family has had a homeopathic physician for the last four generations. Homeopathy is an excellent first-aid system and is also superb in the treatment of minor ailments such as earaches, the common cold, and flu. Homeopathy is again based on the treatment of the individual and when used by a knowledgeable practitioner can also be very effective in the cure of conditions such as hay fever, digestive problems, rheumatoid arthritis, and respiratory infections.

Chiropractic primarily involves the adjustment of spine and joints to alleviate pain and improve general health. It was practiced by the early Egyptians and was developed into its present form by the American Daniel David Palmer in 1895. It is now the most common form of alternative medicine in the United States. Chiropractors not only manipulate spine and joints, but also advise their patients on lifestyle and diet matters. They believe that humans possess an innate healing potential and that all disease can be overcome by properly activating this potential.

Naturopathic medicine also strongly believes in the body's inherent ability to heal itself. Naturopathy emphasizes the need for seeking and treating the causes of a disease rather than simply suppressing its symptoms. Naturopaths use dietary modifications, herbal medicines, homeopathy, acupuncture, hydrotherapy, massage, and lifestyle counseling to achieve healing.

Vitamin therapy or orthomolecular medicine uses vitamins, minerals, and amino acids to return a diseased body to wellness in the belief that the average diet today is often woefully inadequate in providing needed nutrients and that the need for specific nutrients is highly individual. Conditions as varied as hypertension, depression, cancer, and schizophrenia can all benefit enormously from vitamin therapy.

Biofeedback, body work, massage therapy, reflexology, hydrotherapy, aromatherapy, and various other forms of energy medicine round out the vast spectrum of alternative medicine modalities.

How is it different?
So what sets alternative medicine apart from allopathic medicine?

- Conventional medicine is preferred in the treatment of trauma and emergencies while alternative medicine excels in the treatment of chronic disease, although homeopathy can also be very effective as a first-aid.

- Conventional medicine focuses on the relief of symptoms and rarely places emphasis on prevention or the treatment of the cause of a disorder. All alternative systems, on the other hand, strive to find and treat the cause of a disorder and frown on covering up the symptoms. Alternative therapies are also much more focused on prevention.

- Conventional medicine is organ specific, hence ophthalmologists, cardiologists, nephrologists, neurologists, etc. Alternative medicine, without exception, considers each person as a unique individual and uses a holistic approach in treatment.

- Conventional medicine believes in aggressive intervention to treat disease. It revels in terms such as "magic bullet" and "war" ("the war on cancer"), and prefers quick fixes (as do many patients). Alternative medicine believes in gentle, long-term support to enable the body's own innate powers to do the healing.

- Conventional medicine's main "arsenal" consists of surgery, chemotherapy, radiation, and

powerful pharmaceutical drugs. Alternative medicine uses time-tested, natural remedies and gentle, hands-on treatments.

- Conventional medicine practitioners are guided in their treatment by strict rules set out by the Colleges of Physicians and Surgeons. This often leads to a "one size fits all" approach. Practitioners of alternative medicine, on the other hand, treat each patient as an individual and do what, in their opinion, is best rather than what is specified in a "rule book".

- Conventional medicine sees the body as a mechanical system (the heart is a pump and the kidneys are a filter) and believes most disorders can be traced to chemical imbalances and therefore are best treated with powerful chemicals (drugs). Alternative medicine systems, almost without exception, accept that the body is suffused by a network of channels (meridians) that carry a subtle form of life energy. Imbalances or blockages of this energy are what lead to disease and clearing of the blockages and strengthening of the energy is the ultimate goal of alternative medicine.

- Conventional medicine prefers patients to be passive and accept their treatment without too many questions. Alternative medicine, in contrast, prefers and indeed, in many cases, requires the patient to take a highly active part in both prevention and treatment.

- Both conventional and alternative medicine ascribe to the principle "Do no harm". However, while alternative medicine is essentially achieving this goal, conventional medicine seems to have almost totally lost sight of it. Hospitals are now the third largest killer in Australia and over one million people are seriously injured in American hospitals every year. Blood infections acquired in American hospitals cause 62,000 fatalities every year and bypass surgery results in 25,000 strokes a year. Two million patients experience adverse drug reactions in hospitals in the United States every year; of these, over 100,000 die making hospital-induced adverse drug reactions the fourth leading cause of death after heart disease, cancer, and stroke(5-11).

- The practice of conventional medicine is intimately tied in with the whole medico-pharmaceutical-industrial complex whose first priority is to make a profit. Although most conventional physicians have "healing the patient" as their first priority, they find it increasingly difficult to do so while operating within the system with its pharmaceutical salesmen, its rule books, its fear of malpractice suits, its endless paperwork to satisfy bureaucrats and insurance companies, and its time pressures. Most alternative medicine practitioners have no such constraints and pressures and can give the patient their undivided attention.

- Conventional medicine generally resists the use of natural remedies long after their efficacy has been scientifically proven (Germany is an exception to this). Most alternative medicine practitioners eagerly embrace new remedies and, in many cases, can point to years of safe use. Ginkgo biloba is now the most prescribed drug in Germany and has been found effective in the prevention and treatment of Alzheimer's disease(12). Also in Germany the herb saw palmetto is now prescribed in 90 per cent of all cases of enlarged prostate. In the United States 300,000 prostate operations are performed each year to solve this problem. More profitable for sure, but dangerous and unpleasant for the patient(13).

- The major source of funds for medical research is pharmaceutical companies who, not surprisingly, are very reluctant to support investigations into lifestyle modifications, vitamins, and other unpatentable products. Nevertheless, a growing number of medical researchers are focusing their attention on natural supplements and remedies and are publishing their work in mainstream journals. The benefits of antioxidants have now been thoroughly documented by researchers at the Harvard Medical School and similar prestigious institutions. Folic acid, a simple B vitamin, has also been extensively studied in university laboratories and has been found to be effective in preventing or ameliorating heart attacks, strokes, angina, intermittent claudication, atherosclerosis, kidney disease, colon cancer, hearing loss, and Alzheimer's disease(14-18).

Although alternative practitioners and a small group of conventional physicians do embrace the use of natural therapies and products the vast majority of "establishment" physicians are still dragging their heels and even denigrating and ridiculing alternative medicine. This fact, perhaps more than

anything else, is what is driving the rapid and massive switch from conventional to alternative medicine.

*****

REFERENCES

1. Eisenberg, David M., et al. Trends in alternative medicine use in the United States, 1990-1997. Journal of the American Medical Association, Vol. 280, November 11, 1998, pp. 1569-75
2. Bensoussan, Alan. Complementary medicine - where lies its appeal? Medical Journal of Australia, Vol. 170, March 15, 1999, pp. 247-48 (editorial)
3. Fisher, Peter and Ward, Adam. Complementary medicine in Europe. British Medical Journal, Vol. 309, July 9, 1994, pp. 107-11
4. Hussain, Ghazala and Manyam, Bala V. Mucuna pruriens proves more effective than L-dopa in Parkinson's disease animal model. Phytotherapy Research, Vol. 11, 1997, pp. 419-23
5. Ernst, Edzard. Harmless herbs? A review of the recent literature. American Journal of Medicine, Vol. 104, February 1998, pp. 170-78
6. Anderson, Ian. Hospital errors are number three killer in Australia. New Scientist, June 10, 1995, p. 5
7. Cordner, Stephen M. Australia's preventable hospital deaths. The Lancet, Vol. 346, June 17, 1995, p. 1662
8. Bates, David W., et al. Incidence of adverse drug events and potential adverse drug events. Journal of the American Medical Association, Vol. 274, July 5, 1995, pp. 29-34
9. Pittet, Didier and Wenzel, Richard P. Nosocomial bloodstream infections. Archives of Internal Medicine, Vol. 155, June 12, 1995, pp. 1177-84
10. 10. Roach, Gary W., et al. Adverse cerebral outcomes after coronary bypass surgery. New England Journal of Medicine, Vol. 335, December 19, 1996, pp. 1857-63
11. Lazarou, Jason, et al. Incidence of adverse drug reactions in hospitalized patients. Journal of the American Medical Association, Vol. 279, April 15, 1998, pp. 1200-05 and pp. 1216-17 (editorial)
12. The Lancet, November 7, 1992, pp. 1136-39
13. Wilt, Timothy J., et al. Saw palmetto extracts for treatment of benign prostatic hyperplasia. Journal of the American Medical Association, Vol. 280, November 11, 1998, pp. 1604-09
14. Murray, Michael T. Encyclopedia of Nutritional Supplements, 1996, Rocklin, CA, Prima Publishing, pp. 119-26
15. Moghadasian, Mohammed H., et al. Homocysteine and coronary artery disease. Archives of Internal Medicine, Vol. 157, November 10, 1997, pp. 2299-2308
16. Perry, I.J., et al. Prospective study of serum total homocysteine concentration and risk of stroke in middle-aged British men. The Lancet, Vol. 346, November 25, 1995, pp. 1395-98
17. Lowering blood homocysteine with folic acid based supplements: meta- analysis of randomised trials. British Medical Journal, Vol. 316, March 21, 1998, pp. 894-98
18. Clarke, Robert, et al. Folate, vitamin B12, and serum total homocysteine levels in confirmed Alzheimer disease. Archives of Neurology, Vol. 55, November 1998, pp. 1449-55 and 1407-08 (editorial)

Bibliography

- Burton Goldberg Group. Alternative Medicine: The Definitive Guide, Puyallup, Washington, Future Medicine Publishing, Inc. 1993
- Gursche, Siegfried and Rona, Zoltan, editors. Encyclopedia of Natural Healing, Vancouver, BC, Alive Publishing, Inc. 1997
- Micozzi, Marc S., editor. Fundamentals of Complementary and Alternative Medicine, NY, Churchill Livingstone Publishers

First published in International Health News Issue 98, September 1999

Return to Home Page | Message to the Editor | Subscription Information

International Health News is published monthly by Hans R. Larsen, 1320 Point Street
Victoria, BC, Canada V8S 1A5
Phone: (250) 384-2524
E-mail: health@pinc.com
URL: http://www.yourhealthbase.com
ISSN 1203-1933.....

ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಭಾರತೀಯ ವೈದ್ಯಕೀಯ ಪದವೀಧರರು ಸಲ್ಲಿಸಿದ ಶಾಶ್ವತ ನೋಂದಣಿ ಅರ್ಜಿಗಳು

ಆದೇಶ ಆಸ್ಪತ್ರೆಗಳು

D12-A-1

1-4-2011

ಕ್ರ.ಸಂ.	ನಗರ	ತಾಲ್ಲೂಕು	ಹಾಸಿಗೆಗಳ ಸಂಖ್ಯೆ
1	2	3	4
		ಗ್ರಾಮೀಣ ಪ್ರದೇಶ	
1.	Bangalore Urban ಬೆಂಗಳೂರು (ನಗರ) ಜಿಲ್ಲೆ		
1	ಬೆಂಗಳೂರು	ಬೆಂಗಳೂರು (ದ)	225
2	ಮಾರೇನಹಳ್ಳಿ	ಬೆಂಗಳೂರು (ಉ)	6
2.	Bangalore Rural ಬೆಂಗಳೂರು(ಗ್ರಾ.ಮಾಂತರ)ಜಿಲ್ಲೆ		
1	ಮಾಗಡಿ	ಮಾಗಡಿ	10
2	ಕನಕಪುರ	ಕನಕಪುರ	6
3	ದೊಡ್ಡಬಳ್ಳಾಪುರ	ದೊಡ್ಡಬಳ್ಳಾಪುರ	6
3.	Kolar ಕೋಲಾರ ಜಿಲ್ಲೆ		
1	ಶ್ರೀನಿವಾಸಪುರ	ಶ್ರೀನಿವಾಸಪುರ	10
2	ಚಿಂತಾಮಣಿ	ಚಿಂತಾಮಣಿ	6
4.	Tumkur ತುಮಕೂರು ಜಿಲ್ಲೆ		
1	ತುಮಕೂರು	ತುಮಕೂರು	15
2	ಗುಬ್ಬಿ	ಗುಬ್ಬಿ	5
3	ತಿಪಟೂರು	ತಿಪಟೂರು	10
4	ಚಿಕ್ಕನಾಯಕನಹಳ್ಳಿ	ಚಿಕ್ಕನಾಯಕನಹಳ್ಳಿ	6
5.	ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆ		
1	ಶಿವಮೊಗ್ಗ	ಶಿವಮೊಗ್ಗ	40
6.	ಚಿತ್ರದುರ್ಗ ಜಿಲ್ಲೆ		
1	ಹಿರಿಯೂರು	ಹಿರಿಯೂರು	10
2	ಚಿಕ್ಕಮಗಳೂರು	ಹಿರಿಯೂರು	6
3	ಚಳ್ಳಕೆರೆ	ಚಳ್ಳಕೆರೆ	6

1	2	3	4
7.	ರಾಮನಗರ ಜಿಲ್ಲೆ		
1.	ಹಾರನಹಳ್ಳಿ	ಹಾರನಹಳ್ಳಿ	6
8.	ಮೈಸೂರು ಜಿಲ್ಲೆ		
1.	ಮೈಸೂರು	ಮೈಸೂರು	140
2.	ಮರಳಿಯಾರು ಗೂಡಂನಪುರ	ನಂಜನಗೂಡು	6
3.	ನಂಜನಗೂಡು	ನಂಜನಗೂಡು	6
4.	ಟಿ.ನರಸೀಪುರ	ಟಿ.ನರಸೀಪುರ	6
9.	ಚಾಮರಾಜನಗರ ಜಿಲ್ಲೆ		
1.	ಚಾಮರಾಜನಗರ	ಚಾಮರಾಜನಗರ	10
2.	ಗುಂಡ್ಲುಪೇಟೆ	ಗುಂಡ್ಲುಪೇಟೆ	6
10.	ಹಾಸನ ಜಿಲ್ಲೆ		
1.	ಹಾಸನ	ಹಾಸನ	25
2.	ಕೂಡಿಯಂತ	ಹಾಸನ	6
3.	ಬೆಳಗುಂಬ	ಅರಸೀಕೆರೆ	6
4.	ಹೊಳೆನರಸೀಪುರ	ಹೊಳೆನರಸೀಪುರ	10
11.	ಚಿಕ್ಕಮಗಳೂರು ಜಿಲ್ಲೆ		
1.	ವರುಗರೆ	ಕಡೂರು	6
2.	ಕಡೂರು	ಕಡೂರು	10
3.	ಮೂಡಿಗೆರೆ	ಮೂಡಿಗೆರೆ	6
4.	ಕೊಪ್ಪರಿಕೆ	ಚಿಕ್ಕಮಗಳೂರು	6
12.	ಮಂಡ್ಯ ಜಿಲ್ಲೆ		
1.	ಮಂಡ್ಯ	ಮಂಡ್ಯ	25
2.	ಮದಂ	ಮಂಡ್ಯ	6
3.	ಮಳವಳ್ಳಿ	ಮಳವಳ್ಳಿ	6
4.	ಕಿರುಪ್ಪೂರು	ಕಿರುಪ್ಪೂರು	6
13.	ಕೊಡಗು ಜಿಲ್ಲೆ		
1.	ಮಡಿಕೇರಿ	ಮಡಿಕೇರಿ	10
2.	ವಿರಾಜಪೇಟೆ	ವಿರಾಜಪೇಟೆ	10

1	2	3	4
14.	ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ		
	1. ತುಳು	ಮಂಗಳೂರು	6
15.	ಉತ್ತರ ಜಿಲ್ಲೆ		
	ಇಲ್ಲ	—	—
16.	ಬೆಳಗಾವಿ ಜಿಲ್ಲೆ		
	1. ಸಾಂಗತಿ	ಸಾಂಗತಿ	6
	2. ಸುಲಾ	ಸಾಂಗತಿ	10
	3. ಬೆಳಲಮೊಂಗಲು	ಬೆಳಲಮೊಂಗಲು	6
	4. ತಳವಣಿ	ಅಥಣಿ	6
	5. ರಾಮದುರ್ಗ	ರಾಮದುರ್ಗ	6
17.	ಧಾರವಾಡ ಜಿಲ್ಲೆ		
	1. ಹುಬ್ಬಳ್ಳಿ	ಹುಬ್ಬಳ್ಳಿ	25
18.	ಗದಗ ಜಿಲ್ಲೆ		
	1. ಮುಗೇರಿ — ಗದಗ	ಗದಗ	10
	2. ಲೋಕಾಪುರ	ಲೋಕಾಪುರ	6
19.	ಹಾವೇರಿ ಜಿಲ್ಲೆ		
	1. ಶಿಗಾಂವಿ	ಶಿಗಾಂವಿ	6
	2. ರಾಣಿಬೆನ್ನೂರು	ರಾಣಿಬೆನ್ನೂರು	6
20.	ಬಿಜಾಪುರ ಜಿಲ್ಲೆ		
	1. ಬಿಜಾಪುರ	ಬಿಜಾಪುರ	50
21.	ಬಾಗಲಕೋಟೆ ಜಿಲ್ಲೆ		
	1. ಬಾಗಲಕೋಟೆ	ಬಾಗಲಕೋಟೆ	10
	2. ಜಮಖಂಡಿ	ಜಮಖಂಡಿ	10
	3. ಬೀಗಿ	ಬೀಗಿ	6

..... 4

1	2	3	4
22.	ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆ		
	1. ಕಾರವಾರ	ಕಾರವಾರ	10
	2. ನಿಡಗೋಡ	ನಿಡಗೋಡ	10
	3. ಹುಮಚಾ	ಹುಮಚಾ	6
23.	ಗುಲ್ಬರ್ಗಾ ಜಿಲ್ಲೆ		
	1. ಕಮಲಾಪುರ	ಗುಲ್ಬರ್ಗಾ	6
	2. ಜೇವರ್ಗಿ	ಜೇವರ್ಗಿ	10
	3. ಆಫಜಲಪುರ	ಆಫಜಲಪುರ	10
	4. ಸೇಡಂ	ಸೇಡಂ	6
	5. ಮುಧೋಳ ನಾಗಾಯಿಕ್ಕರ	ಮುಧೋಳ ನಾಗಾಯಿಕ್ಕರ	6
	6. ಶಹಾಪುರ	ಶಹಾಪುರ	6
	7. ಯಾದಗಿರಿ	ಯಾದಗಿರಿ	6
24.	ರಾಯಚೂರು ಜಿಲ್ಲೆ		
	1. ರಾಂಪುರಬಜಾರು	ರಾಂಪುರಬಜಾರು	15
25.	ಕೊಪ್ಪಳ ಜಿಲ್ಲೆ		
	1. ಕೊಪ್ಪಳ	ಕೊಪ್ಪಳ	6
	2. ಗುಂಡೂರಾ	ಕುಪ್ಪಳ	6
	3. ಗಂಗಾವತಿ	ಗಂಗಾವತಿ	10
26.	ಬೀದರ ಜಿಲ್ಲೆ		
	1. ಬೀದರ	ಬೀದರ	15
	2. ಬಸವ ಕಲ್ಯಾಣ	ಬಸವ ಕಲ್ಯಾಣ	6
27.	ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆ		
	1. ಬಳ್ಳಾರಿ	ಬಳ್ಳಾರಿ	85
	2. ಸಂಡೂರು	ಸಂಡೂರು	6
	3. ಹೊಸಪೇಟೆ	ಹೊಸಪೇಟೆ	10
	4. ಹಿರಗುಪ್ಪ	ಹಿರಗುಪ್ಪ	6
	5. ಮಿಟ್ಟಿಕಲಸೂರು	ಕುಡತಿನಿ	6
	6. ಕೂಡಲಿಗಿ	ಕೂಡಲಿಗಿ	6

ಅನುಬಂಧ ನಾಲ್ಕು

ಕ್ರ.ಸಂ.	ಜಿಲ್ಲೆ	ಸ್ಥಳ	ತಾಲ್ಲೂಕು	ಹಾಸಿಗೆಗಳ ಸಂಖ್ಯೆ
1	2	3	4	5
1.	ಬೆಂಗಳೂರು (ನಗರ)	ಬೆಂಗಳೂರು	ಬೆಂಗಳೂರು (ದಕ್ಷಿಣ)	100
2.	ಬೆಂಗಳೂರು (ಗ್ರಾಮಾಂತರ)	ರಾಮನಗರ	ರಾಮನಗರ	10
3.	ತುಮಕೂರು (ಪೆಂ)	ತುಮಕೂರು	ತುಮಕೂರು	10
4.	ಶಿವಮೊಗ್ಗ (ಪೆಳ)	ಶಿವಮೊಗ್ಗ	ಶಿವಮೊಗ್ಗ	10
5.	ಮೈಸೂರು (ಪೆಂ)	ಮೈಸೂರು	ಮೈಸೂರು	20
6.	ಬಿಜಾಪುರ (ಪೆಂ)	ಬಿಜಾಪುರ	ಬಿಜಾಪುರ	10
7.	ಗುಲ್ಬರ್ಗಾ	ಶಿವಮೊಗ್ಗ–ರಂಗಂಪೇಟೆ	ನರಸರ	6
8.	ರಾಂಚಿ	1. ರಾಂಚಿ	ರಾಂಚಿ	10
		2. ಮಾನಿ	ಮಾನಿ	6
9.	ಬೀದರ್ (ಪೆಂ)	ಬೀದರ್	ಬೀದರ್	10
10.	ಬಳ್ಳಾರಿ	ಬಳ್ಳಾರಿ	ಬಳ್ಳಾರಿ	10

ಪೋಷಿಸಿಂಧುವಾಸತಿ

1.	ಬೆಂಗಳೂರು (ನಗರ)	ಬೆಂಗಳೂರು	ಬೆಂಗಳೂರು (ದಕ್ಷಿ)	40
	ಸುಳ್ಳಿನಗ (ಪಿ)	ಸುಳ್ಳಿಗಾ	ಸುಳ್ಳಿ ಗಾ	4
2.	ಶಿವಮೊಗ್ಗ (ಪೆಂ)	ಶಿವಮೊಗ್ಗ	ಶಿವಮೊಗ್ಗ	10
3.	ಮೈಸೂರು (ಪೆಂ)	ಮೈಸೂರು	ಮೈಸೂರು	10
4.	ಹಾಸನ (ಪೆಂ)	ಹಾಸನ	ಹಾಸನ	10
5.	ಶಿವಾಮಗ್ಗ	ಸೋಪಮಾರಪೇಟೆ	ಸೋಪಮಾರಪೇಟೆ	10
6.	ಕೋಲಾರ	ಕೋಲಾರ	ಕೋಲಾರ	10
7.	ಬಿಜಾಪುರ (ಪೆಂ)	ಬಿಜಾಪುರ	ಬಿಜಾಪುರ	10
8.	ಬಳ್ಳಿಗಾ (ಪೆಂ)	ಬಳ್ಳಿಗಾ	ಬಳ್ಳಿಗಾ	10

ಪ್ರಸೂತಿ ಚಿಕಿತ್ಸೆ ಮತ್ತು ಅಂಧತ್ವ ನಿವಾರಣೆ

1.	ಬೆಂಗಳೂರು (ನಗರ)	ಬೆಂಗಳೂರು (ಎಸ್.ಜೆ.ಐ.ಬಿ.ಎಂ.)	ಬೆಂಗಳೂರು (ದಕ್ಷಿಣ)	10
2.	ಮೈಸೂರು	ಮೈಸೂರು	ಮೈಸೂರು	6
3.	ಬಳ್ಳಾರಿ	ಬಳ್ಳಾರಿ	ಬಳ್ಳಾರಿ	10

ಅನುಬಂಧ

1	2	3	4	5
1.	ಬೆಂಗಳೂರು(ನಗರ)	ಬೆಂಗಳೂರು (ಎಸ್.ಜೆ.ಐ.ಐ.ಎಂ)	ಬೆಂಗಳೂರು(ದಕ್ಷಿಣ)	5
2.	ಮೈಸೂರು	ಮೈಸೂರು	ಮೈಸೂರು	5
3.	ಬಳ್ಳಾರಿ	ಬಳ್ಳಾರಿ	ಬಳ್ಳಾರಿ	5

ಸಿದ್ಧ

1.	ಬೆಂಗಳೂರು(ನಗರ)	ಬೆಂಗಳೂರು (ಎಸ್.ಜೆ.ಐ.ಐ.ಎಂ.)	ಬೆಂಗಳೂರು(ದಕ್ಷಿಣ)	10

× × × ×

ನಿರ್ದೇಶಕರು,
ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿಗಳು ಮತ್ತು
ಹೋಮಿಯೊಪತಿ ನಿರ್ದೇಶನಾಲಯ,
ಬೆಂಗಳೂರು-9.

ಎಸ: 100898.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿಗಳು ಹೋಗುವ ಪೆಟ್ರೋಲಿಯಂತೈಲೋತ್ಪತ್ತಿ ಇಲಾಖೆಯಂತು

_ಅಧೀನದ ಚಿಕಿತ್ಸಾಲಯಂತುಗಳು._

(01-4-2000ರಲ್ಲಿ ಇದ್ದಂತೆ).

ಕ್ರಮ ಸಂಖ್ಯೆ.	ಸ್ಥಳ.	ತಾಲೂಕ್ಕು.	ಕ್ರಮ ಸಂಖ್ಯೆ.	ಸ್ಥಳ.	ತಾಲೂಕ್ಕು.
1	2	3	1	2	3

ಆಂತುಪರ್ವೇದ

ಬೆಂಗಳೂರು ವಿಭಾಗ:-

1. ಬೆಂಗಳೂರು (ನಗರ) ಜಿಲ್ಲೆ:-

1.	ಶಾಸಕರ ಭವನ.	ಬೆಂಗಳೂರು.	5.	ಮಲ್ಲೇಶ್ವರಂ.	ಬೆಂಗಳೂರು(ಉತ್ತರ).
2.	ತುಳಸಿ ತೋಟ.	ಬೆಂಗಳೂರು.	6.	ಯಲಹಂಕ.	-"-
3.	ಬನ್ನೇರುಘಟ್ಟ.	ಬೆಂಗಳೂರು.	7.	ತ್ಯಾಂಪಗಾನಹಳ್ಳಿ.	-"-
4.	ನೆಲ್ಲೋಡನಹಳ್ಳಿ.	ಬೆಂಗಳೂರು(ದಕ್ಷಿಣ)	8.	ರಾಗಿಹಳ್ಳಿ.	ಆನೇಕಲ್.

2. ಬೆಂಗಳೂರು(ಗ್ರಾಮಾಂತರ) ಜಿಲ್ಲೆ:-

1.	ಹೊಸಕೋಟೆ.	ರಾಮನಗರ.	5.	ಹಣಬೆ.	ದೊಡ್ಡಬಳ್ಳಾಪುರ.
2.	ತುಂಬೇನಹಳ್ಳಿ.	-"-	6.	ಕೊಡಿಹಳ್ಳಿ.	-"-
3.	ಯಂಟಗಾನಹಳ್ಳಿ.	ನೆಲಮಂಗಲ.	7.	ಹೆಗ್ಗನಹಳ್ಳಿ.	ದೇವನಹಳ್ಳಿ.
4.	ಮಂಟನಕರ್ಜಿ.	-"-	8.	ಮೊಳಕಾಲ್ಗಾನಹಳ್ಳಿ.	ಮಾಗಡಿ.
			9.	ಬಿಜ್ಜಹಳ್ಳಿ.	ಕನಕಪುರ.
			(10)	ಹೊಸಕೋಟೆ	ದೊಡ್ಡಬಳ್ಳಾಪುರ
			(11)	ಕೋಲಾರ ಜಿಲ್ಲೆಯ	ಕೆಜಿಎಫ್
			(12)	ಚಿಕ್ಕಬಳ್ಳಾಪುರ	

3. ಕೋಲಾರ:-

1.	ಸೀನಂದ್ರ.	ಕೋಲಾರ.	5.	ಜಿಂಡಾರು.	ಗುಡಿಬಂಡೆ.
2.	ಶಿವಾರಪಟ್ಟಣ.	ಮಾಲೂರು.	6.	ಸಂತೆಕಲ್ಲಹಳ್ಳಿ.	ಚಿಂತಾಮಣಿ.
3.	ಬಿಕ್ಕ ತಿರುಪತಿ.	-"-	7.	ನೆಲ್ಲೋಡಂಯಾಜಲಹಳ್ಳಿ.	ಶ್ರೀನಿವಾಸಪುರ.
4.	ನೆಲ್ಲೋಡನಹಳ್ಳಿ.	ಗುಡಿಬಂಡೆ.	8.	ಅಂಬ್ಲಿಕಲ್.	ಮುಳಬಾಗಿಲು.
			9.	ನಿಡುವಾಳಿಡಿ.	ಬಾಗೇಪಲ್ಲಿ.

1	2	3	1	2	3

4. ತುಮಕೂರು:–

1.	ಹಿರೇಹಳ್ಳಿ.	ತುಮಕೂರು.	14.	ಕಂಪಾರಹಳ್ಳಿ.	ತಿಪಟೂರು.
2.	ಶೀತಕಲ್ಲು.	–"–	15.	ಕೊಪ್ಪಳ್ಳಿ.	–"–
3.	ಹೊಸಹಗೆರೆ.	–"–	16.	ಬಾರುಡೇಪಟ್ಟ.	–"–
4.	ವೀರಾಂಜನೇಯ.	ಶಿರಾ.	17.	ಬನ್ನಿಕೇಶವಪುರ.	ಪಾವಗಡ.
5.	ಶಿಷ್ಟೇಕೊಪ್ಪಲು.	–"–	18.	ಹೊಸವಸ್ತಾವರಿ.	–"–
6.	ಪಟ್ಟದಹಳ್ಳಿ.	ಗುಬ್ಬಿ.	19.	ಅರೇಮಲ್ಲೇನಹಳ್ಳಿ.	ತುರುವೇಕೆರೆ.
7.	ದೊಡ್ಡಗುಣಿ.	–"–	20.	ದಬ್ಬೇಪಟ್ಟ.	–"–
8.	ಬ.ಕೊಪ್ಪಲಿಹಳ್ಳಿ.	–"–	21.	ಸಜ್ಜೇಹೊಸಹಳ್ಳಿ.	ಮಧುಗಿರಿ.
9.	ಹರಡಗೆರೆ.	–"–	22.	ಗರಣಿ.	–"–
10.	ದುಡ್ಡನಹಳ್ಳಿ.	ಕೊರಟಗೆರೆ.	23.	ಚಿಕ್ಕದಾಳವಟ್ಟ.	–"–
11.	ದೊಡ್ಡವಂದಿರೆ.	ಕುಣಿಗಲ್.	24.	ಚಿಚಿ.ಮೇಲೇನಹಳ್ಳಿ.	ಚಿಕ್ಕನಾಂಯಕನಹಳ್ಳಿ.
12.	ಗಂಗನಪಟ್ಟ.	ತಿಪಟೂರು.			
13.	ರಾಮಚಂದ್ರಪುರ.	ತಿಪಟೂರು.			

5. ಶಿವಮೊಗ್ಗ:–

1.	ಕೊಮವ್ಮನಾಳು.	ಶಿವಮೊಗ್ಗ.	17.	ಗುಡವಿ.	ಸೊರಬ.
2.	ನಿದಿಗೆ.	–"–	18.	ವಲ್ಲಾಪುರ.	–"–
3.	ಶೆಟ್ಟಿಹಳ್ಳಿ.	–"–	19.	ಕಾತುವಳ್ಳಿ.	–"–
4.	ಚೋರಡಿ.	–"–	20.	ಸಾಲೂರು.	ತೀರ್ಥಹಳ್ಳಿ.
5.	ಸಿರಿಗೆರೆ.	–"–	21.	ಹೊಸದಲ.	–"–
6.	ತ್ಯಾಜಪಳ್ಳಿ.	–"–	22.	ಬನವಾಸಿ.	–"–
7.	ಗಂಬಳಿಬೈಲು.	–"–	23.	ಬಾವಿಕೈಸರು.	–"–
8.	ಅನವೇರಿ.	ಭದ್ರಾವತಿ.	24.	ಕೆಂದಾಳಿಬೈಲು.	–"–
9.	ಮೈಸಿದೊಳಲು.	–"–	25.	ಪುರಪ್ಪೆವನೆ.	ಹೊಸನಗರ.
10.	ಹನುವಂತರಾಪುರ.	–"–	26.	ವಿಜಾಪುರ.	–"–
11.	ಸೈದರ ಕಲ್ಲಹಳ್ಳಿ.	–"–	27.	ತ್ರಿಣವೆ.	–"–
12.	ನಿಂಬಿಗುಂದಿ.	–"–	28.	ಬೆಳಾಳರು.	–"–
13.	ಅರಳೀಕೊಪ್ಪ.	–"–	29.	ಹುರತಾಳು.	–"–
14.	ಸೈದಬಾರು.	ಸಾಗರ.	30.	ಹೊಸಾಸೂರು.	ಶಿಕಾರಿಪುರ.
15.	ಗುದ್ರಿ.	ಸೊರಬ.	31.	ಬೆಳಕಿ.	–"–
16.	ಆಲಪಳ್ಳಿ.	ಸೊರಬ.	32.	ಕಡೇನಂದಿಹಳ್ಳಿ.	–"–
			(33)	ಗೋಳಿಕೊಪ್ಪ	"
			(34)	ಸಿರಿಮನೆ	ಸಾಗರ

6. ಚಿತ್ರದುರ್ಗ :-

1. ಅಳಗವಾಡಿ.	ಚಿತ್ರದುರ್ಗ.
2. ಕೆಂಚಾಪುರಹಳ್ಳಿ.	— ,, —
3. ಕೆಂಚೇಗುಂಡಿ.	— ,, —
4. ಜಂಪಣ್ಣನತಾಂಡ್ಯಕ್ಕನ ಕೆಂಚೇಟಿ.	— ,, —
5. ದೊಡ್ಡಿಂಗನಾಳ.	— ,, —
6. ನೆಲಾಂಡೇಕೆರೆ.	ಹಿರಿಯೂರಾರು.
7. ಬಾರುದರಕಲುಂಟೆ.	— ,, —
8. ಮಲ್ಯಾಕಲಹಾರಹಳ್ಳಿ.	— ,, —
9. ಲ್ಯಾದರಹಳ್ಳಿ.	— ,, —
10. ಲಂಡೇಬೊಮವ್ಯನಹಳ್ಳಿ.	ಚಿಕ್ಕಬಳ್ಳಾಪುರ.
11. ಗುಳಿಹೊಸಹಳ್ಳಿ.	— ,, —
12. ಚಿತ್ರಹಳ್ಳಿ.	— ,, —
13. ಮಲಾಳೇನಹಳ್ಳಿ.	— ,, —
14. ಬೆಬ್ಬಳ್ಳಿ.	ಹೊಸದುರ್ಗ.
15. ಬಸಕ್ಕನಾಗರ.	— ,, —
16. ದೊಡ್ಡಘಟ್ಟ.	— ,, —
17. ದೊಡ್ಡತೇಕಲವಟ್ಟ.	— ,, —
18. ಅಲಘಟ್ಟ.	ಹೊಸದುರ್ಗ.
19. ಕಂಗುವಳ್ಳಿ.	— ,, —
20. ತಂಡಗ.	— ,, —
21. ನನ್ನಿಬಾಳ.	ಚಳ್ಳಕೆರೆ.
22. ಛಬರ್ತಿ.	— ,, —
23. ಬೆಳಗೆರೆ.	— ,, —
24. ಒಬಳಾಪುರ.	— ,, —
25. ಟಿ.ಎನ್.ಕೆಂಚೇಟಿ.	— ,, —
26. ಮಲಲ್ಲಾರಹಳ್ಳಿ.	— ,, —
27. ಹಿರೇಹಳ್ಳಿ.	— ,, —
28. ಮಹದೇವಪುರ.	— ,, —
29. ಚಿಕ್ಕ ಮದುರೆ.	— ,, —
30. ಹುಲಿಕುಂಟೆ.	— ,, —
31. ತಿಮ್ಮಪ್ಪಂತಮ್ಯನಹಳ್ಳಿ.	— ,, —
32. ಅಬ್ಬೇನಹಳ್ಳಿ.	— ,, —
33. ದೇವಸಮುದ್ರ.	ಚಿಕ್ಕಳಕಾಲಹಾರು.

7. ದಾವಣಗೆರೆ ಜಿಲ್ಲೆ :-

1. ಹೊಸಕಡ್ಲೆಬಾಳು.	ದಾವಣಗೆರೆ.
2. ಹುಲಿಕಟ್ಟೆ.	— ,, —
3. ಕಾನಗೊಂಡನಹಳ್ಳಿ.	— ,, —
4. ನರಗನಹಳ್ಳಿ.	— ,, —
5. ಕಾದಜಿಜ್ಜಿ.	— ,, —
6. ಅಣಬೇರು.	— ,, —
7. ಹುಚ್ಚವ್ವನಹಳ್ಳಿ.	ಜಗಳೂರಾರು.
8. ಹಾಲಿವಾಣ.	ಹರಿಹರ.
9. ಮಲಾಗಿನಗುಂದಿ.	— ,, —
10. ಬಣ್ಣಕೆಲ್ಲೇಡು.	— ,, —
11. ಕದರನಹಳ್ಳಿ.	ಚನ್ನಗಿರಿ.
12. ಬೆಳಲಗೆರೆ.	— ,, —
13. ನಲುಕ್ಕವರೆ.	— ,, —
14. ದುರ್ಗಿಗರೆ.	— ,, —
15. ರಾಮೇಶ್ವರ.	ಹೊನ್ನಾಳಿ.
16. ಒಡೆಂತುರ-ಹತ್ತೂರು.	ಹೊನ್ನಾಳಿ.
17. ಮಲಾದೇನಹಳ್ಳಿ.	ಹೊನ್ನಾಳಿ.
18. ಕುಂಬಳಾರು.	ಹೊನ್ನಾಳಿ.
19. ಮುಂಕ್ಕೇನಹಳ್ಳಿ.	— ,, —
20. ಸಲವನಹಳ್ಳಿ.	— ,, —
21. ಬಿನ್ನಿಕಟ್ಟೆ.	— ,, —
22. ಗೋಪಗೊಂಡನಹಳ್ಳಿ.	— ,, —
23. ಮೂರಿಗೊಂಡನಹಳ್ಳಿ.	— ,, —
24. ಕ್ಯಾಸಿನಕೆರೆ.	— ,, —
25. ರಾಗಿಮುಸಲವಾಡ.	ಹರಪನಹಳ್ಳಿ.
26. ಕೆ.ಕಲ್ಲಹಳ್ಳಿ.	— ,, —
27. ಹುಲಿಕಟ್ಟೆ.	— ,, —
28. ಮೂಡಿಹಳ್ಳಿ.	— ,, —
29. ಕಂಬಿಕೇರಿ.	— ,, —
30. ಕದಬಗೇರಿ.	— ,, —
31. ಬೆಂಡಿಕೇರಿ.	ಚನ್ನಗಿರಿ.

ಮೈಸೂರು ವಿಭಾಗ:-

8. ಮೈಸೂರು ಜಿಲ್ಲೆ:-

1.	ಹಿನಕಲ್.	ಮೈಸೂರು.	18.	ಮೇಲುಕೋಟೆ.	ಕೃಷ್ಣರಾಜನಗರ.
2.	ದೇವಲಾಪುರ.	-"-	19.	ಕಾಂತರ್ಜ.	ನಂಜನಗೂಡು.
3.	ಶ್ರೀರಂಪುರ.	-"-	20.	ಹೆಮ್ಮರಗಾಲ.	-"-
4.	ಕಲ್ಲೂರು ನಾಗನಹಳ್ಳಿ.	-"-	21.	ನಗರಲೆ.	-"-
5.	ಎನ್.ಉತ್ತನಹಳ್ಳಿ.	-"-	22.	ಂತಾಲಹಳ್ಳಿ.	-"-
6.	ನಾಗನಹಳ್ಳಿ.	-"-	23.	ಓಲಗೆರೆ.	-"-
7.	ಆಂತರಹಳ್ಳಿ.	ಹುಣಸೂರು.	24.	ನೇರಳೆ.	-"-
8.	ಹಾರ್ವೆ.	-"-	25.	ಕೆಂಪಸಿದ್ದನಹುಂಡಿ.	-"-
9.	ಕಲ್ಲಹಳ್ಳಿ.	-"-	26.	ಕಿರುಗುಂದ.	-"-
10.	ಉಂಡವಾಡಿ.	-"-	27.	ಕೊಡಗಹಳ್ಳಿ.	ಟಿ.ನರಸೀಪುರ.
11.	ಪಂಚವಳ್ಳಿ.	ಪಿರಿಂತಾಪಟ್ಟಣ.	28.	ಹೆಗ್ಗಾರು.	-"-
12.	ಮಾಕೋಡು.	-"-	29.	ಂತಾಜೀನಹಳ್ಳಿ.	-"-
13.	ದೊಡ್ಡಕವರವಳ್ಳಿ.	-"-	30.	ಮುತ್ತಲವಾಡಿ.	-"-
14.	ಕೊಣನಸೂರು.	-"-	31.	ಹಿರಿಂತಾರು.	-"-
15.	ಕೆಸ್ತೂರು-ಕೊಪ್ಪಲು.	ಕೃಷ್ಣರಾಜನಗರ.			
16.	ಚಿನ್ನಂಗೆರೆ.	-"-			
17.	ಗಂಧನಹಳ್ಳಿ.	-"-			

9. ಚಾವುರಾಜನಗರ ಜಿಲ್ಲೆ:-

1.	ಗಣಗಾನೂರು.	ಚಾವುರಾಜನಗರ.	6.	ಗೋಪಾಲಪುರ.	ಗುಂಡ್ಲುಪೇಟೆ.
2.	ಕೊಡಸೋಗೆ.	ಗುಂಡ್ಲುಪೇಟೆ.	7.	ತಿಪ್ಪರಾಜೀಪುರ.	ಕೊಳ್ಳೇಗಾಲ.
3.	ಆಲತ್ತೂರು.	-"-	8.	ತೆಳ್ಳನೂರು.	-"-
4.	ನೇನೆಕಚ್ಚಿ.	-"-	9.	ಬಳಿಗಿರಿರಂಗನ ಬೆಟ್ಟ.	ಂತಾಳಂದೂರು.
5.	ಸೋಲೆವೀನಹಳ್ಳಿ.	-"-	(10)	ಮುಳ್ಳೂರು ಪೇಟೆ	ಹುಣಸೂರು

ಕವಿನ:

1	2	3	1	2	3

10. ಹಾಸನ ಜಿಲ್ಲೆ:—

1.	ಕ.ಹಿರೇಹಳ್ಳಿ.	ಹಾಸನ.	26.	ಆಪ್ಪಿಹಳ್ಳಿ.	ಬೇಲೂರು.
2.	ದುಂದನಾಂತ್ಯನಹಳ್ಳಿ.	— ,, —	27.	ನಾಣೀನಹಳ್ಳಿ.	— ,, —
3.	ಕಿತ್ತಾನೆ.	— ,, —	28.	ಬೇಲೂರು.	— ,, —
4.	ಮುತ್ತತ್ತಿ.	— ,, —	29.	ಅಗ್ರಹಾರ.	ಆರಕಲಗೂಡು.
5.	ದೊಡ್ಡಗದ್ದವಳ್ಳಿ.	— ,, —	30.	ಹೆಬ್ಬಾಲೆ.	— ,, —
6.	ಮಡೇನೂರು.	— ,, —	31.	ಸಂತೆಮರೂರು.	— ,, —
7.	ಮಿಳಿಗೋಡು.	— ,, —	32.	ಹುಲಿಕಲ್.	— ,, —
8.	ಮಾವಿನಹಳ್ಳಿ.	— ,, —	33.	ಲಕ್ಕಾಕರು.	— ,, —
9.	ಮರ್ಕುಲಿ.	— ,, —	34.	ರಾವಣನಾಥಪುರ.	— ,, —
10.	ಎಂ.ಶಿವಾರ.	ಚನ್ನರಾಂಯಪಟ್ಟಣ.	35.	ಸಿದ್ಧಾಪುರಗೇಟ.	— ,, —
11.	ನವಿಲೆ.	— ,, —	36.	ಅರಕೆರೆ.	ಅರಸೀಕೆರೆ.
12.	ಸಂತೆ ಶಿವಾರ.	— ,, —	37.	ಮುಡಿಡಿ.	— ,, —
13.	ದಡಿಪಟ್ಟ.	— ,, —	38.	ವೃಂದಾವನಹಳ್ಳಿ.	— ,, —
14.	ಶ್ರೀರಾಮ ಬಡಾವಣೆ.	— ,, —	39.	ಚಿಕ್ಕಾಕರು.	— ,, —
15.	ಶ್ರೀಗಿರಿಕ್ಷೇತ್ರ.	— ,, —	40.	ದುವೆಮ್ಮೀನಹಳ್ಳಿ.	— ,, —
16.	ಬಾಳಗಾಲ.	— ,, —	41.	ದೊಣ್ಣೆನಕಟ್ಟೆ.	— ,, —
17.	ದೊಡ್ಡಕಣಗಾಲು.	ಆಲೂರು.	42.	ಜಿ.ಪುರ.	— ,, —
18.	ಹೊಸಪಟ್ಟಣ.	— ,, —	43.	ಕಲ್ಲಂಡಿ.	— ,, —
19.	ಕಾರ್ಜುವಳ್ಳಿ.	— ,, —	44.	ಕುರಾದಹಳ್ಳಿ.	— ,, —
20.	ಮಾವನೂರು.	ಹೊಳೆನರಸೀಪುರ.	45.	ಕುರುವಂಕ.	— ,, —
21.	ತೆರಣ್ಯ.	— ,, —	46.	ಂತುಡವನಹಳ್ಳಿ.	— ,, —
22.	ನಗರನಹಳ್ಳಿ.	— ,, —	47.	ತೊಂಡಿಗನಹಳ್ಳಿ.	— ,, —
23.	ಜೋಡಿಗುಬ್ಬಿ.	— ,, —	48.	ಉದೇವಾರ.	ಸಕಲೇಶಪುರ.
24.	ಉದುಂಡರು.	— ,, —	49.	ಹೆಗ್ಗದ್ದೆ.	— ,, —
25.	ಕರಗದ.	ಬೇಲೂರು.	50.	ಹೊಸಮೂರು.	— ,, —

11. ಮಂಡ್ಯ ಜಿಲ್ಲೆ:—

1.	ದೊಡ್ಡಬಾಣಸವಾಡಿ.	ಮಂಡ್ಯ.	8.	ಕ.ಆರ.ಪೇಟೆ.	ಕ.ಆರ.ಪೇಟೆ.
2.	ತಿಮ್ಮನಹೊಸೂರು.	— ,, —	9.	ಶ್ರೀ.ಆದಿಚುಂಚನಗಿರಿ ಕ್ಷೇತ್ರ.	ನಾಗಮಂಗಲ.
3.	ಮುತ್ತತ್ತೀಗೆರೆ.	— ,, —	10.	ದೊಡ್ಡಪಾಳ್ಯ.	ಶ್ರೀರಂಗಪಟ್ಟಣ.
4.	ಮಾದಾಪುರ.	ಕ.ಆರ.ಪೇಟೆ.	11.	ಂತುಡಗನಹಳ್ಳಿ.	ಮದೂರು.
5.	ವಿಠಲಾಪುರ.	— ,, —	12.	ಬಂಡೂರು.	ಮಳವಳ್ಳಿ.
6.	ಬಲ್ಲೇನಹಳ್ಳಿ.	— ,, —	13.	ಕನ್ನಲಿ.	ಮಂಡ್ಯ.
7.	ಮಂದಗೆರೆ.	— ,, —			

1	2	3	1	2	3

12. ಕೊಡಗು ಜಿಲ್ಲೆ:-

1.	ಕರಿಕೆ.	ಮಡಕೇರಿ.	4.	ತೊರೆನೂರು.	ನೋವಮಬಾರಪೇಟೆ.
2.	ಆರಪಟ್ಟು.	— ,, —	5.	ಬಿಸುರು.	— ,, —
3.	ಬಲ್ಲಮಾವಟಿ.	— ,, —	6.	ನಲುನ್ನೂರು.	ವಿರಾಜಪೇಟೆ.

ಶ್ರೀಮಂಗಲ ವಿರಾಜಪೇಟೆ

13. ಚಿಕ್ಕಮಗಳೂರು ಜಿಲ್ಲೆ:-

1.	ಕುರುಬರ ಬೂದಿಹಾಳೆ.	ಚಿಕ್ಕಮಗಳೂರು.	21.	ಮರುವಂಜಿ.	ಕಡೂರು.
2.	ಮೇರಿನ ಹುಲಿಪತ್ತಿ.	— ,, —	22.	ಉಡುಗರೆ.	— ,, —
3.	ಆಂಬಳೆ.	— ,, —	23.	ಕುಪ್ಪಾಳು.	— ,, —
4.	ಗುಡ್ಡದಬೂರು.	— ,, —	24.	ಕಲ್ಕರೆ.	— ,, —
5.	ಉದ್ದೀಬೋರನಹಳ್ಳಿ.	— ,, —	25.	ಬಟ್ಟದವನೆ.	ಮುಡಾಡಿಗೆರೆ.
6.	ಮೂಗಡಿ ಕೈಮರ.	— ,, —	26.	ದೇವವ್ಯಂದ.	— ,, —
7.	ಬಳಪಾಲ.	ಕಡೂರು.	27.	ಗಾಂಧಿಫರ.	— ,, —
8.	ಜೋನ್ನೀನಹಳ್ಳಿ.	— ,, —	28.	ವೇಗೂರು.	ಕೊಪ್ಪ.
9.	ಎವೆಬ್ಬಿಡಿಬಾಡಿಡ.	— ,, —	29.	ನಾರ್ವೆ.	ಕೊಪ್ಪ.
10.	ಜೋಡಿಲಿಂಗದಹಳ್ಳಿ.	— ,, —	30.	ಹಾದಿಕೆರೆ.	ತರೀಕೆರೆ.
11.	ಆಂತರಘಟ್ಟ.	— ,, —	31.	ನಂದಿ.	— ,, —
12.	ಜೋಬಿಹಳ್ಳಿ.	— ,, —	32.	ಮುಂಡ್ರೆ.	— ,, —
13.	ಕೆ. ಬಿದರೆ.	— ,, —	33.	ಶಿವನಿ ರೈಲ್ವೆ ಸ್ಟೇಷನ್.	— ,, —
14.	ಕೆರೆಸಂತೆ.	— ,, —	34.	ಬಾವಿಕೆರೆ.	— ,, —
15.	ಪಟ್ಟಣಗೆರೆ.	— ,, —	35.	ದಂದ್ಲೂರು.	— ,, —
16.	ನಿಡುವಳ್ಳಿ.	— ,, —	36.	ನಂದಿ ಬಟ್ಟಲು.	— ,, —
17.	ಎನ. ಮಾದಾಪುರ.	— ,, —	37.	ಕೆರೆಕಟ್ಟೆ.	ಶೃಂಗೇರಿ.
18.	ಆಣಿಗೆರೆ.	— ,, —	38.	ಮೇಲೆ ಪಾಲೆ.	ನರಸಿಂಹರಾಜಪುರ.
19.	ಮೂಬಿಗೆಬಾಂಡನಹಳ್ಳಿ.	— ,, —			
20.	ನೋವಮನಹಳ್ಳಿ.	— ,, —			

ಕೆಳಗೂರು ಶೃಂಗೇರಿ

14. ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ:-

1.	ಬಳಕುಂಜೆ.	ಮುಂಗಳೂರು.
2.	ಕಾಣಿಂತುರು.	ಬೆಳ್ತಂಗಡಿ.
3.	ತಣ್ಣೀರು ಪಂಥ.	ಬೆಳ್ತಂಗಡಿ.
4.	ಸಜಪಮುಡ.	ಬಂಟ್ವಾಳ.

1	2	3	1	2	3

15. ಉಡುಪಿ ಜಿಲ್ಲೆ:–

1.	ಫಲವಾರು.	ಉಡುಪಿ.	4.	ನಾವುಂದ.	ಕುಂದಾಪುರ.
2.	ಹೊಸಾಸೂರು ಕರ್ಜೆ.	–"–	5.	ಅವಾಸೆಬೈಲು.	–"–
3.	ಬೆಳ್ಮ.	–"–	6.	ಕೆರೆಬಾಶೆ.	ಕಾರ್ಕಳ.

ಬೆಳಗಾಂ ವಿಭಾಗ:–

16. ಬೆಳಗಾಂ ಜಿಲ್ಲೆ:–

1.	ಭಾಕನೂರು.	ಬೆಳಗಾವಿ.			
2.	ವುಗಳೀಹಾಳ.	ಖಾನಾಪುರ.			
3.	ಗೊಡ್ಡೋಳಿ.	–"–	13.	ಹಿರೇಬೂದನೂರು.	ಸೌಂದತ್ತಿ.
4.	ಗಂಡಿಗವಾಡ.	–"–	14.	ವುಗಳೀಹಾಳ.	–"–
5.	ತುರವುರಿ.	ಬೈಲಹೊಂಗಲ.	15.	ಸುತಗಟ್ಟಿ.	–"–
6.	ಬೈಲವಾಡ.	–"–	16.	ಹತ್ತರಗಿ.	ಹುಕ್ಕೇರಿ.
7.	ಸಂವಗಾವಿ.	–"–	17.	ವುಕ್ಕಳಗೇರಿ.	ಗೊಡ್ಡೋಕಾಕ.
8.	ಬೆಂಡವಾಡ.	ರಾಂತುಭಾಗ.	18.	ಬಂದರಗಿ.	ರಾವುದುರ್ಗ.
9.	ಕೆರಾಟ್ಟಲಗಿ.	ಅಥಣಿ.	19.	ಕೇಸ್ತಿ.	ಹುಕ್ಕೇರಿ.
10.	ವುಜಲಟ್ಟಿ.	ಬಿಕೆರ್ಕೋಡಿ.	(20)	ನಾಗನೂರು	ಗೋಕಾಕ್
11.	ನೇಜ.	–"–	(21)	ಸವದಿ	ಚಿಕ್ಕೋಡಿ
12.	ಕಾಗದಾಳ.	ಸೌಂದತ್ತಿ.	(22)	ಕಲ್ಲಿಕಟ್ಟಿ	ಹುಕ್ಕೇರಿ

17. ಧಾರವಾಡ ಜಿಲ್ಲೆ:–

1.	ವುಂಗಳಗಟ್ಟಿ.	ಧಾರವಾಡ.	6.	ಹೆಬ್ಬಾಳ.	ನವಲಗುಂದ.
2.	ತೇಗೂರು.	–"–	7.	ಹನಸಿ.	–"–
3.	ವುಂಟೂರು.	ಹುಬ್ಬಳ್ಳಿ.	8.	ಶಿರೂರು.	–"–
4.	ರಾಂತುನಾಳ.	–"–	9.	ಸುರಶೆಟ್ಟಿಕೊಪ್ಪ.	ಕಲಘಟಗಿ.
5.	ಅವುರಗೊಳ್ಳ.	ನವಲಗುಂದ.	10.	ಹಿರೇಹೊಸಹಳ್ಳಿ.	–"–
			11.	ಹೆಬಸೂರು.	ಹುಬ್ಬಳ್ಳಿ.

1	2	3	1	2	3

18. ಈ ಗದಗ ಜಿಲ್ಲೆ:—

1.	ಬಕ್ಕಹಂಡಿಗೌಳ.	ಗದಗ.	9.	ಕುರ್ಲಳ್ಳಿ.	ವಡಂಡರಗಿ.
2.	ಕೊಳಚವಡಬಗಿ.	—"—	10.	ಪದಿರಹಳ್ಳಿ.	—"—
3.	ಪಾಪನಾಶ.	—"—	11.	ಡೋಣಿ.	—"—
4.	ಬಳಗಾನೂರು.	—"—	12.	ರಾಜೂರು.	ರೋಣ.
5.	ನೀರಬೂರು.	—"—	13.	ವೆಣಸಗಿ.	—"—
6.	ನಿಲಸಿರುಂಜ.	—"—	14.	ಂತಾವಗಲ್ಲ.	—"—
7.	ಪೇಠಾ ಆಲೂರು.	ವಡಂಡರಗಿ.	15.	ಇಟಗಿ.	—"—
8.	ಹಾರೋಗೇರಿ.	—"—	16.	ಜಕ್ಕಲಿ.	—"—
			(15)	ಸಂಬಳ	ಗದಗ

19. ಹಾವೇರಿ ಜಿಲ್ಲೆ:—

1.	ಬೆಳವಿಗೆ.	ಹಾವೇರಿ.	5.	ಬುಡವನಹಳ್ಳಿ.	ಬ್ಯಾಡಗಿ.
2.	ಜೋಂಡಸರಹಳ್ಳಿ.	ರಾಣಿಬೆನ್ನೂರು.	6.	ಹಾವಣಗಿ.	ಹಾನಗಲ್.
3.	ಎತ್ತಿನ ಹಳ್ಳಿ.	ಹಿರೇಕೆರೂರು.	7.	ಹೆಡಿಂಡಾಳ.	ರಾಣಿಬೆನ್ನೂರು.
4.	ಅಣೂರು.	ಬ್ಯಾಡಗಿ.	(8)	ಕೆಲಗಳು ಬುಂದ	ಹಾಂಳಿ
			(9)	ಯಲು ಬಿಟ್ಟಿಲ್ಲ	ಬಳ್ಳಾರಿ

20. ಬಿಜಾಪುರ ಜಿಲ್ಲೆ:—

1.	ಧನಗಿ.	ಬಿಜಾಪುರ.	7.	ಬಳಬಟ್ಟಿ.	ವಡದೇಬಹಾಳ.
2.	ಕಣಬೂರು.	—"—	8.	ಜೀವಾರ.	ಇಂಡಿ.
3.	ಗುಣದಾಳ.	—"—	9.	ಬಸನಾಳ.	—"—
4.	ಕೆರಟಗಿ.	ಸಿಂಧಗಿ.	10.	ವೂರ್ಕಬ್ಬನಹಳ್ಳಿ.	ಬ.ಬಾಗೇವಾಡಿ.
5.	ಂತಲಗೂರು.	ವಡದೇಬಹಾಳ.	11.	ಹೆಬ್ಬಾಳ.	—"—
6.	ಪಡೇಕನೂರು.	—"—	12.	ಹಿರೇವಡರಾಳ.	ವಡದೇಬಹಾಳ.

1	2	3	1	2	3

21. ಬಾಗಲಕೋಟೆ ಜಿಲ್ಲೆ:-

1.	ಗೋಳೆ.	ಜಮಖಂಡಿ.	8.	ಬೆಣಗುಡ್ಡ.	ವಿಜಯಪುರ.
2.	ಹೆಪ್ಪರಗಿ.	— " —	9.	ವಿಜಯಪುರ.	— " —
3.	ಬೆಕ್ಕೇರಿ.	ಹುನಗುಂದ.	10.	ಅನಗವಾಡಿ.	ಬೀಳಗಿ.
4.	ವಿಜಾಗನೂರು.	— " —	11.	ಆರಕೆರೆ.	— " —
5.	ಕೆಲವಡಿ.	ಬಾದಾಮಿ.	12.	ವಿನ್ನೀಕೇರಿ.	— " —
6.	ವಜ್ಜರವಟ್ಟಿ.	ವಿಜಯಪುರ.	13.	ಜವನ್ನಕಟ್ಟಿ.	ಬಾದಾಮಿ.
7.	ಬಂಟನೂರು.	— " —	14.	ಂತಡಹಳ್ಳಿ.	ಬೀಳಗಿ.
			(15)	ಕಲಾಗಿ	ಹುನಗುಂದ

22. ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆ:-

1.	ವತ್ತಿಘಟ್ಟ.	ಶಿರಸಿ.	7.	ಬ.ಷೆ.ಹಳ್ಳಿ.	ಹಳಿಂತೂಳ.
2.	ಬೈರುಂಭೆ.	— " —	8.	ಹೆಗ್ಗರಣಿ.	ಸಿದ್ದಾಪುರ.
3.	ಹೆತ್ತಲಹಳ್ಳಿ.	ಂತಲ್ಲಾಪುರ.	9.	ಜಾಲಿ.	ಭಟ್ಕಳ.
4.	ಉವಮ್ಮಚಿಗಿ.	— " —	10.	ವಿಜಂಡಗೆಳಾಡಿಜ.	ವಿಜಂಡಗೆಳಾಡಿಜ.
5.	ಅನವೇರಿಡ.	ಜೆಳಾಂತಿಡ.	11.	ಹಿರೇಬೈಲು.	ಹೊನಾವರ.
6.	ಜಗಲಬೀಟೆ.	— " —	12.	ಅಬಚೆ-ಕೇಶವಳ್ಳಿ.	ಅಂಕೊಳಾಲಾ.

ಗುಲಬರ್ಗಾ ವಿಭಾಗ:-

23. ಗುಲಬರ್ಗಾ ಜಿಲ್ಲೆ:-

1.	ಸಣಾನ್ದರು.	ಗುಲಬರ್ಗಾ.	9.	ಬಡಗಾ.	ಆಳಂದ.
2.	ರಾಜಾಪುರ.	— " —	10.	ಸಲಗರ ಬಸಂತಪುರ.	ಚಿಂಚೋಳಿ.
3.	ಬಲ್ಲೂರಗಿ.	ಅಫಜಲಪುರ.	11.	ಚಿವನ್ನಚಿಂಚೋಳಿ.	— " —
4.	ಕಲಾಲ್ಲೂರು.	— " —	12.	ವೀರಾತಕಪಲ್ಲಿ.	ನೇಡಂ.
5.	ಫತ್ತರಗಾ.	— " —	13.	ವಿಜಾಣಿಕಗಿರಿ.	— " —
6.	ಚಾಡಾಪುರ.	— " —	14.	ಹತ್ತಿಕುಣಿ.	ಂತೂಡಗಿರಿ.
7.	ಚಿಂಚನಸೂರು.	ಆಳಂದ.	15.	ವಿಜಾಧ್ಯವಾರ.	— " —
8.	ವಿಜಾಡಿಂತೂಳ.	ಆಳಂದ.	16.	ಆಲಹಳ್ಳಿ.	ಚಿತಾಪುರ.

ಕನಿನ:

1	2	3	1	2	3
17. ಹೆಬ್ಬಾಳ.	ಬೆತ್ತಾಪುರ.		21. ರೇವಗಿ.	ಬೆತ್ತಾಪುರ.	
18. ಪಂಗಲಗಿ.	— ,, —		22. ಕರ್ಲಗೆರೆ.	ಜೀವರ್ಗಿ.	
19. ಹೊಸನಗುಂಟಾ.	— ,, —		23. ಗಾನಹಳ್ಳಿ.	— ,, —	
20. ತೊಸನಸನಹಳ್ಳಿ.	— ,, —		24. ಹೊಸನಗೇರಾ.	ಯಾದಗಿರಿ.	

24. ರಾಂಯಚೂರು ಜಿಲ್ಲೆ:—

1. ಯರಗೇರಾ.	ರಾಂಯಚೂರು.	7. ಗೋರೆಬಾಳು.	ಲಿಂಗಸುಗೂರು.
2. ರಾಂಯಚೂರು.	— ,, —	8. ಪಸಕಕಲಲ್ಲ.	ದೇವದುರ್ಗ.
3. ಬಾಗಲವಾಡ.	ಮಾನ್ವಿ.	9. ದೊಡ್ಡಂಬಳ್ಳಿ.	— ,, —
4. ಹಾವನಕಲಲ್ಲಾರು.	— ,, —	10. ಗಲಗ.	— ,, —
5. ಚೀಕಲಪರ್ವಿ.	— ,, —	11. ಅಲಕೊಡ.	— ,, —
6. ಮಸ್ಕಿ.	ಲಿಂಗಸುಗೂರು.	12. ಮಟಾರು.	ಲಿಂಗಸುಗೂರು.

25. ಕೊಪ್ಪಳ ಜಿಲ್ಲೆ:—

1. ಕಿನ್ನಾಳ.	ಕೊಪ್ಪಳ.	8. ಹುಲಿಹೈದರ.	ಗಂಗಾವತಿ.
2. ಕಾವನಾರು.	— ,, —	9. ಗಾರಿಪುರ.	— ,, —
3. ಯಡಿಯಾಡೀಣ.	ಯಲಬುರ್ಗ.	10. ನಂದಿಹಳ್ಳಿ.	— ,, —
4. ಬಂಡಿ.	— ,, —	11. ಮಲ್ಲಾಪುರ.	— ,, —
5. ಹಣವಾಳ.	ಗಂಗಾವತಿ.	12. ಮಸಲಾಪುರ.	— ,, —
6. ಅಗೊಲ.	— ,, —	13. ಎಂ.ಗುದದುರು.	ಕುಷ್ಟಗಿ.
7. ಬಕ್ಕ ವಾದನಾಳ.	— ,, —		

26. ಬೀದರ ಜಿಲ್ಲೆ:—

1. ಮೂಳೆಗಾಂವ.	ಬೀದರ.	4. ಕೊಳೇನವೋಳಕುಂದಾ.	ಭಾಲ್ಕಿ.
2. ಶಿರಕಟ್ಟಿಹಳ್ಳಿ.	— ,, —	5. ಹುಲಸೂರು.	ಬಸವಕಲ್ಯಾಣ.
3. ಬಾಳೂರು.	ಭಾಲ್ಕಿ.	6. ರಾಜೇಶ್ವರ.	— ,, —

1	2	3	1	2	3
7. ಮುಡಬ.	ಬನವಕಲ್ಯಾಣ.		12. ಸೊಲ್ಲಾಪುರ.	ಶಿರಾಡ.	
8. ವಿಜಯಕಲ.	—"—		13. ದೂಪದ ಮಹಾಗಾಂವೆ.	—"—	
9. ನಿರ್ಣಾ.	ಹುಮನಾಬಾದ.		14. ಸುಂದಾಳ.	—"—	
10. ಹುಡುಗಿ.	—"—		15. ಸಿರ್ಸಿ(ಎ).	ಬೀದರ.	
11. ಮುತ್ತಂಗಿ.	—"—		(16) ಖಿ ಮಿಳ್ ಖಿಳಿಡ	ರಬ್ಬಳ್ಳಿ ಬಾಬ	

27. ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆ :—

1. ಜೋಳದರಾಶಿ.	ಬಳ್ಳಾರಿ.
2. ವೈ. ಬಾದಿಹಾಳ.	—"—
3. ಅಯರಗುಡಿ.	—"—
4. ಹಂದಿಹಾಳು.	—"—
5. ಕೊಳಾಳಾರು.	—"—
6. ವಣೇನಾರು.	—"—
7. ವಿಂಜೇರಿ.	—"—
8. ಸಿದ್ಧಮಪ್ಪನಹಳ್ಳಿ.	—"—
9. ಬಳ್ಳಿಗುರ್ಕಿ.	—"—
10. ಸಿಂಧವಾಳ.	—"—
11. ಹೆಚ್. ವೀರಾಪುರ.	—"—
12. ನಾಗರಕಟ್ಟೆ.	ಕೂಡ್ಲಿಗಿ.
13. ಸೂಲದಹಳ್ಳಿ.	—"—
14. ಹೂಡೇಂ.	—"—
15. ಧೂಪದಹಳ್ಳಿ.	—"—
16. ಬೆಣ್ಣಿಕಲ್ಲು.	ಹೆಚ್. ಬಿ. ಹಳ್ಳಿ.
17. ವಲ್ಲಭಾಪುರ.	—"—
18. ಹುಪಾಪಟ್ಟಣ.	—"—
19. ಆಂಕನವಮುದ್ರ.	—"—
20. ಜಿ. ಕೊಳಾಡಿಹಳ್ಳಿ.	—"—
21. ಮುತಕಾರು.	—"—
22. ಉತ್ತಂಗಿ.	ಹಡಗಲಿ.
23. ಹರ್ವಿ.	—"—
24. ಕೊಂಬಳಿ.	—"—
25. ಹ್ಯಾರದ.	—"—
26. ಸೊಲ್ಲಾಪೇನಹಳ್ಳಿ.	ಹಡಗಲಿ.
27. ಉಪನಾಂತಪ್ಪನಹಳ್ಳಿ.	—"—
28. ಹಿರೇವಮಲ್ಲನಕೇರಿ.	—"—
29. ನಾಗಿತ್ತ ಬನಾಪುರ.	—"—
30. ಕೊಲಾವಮಾರನಹಳ್ಳಿ.	—"—
31. ಉಬ್ಬಲಗುಂಡಿ.	ಸಂಡೂರು.
32. ಅಯಶವಂತನಗರ.	—"—
33. ಹೊಸದರೊಜಿ.	—"—
34. ಗೊಲ್ಲಲಿಂಗವಪ್ಪನಹಳ್ಳಿ.	—"—
35. ತಂತಾಪುರ.	—"—
36. ವಣಮಾರು—ನುಗಾರು.	ಶಿರಗುಪ್ಪ.
37. ಹುಟಚೋಳಿ.	—"—
38. ಬಿ. ಎಂ. ನುಗಾರು.	—"—
39. ಕೆ. ನುಗಾರು.	—"—
40. ಕೆ. ಬೆಳಗಲ.	—"—
41. ಬಲಕುಂದಿ.	—"—
42. ತಾಳಾರು.	—"—
43. ನಡವಿ.	—"—
44. ಕುಡುದರಹಾಳು.	—"—
45. ರಾವುಸಾಗರ.	ಹೊಸಪೇಟೆ.
46. ಹಂಪಿ.	—"—
47. ಜಿ. ನಾಗಲಾಪುರ.	—"—
48. ಬುಕ್ಕಸಾಗರ.	—"—
49. ದೇವನವುದ್ರ.	—"—
50. ನಾಗೇನಹಳ್ಳಿ.	—"—

1	2	3	1	2	3

8. ಮಂಡ್ಯ ಜಿಲ್ಲೆ:–

1. ಶ್ರೀರಂಗಪಟ್ಟಣ. ಶ್ರೀರಂಗಪಟ್ಟಣ.
2. ನಾಗಮಂಗಲ. ನಾಗಮಂಗಲ.

(3) ಗುತ್ತಲಹಳ್ಳಿ ಮಂಡ್ಯ

9. ಚಿಕ್ಕಮಗಳೂರು ಜಿಲ್ಲೆ:–

1. ಹೊಸಹಳ್ಳಿಪೇಟೆ. ಚಿಕ್ಕಮಗಳೂರು.

10. ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ:–

1. ಬೆಂಗರೆ–ಕಸಬಾ. ಮಂಗಳೂರು.
2. ಕಿಲ್ಲಾಡಿ–ಕೆಂಪುಗುಡ್ಡೆ. –"–

ಬೆಳಗಾಂ ವಿಭಾಗ:–

11. ಬೆಳಗಾಂ ಜಿಲ್ಲೆ:–

1. ಕೋಹಳ್ಳಿ. ಅಥಣಿ.

12. ಹಾವೇರಿ ಜಿಲ್ಲೆ:–

1. ಕೆಲಾಪ್ಪರಸಿ ಕೆಲಾಪ್ಪ. ಹಾನಗಲ್.

13. ಬಾಗಲಕೋಟೆ ಜಿಲ್ಲೆ:–

1. ಇಳಕಲ್. ಹುನಗುಂದ.

ಗುಲಬರ್ಗಾ ವಿಭಾಗ:–

14. ಗುಲಬರ್ಗಾ ಜಿಲ್ಲೆ:–

1. ಗುಲಬರ್ಗ. ಗುಲಬರ್ಗ.
2. ಬಲಿಹಾರ. –"–
3. ಜಿಲಾನಾಬಾದ. –"–
4. ಉಡಚನ. ಅಫಜಲಪುರ.
5. ಹಿರೋಳಿ. ಆಲಂದ.
6. ತೆಂಗಳಿ. ಚಿತ್ತಾಪುರ.
7. ರಟಕಲ್. ಚಿಂಚೋಳಿ.
8. ಅಂದೆಲೋಲಾ. ಜೀವರ್ಗಿ.
9. ಜೀವರ್ಗಿ. –"–
10. ಹಾನದುರ್ಗ. ಶಹಾಪುರ.
11. ಕಡೇಚೂರು. ಲಿಂಗಸುಗೂರು.
12. ಸೈದಾಪುರ. –"–
13) ಮಸಕ ಯುಡಲ್ಲಾ ಲಿಂಗಸೂರು

15. ರಾಂಪುರ ಜಿಲ್ಲೆ:–

1. ಇಡಪನೂರು. ರಾಂಪುರ.
2. ಬೆಲದಕಿನಾಳ. ಲಿಂಗನಮಗೂರು.
3. ನಾಗರಹಾಳ. –"–
4. ರಾಮದುರ್ಗ. ದೇವದುರ್ಗ.

16. ಕೊಪ್ಪಳ ಜಿಲ್ಲೆ:–

1. ನವಲಿ. ಗಂಗಾವತಿ.
2. ಸಿಂಧನೂರು. ಸಿಂಧನೂರು.

1	2	3	1	2	3

17. ಬೀದರ ಜಿಲ್ಲೆ:—

1. ಬೀದರ. ಬೀದರ.
2. ಗಾರನಹಳ್ಳಿ. — ״ —
3. ಮೆಹಕರ. ಭಾಲ್ಕಿ.
4. ಗೊಲ್ಲಡವಾಡಿ. ಹುಮನ್ನಾಬಾದ.
(5) ಠಗಿಳಿಳಿ ಒನಂಬೆಳ್ಳಿ

18. ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆ:—

1. ಬಳ್ಳಾರಿ. ಬಳ್ಳಾರಿ.

ಹೆಚ್ಚುವರಿ ಆಯುಕ್ತರು

ಬೆಂಗಳೂರು ವಿಭಾಗ:—

1. ಬೆಂಗಳೂರು (ನಗರ) ಜಿಲ್ಲೆ:—
   1. ಹೆಬ್ಬಾಳ. ಬೆಂಗಳೂರು(ಉತ್ತರ).
   2. ಶಾಸಕರ ಭವನ. ಬೆಂಗಳೂರು(ದಕ್ಷಿಣ).
2. ಬೆಂಗಳೂರು (ಗ್ರಾಮಾಂತರ) ಜಿಲ್ಲೆ:—
   1. ಬೈರನಂದ್ರ. ನೆಲಮಂಗಲ.
3. ತುಮಕೂರು ಜಿಲ್ಲೆ:—
   1. ಕೊಂಡವಾಡಿ. ಮಧುಗಿರಿ.

ಮೈಸೂರು ವಿಭಾಗ:—

4. ಹಾಸನ ಜಿಲ್ಲೆ:—
   1. ಂಟಾದಾಪುರ. ಅರಸೀಕೆರೆ.
5. ಕೊಡಗು ಜಿಲ್ಲೆ:—
   1. ಪಾರಾಣೆ. ಫಡಕೇರಿ.
6. ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆ:—
   1. ಮೂಳಾರು. ಮಂಗಳೂರು.

1	2	3	1	2	3

ಬೆಳಗಾಂ ವಿಭಾಗ:—

ಪಿ 7. ಬೆಳಗಾಂ ಜಿಲ್ಲೆ:—

1.	ಂಬರಟ್ಟಿ.	ರಾಂಬಾಗ.
2.	ಂಬಕಟ್ಟಂಡಿ.	ನಾಂದತ್ತಿ.
3.	ಚಳಕೆ.	— ,, —
4.	ಹಳೇ—ತೆಲಾರಗಲ.	ರಾಮದುರ್ಗ.
5.	ಚಂದಜಾರು.	ಬೆಕೊಪ್ಪಾಲ್ಡಿ.
6.	ನಂಬಾ ನಗರ.	ಬೈಲಹೊಂಗಲ.

8. ಧಾರವಾಡ ಜಿಲ್ಲೆ:—

1.	ನಿಗದಿ.	ಧಾರವಾಡ.

9. ಗದಗ ಜಿಲ್ಲೆ:—

1.	ಮಾಳವಾಡ.	ರೋಣ.
2.	ಆಸಂಡಿ.	ಗದಗ.
(3)	ಎಳ್ಳೇ ಎನೆಗಡಿ	ಎಮ್ಮಿಡೂರಿನಿ

10. ಹಾವೇರಿ ಜಿಲ್ಲೆ:—

1.	ಕರ್ಜಗಿ.	ಹಾವೇರಿ.
2.	ಹುಲ್ಲತ್ತಿ.	ಹಾನಗಲ.
3.	ಸವಮ್ಮನಗಿ.	— ,, —
4.	ಗೆಲಾಂಡಿ.	— ,, —

11. ಬಿಜಾಪುರ ಜಿಲ್ಲೆ:—

1.	ಹುಲಲಾಲರು.	ವುಬಡೋಬಹಾಳ.

ಗುಲಬರ್ಗಾ ವಿಭಾಗ:—

12. ಗುಲಬರ್ಗಾ ಜಿಲ್ಲೆ:—

1.	ಂಬಾದಗಿರಿ.	ಂಬಾದಗಿರಿ.
2.	ತಿಂತಣಿ.	ಸುರಪುರ.
3.	ತುವುಕಲಾರು.	ಶಹಾಪುರ.
4.	ಶಿವಪುರ.	— ,, —
5.	ಗುಳ್ಳೀಸುಗೂರು.	— ,, —
6.	ಚಿಮ್ಮಲಾಪುರ.	ಂಬಾದಗಿರಿ.
7.	ಬಾಡಿಹಾಳ.	— ,, —
8.	ಕಪನೂರು.	ಗುಲಬರ್ಗಾ.
(9)	ಸಿಪ್ಪಿಪಿಗಿನ ನಗರ	ಕಪ್ಪಿಪಿಗಿನ
(10)	ಕೆಂಚಿಗರೆಲ್ಲ	ಕೆಂಚಿಗಿಲ್ಲರ
(11)	ಸಾಮಿರೆಲ್ಲ	"
(12)	ಬಡ್ಡಿಪಲ್ಲಿ	ಂಬಾದಗಿರಿ
(13)	ಪಂಡಿಕೆಳಿ	ನಿಳಿಡಂ

13. ಕೊಪ್ಪಳ ಜಿಲ್ಲೆ:—

1.	ಕುಷ್ಟಗಿ.	ಕುಷ್ಟಗಿ.

ಗಂಗಾವತಿ ಜಿಲ್ಲೆ

1	ಕಿನಾಳ	ಎಮ್ಮಿಗಿ

14. ಬೀದರ ಜಿಲ್ಲೆ:—

1.	ವುಂಗಲಗಿ.	ಹುವಮ್ಮಾಬಾದ.
2.	ಬರೂರು.	ಬೀದರ.

15. ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆ:—

1.	ಬೆಣಕಲ.	ಬಳ್ಳಾರಿ.
2.	ಉಪ್ಪಾರಗಟ್ಟಿ.	ಹಗರಿಬೊಮ್ಮನಹಳ್ಳಿ.
3.	ಹರಗಿನಡೋಣಿ.	ಬಳ್ಳಾರಿ.

1	2	3	1	2	3

ಪ್ರಕೃತಿ ಚಿಕಿತ್ಸೆ ಮತ್ತು ಯೋಗ.

1. ತುಮಕೂರು ಜಿಲ್ಲೆ:—

1. ಸಿದ್ಧರ ಬೆಟ್ಟ. ಕೊರಟಗೆರೆ.

2. ದಾವಣಗೆರೆ ಜಿಲ್ಲೆ:—

1. ದಾವಣಗೆರೆ. ದಾವಣಗೆರೆ.

3. ಚಿಕ್ಕಮಗಳೂರು ಜಿಲ್ಲೆ:—

1. ಮಲ್ಲೇಶ್ವರ. ಕಡೂರು.

4. ಬೆಳಗಾವಿ ಜಿಲ್ಲೆ:—

1. ಬೆಳಗಾವಿ. ಬೆಳಗಾವಿ.

5. ಧಾರವಾಡ ಜಿಲ್ಲೆ:—

1. ಹುಬ್ಬಳ್ಳಿ. ಹುಬ್ಬಳ್ಳಿ.

ನಿರ್ದೇಶಕರು,
ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿಗಳು ಮತ್ತು
ಹೋಮಿಯೋಪತಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.

ಕನಿಷ್ಠ.

18.12

DRA-1

ಡಾ: ಬಿ. ಗುರುನಾಥ್ ಪಿ;

ಭಾರತೀಯ ವೈದ್ಯ ಪದ್ಧತಿಗಳು ಮತ್ತು
ಹೋಮಿಯೋಪತಿ ನಿರ್ದೇಶನಾಲಯ,
ನಂ.19, ಮಿಲ್ಲರ್ಸ್ ರಸ್ತೆ, ಬೆಂಗಳೂರು-560046

ಭಾವೈಪ: 39: ಬಂಮುಚಿ(1)98-2000.-ರಿ/ 04-9-2001.

ಮಾನ್ಯರೆ,

ವಿಷಯ: ಜಿಲ್ಲಾ ಮತ್ತು ತಾಲ್ಲೂಕು ಮಟ್ಟದ ಆರೋಗ್ಯ ಸಂಸ್ಥೆಗಳಲ್ಲಿ ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿ ಮತ್ತು ಹೋಮಿಯೋಪತಿ ಪದ್ಧತಿಯ ಶಿಫಾರಸಿಗಳನ್ನು ತಿಳಿಸುವುದು.

ಉಲ್ಲೇಖ: 1) ನಿರ್ದೇಶನಾಲಯದ ಸಮಸಂಖ್ಯೆ ಪತ್ರ ದಿನಾಂಕ: 31-5-2000 ಮತ್ತು 18-6-2001. 551

2) ಸರ್ಕಾರದ ಕಡತ ಸಂಖ್ಯೆ: ಆಕುಇ 115 ಶಿಐಎಂ 2000.

******

ರಾಜ್ಯದ ೫ ಜಿಲ್ಲಾ ಕೇಂದ್ರಗಳಲ್ಲಿ ಹಾಗೂ ತಾಲ್ಲೂಕು ಕೇಂದ್ರಗಳ ಒಂದೇ ಸ್ಥಳದಲ್ಲಿ ಎಲ್ಲಾ ಪದ್ಧತಿಗಳ ಆರೋಗ್ಯ ಸೇವೆಯನ್ನು ಸಾರ್ವಜನಿಕ ಜನರಿಗೆ ಒದಗಿಸುವುದು ಇಂದಿನ ದಿನಗಳಲ್ಲಿ ಅತ್ಯಾವಶ್ಯಕವಾಗುತ್ತಿದೆ. ಈ ಇಲಾಖೆಯ ಸ್ಥಳಾವಕಾಶ ಅಲಭ್ಯತೆಯಿಂದಾಗಿ ಅನೇಕ ಜಿಲ್ಲಾ ಕೇಂದ್ರಗಳಲ್ಲಿ ಆಸ್ಪತ್ರೆಗಳನ್ನು ತೆರೆಯಲು ಸಾಧ್ಯವಾಗುತ್ತಿಲ್ಲ, ಆದ್ದರಿಂದ ಜಿಲ್ಲಾ ಹಾಗೂ ತಾಲ್ಲೂಕು ಕೇಂದ್ರಗಳಲ್ಲಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವ ಸಾರ್ವಜನಿಕ ಆಸ್ಪತ್ರೆಗಳಲ್ಲಿ ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿ ಮತ್ತು ಹೋಮಿಯೋಪತಿ ಆಸ್ಪತ್ರೆಗಳನ್ನು ಪ್ರಾರಂಭಿಸಲು ಕಟ್ಟಡ ಸೌಲಭ್ಯ ನೀಡಲು ಆರೋಗ್ಯ ಇಲಾಖೆಯ ಸಚಿವರುಗಳಿಗೆ ಸರ್ಕಾರ ಒಂದು ನೀತಿ ನಿರ್ಣಯ ರೂಪಿಸಲು ಉಲ್ಲೇಖಿತ (1)ರ ಪತ್ರಗಳಲ್ಲಿ ಸರ್ಕಾರವನ್ನು ಕೋರಲಾಗಿತ್ತು. ಇದರಿಂದಾಗಿ ಈ ಇಲಾಖೆಯ ಆಸ್ಪತ್ರೆಗಳ ಕಟ್ಟಡ ನಿರ್ಮಾಣಕ್ಕೆ ಸಚಿವಾಲಯ ತೊಡಗಿಸುವುದು ತಪ್ಪುವುದಲ್ಲದೆ ಸಾರ್ವಜನಿಕರಿಗೂ ಒಂದೇ ಸ್ಥಳದಲ್ಲಿ ವಿವಿಧ ಪದ್ಧತಿಗಳ ಸೇವಾ ಸೌಲಭ್ಯ ದೊರಕುತ್ತದೆ. ಆದ್ದರಿಂದ ಸರ್ಕಾರವು ಕಾರ್ಯ ಪಡೆಯಂತೆ ಶಿಫಾರಸ್ಸಿನ ಈ ಅಂಶವನ್ನು ಪರಿಗಣಿಸಿ ಸೂಕ್ತ ಆದೇಶ ಹೊರಡಿಸಲು ಮತ್ತೆ ಕೋರಲಾಗಿದೆ. ಈ ವ್ಯವಸ್ಥೆಯಿಂದಾಗಿ ಸರ್ಕಾರಕ್ಕೆ ಯಾವುದೇ ಹೆಚ್ಚುವರಿ ಹೊಣೆ ಬರುವುದಿಲ್ಲ ಎಂಬುದನ್ನು ತಮ್ಮ ಗಮನಕ್ಕೆ ತರಬಯಸುತ್ತೇನೆ.

ಧನ್ಯವಾದಗಳು

ತಮ್ಮ ವಿಶ್ವಾಸಿ;

ದಿನಾಂಕ 12/9/01

ಶ್ರೀ.ಡಿ.ಎಸ್. ಮಲ್ಲಿಕಾರ್ಜುನ,
ಸರ್ಕಾರದ ಉಪ ಕಾರ್ಯದರ್ಶಿಗಳು,
ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ,
ಬಹುಮಹಡಿಗಳ ಕಟ್ಟಡ, ಬೆಂಗಳೂರು-1.

ಕಡಿನ:

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಸಂಖ್ಯೆ:ಭಾವೈಪ:33:ಬಿಂತುಬಿ(1)2000-01. ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿಗಳು ಮತ್ತು ಹೋಮಿಯೋಪತಿ ನಿರ್ದೇಶನಾಲಯ, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 7-9-2001.

ಗೆ,

ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು,
ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ,
ಬಹುಮಹಡಿಗಳ ಕಟ್ಟಡ,
ಬೆಂಗಳೂರು.

ಮಾನ್ಯರೆ,

ವಿಷಯ: ಆರೋಗ್ಯ ಕಾರ್ಯಪಡೆ ಮಧ್ಯಂತರ ವರದಿಯ ಶಿಫಾರಸುಗಳನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸುವುದು – ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿ ಮತ್ತು ಹೋಮಿಯೋಪತಿ ಚಿಕಿತ್ಸಾಲಯಗಳ ಔಷಧ ಖರೀದಿಯ ಮಿತಿಯನ್ನು ಹೆಚ್ಚಿಸುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ: ಸರ್ಕಾರದ ಪತ್ರಸಂಖ್ಯೆ: ಆಕಾಇ 561 ಪಿಎಂಇ 2000
ದಿನಾಂಕ: 2-8-2001.

●●●○●●●

ಆರೋಗ್ಯ ಕಾರ್ಯಪಡೆಯ ಶಿಫಾರಸುಗಳನ್ನು ಕಾರ್ಯರೂಪಕ್ಕೆ ತರಲು ಪ್ರಸ್ತಾಪಿತ ಪ್ರಸ್ತಾವನೆಯನ್ನು ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸಲಾಗಿದೆ. ಚಿಕಿತ್ಸಾಲಯಗಳ ಔಷಧ ಖರೀದಿಗಾಗಿ ಹೆಚ್ಚು ಹೆಚ್ಚು ಹಣವನ್ನು ಅಂತರ್ಪಕಂಟುವನ್ನು ಪಡಾಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ ಎಂದು ವರದಿಯಲ್ಲಿ ತಿಳಿಸಲಾಗಿರುವುದರಿಂದ ಪ್ರಸ್ತಾವನೆಯನ್ನು ಪರಿಶೀಲಿಸುವ ಅಗತ್ಯತೆ ಇರುವುದಿಲ್ಲ ಎಂದು ಉಲ್ಲೇಖಿತ ಪತ್ರದಲ್ಲಿ ತಿಳಿಸಲಾಗಿದೆ. ಆದರೆ ಅಂತರ್ಪಕಂಟುವ ಅವಕಾಶ ಇದ್ದರೂ, ಸರ್ಕಾರದ ಆದೇಶವಿಲ್ಲದೆ ಚಿಕಿತ್ಸಾಲಯಗಳ ಔಷಧ ಖರೀದಿ ಮಿತಿಯನ್ನು ಇಲಾಖೆಯಿಂದ ಸ್ವತಂತ್ರವಾಗಿ ವಿನಿಯೋಗಿಸಲು ಸಾಧ್ಯವಾಗುವುದಿಲ್ಲ. ಹಿಂದಿನ ವರ್ಷಗಳಲ್ಲಾ ಸಹ ಔಷಧಗಳ ಖರೀದಿ ಮಿತಿ ಹೆಚ್ಚಿಸಿದಾಗ ಸರ್ಕಾರದ ಆದೇಶ ಪಡೆದು ನಂತರ, ಆದರಂತೆ ಚಿಕಿತ್ಸಾಲಯಗಳಿಗೆ ಔಷಧ ಖರೀದಿಸಿದೆ; ಪ್ರಾಯೋಗಿಕವಾಗಿ ಸರ್ಕಾರದ ಆದೇಶಗಳ 2 ಪ್ರತಿ ಕಳುಹಿಸಿದೆ. ಆದ್ದರಿಂದ ಈ ವರ್ಷದಿಂದ ಅನ್ವಯವಾಗುವಂತೆ ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿ ಮತ್ತು ಹೋಮಿಯೋಪತಿ ಚಿಕಿತ್ಸಾಲಯಗಳ ಔಷಧ ಖರೀದಿ ಮಿತಿಯನ್ನು ರೂ: 18,000-00 ದಿಂದ ರೂ: 36,000-00 ಗಳಿಗೆ ಹೆಚ್ಚಿಸಲು ಸರ್ಕಾರದ ಆದೇಶ ಹೊರಡಿಸಲು ಕೋರಿದೆ. ಸರ್ಕಾರದ ಆದೇಶ ಅವಶ್ಯಕತೆಯಿಲ್ಲ ವೆಂದು ಭಾವಿಸಿದಲ್ಲಿ, 2001-02 ನೇ ಸಾಲಿನಿಂದ ಭಾವೈಪ.ಮತ್ತು ಹೋ. ಚಿಕಿತ್ಸಾಲಯಗಳಿಗೆ ರೂ: 36,000-00 ಗಳ ವಾರ್ಷಿಕ ಔಷಧಗಳ ಖರೀದಿಗೆ ಅನುಮತಿ ನೀಡಲು ಕೋರಲಾಗಿತ್ತೆನೆ. ಈ ಅನುಮತಿಯನ್ನು/ಆಥವಾ ಆದೇಶವನ್ನು ಜಿಲ್ಲಾಪಂಚಾಯತಿಗಳಿಗೂ ಸಹ ತಿಳಿಸುವುದು ಅವಶ್ಯಕವಾಗಿದೆ.

ಧವಾನಿಸಲಾಗಿದೆ

ದಿನಾಂಕ 14/11/01/608

ತಮ್ಮ ವಿಶ್ವಾಸಿ;

ನಿರ್ದೇಶಕರು
ಭಾರತೀಯ ವೈದ್ಯ ಪದ್ಧತಿಗಳು ಮತ್ತು
ಹೋಮಿಯೋಪತಿ ಇಲಾಖೆ,

ಕವಿನಃ

2-8-2001.

ಆಕಂಕ 56ಕೆ ಪಿಐಎಂ 2000.

ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ

ನಿರ್ದೇಶಕರು,
ಭಾರತೀಯ ವೈದ್ಯ ಪದ್ಧತಿ ಮತ್ತು
ಹೋಮಿಯೋಪತಿ ನಿರ್ದೇಶನಾಲಯ,
ಬೆಂಗಳೂರು.

ಮಾನ್ಯರೆ,

ವಿಷಯ: ಆರೋಗ್ಯ ಕಾರ್ಯಪಡೆ ಮಧ್ಯಂತರ ವರದಿಯ ಶಿಫಾರಸ್ಸುಗಳನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸುವುದು — ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿ ಮತ್ತು ಹೋಮಿಯೋಪತಿ ಚಿಕಿತ್ಸಾಲಯಗಳ ಔಷಧ ಖರೀದಿಯ ವಿತರಣೆಯನ್ನು ಕೆಡಿಪ್ಸುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ: ನಮ್ಮ ಪತ್ರ ಸಂಖ್ಯೆ:ಭಾವೈಪ:33:ಐಂಎಂಬಿ(1): 2000-01;225, ದಿನಾಂಕ:20-6-2001.

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಉಲ್ಲೇಖಿತ ಪತ್ರದಲ್ಲಿ ಕೋರಲಾಗಿರುವಂತೆ ಗ್ರಾಮೀಣ ಪ್ರದೇಶಗಳಲ್ಲಿನ ಭಾರತೀಯ ವೈದ್ಯ ಪದ್ಧತಿ ಮತ್ತು ಹೋಮಿಯೋಪತಿ ಚಿಕಿತ್ಸಾಲಯಗಳ ಔಷಧ ಖರೀದಿಯ ವಿತರಣೆಯನ್ನು ಕೆಡಿಪ್ಸುವ ಬಗ್ಗೆ ಪ್ರತಿ ಔಷಧಾಲಯಕ್ಕೆ ರೂ.36,000-00 ಗಳ ವೆಚ್ಚದಲ್ಲಿ ಔಷಧ ಖರೀದಿಸಲು ಆಯವ್ಯಯದಲ್ಲಿ ಅವಕಾಶ ಮಾಡಿಕೊಡಿರುವುದಾಗಿ ಹಣಕಾಸು ಸಚಿವರು "The Task Force on Health & Family Welfare"ನ ಅಂತಿಮ ವರದಿಯಲ್ಲಿ ಮಧ್ಯಂತರ ವರದಿ ಶಿಫಾರಸ್ಸುಗಳ ಕುರಿತಂತೆ ನಮ್ಮಿಂದಾದಿಸಲಾದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಪ್ರಸ್ತಾವನೆಯನ್ನು ಪರಿಶೀಲಿಸುವ ಅಗತ್ಯತೆ ಇರುವುದಿಲ್ಲವೆಂದು ತಿಳಿಸಲು ನಾನು ನಿರ್ದೇಶಿತನಾಗಿದ್ದೇನೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

(ಜೆ. ಶ್ರೀನಿವಾಸನ)
ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,
ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ.

ANNEXURE - 2

BUDGET ALLOCATION AND EXPENDITURE OF LAST THREE YEARS I.E. FROM 1998-1999 TO 2000-2001

(Rs. In lakhs)

YEAR	State Sector Schemes				District Sector Schemes				CSS (100%)	
	Plan		Non Plan		Plan		Non Plan		Plan	
	B.E.	Expr.	B.E.	Expr	B.E.	Expr.	B.E.	* Expr.	B.E.	Expr.
1998-1999	200.00	128.69	1296.12	1082.69	247.41	150.36	1121.93	1121.93	6.00	4.23
1999-2000	270.00	241.24	1547.43	1464.94	238.07	202.53	1318.99	1318.99	8.00	5.76
2000-2001	320.00	272.47	1639.36	1546.84	319.28	259.00	1314.00	1314.00	7.90	10.17

* NOTE: The Non-Plan expenditure of the District Sector schemes are maintained by the concerned Zilla Panchayath's. Hence, the whole budget estimates is considered as expenditure.

Increase in the demands is due to creation of posts, sanction of additional DA, Annual Increments, and increase in the prices of drugs and chemicals, linen and diet commodities etc.,

Some amt surrendered d/o PWD working cost.

ANNEXURE - 1

STATEMENT SHOWING THE DETAILS OF BUDGET ESTIMATES UNDER EACH HEAD OF ACCOUNT
YEAR 2001-2002
DEPARTMENT : INDIAN SYSTEMS OF MEDICINE AND HOMOEOPATHY.

Sl.No.	Head of Account	BE Page No.	Institution	Plan	Non Plan	Total
STATE SECTOR:						
1	2210-02-101-1-01	53-54	DISM & H	7 62	86 81	94.43
2	2210-02-101-1-02	54	Divisional Offices	30.38	12 03	42.41
3	2210-02-101-2-01	55-56	SJIIM, Bangalore		241 81	241 81
4	2210-02-101-2-02	56-57	Ay. Hospital, Mysore		130.12	130.12
5	2210-04-101-1-01	64	SMP Centres & Pvt. Hosps		5 81	5.81
6	2210-04-101-1-06	65	District Hospitals	31 31	146 46	177.77
7	2210-05-101-1-03	67	Private Colleges		313 60	313 60
8	2210-05-101-1-05	68-69	Taranatha Hosp. Bellary		45.45	45.45
9	2210-05-101-1-12	73	Increase of Beds in ISM&H Hosp.	21 69	79 27	100.96
10	2210-05-101-1-13	74	Govt. Ay. Medical colleges	41 85	378.55	420.40
11	2210-05-101-3-01	75-76	Govt. Central Pharmacy, B'lore	0 75	191 42	192.17
12	2210-05-101-6-00	77	Dev. of Medicinal Plants	2 87	0.96	3.83
13	2210-05-102-0-02	79-80	Govt. Homoeopathic Hosp. B'lore		26 29	26.29
14	2210-05-102-0-04	80-81	GHMC., Bangalore	20 81	51 99	72.80
15	2210-05-103-0-01	82	GUMC, Bangalore	19 88	66 92	86.80
16	2210-05-103-0-02	83	National Inst., of Unani Medicine	100 00		100.00
17	2210-05-200-0-01	101	Dev. Of Yoga		9 91	9.91
18	2210-05-200-0-02	101-102	Govt. Nature Cure College, Mysore	2 84	9.56	12.40
19	2210-01-110-1-16	23	Capital Outlay - Buildings		10.29	10.29
20	4210-03-101-1-01	165	Capital Outlay - Buildings	70 00		70.00
			TOTAL	350.00	1807.25	2157.25
	100% CSS					
	2210-05-200-0-04	102-103	Taranatha College Bellary - PG edn	12 00		12.00
	District Sector (ZP)					
1	2210-04-101-1-71		Govt., Ay Dispensaries	--	398 34	398 34
2	2210-04-101-1-72		Opening & Maint., of GAD's	174.05	161.5	335.55
3	2210-04-101-1-73		Upgrading of GAD's	13 80	41 12	54 92
4	2210-04-101-1-74		Staff to Dispensaries	5.74	9 83	15.57
5	2210-04-101-1-75		TDB Dispensaries	---	294 01	294 01
6	2210-04-101-1-76		Buildings	37.02	---	37.02
7	2210-04-101-1-77		Taluk Level Hospitals	66 32	108.74	175.06
8	2210-04-102-0-71		Openin & Maint., of GHD's	17 30	29 67	46.97
9	2210-04-103-0-01		Govt., Unani Hospitals	3.53	94 85	98.38
10	2210-04-103-0-02		Opening & Maint., of GUD's	13 80	27 13	40.93
11	2210-04-200-0-71		Govt., Nature Cure Disp., & Hosp.,	0 50	21 02	21 52
			TOTAL	332.06	1186.21	1518.27
	ABSTRACT		State Sector	350 00	1807 25	2157.25
			CSS 100%	12.00	---	12.00
			District Sector	332 06	1186 21	1518.27
			Total	694.06	2993.46	3687.52

fc
4/3/02

NUMBER OF PRIVATE DOCTORS QUALIFIED IN AYURVEDIC & UNANI

WORKING IN A TALUK.

SL.NO.	DISTRICT	NAME OF THE TALUK	NO. OF AYURVEDIC PRIVATE PRACTITIONERS.	NO. OF UNANI PRIVATE PRACTITIONERS	TOTAL
1	2	3	4	5	6
1.	Bangalore Corporation		1222	193	1415
	Bangalore	north Taluk	7	-	7
	Bangalore	South Taluk	7	3	10
		Anekal TQ	12	1	13
2.	Bangalore (R)	Channapatna	6	5	11
		Devanagarahally	5	-	5
		Doddaballapur	6	-	6
		Hoskote	4	-	4
		Kanakpura	16	-	16
		Magadi	5	-	5
		Nelamangala	8	-	8
		Ramnagar	4	2	6
3.	Kolar Dist	Chintamani	6	1	7
		Bagarupate	6	2	8
		Mulabagulu	3	2	5
		Sreenivasapura	4	1	5
		Kolar	8	8	16
		KGF	3	1	4
		Chikkaballapura	7	-	7
		Gouribidanur	8	-	8
		Malur	2	1	3
		Shiddlaghatta	-	-	-
4.	Tumkur Dist	Tumkar	23	2	25
		Gubbi	11	-	11
		Turuvekere	8	-	8
		Chikkanayakanahally	8	-	8
		Sira	7	3	10
		Madugiri	6	1	7
		Pavagada	1	-	1
		Kunigal	2	2	4
		Tiptur	8	-	8
		Koratagere	8	-	8
.	Shimoga Dist	Shimoga	94	1	95
		Bhadravathi	28	1	29
		Hosanagar	10	-	10
		Sagara	16	-	16
		Shikaripura	18	-	18
		Soraba	21	-	21
		Thirthahally	25	-	25
.	Chitradurga	Chitradurga	30	2	32
		Challakere	39	-	39
		Hiriyur	10	1	11
		Hosdurg	22	-	22
		Molakalmayuru	-	2	2
		Holalkere	16	-	16

1	2	3	4	5	6
7.	Davangere Dist	Davangere	79	1	80
		Harihara	22	-	22
		Chanagiri	2	-	2
		Honalli	2	-	2
		Jagalur	5	-	5
		Harapanahally	4	-	4
8.	Mysore Dist	Mysore	360	23	383
		H.D.Kote	3	-	3
		Hunasure	6	-	6
		K.R.Nagar	15	1	16
		Priyapattna	11	-	11
		T.Narisipura	12	-	12
		Nanjanagudu	26	-	26
9.	Chamaraj Nagar	Chamaraj nagar	3	-	3
		Gundlupate	4	-	4
		Kollegal	3	-	3
10.	Hassan Dist	Hassan	56	3	59
		Alur	7	-	7
		Arakalgudu	11	1	12
		Belûur	4	-	4
		Arasikere	23	-	23
		Channaraya-patna	21	1	22
		Hole Narasi - pura	7	-	7
		Sakaleshpur	5	-	5
11.	Chikkamagular	Chikkamagular	17	2	19
		Kadur	10	-	10
		Koppa	27	-	27
		Moodigere	8	2	10
		Narasimaraj-upura	9	-	9
		Srigere	9	-	9
		Tarikere	12	-	12
12.	Mandya Dist	Mandya	39	1	40
		Maddur	14	1	15
		Malavalli	10	1	11
		K.K.Pete	12	-	12
		Nagamangala	2	1	3
		Pandavapura	10	1	11
		Srirangapatna	13	-	13
13.	Kodagu Dist	Madakere	26	-	26
		Somwarapete	9	-	9
		Virajapet	12	-	12
14.	D.K.Dist	Mangalore	191	3	194
		Belthangady	26	-	26
		Bantwal	57	-	57
		Puttur	42	-	42
		Sullia	32	-	32

1	2	3	4	5	6
15.	Udupi Dist	Udupi	210	1	211
		Kundapura	55	-	55
		Karkala	31	-	31
16.	Belgaum	Belagavi	341	1	342
		Attani	82	1	83
		Bailhongal	70	-	70
		Chikkodi	101	-	101
		Gokak	116	-	116
		Hukkeri	63	-	63
		Khanapur	39	-	39
		Raybagh	57	-	57
		Ramadurg	48	-	48
		Soudhatti	47	-	47
17.	Dharwad Dist	Dharwad	72	-	72
		Hubli	106	1	107
		Kalaghatagi	4	-	4
		Kundagmmisola	11	-	11
		Navalagunda	26	-	26
18.	Gadag Dist	Gadag	67	2	69
		Mundargi	17	-	17
		Naragunda	9	-	9
		Shiratti	11	-	11
		Rona	36	-	36
19.	Haveri Dist	Haveri	33	-	33
		Hirekerur	4	-	4
		Ranebennur	27	1	28
		Byadagi	19	-	19
		Savanur	9	-	9
		Hanagal	8	1	9
		Shiggaviavi	14	-	14
20.	Uttar Kannada	Karwar	28	-	28
		Ankola	11	1	12
		Bhatkala	7	2	9
		Haliyala	6	-	6
		Honnavara	22	-	22
		Kumata	28	-	28
		Mundagoda	10	-	10
		Siddapur	9	1	10
		Sirsi	29	1	30
		~~Zeeda~~ zeroida	9	-	9
		Yallapura	8	-	8
21.	Bijapur Dist	Bijapur	417	10	427
		Basavana Bagewadi	107	1	108
		Indi	46	-	46
		Muddebihal	57	-	57
		Sindhagi	46	-	46
22.	Bagalkote	Bagalkote	81	1	82
		Jamakhandi	62	-	62

1	2	3	4	5	6
22.	Bagalkote Dist				
		Hunagunda	62	1	63
		Badami	53	-	53
		Mudhola	47	-	47
		Bilagi	17	-	17
23.	Gulbarga Dist	Gulbarga	81	6	87
		Alaanda	15	2	17
		Afazelpur	6	-	6
		Chincholi	3	-	3
		Chittapura	17	2	19
		Jevargi	16	1	17
		Sadam	10	2	12
		Shahapura	13	2	15
		Surapura	16	4	20
		Yadagiri	10	3	13
24.	Raichur Dist	Raichur	48	14	62
		Devadurga	13	-	13
		Lingasugur	33	1	34
		~~Manri~~ Manvi	23	-	23
25.	Koppala Dist	Koppala	47	1	48
		Yelaburga	33	-	33
		Kustagi	25	-	25
		Gangavathi	37	-	37
		Sindhanur	20	3	23
26.	Bidar Dist	Bidar	39	2	41
		Basava Kalyana	18	1	19
		Aurade	11	-	11
		Bhalki	26	-	26
		Humanabad	8	-	8
27.	Bellary Dist	Bellary	161	5	166
		Hadagali	33	-	33
		H.B.Halli	25	-	25
		Hospet	57	-	57
		Kudlagi	35	-	35
		Sandur	14	-	14
		Siraguppa	13	-	13

(REGISTRAR) 20/3/02
Karnataka Ayurvedic & Unani
Practitioners Board, Bijapur

DRA-1.

Indigenous Systems of Medicine at the Crossroads.

India 's Post-independence efforts to establish public health delivery systems have been severely hindered by an acute dearth of resources of all kind. The health care system cannot be extended adequately because India lacks the necessary means to invest in modern infrastructure, human resources, drugs and vaccines at affordable costs. There is also the belief that improved health services in India can only be achieved with modern institutions and sophisticated technology.

Clearly, we cannot think of 'Health for All' on such unaffordable terms. Only if the large number of traditionally trained human resources, proven medicines, methods, and practical and theoretical principles of health care, which have been indigenously evolved for managing health care in India, are included in development plans and encouraged to contribute their fullest potential, can the present situation change and the resource scarcity position on the health care front improve.

The different Indian systems of medicine can derive legitimacy only when the theoretical foundations of indigenous knowledge are accepted and promoted in their own right, and substantial resources are invested both in the non-government and government sector for their development.

Recommendations:

It must be noted that revitalization of the Indian medical heritage is not a short-term task and cannot be achieved 'over-night'. A 'Pilot project' approach needs to be taken to support strategic and bold initiatives at primary, secondary and tertiary levels of health care, and also for upgrading manufacturing standards and providing new research models. Another key area is to take steps to protect indigenous knowledge from bio-piracy. Some of the thrust areas for promoting traditional medicine in India are outlined below.

1. National guidelines to ensure the efficacy, standardization and safety of ISM drugs should be drawn up.
2. A nationally co-ordinated, collaborative research programme, involving a number of government and private research institutes need to be initiated, to set standards for a priority list of the clinically most important plants and natural products used by ISMs.
3. The Department of ISM urgently needs to work the Ministry of Environment and Forests and the Ministry of Agriculture, to evolve a national policy and strategic programmes for the conservation of medicinal plants and other natural resources. If the natural resources base is lost, ISMs are bound to suffer.
4. In the area of primary health care, codified ISMs and allopaths in the government sector, should collaborate to revitalize the 'oral' local health traditions in our villages.
5. Complete therapeutic centres need to be supported as national centres of excellence; these need to carry out rigorous documentation. Presently, only anecdotal accounts of successful ISM management are available.

Future Prospects

Whether one acknowledges the fact or not, trends all over the world would show that for one reason or the other, people are not only willing to try alternative systems of medicine but are actively seeking not-conventional remedies. People have t aright to be educated about what is efficacious and what is not. If efficacy is established, it is important to give the option to people to decide what they wish to use. Equally, if there are no side effects, it is time that remedies based on indigenous systems are offered as adjuvants or adjuncts to help restore normalcy. Healthy partnership would be built up aimed at preventing disease and encouraging rapid recovery.

It is time that India with its vast number of public health professionals, array of clinical material, research laboratories, with long experience in undertaking fundamentals, clinical and operational research, supported by bodies like the Indian council of Medical Research, move into this area to avail of funding available through NIH, USA. It is time that proper programmes for testing the claim of different systems of medicines are drawn up on priority with a view to giving patients added relief while combating morbidity. It is also time that the available potential is harnessed and exploited in the name of medical science and patient care. It is a promise but which have failed to get the attention of public health specialists and scientists till now. Before the world opinion to be rid of the side effects of conventional medicine pushes people into medicating themselves and before promising claims are rendered futile, even before they have been studies, tried and tested, it is time that a direction was given by prioritization, investigation and proper publication of outcomes. We have the potential to do this efficiently if we decide to use the opportunity to build an effective partnership. This time is now.

Source: Health for the Millions Sept-Oct & Nov –Dec 1997 & extract of an article by Ms.Shailaja Chandra, Former Secretary of ISM and Homeopathy, Ministry of H &F.W of Govt. of India.

DRA-1.

DEPARTMENT OF INDIAN SYSTEM
OF MEDICINES AND HOMOEOPATHY
MINISTRY OF HEALTH AND FAMILY WELFARE
GOVERNMENT OF INDIA

CENTRAL SCHEME FOR RE-ORIENTATION TRAINING PROGRAMME
OF I.S.M. & H. PERSONNEL.

.....

Re-orientation and training of ISM&H personnel (Teachers Govt. Doctors and practitioners) is very important particularly because many of the degree awarding institutions in this sector are week and therefore there is even great need to upgrade the competence and skill of ISM personnel in the interest of public health and standards of education of fresh graduates.

The Department of ISM&H has been supporting some institutions for re-orientation training purposes in the last four years, but the programme has not taken up well. The reasons for this have been two firstly, good institutions for training were not identified and approached properly and, secondly, the norms for cost of training prescribed in 1990-91 are insufficient. Now keeping in view to correct these deficiencis institutions of repute belong-ing to different ISM&H systems were approached to have their proposals and willingness to undertake these training programmes.

Now, the Deptt. of ISM&H has revised the fund allocations for all these training programmes and has also identified the institutions which are willing to take up these training programmes. The Deptt. has also identified the various specialised training programmes and the Institutions as well.

1. The following are the main guidlines to implement this programme :-

1. Good institutions having requisite infrastrcture of Hospital, teaching faculty members and hostel facilities to the trainees should take up this programme.

2. To make the programme cost effective, a batch of 20 trainees should be made as per the provisions in the scheme of teachers and physicians and a batch of 10 for specialiseu re-orientation training programme like Kshar-sutra, Pancha-karma the rapy and Dental practices (Ayurveda).

Cont'd.....2

3. The trainging institution should circulate their programme of training well in advance, say about two months, to all the teaching colleges, directorates of IS&H and Associations of Ayurveda Unani, Siddha, Yoga and Homoeopathy to invite the participants.

4. The applicant institutions are required to formulate a proper course of training including all the advances and new practices relating to the speciality and skill of the participants.

5. The diredtions of CCIM and CCH should also be kept in mind while designing the course contents. However, the information about the contemporary developments in v various systems of medicine could be given to the participants.

6. There is provision of one month training for the teachers, Govt. physicians and practitioner for general subject of teaching and practice.

7. For specialised skills and therapies like Panchakarma, Ksharsutra and Yoga wherein the background of the trainees is very weak, the duration of the course is of two months.

8. In the provisions of the scheme, the amount of honorarium per lecture as well as provision for teaching material has been made. Therefore, it is expected that the text of the lectures should be cyclostyled and distributed to the participants in the class-room.

9. To make the training programme useful, proper assessment in the form of written question-paper and oral examination should be conducted at the end of the training period. Howeve an internal assessmentcould be made at the end of two weeks.

10. The training programmes should be designed practical oriented which are directly applicable in the teaching and practices.

11. To minimise the delay in implementing the programme as well as official proddures, the financial assistance will be directly given to the Principals/Deans of the Colleges and Director of the National Institutes.

12. For one month training, minimum number of training should be 15. For two months trainingof specialisedskills, minimum number of trainees should be 5. For the Yoga training, the minimum number of trainees should be 15.

13. Local participants from the training institute will be limit to 1 only. However, if more participants are interested to participate, they will be supernumerary and will not be entitled for any financial assistance.

Contd.....3

14 There will be separate batches of teachers and physicians. However, in some of the clinical specialities the training batch may include all the categories of participants.

15. It will be necessary for the participant to attend 90% of lectures and practicals. They will appear in an assessment examination at the end of the course. The result of the examination will be communicated to the members/heads of institutions.

16. All the participants will submit a feed back proforma, one copy of which will be retained by the institutions and one copy will be sent to the Ministry of Health, Govt. of India.

17. At the end of the trainingprogramme, the account of expenditure two page report of the programme and the feed back proforma will be sent to the Ministry of Health.

18. 10% money inbuilt in the scheme as institute's support will be retained by the Department of ISM and will be released after the completion of the course and submission of the report and accounts to the Govt. of India.

19. The expenditure mentioned in the various components of the scheme could be internally adjusted with minor alterations under the head of cost of consumables, cost of stationery, contingencies etc. Similarly, slight variation could also be done in invirting the external/internal experts.

20. The institution is allowed to fill up the gaps in the scheme by utilising the fund from the institution/State Govt. to make the programme a success.

21. Training institutions will formulate the module of the training programme, course contents and teaching material, etc. which will be circulated to the participants.

II ELIGIBILITY

a) Government/Private/N.G.O. Institutions are eligible to takeup this training programme.

b) Teachers, Government/Private Physicians, Private Practitioners with minimum Degree Graduates in the ISM&H are eligible for this training. However, the preference will be given to Govt. Colleges, teachers and Physicians.

Cont'd.....4

III. DURATION OF THE TRAINING

The duration of the re-orientation training programme as under :-

a) Teacher's and Physician's Training -- 1 weeks

b) Training in Specialised fields like Kshar-Sutra, Pancha-karama therapy, and Dental Practices & Yoga -2 months

The details regarding training programmes, number of [illegible] courses, number of trainees, pattern of financial assistance etc. are given in Annexure I, II, and III [illegible]

****

ANNEXURE I

ONE MONTH RE-ORIENTATION TRAINING PROGRAMME FOR TEACHERS AND PHYSICIANS OF ISM&H PERSONNAL

1. Number of Trainees : 20 (Twenty) bu the minimum number could be 15. However to make it cost effective, it is necessary that full strength of participants is mobilised to reach upto 20.

2. Number of Training Courses As per the capcity of the Institute College and sanction of the Govt. of India.

3. Expenditure on boarding and lodging : (i) The Institution will arange for hostel accommodation at a reasonable rate.

@ Rs. 50 X 20 Nos. X 30 days = Rs. 30,000/-

(ii) Food -- @ Rs. 75 X 20 Nos. X 30 days = Rs. 45,000/-

Total = Rs. 75,000/-

4. Duration of Training : 6 hours per day for 25 days

(24 hours per week)
2 hours Lectures
2 hours Practicle
2 hours discussions
Total : 25 days X 6 hours = 150hrs

5. Number of trainers from the faculty : 4 trainers @ Rs.150/- per hour 80 hours a month.
(i) @ Rs.150 per hour X 80 hours= Rs.12,000/-

(ii) Number of trainers from outside the faculty : One expert from outside the faculty per week for whom Rail Fare upto IInd A.C. will be paid and one local expert for whom only honorarium and local conveyance will be paid.

(a) Rail Fare (Upto IInd AC) for external expenses @ Rs. 1000/- each

Total - Rs. 1,000 X 4 - Rs. 4,000/-

(b) Honorarium to be paid to Guest Speaker @ Rs.300/- per day

Total - Rs. 300 X 4 - Rs. 1200/-

Cont'd.....2

5 (ii) (Cont'd)	:	(c) Boarding and Lodging for External experts @ Rs. 150/- per day 4 outsiders in 4 weeks (Rs. 150 X 4) = Rs. 600/- (d) Honorarium to local/outside experts @ Rs. 300/- per day & Rs. 100/- as conveyance. 4 local in 4 weeks X (Rs. 300+Rs. 100 = Rs. 400) = Rs. 1600/- per month. Total of 5(i) + (ii) = Rs. 19,400/-
6 (Number of technical/ administrative support, staff, and amount of honorarium to be paid	:	Rs. 2000/- per month to be shared among various personnel (Generally 4)
7. Cost of consumables	:	Rs. 500/- per trainee per course Total = Rs. 500 X 20 Nos. = Rs. 10,0
8. Cost of Stationary, etc. (Manuals/books, etc. for trainees)	:	Rs. 200/- per trainee Total = Rs. 200 X 20 Nos. = Rs. 4,00
9. Contingencies	:	5% of the above expenditure i.e. Rs. 1,10,400/- = Rs. 5520/-
10. Institute support charges: for providing infrastructure facilities, etc. to the trainees Institution. The Institution is free to utilise this amount for the development activity regarding training infrastructure		@ 10% of the expenditure i.e. Rs 1,10,400/- = Rs. 11040/-
Grand Total of expenditure: mentioned against Sl. Nos. 3, 5(i), (ii), 6,7,8,9 & 10		Rs. 1,21,990/-

****

ANNEXURE II

TWO MONTHS RE-ORIENTATION TRAINING PROGRAMME FOR PANCHAKARMA THERAPY, KSHAR-SUTRA THERAPY AND DENTAL PRACTICES OF ISM & H PERSONNEL

1. Number of Trainees : 10 (Ten) but the minimum number could be 8. However to make it most effective, the maximum number of trainees should be arranged.

2. Number of Training Courses :

As per the capacity of the Institut College and sanction of the Govt. of India. Number of training courses could be maximum 4 in a year.

3. Expenditure on boarding and lodging :

(i) The Institution will arrange for hostal accommodation at a reasonable rate.

@ Rs. 50 X 10 Nos. X 60 days = Rs. 30,000/-

(ii) Food = @ Rs. 75 X 10 Nos. X 60 days = Rs. 45,000/-

Total : Rs. 75,000/-

4. Duration of training : 6 hours training per day for 5 working days
2 hours Lectures
2 hours Practicle
2 hours discussions

Total : 50 days X 6 hours = 300 hours for whole course.

5. (i) Number of trainers from the faculty : 4 to 5 trainers @ Rs. 150/- per hour for 170 hours in 2 months

@ Rs. 150 per hour X 170 hours = Rs. 25,500/-

(ii) Number of trainers from outside the faculty : One expert from outside the faculty per week for whom rail fare upto IInd A.C, will be paid and one local expert for whom only honorarium and local conveyance will be paid.

(a) Rail Fare (Upto IInd AC) for External Expenses @ Rs. 1000/- each

Total = Rs. 1,000 X 8 =

Rs. 8000/-

(b) Honorarium to be paid to Guest Speakers @ Rs. 300/- per day.
Total = Rs. 300 X 8 = Rs. 2400/-

Cont'd....2

5 (ii) (Cont'd)	:	(c) Boarding and lodging for external experts @ Rs. 150/ per day. 6 outsiders in 8 weeks (Rs. 150 X 8) = Rs. 1200 /- (d) Honorarium to local/outside experts @ Rs. 300/- per day + Rs. 100/- as conveyance. 8 local in 8 weeks X (Rs. 400 X 8) = Rs. 3200/- Total of 5(i) + (ii) = Rs. 39,200/-
6 Number of technical/ administrative support, staff and amount of honorarium to be paid.	:	@ Rs. 500/- per week Total Rs. 4000/- for two months.
7 Cost of consumables eg. medicines/material of training	:	@ Rs. 1000/- per trainee per course Total = Rs. 1000 X 10 Nos. = Rs. 10,000/-
8. Cost of stationery, etc. (Manuals/books, etc. for trainees).		Rs. 200/- per trainee per month. Total = Rs. 200 X 2 months X 10 Nos. = Rs. 4,000/-
9. Contingencies	:	5% of the above expenditure i.e. Rs. 1,32,200/- = Rs. 6610/-
10. Institute support charges: for providing infrastructure facilities, etc. to the trainees Institution. The Institution is free to utilise this amount for the development activity regarding training infrastructure.		@ 10% of the expenditure i.e. Rs. 1,32,200/- = Rs. 13,220/-
Grand total of expenditure mentioned against Sl. Nos. 3,5(i), (ii),6,7,8,9 & 10		Rs. 1,52,030/-

****

ANNEXURE III

TWO MONTHS RE-ORIENTATION TRAINING PROGRAMME FOR YOGA OF ISM&H PERSONNAL

1.	Number of Trainees	:	20 (Twenty) but the minimum number could be 15. However to make it more effective, it is necessary that full strength of participants is mobilised to reach upto 20.
2.	Number of training courses	:	As per the capacity of the Institute College and sanction of the Govt. of India. Number of training courses could be maximum 4 in a year.
3.	Expenditure on boarding and lodging	:	(i) The Institution will arrange for hostel accommodation at a reasonable rate. @Rs. 50 X 20 Nos. X 60 days = Rs. 60,000/- (ii) Food @ Rs. 75 X 20mNos. X 60 days = Rs. 90,000/- Total Rs. 1,15,000/-
4.	Duration of Training	:	6 hours trainingper day for 5 working days 2 hours Lectures 2 hours Practical 2 hours discussions Total : 50 days X 6 hours = 300 hours for whole course.
5.	(i) Number of trainers from the faculty	:	4 to 5 trainers @ Rs. 150/- per hour for 170 hours in 2 months. @ Rs. 150 per hour X 170 hours = Rs. 25,500/-
	(ii) Number of trainers from outside the faculty	:	One expert from outside the faculty per week for whom rail fare upto IInd AC will be paid and one local expert for whom only honrarium and local conveyance will be paid. (a) Rail fare (upto IInd AC) for External Expenses @ Rs. 1000/- each. Total = Rs. 1000 X 8 = Rs. 8000/- (b) Honorarium to be paid to Guest Speakers @ Rs. 300/- per day. Total = Rs. 300 X 8 = Rs. 2400/-

Cont'd.....2

5(ii) (Cont'd)	:	(c) Boarding and lodging for External experts @ Rs. 150/- per day. 8 outsiders in 8 weeks (Rs. 150 X 8) = Rs. 1200/- (d) Honorarium to local/outside experts @ Rs. 300/- per day + Rs. 10 - as conveyance. 8 local in 8 weeks X Rs. 400 X 8 = Rs. 3200/- Total of 5(i) + (ii) = Rs. 40,300/-
6. Number of technical/ administrative support, staff and amount of honorarium to be paid	:	@ Rs. 500/- per week. Total = Rs. 4000/- for two months.
7. Cost of consumables eg. medicines/material of training.	:	Rs. 500/- per trainee per course. Total = Rs. 500 X 20 Nos. = Rs. 10,000/-
8. Cost of stationary, etc. (Manuals/books, etc. for trainees).	:	Rs. 200/- per trainee per month. Total = Rs. 200 X 2 months X 20 Nos = Rs. 8000/-
9. Contigencies	:	5% of the above expenditure i.e. Rs. 1,77,300/- = Rs. 8865/-
10. Institute support charges: for providing infrastructure facilities, etc. to the trainees Institution. The Institution is free to utilise this amount for the development activity regarding training infrastructure.		@ 10% of the expenditure i.e. Rs. 1,77,300/- = Rs. 17,730/-
Grand total of expenditure mentioned against sl. Nos. 3, 5(i), (ii), 6, 7, 8, 9 & 10		Rs. 2,03,895/-

****

Assessment proforma of Training Programme (Feed back)

(To be filled by the participant at the end of the Training programme).

Name of the Institution

Title of the Training Programme
with dates

Please tick (√) mark the column of your choice.

1. Usefulness of the programme.

Very useful | Useful | Not useful

2. About the teaching faculty members

(a) Observation about the local teachers from th Training Institute.

Very Good. No.....	Not good. No.....

(b) Observation about the outside expert teacher:

Very good. No.....	Not good. No....

3. What input do you suggest to be incorporated in the future trainingprogramme.

4. Best thing you observed in the trainingprogramme

5. Worst thingyou observed in the training progra

Name and Address
of the Trainee.

WONDERS OF UROPATHY

Urine Therapy as a Universal Cure.

BY
G. K. THAKKAR

PAPER

ON

WONDERS OF UROPATHY

OF

URINE THERAPY AS A UNIVERSAL CURE

PRESENTED

BY

Mr.G.K. THAKKAR

B.A.,L.L.B.,Advocate, Urine Therapist

AT

16th WORLD CONGRESS OF COMPLIMENTARY MEDICINES

Held on April 28th, 29th and 30th 1989

AT

ATHENS HILTON HOTEL, ATHENS, GREECE.

DEDICATED
To
My Guru
KISONLAL TEJPAL
Who Initiated me
To
This Divine Therapy
AND
To
'Shivambu-Rushi' Morarji Desai
Who gave me
Inspiration, Courage and Confidence
For
Propogating the Messaage
of
This Divine Therapy
To
four corners of the World.

Friends and fellow Delegates,

I am very happy and glad to present this paper of mine titled "WONDERS OF UROPATHY" or "Urine Therapy as a Universal Cure"

I had presented a paper on this subject at the 2nd All India Congress on Alternate Therapies held on 17th & 18th September 1988 at Tajmahal Hotel, Bombay under the auspicious of COSMEHRA. It was my first attempt at writing a paper on the subject. There is a world of difference in the presentation of the same to-day, because that presentation was such a grand success that I received an Invitation to speak and present my paper from Sir Anton Jayasuriya at this Congress who was present in that Congress in Bombay and, I am before you today.

In that paper of mine in the last lap of the same I had claimed and declared confidently that when Urine Therapy cures deadly diseases like Cancer and Kidney failure very easily hence it must, definitely cure the most dreaded and horrible disease AIDS which is the biggest challenge to the scientists of present generation. My claim was neither based on the superficial surmise, nor it was remark of a casual nature, but it was based on my deep and intensive study and a perfect scientific approach of Urine Therapy.

Nobody would have paid a serious attention or would have given any importance to my above claim because I am neither a doctor nor I had seen any AIDS patient. But miraculously my paper 'Miracles of Urine Therapy' reached U.S.A. via Switzerland and fell in the hands of a doctor named Dr. Beatrice Bartnett; who is practising Urine Therapy over there and has written a book named 'Miracles of Urine Therapy'. What a wonderful coincidence! She was so glad to go through my paper that she presented me her book with the remark "To Mr. G.K. Thakkar, Thank you, so much for your courage and the great work you are doing. God bless you and your family, with Universal love". Sd/- Beatrice Bartnett. In her letter she appreciated my paper and wrote that she has successfully treated few AIDS Patients with Urine Therapy. She also enclosed along with her letter a thrilling recovery story of a full blown AIDS Patient; Quique Palladino in his own words.

Because of this incident about a dozen news papers from Bombay and several news papers all over India have given me wide publicity by printing the news that Urine Therapy is the most effective cure for the horrible disease AIDS. Because of this news message of Uropathy has spread throughout the length and breadth of India, as wild fire and now it is going to spread to at least dozens of countries, from which fellow delegates have come to participate in this Congress, and thereby object of my Mission will be fulfilled.

More and more people are turning to Urine Therapy who are disappointed with Allopathy and other modes of treatment.

Friends, how miserable and unlicky we are! Ever loving and all caring God has given us such a precious and valuable gift right from our birth, which has the potentiality of curing each and every disease present on this planet including deadly diseases like Cancer, Kidney failure, heart disease and even horrible AIDS, of which we are not aware till we die a miserable premature death at the hands of experimenting, physicians and surgeons! I am happy and proud that ever loving God has elected me to be his mouth-piece or representative for informing the hidden fabulous medicinal values of our own urine to the masses. I am purposely using the word elected because while electing a person for any post or job no qualification, education or ability is considered, which is looked into while selecting a person. In election only God's grace is needed which comes by devotion, sincerity of purpose and selfless service of the ailing humanity.

Friends I have not come to sell or advertise any medicine. Urine Therapy can be carried out by anybody young or old and even a child at home without any expenditure whatsoever, and with a little knowledge about UROPATHY.

I would start the subject proper by printing the exact wording of the FORWORD given by Dr. Beatric Bartnett and Margie Adelman in their book referred to above published by Water of Life Institute P.O. Box No. 22-3543 Hollywood, Florida-330022 3543, which I have liked very much.

How fortunate we are to be alive in this great time; in this time of change and growth. Mankind is growing from adolescence into adulthood, and we will help this process.

Give thanks that you are one of the chosen ones to be alive in this special hour. Listen to the voice inside you, so that you will fulfill your destiny and the destiny of Mankind, Mother Earth and the Universe.

This is the time the prophets foretold in thier books. Mankind has been waiting thousands of years for its arrival and we are a part of it.

Love yourself, you are special. Love will move mountains, heal the sick and develop the arts and sciences.

Love yourself, for what you are a God or Godess -- perfect, loving, and good.

The Water of Life is a gift given by our creator for our spiritual growth and physical well-being.

It was used by the spiritual leaders, sacred groups, and simple folk through all ages.

It was never lost, only hidden, for truth always exists.

You were guided to find this information, read it and meditate it. Let God within, be your teacher and go over those obstacles which may hinder you on your path. Ask for guidance and it shall be given to you.

Give thanks to be a part of this wondrous plan!

But most of all - love yourself - love will move any atoms in the universe and bring positive changes to these times.

With love,
Margie Adelman
Dr. Beatrice Bartnett.

The above authors have coined out a very unique word. UROPATHY which can interchangeably be used for Urine Therapy. This word cannot yet be found in any dictionary. It is derived from the word urine (URO) and PATHY (Dis-ease). Uropathy is the method of healing dis-ease by the application and use of one's own urine (Auto - Urine - Therapy).

Now I am going to share with you some of my miraculous experiences and experiments of "Auto Urine Therapy" or "*SHIVAMBU KALPA VIDHI*".

About four years before I got attracted towards this therapy and was thrilled by its wonderful results. I was suffering from Amoebic Dysentry since last 20 years and my physicians had assured me that it will accompany me till end! Also I was having Eczema since more than 40 years. To my utter surprise I got rid of both major diseases by this wonderful remedy 'Auto Urine Therapy". You will be further surprised to know that there are some side effects too; but not of the usual harmful nature, which you very often suffer in Allopathic treatment. I suffered from falling hair and dandruff. I always used to have cracks in my feet and even on my lips in all the seasons. I had to use Boroline and other creams for the same. Likewise I suffered from stomatitis (Ulcers in mouth) once in few months regularly. I got rid of all the above complaints and ailments unknowingly, as beneficial side effects of this therapy! I have grown younger by many years, and today I am having vigour, stamina and energy which I didn't have thirty years before! My wife says, I was not so young, energetic and sexy even in my young days! All these benefits on a wholesale basis were achieved by Auto Urine Therapy of few months.

The biggest miracle or beneficial side effect that has occured in my case is that Urine Therapy has made me an effective and bold orator overnight. Yes, I had never spoken from any stage before even a small audience, prior to doing Urine Therapy. Now I can speak in four languages for hours at a stretch on this subject and many more. The secret of this phenomenon is that Lord Shanker has promised mother Parvati in *Shloka 89* of *'DAMAR TANTRA'* (Five thousands years old scripture) that one who does this therapy for three years as per his strict instructions acquires "*WAK SIDDHI*" becomes effective orator! I am glaring example of that promise! This therapy has passed down from ancient civilization, sacred groups, Yogis and Sages.

My wife was a regular patient for more than 20 years and was suffering from numerous diseases viz. ear trouble, vertigo, constipation, pain in the

joints, cramps in leg and many more. I had tried for her all the best available talents in Allopathy, Homeopathy, Ayurved and even Unani! But without any result. At last we stumbled across this wonderful therapy and she got rid of her all the ailments by Urine Therapy miraculously. **Even she got rid of a tumour in Uterus** for which the surgeons had **advised operation!**

My elder son who is 20 years old was suffering from **CHRONIC COLD & CONSTIPATION** since a decade and no need to tell that we had exhausted all the pathys, without any positive result. He drank it, of course his own URINE through his nose and got rid of his both the troubles.

Now comes the exciting story of my younger son aged 18 years who suffered from Hematuria since more than a year. He was passing blood in urine which could not be cured by the treatment for more than one year. My doctors told that something was seriously wrong with his kidneys and advised that intravenous pylograph should be done to find out as to what was wrong with his kidneys. I told my doctor that if my son agrees to drink his urine, I have not to go for any investigations or treatment for his trouble. I persuaded my son for starting Urine Therapy. He said "Dad if I drink urine and don;t get cured" I assured him, and said "You do this therapy for 30 days and if you are not cured at the end of this period I will stop drinking urine myself and stop talking about it." At the end of 30th day on 17th Feb. 1988 when the urine report was received my son danced with joy and said "Dad you are great"! The urine report was absolutely normal! Now our whole family is a *SHIVAMBU* family! On being inspired by its wonderful results I resolved to study this *SHIVAMBU* science deeply. I gathered all the available literature and books on the subject and studied the same intensively. On achieving wonderful results I went deeper & deeper in it. Now it has become Mission of my life to spread the knowledge of this wonderful therapy and to serve the ailing humanity thereby in my humble way.

Our elderly Morarjibhai Desai Ex-P.M. of India who is in perfect shape and health at the ripe age of 94 got the knowledge of this therapy at the age of 68 about 26 years ago. He is an ardent follower of this therapy, since more than a quarter century! Hardly very few might be knowing as to what benefits he has derived from this wonderful practise! We have come very close to each other because of common interest and liking, Urine Therapy.

He says that he got rid of his 45 years old constipation. He got rid of his cataract at the age of 68 which was in the initial stage. He was operated for cataract recently. He says he could stop cataract formation for twentyfive years by using his own urine as EYE DROPS! He is massaging his whole body with old Urine for more than one hour daily since 25 years! Also he has not used bathing soap for bathing and not used shaving cream or soap for shaving during the last 25 years! Yes he is using urine as shaving cream as well as after shave lotion! Every time I meet him I come to know from him

something new about Urine Therapy. According to him on his becoming P.M. of India, *Shivambu* or Urine Therapy got a very big boost for its spreading in India as well as in various countries around the Globe. He is perfectly justified in his statement.

It is a feast for the eyes to have a look of him from close quarters and it's a unique experience of touch to shake hands with him. He has no old age wrinkles on his face or body at the age of 94 and his skin has a silky, soft texture of a small child! The secret lies in *Shivambu* massage. By its massage your skin becomes smooth, lustrous, and silky and your aging stops instantly. If this secret reaches to the modern feminine world and if they choose to shed away repulsion and nausea for Urine, business of many cosmetic manufacturers will be badly affected! Many girls & women have on my advise used their urine as lotion for improving their skin complexion and the results were fabulous!

HISTORY OF *"SHIVAMBU KALPA"* OR URINE THERAPY

We must congratulate overselves that in every age there are at least some individuals who have consumate love for TRUTH and they are ever ready to re-establish it at all costs. J.W. Armstrong of England, Mr. Ravjibhai Patel and Dr. P.D. Desai of India were such souls. They established and proved that urine is a remedy par excellence. We can well imagine that it must have been a matter of great courage and conviction to practise it upon one-self and on others on the face of adverse public opinion in those days.

Mr. John W. Armstrong an Englishman can be called the pioneer in the field of Urine Therapy. The whole humanity will remain indebted to him for ever for his pioneering work he did by writing a magnificent treatise on Urine Therapy titled 'WATER OF LIFE', about 50 years before which is freely available in almost all the countries around the Globe and which is translated into innumerable languages of the world. This book is a class by itself and can be termed ALMA ATTA OF URINE THERAPY.

In India this therapy was made popular by a wellknown freedom fighter and co-worker of MAHATMA GANDHI, late Mr. Ravjibhai Patel who got cured of his Asthama, heart trouble and other ailments by urine Therapy. He got the knowledge of this therapy from the book "WATER OF LIFE" referred above. Mr. Morarji Desai, Ex. P.M. of India got inspiration from the same book which was given to him by Ravjibhai Patel. He has written a very informative book on Urine Therapy, titled "MANAV MOOTRA" which is translated into English, Hindi and Kannada.

Mr. Armstrong got inspiration from a writing in Bible, which said "Drink water from thy own cistern" (Proverb 5-15). He interpreted the writing of

Bible in a plain manner and got himself cured from the deadly disease Tuberculosis by drinking and massaging his own urine. Being thrilled by his own miraculous recovery he tried this therapy on around 40 thousand patients rejected by allopathy over 20 years of time suffering from incurable diseases ranging from Cancer, to Kidney failure and Gangrene to Diabetes and cured majority of them all! The outcome of his intensive and successful experimentation was the fabulous book "WATER OF LIFE"!

Friends, you will be astonished to know that though I have called Mr. Armstrong the pioneer of Urine Therapy, it has its origin in India! And that too it dates back to more than 5,000 years! Does it not sound funny? When the book "Water of Life" came to India about 40 years before few individuals came to know about the fabulous medicinal values of our own urine. Few years after that it was discovered by us that the reference of this therapy is found in *VEDAS, MAHABHARAT* and almost all the volumes of *AYURVEDA*, which are the oldest scriptures of our culture.

In one of the volumes of *AYURVEDA* viz. *BHAVPRAKASHA Urine* is termed as *"VISHAGHNA"* killer of all poisions and **"RASAYANA"** which can rejuvinate even old person and *"RAKTAPAMAHARAM"* which purifies blood and cures all skin diseases. Reference of Urine Therapy is found in almost all the volumes of *Ayurveda* viz. *SUSHRUT, HARIT, BHAVPRAKASH, GAJNIGHANTU, YOGRATNAKAR, BHAISHAJ-RATNAVALI, RAJNIGHANTU, VAGBHATT, DHANVANTARI NIGHANTU* and many more. In **SHIVAMBU KALP VIDHI"** which is part of *"DAMARTANTRA"* our oldest scripture, Lord *Shankara* has explained to *PARVATI* in 107 verses *(SHLOKAS)* the procedure and rules to be followed while doing U.T. and its beneficial effects when taken with certain herbs.

It was used only by *YOGIS* and *RISHIS* but not by general populace and hence it remained hidden. There are several other reasons as to why this practise was kept hidden for centuries. I am not going to discuss the same in this paper for want of time and space.

You will be further surprised to know that Urine Therapy or *"SHIVAMBUKALPA"* is part and parcel of *TANTRIK YOGA!* In spite of this basic fact this knowledge has not reached the masses, though Yoga has become so popular and has reached in the four corners of the world and I was not an exception to it. Yes, though I am practising Yoga and Pranayam since more than 40 years, I came in possession of the knowledge of Urine Therapy four years before. I was so much thrilled with its wonderful results that I decided to inform it to the whole world, and I am before you!

In *TANTRIK YOGA* culture this practise is termed as *'AMROLI'. Amroli* comes from the root word *AMAR* which means **IMMORTALITY, UNDYING, IMPERISHABLE,** *Amroli* was therefore a technique designed to bring about immortality! *Amroli* was originally a spiritual practise rather than

a method of treatment. They term it holy liquid i.e. *"SHIVAMBU"*. According to them Urine is more nutritious than even Milk! You are not only physically benefitted by its practice, but you become spiritually advanced because it is an elixir for body, mind and spirit!

The only unpolluted (Purest) thing in this polluted world is our Urine!

In our scriptures VEDAS & UPNISHADAS our body is compared with the Universe *"YAA PINDE SAA BAHMANDE"*. We cannot imagine the existence and survival of our beautiful planet (Earth) for a moment without the support and presence of salty oceans, in the like manner I can't imagine the existance of healthy human life without the help and support of our salty Urine!

In every passenger vehicle there is always kept an emergency exit, in the like manner all caring and loving God has given us emergency kit (Urine) right from our birth. We must know how to use it to our best advantage in times of emergency. I am going to teach you how to do it.

If disease is a blow of the sword, our urine is the protector *'DHAL'* against that fatal blow!

This therapy disproves and falsifies one very old and wellknown proverb "Little knowledge is always dangerous". Friends, take it from me that even the slightest knowledge of Uropathy will be immensely useful under any circumstances!

Even though so much is said about U.T. in so many volumes of *AYURVEDA* AND several old scriptures like *VED, MAHABHARAT, DAMAR TANTRA, BIBLE, MASONIC TEACHINGS, SUFI TEXTS, JAIN* AND *BUDDHA TEACHINGS* etc still it remained hidden and unexplored for centuries! It was never lost but hidden for **TRUTH** always exists!

Friends, we all are aware that medicinal values of different medicines change from time to time because of new inventions, and passage of time and in many cases they are even proved to be harmful after its prolonged use; but you will be surprised to know that medicinal values of our Urine have never changed during the period of thousands of years as it is manufactured in the Divine lab. **TRUTH** can never change!

There are stories of olden times and even recent ones of travellers and explorers who were often put into hardships and seclusion while in desert and sea and when water got exhausted have survived for days by drinking their own urine and successfully completed their journey.

Late Maurice Wilson, who made a magnificent but abortive attempt to climb Mount everest, ascribed his immunity from ordinary ills and his astonishing stamina to his many fasts on **URINE** only, plus external friction with **URINE.**

Tibetan Lamas are known to use their own urine profusely for preserving their health in isolated, cold dry plateau of Tibet. They live a very long life (More than hundred years) with the grace of nutritious ingredients of urine. By the same

means they can also traverse deserts inaccessible to ordinary mortals!

Even in Western countries efficacy and fabulous medicinal values of urine were known to the people which is evident from old records. In a book **"ONE THOUSAND NOTABLE THINGS"** published in England, Scotland and Ireland simultaneoulsy in the beginning of Nineteeth Century there are many important and useful references of Urine Therapy.

Similarly in another book **"SOLOMONS ENGLISH PHYSICIAN"** published in 1695, we find good knowledge of properties of Urine. It is written that urine is watery part of blood, (which is absolutely true). It also prevents decay and rotting. By drinking of Urine diseases of Kidneys Liver and Biles, dropsy, Jaundice and other poisonous fevers are cured. It cures wounds caused by even poisonous arms and weapons. It opens all obstructions of Rein Mysentary.

The above excerpts prove the point that Urine therapy is not a new thing. It has been handed down to us from anteriority.

These stories primarily show us that the common notion that urine is something dirty and poisonous is not correct, but it is a living solution. It contains ingredients which make and nourish human tissues and blood.

In the whole of the Creation we don't find even a single creature whose necessities of life have not been taken care of by nature. The human body has also been equipped to produce remedy for every disease which body is likely to get in the course of living, and that remedy is **URINE**.

The final and most profound argument in favour of Urine therapy is that it WORKS. Any one can test it for himself or herself. In the last analysis this is the only thing that matters.

SCIENCE AND UROPATHY

Many people believe that Urine is **TOXIC** substance or dirty excretion of they body. If this belief was true, how could our elderly **Morarji Desai, Ex. P.M. of India** would have survived who is drinking his urine since more than quarter century?

He has not only survived but is healthier than any other person of his age. Many individuals trapped in boat, raft or in desert have survived for days by drinking their own urine. The Governments of several countries recommend to their soldiers to drink their own urine in cases of liquid shortage-would they really poison their own people? Myself and my wife are drinking Urine since more than four years, have acquired better health and grown younger!

After innumerable clinical and laboratory tests carried out over several years in Japan, China, U.S.A., Switzerland, and many Europeon countries it has been conclusively proved that over and above Urea it contains Enzymes (of different kinds) Vitamins, Antigens, Antibodies, Aminoacids, valuable salts,

and minerals Carbonates, Bicarbonates, pigments, Carbohydrates and Hormones. It is a watery part of Blood.

If we consider human urine Therapy from the allopathic point of view, it must be accepted that human urine has close relation to the theory of bacterial infection. The bacteria in urine have proved to be effective in many dis-eases. Thus this theory can be evaluated vis-a-vis the allopathic bacteria theory. Thus this U.T. has the backing of science as allopathic therapy has.

Very recently two Doctors Dr. Alexander N. Glazer and Dr. Stocker from University of California have discovered that the yellowing dye responsible for Jaundice, present in Urine long dismissed as valueless bodily waste appears to have a beneficial function that can lessen tissue damage in **CANCER, AGING, INFLAMATION** and **HEART DISEASE.** "Instead of spending 95% of our time in developing means to get rid of bilirubin, we should spend time on possible beneficial roles of bilirubin." Dr. Stocker said. The above news had appeared in "**EXPRESS**" (U.S.A.) dated 1-3-87.

We all are aware of the biggest drawback of Allopathy that it does not consider human being as a whole-an integrated whole and the result is, need has arisen for spare parts like KIDNEYS, HEARTS, LIMBS, etc. on a wholesale basis! Moreover Antibiotiic drugs do destroy disease causing bacteria and viruses, but together with it they also adversely affect the life force, and digestive flora of the patient which gives rise to further serious diseases. In turn the scientists have to find out more powerful antibiotics to suppress the aggravated diseasse, and the vicious circle continues.

In this connection I am reminded of the remark of **Dr. Allan cantwell** (**AIDS** researcher) who says "Medical scientists may have unwittingly produced more virulent and more contagious cancer bacteria (or viruses), by the widespread use of chemotherapy, antibiotic therapy and radioactive therapy in the modern treatment of Cancer"!

Dr. Pragjibhai Rathod (Ayurvedic Practioner) has accidently discovered that Cow's urine contains **steroids.** We all Indians are fully aware of the fabulous medicinal qualities of Cow's Urine.

I am fully confident and of the firm belief that our urine also must contain **STEROIDS.** This is the secret of its fabulous medicinal qualities.

Friends, we all are fully aware that **STEROIDS** is one of the most cursed drugs of our time. It's bad effects are now internationally known but let me assure you that there won't be side effect of any kind even if one consumes urine in large quantity over a length of time; because Steroids present in our urine is not harmful like synthetic steroids.

A day is not far off when the athletes taking part in Olympic games might drink their own urine for best performance without fear of being disqualified for the consumption of **steroids**! They will get **STEROIDS** from the consumption of Urine in the most effective and harmless form.

Scientists of Holland have recently discovered a bio-element from human Urine, which ensures a long healthy life. They have not yet named that element. This discovery might revolutionise healing greatly.

Professor **John W. Pleasch, M.D.** did a study on Urine Therapy in the 1940's. In his paper he states, "Since I started Auto Urine Therapy three years ago, I have not come across a single case where **the patient suffered any harm.** It is for this reason that I decided to publish my findings at this early stage".

A study done by Lars. A Hanson and Eng. M. Tan at the Rockefeller Institute, New york in 1965 showed antibodies for cholera, Salmonella typhi, Diphtheria, Tetanus toxoid, and Polio present in human urine.

Unfortunately in a world of modern medicine and pharmaceutical interests, a tincture free and self produced, will not profit the health industry. For this reason a very limited amount of research has been done on this topic.

In recent years lot of scientific research is being carried out by the eminent scientists in the different countries of the world, but not to the extent it should be done; as nobody would be able to earn profit out of this free tincture (Urine).

Friends, you must be aware of the fact that inspite of the above drawback **Japan** and China are extracting a very valuable substance called **UROKINASE** out of human urine collected from public urinals, and are earning valuable foreign exchange by exporting the same since many years. This extract is useful for dissolving the blood clots in heart and lung disease. It works as a powerful artery dialating agent resembling Nitroglycerine, which is harmless as extracted from our Urine.

Reference of **UROKINASE** is found on page 1354 in the big volume written by four learned American Doctors who are M.D.Ph.D.. The name of the book is "**Goodman & Gilman's the Pharmacological Basis of Therapeatics**", which is published by Macmilan publishing Co. Newyork and is prescribed for the students studying in M.B.B.S. Therein along with other things it is mentioned that **UROKINASE** is extracted from human urine and that the course of therapy with **UROKINASE** is very expensive. What a pity, the fabulous free tincture gifted by God becomes prohibitively costly when it is processed in the factory, which is classified as life saving drug! Instead of opting for costly treatment why not drink self Urine which is provided freely by our creator?

Scientists have so far succeeded in isolating only one enzyme, UROKINASE from human Urine but it contains several other unknown Enzymes, which helps the recovery from even incurable and deadly diseases.

Japanese people are known world over for their ingenuity, hardwork and originality, and that is the reason why they are the leaders in many fields like electronics, automobiles, ship building and many more. Very recently they

have started extracting very precious hormonal ingredients from the Urine of pregnant women! During pregnancy the Urine is full of particular type of (Hormones), **OESTROGEN** and **PROJESTROGEN**. Friends you will be wondering as to how and from where that Japanese firm is obtaining the raw material? (Urine of the pregnant women) You will be surprised to know that one marketing company from Hyderabad (India) is exporting it in bulk to Japan! This marketing company chalked out a very novel plan to get the urine from the pregnant women. They are carrying on some social work in the poor localities and Zopadpatties of Hyderabad and Secunderabad and in return they ask for the urine from the pregnant women. They have engaged the services of lady nurses for the purpose of collection of the same.

In scientific investigations carried out in several countries viz. U.S.A. Japan, Scandinavia etc. normal human urine has been found to contain marvellous healing property promising to cure deadly diseases such as Cancer, Tuberculosis, Pulmonary and Cardiac Vascular diseases etc. as mentioned in the Press Reports published in Medical Journals, extracts from which are given below:-

1. Press Report: San Fransisco (U.S.A.) October 24, 1967 (A.P.)

"An extract of human urine shows great promise for treatment of certain deadly diseases caused by formation of blood clots, Research Physicians said at the Scientific sessions of the American Heart Association. The extract is called 'Urokinase". It activates substances in the blood stream that dissolve the clots.....Experience has been obtained with about 200 patients with Pulmonary Embolism, the most common of seious Lung diseases, Dr. Sherry pointed out".

2. Extract from the "Science Digest" July 1958:

"Normal human urine has been found to contain a powerful Artery-dialating agent resembling Nitroglycerin in its ability to increase the coronary blood flow to the cardiac muscle, used for the relief of Angina Pectoris".

3. Report presented at the annual meeting of the "Federation of American Society for Experimental Biology" in Atlantic City U.S.A. in April 1966, under the heading "**BRINGING CANCER CELLS INTO LINE**". Gives the account of research showing the effect of human urine on cancer cells.....The two Researchers found unexpectedly last year that the urine extract, which they call "DIRECTIN" When added to the culture medium, caused all the cancer cells on which it has so far been tested, to align themselves end-to-end into straight rows?"

More than two and even three decades have passed since the above discovery and research was made, but hardly any further remarkable development or progress is made in this field during the period of quarter century. I presume that reason for such slow pace and progress is that it is not a profitable venture!

These investigations give strong support to the claims of the **Auto-Urine Therapy1-An Emperic Therapy of Ancient India known as *"SHIVAMBU KALP"*-of providing an universal remedy for the prevention and cure of every kind of the patient's own illness.**

MY PERSONAL EXPERIMENTS:

I have tried this remedy on myself, my wife and two sons and got rid of many ailments as mentioned earlier, and on my advise many others have also tried it on themselves who got cured of numerous ailments. I have seen cases of chronic cold, Asthama, worst Arthritis, Kidney failure, Piles, fistula, vericose veins, vericose ulcer, psoriasis, eczema, pimples, Acne, all sorts of eyes, ears, nose and throat troubles, epilepsy, nervous break-down, ladies problems during pregnancy and menopause being cured.

Friends I have achieved very promising results in Obesity in several cases, even without diet restrictions! It works fantastically on Impotency and sexual debility. It is world's best de-aging tonic discovered so far.

A very interesting case of a couple is reported in the book "SHIVAMBU KALPA" written by Mr. Arthur Lincoln Pauls, a Canadian born author settled in U.K. A Young 27 years old Anglo Indian who got married to a girl of 18. After few years of marriage it was detected that he was not virile and his semen lacked active sperms, and hence his wife did not conceive. Both of them drank each others' Urine and their own urine on alternate days on advise from boy's Grand father (Indian) and they both anoited each others urine on their genital organs and he became more potent and his sperm count increased. In two months his wife conceived. Now they have two sons.

I have tried this therapy on worst tooth pain, and all sorts of tooth and gum troubles, like gingivitis, pyorrhoea and gumboil. On my advise my wife, two sons and many friends have tried this for their tooth and gum troubles which has never failed in a single instance. **Severest tooth pain disappears in minutes!**

Once during my lecture, one gentleman rose from the audience and asked me "Mr. Thakkar' you are talking so highly about urine treatment for all tooth problems, but my experience is otherwise with it. I am rinsing my mouth with urine since two years, still I have lost my two teeth and the third one is loose and is on the verge of going". I was so much confident about Urine's efficacy for all the tooth problems, that I told to that gentleman who happened to be a homeopathic doctor, that I would put only one question to him and his doubt would be over! I asked him "How long you rinse your mouth with Urine"? His reply was "for a minute or two". The defect in the treatment was detected instantly. One has to fill his or her mouth with fresh urine for few minutes from 5 to 15 depending upon the severity of the tooth problem and pain, so that it can be absorbed by the gums and would reach the roots of the teeth. The doubting doctor was fully satisfied and convinced by my explanation.

Thereafter I had inquired of him about his loose tooth, which he said had become all right with my technique.

Friends, I have successfully tried this on the worst type of pimples and acne and even black spots caused by acne and have earned the good wishes of numerous young boys and girls who had tried all the modern, widely advertised, costly creams and lotions with no results. For popularising this successful, simple, harmless and sure therapy for pimples and acne I intend to deliver my talks in colleges and schools so that hundreds and thousands of young boys and girls suffering from this ugly skin disease will be benefitted most.

In this context I am reminded of a interestly story narrated to me by Mrs. Nalini Daftary, daughter of my "Guru" Kisonlal Tejpal who gave me "*DIKSHA*" of *Shivambu*, who drank my urine to remove my repulsion, nausea and hesitation and initiated me to this wonderful therapy. He used to drink the urine of each and every patient suffering from any disease to remove his nausea and repulsion who went to him for guidance. Naliniben who is staying in States happened to visit the college where her daughter was studying, to meet her professor for some work. She could see that Mr. John's (Professor) face was full of big lumps of Pimples. He told her he was suffering from this malady since several years, which he couldn't get rid of inspite of trying all the latest medicines and treatment available in States. Wellknown Vaidya Dr. Pragjibhai Rathod, a great exponent of Urine Therapy and writer of a book on Urine Therapy in Gujrati language terms this as "MAHA ROG" of twentieth century because it is hard to cure even with most sophisticated drugs, lotions and ointments. But our Mr. John got rid of this "*MAHA ROG*" by this therapy (by application and drinking of his own urine) which had made his face ugly. Mr. John who is Ph.D in Maths and Physics is teaching in the University of Orlando was so much thrilled and overjoyed by the wonderful results of this therapy, that he wants to do Ph.D. in "*SHIVAMBU KALPA*" or **URINE THERAPY**. I am doubtful whether he will succeed in doing so. Because to my knowledge no University in India or any country in the World has got the arrangements for teaching this repulsive, nauseating and obnoxious but wonderful subject. If any University, College or Institute becomes pioneer in starting such a course to teach "*SHIVAMBU* or **AUTO URINE THERAPY**", I offer my free services to teach the subject in the service of ailing humanity. I would request Dr. Jayasuriya to give a serious thought in this direction to start a faculty for teaching this wonderful therapy in the Open International University for Complimentary Medicines. The course will be of a shortest duration of hardly one week. Yes it can conveniently and exhaustively be taught in a period five days from Monday to Friday.

Very recently I have written a letter to **Mr. Gorbachev the president of U.S.S.R.** wherein I have made a very unique, timely and useful suggestions to him. The gist of the same is as under:-

In the **Science Express** (Weekly supplement) of **Indian Express,** I came accross a news item, a team of American Scientists have said that those who were staying in 30 K.M. radius of Chernobyl and who were exposed to radiation because of 1986 accident are likely to suffer from cancer in te next decade. On reading this news an idea flashed in my mind that when cancer can be easily cured by Urine Therapy it must prevent also.

I have requested Mr. Gorbachev to carry out a unique experiment on the resident population around Chernobyl who were exposed to radiation. I have requested him to try Urine Therapy on the 50% of the population staying around Chernobyl and rest of the individuals who were equally exposed to radiation may not be given this treatment. After a duration of few months it will be noticed that those who are kept under. U.T. would not develop any cancer trouble, while the rest might develop the disease of cancer as forecast by the American Scientists. This experiment is so safe, simple and sure that it can be carried out without fear of any harmful side effects. When I am talking of side effects, which you generally come accross when any new drug or medicine is invented and experimented; Thats why it is generally first tried on monkeys or guinea pigs or rats. In case of Urine Therapy not a single untoward incident has been reported so far of any harmful side effect. On the contrary numerous cases of beneficial side effects are reported by different patients. Yes, when any body tries this therapy for any serious or chronic disease minor dis-eases disappear unknowingly!

Dr. C.P. Mithal M.B.B.S., M.D. Ex House Physician, N.F. Medical College (West Bengal) (India) who has written a wonderful book titled "**Miracles of Urine Therapy**" writes in his book that he used to ask his patients suffering from Chronic and hard to cure diseases to bring their urine for test on each visit. He colured and flavoured the same and would return it in another bottle to the patients as medicine. After few days when satisfactory improvement was noticed he would tell the **TRUTH** to them with the advise to drink their own **waters** in purest and most unadulterated form! He got amazing results in several chronic and deadly diseases!

During four years of my deep involvement in U.T. I have come accross several, thrilling recovery stories of patients who got recovered from deadly and incurable diseases like Terminal Arthritis, Kidney failure, Cancer, Vericose-Veins, Vericose Ulcer, epiplepsy, nervous break down, piles, fistula etc. It's not possible for me to narrate and include all of them in this paper for want of time and space.

When I came to know that the well known heart surgeon **Dr. Christian Bernard** is suffering from severe Osteo-Arthritis and has stopped operating because of this incapacitating and painful malady, I wrote him a letter informing him about the fabulous medicinal values of our urine and the procedure of treatment. About six months have passed but so far I have not received reply to my letter.

EMINENT DOCTOR'S OPINION ABOUT AUTO URINE TREATMENT

Dr. Rabagliati of Bradford-that frank and broadminded surgeon admitted that the surgical treatment of cancer was a complete failure. He had performed over 500 major operations for Cancer and rarely had any patient survived after the operation. Regarding the success of Auto Urine treatment **in diagnosed cancer cases,** he testified as under:

"I have examined a number of women who according to orthodox treatment would have been operated and got one or both of their breasts removed. These brave and fortunate mortals declined my advice and gone under urine therapy. When they consulted me again, I did not find, even a scar to suggest the healing of "**INCURABLE MALIGNANT GROWTH**". Some of them found lumps **disappeared within a fortnight and others even in four days.** Thus I think **Mr. Armstrong** is probably correct in his suggestion that most of these lumps are not malignant until **AFTER** surgical and drug interference and that in the incipient stage. **The so-called king of terrible disease can be easily cured if tackled promptly by the Auto Urine Treatment " (The same is the case with the horrible deadly disease AIDS**-it is my opinion).

"If, however, any layman claimed and produced a thousand cured cases on one platform.....I doubt if it would impress my profession...even claims for the improvement of cancer victims are either openly ridiculed or ignored. It is a sad reflection that my profession thrives on disease, and the inhuman propoganda of official scaremongering and **exploitation**". (This is exactly being done at present about the disease of AIDS by the press and scientists concerned).

Is it not surprising that inspite of such high opinion of a renowned surgeon of England about Urine Therapy for Cancer treatment, expressed by him about half a century before hardly any doctors and scientists have cared to look into it?

Dr. Jivraj N. Mehta M.D. (London) former chief minister of Gujrat, writes, in his foreword to the book **MANAV MOOTRA** (English-Edition) "The belief that Urine is not an excreta, but is an elixir of life, gifted by nature for the purpose of healthy living and for the use as a main therapeutic measure for almost the WHOLE RANGE of human disease including Cancer, T.B. Leprosy etc. is intriguing, interesting and fascinating. If it could be substaniated by human experiments undertaken and planned on a scientific basis, it would be a great boon to human beings, more so in the modern age of space travel". (No step is taken by the Govts. of any country in this direction after a lapse of more than 40 years and inspite of fabulous medicinal qualities of Urine).

EMINENT PERSONS' OPINION ABOUT AUTO-URINE TREATMENT:-

Mr. Morarji Desai, former Prime Minister of India, writes:- "I personally know of several cases who have cured their incurable illnesses of various kinds by the Auto Urine Treatment. This treatment is simple, inexpensive and harmless and is a great boon for a poor country like India.

I have tried the remedy on myself and on my advise some others have also tried on themselves, I have seen cases of diabetes, cancer, T.B. and kidney failure cured by it. For Disease of eyes, ears, teeth and skin it is the most effective remedy.

Late Mr. Balkoba Bhave, Suprintendent of Nature cure Ashram, **Uruli-Kanchan (India)** writes:- "The Auto Urine Therapy is superior to Allopathy, Homeopathy etc. all of which are dependent on medicines for treatment, No medicine or surgery is necessary in the Auto Urine Therapy hence it makes the patient self reliant in the treatment of his illness."

DISEASES WHICH CAN BE CURED BY THIS THERAPY

Friends, I have already stated more than once that there is not a single disease present on this planet which cannot be cured by this Therapy. Still I would summarise in the words of **Dr. T. Wilson Ph.D.M.D.** "As the urine contents vary according to the pathalogical state of the patient its use is indicated in all forms of diseases except those caused by traumatism or those that are of mechanical nature".

Any how for the befefit of the fellow delegates I would mention some of the diseases on which it has ben successfully tried by numerous patients known and unknown.

To name the few serious and chronic diseases: Cancer, (of all types), Osteo Arthritis of all types. Kidney failure, heart disease (all types) vericose veins, vericose Ulcer, Gangrene, all skin diseases named or un-named including leucoderma and leprosy. All types of ear troubles like pain, discharge, deafness, giddiness etc. For nose and sinus troubles, mouth and throat diseases like stomatitis, tonsillitis, dental diseases like gingivitis, pyrorrhoea, gum-boil, shaking teeth etc. for piles fistula and fissure, for Female organs, leucorrhoea, excessive menstruation, tumour in uterus. It acts wonderfully on insect and other poisonous bites. All sorts of pregnancy problems are remedied by its use. It works fabulously on fevers, headaches, migrain, constipation, paralysis, slip disc, and even mental disorders.

The diseases may be many and their names numerous but the remedy is only one and that is one's own Urine, Which cures the illness by removing the waste products and toxins from the body and also by stimulating the defensive mechanism of the body.

Preferably no other medicines should be taken while doing this therapy.

For injury, burns, swollen painful parts, boils, ulcers and tumours etc. put urine compresses-cloth soaked in urine on the effected parts.

This remedy is also very effective in poisoning from snake-bite, rat-bite, bite of scorpion and even dog-bite. We feel more alive, more vital, more capable by its use. Self confidence soars and life becomes heaven on earth!

METHOD OF "SHIVAMBU" OR URINE THERAPY TREATMENT:-

It is quite difficult for a beginner to start the treatment with this repulsive remedy, though it tastes much better than beer and liquor. Repulsiveness and nausea can be overcome by two methods. One psychological and the other practical one.

Once you are convinced about the fabulous medicinal values of the Urine, which is produced by your own divine laboratory within the body in its purest form which has life in it, and when you become aware of the fact that it contains valuable minerals, enzymes, vitamins, hormones, antigens and antibodies etc., and that it is not a waste product of the body, your repulsion and nausea is bound to disappear instantly. So whosoever has courage and puts aside his/her prejudices can use urine and reap the benefits of Urine Therapy.

In the missionary zeal, to spread the message of "**SHIVAMBU**" or Auto Urine Therapy, I can drink Urine of any person just to remove the repulsion of fellow delegates, if it is made available to me.

Practical method for getting rid of repulsion and nausea I have been advising is that, in the beginning one should add some water and honey or syrup to the fresh urine and drink it. If taken with water and honey one will not have the slightest repulsive taste of Urine. After few days of drinking you would like to drink it in its unadulterated form without adding anything!

Dear friends let me point out that nauseating and repulsive taste is due to the kind of food one eats. If you eat sensible and balanced food without too much salt, and spices, your urine will be as clear and tasteless as water. You must have noticed an infant's Urine never smells.

This therapy does not give only physical benefits but it gives spiritual and mental benefits too. Because U.T. is not a medicine for a specific disease or diseases, but it is a divine nectar for body mind and spirit (soul)! I have come accross cases where even nervous break-down and madness is cured by this treatment.

DOSAGE:-

1. As a best general tonic for keeping fit, healthy and energetic and also as a preventive against all infections diseases one glass (200 c.c) once or twice a

day can be safely taken. (Even if it is taken in more quantity it is beneficial and not harmful).

2. For minor illnesses of all kinds such as common cold, cough, gas, indigestion and fevers, enima of warm water mixed wth urine should be given. Observe complete fast for 1 to 2 days during which period all food and drinks should be stopped, all the quantity of Urine passed every time should be taken, and in the interval one can take only plain water as desired. By such treatment the acute illness will be cured within two or three days. The fast should be broken with Orange Juice, Moong water, and subsequently milk or light liquid food should be taken in small qantity. After two or three days begin taking light normal diet.

3. For chronic illnesses of all kinds, such as cancer, T.B, Asthma, Heart and Kidney diseases, Diabetes, skin diseases etc.

i. First give an enima of warm water mixed with urine as mentioned above.

ii. Complete fast should be observed for 3 to 30 days depending upon the severity of the disease, and condition of the patient as mentioned above on water and urine only. Long period fast should be undertaken, under expert guidance. If complete fast is not possible one can remain on liquid food like moong water and fruit juices; but all the quantity of urine passed should be taken.

iii. Systematic rubbing of the skin on all parts of the body from head to foot with old urine is a must during the treatment of chronic diseases; and while fasting.

Like old wine, old urine is precious for rubbing and massage. (Not for drinking) Minimum four days old urine should be used for rubbing and massage.

I have just tired to give an outline for the treatment of acute and chronic diseases. I am sorry, that I can't give detailed treatment for the different diseases in this paper for want of space and time.

MULTIFARIOUS USES OF URINE:-

Friends you will be astonished to know the multifarious and divergent uses to which we can put our urine at work!

It can be safely & beneficially used as:- A conditioner for hair, Shaving cream, after shave lotion, Tanning lotion, antiseptic lotion for cuts and wounds, complexion improving lotion, eye washes for all eye troubles, astringent lotion for pimples and acne, mouth wash for all dental problems, nasal passage cleaner for all sinus troubles, rheumatic and muscular pain killer, soothing & healing lotion for burns & treating piles and fistula, antidote for snake and scorpion bites, can be used as aphrodisiac, on impotency, as dush for leucorrhoea and other menstrual diseases and last but not the least an in-

stant energizer. My wife says, I was not so sexy, energetic and young even in my real young days! I will be completing sixty on 14-10-1989. If you used it as mouth wash daily, I can give life time guarantee for your teeth! It not only makes the complexion fair but one can also get rid of old age wrinkles of face and body. It is the most effective de-aging tonic ever known.

SIDE REACTIONS DURING AUTO-URINE TREATMENT

The Auto – Urine cures the illness by dissolving the waste products and toxins accumulated in the body – which is the root cause of most of the illnesses – or by removing the same from the body by way of mouth, nose, anus or skin. Thus the patient may have vomiting, cough and cold, diarrhoea or skin eruptions. The patient need not worry by such reactions, which are helpful in curing the illness. They will disappear automatically within few days. Therefore, no other medicine should be taken for removing them. For skin reaction old urine should be rubbed on the eruptions.

Some patients have got allergy hence eruptions may appear after rubbing with old urine on the skin of various parts of the body, or there may be severe itching. In such cases, the rubbing of the old urine should be stopped and only drinking of fresh urine should be continued, and fresh urine should be rubbed on the body.

In some allergic patients drinking of urine may cause severe itching of the whole body and skin eruptions. In such cases the patients should stop drinking urine and continue only external application (rubbing) of the old urine.

SELECTION OF FOOD WHILE DOING U.T.:-

"FOOD IS LIFE" is a fundamental principle of the science of health. Food itself has medicinal value. Most of diseases of the present generation have spread throughout the world because of wrong food habits and wrong way of living. Some of you must have read the book titled "**Recalled By Life**" written by **Dr. Arthur Sattilaro**, president of the Methodist Hospital, Philadelphia, U.S.A..

He was suffering from terminal Cancer (Stage-IV (D)) which had spread throughout his body. He was operated several times and his testicles and few ribs of his chest were removed. Being a president of the Methodist Hospital, panel of Doctors were attending on him and was getting the best treatment available in States, still his physicians advised him frankly that he had few months to live.

Accidentally he stumbled accross a group of people propogating strange diet & philosophy called "MACROBIOTICS" which promised to reverse his cancer. He strictly followed the "MACROBIOTICS" diet and got cured of

his cancer. Today he is having such a fine health & stamina which he didn't have 20 years before!

He became world renowned by writing the above book in which he has given the detailed account of his miraculous recovery from the deadly terminal cancer.

I intend to meet him in Philadelphia (PA) when I visit States next week, to acquaint him of this wonderful therapy.

During the treatment with U.T. one should take the following precaution in selection of food.

All tinned foods, bread, biscuits, jams, pickles, fried and spicy foods should be strictly avoided.

All intoxicants like wine, and tobacco in all forms are to be tabooed.

Only simple, light, sensible food should be taken. It should include sprouted cereals (Moong) raw vegetables, salads, fruits and dates. Brown rice will be much helpful during the treatment.

Regularity in food, rest and sleep is must.

COMMERCIALISATION OF NOBLE PROFESSION

We all of us are fully aware that noble profession of medicine and healing has been fully commercialised and as such all the unhealthy business tactics have crept into it. It is high time to realise that to the vested interests healing and preventive medicines are a **DISASTER** of the first magnitude! Who can make large profits off healthy people? In this state of affairs how can we expect healing? So is it not advisable for us to find our own way out of this disappointing situation? Our Governments are not going to help us in any manner, we have to help ourselves.

Friends you must have read the news that a division of **Medical Research Council of London**, which is doing research **on common cold** since 1957 which has annual budget of £ 5 lacs is going to be closed for ever as they couldn't find a cure for it inspite of intensive research of 37 years!

In-spite of this fact millions of dollars worth medicines are being sold for the cure of common cold! What a big hoax is being played on the gullible public for so many years?

Friends take it from me, that any body can get rid of acute common cold in 12 to 18 hours only by Urine Therapy. One has to do fasting for 12 to 18 hours and drink all the urine he/she passes. If one feels thirsty he/she may drink lukewarm water. I am telling this to you after successful experimentation on my self, my wife, my sons and friends!

Dr. J.L. Jamaison from Maripsoa, California, U.S.A. in a letter to Dr. P.D. Desai of India writes, "Friend, I appreciate your concern for the ailing humanity, but in the United States of America we have perhaps the most cri-

minal Government in the world. It is Government policy to maintain ill health, as there is money in it."

I don't wish to bring politics in our discussion of Complementary medicines and criticise any Govt., but at the same time I will be failing in my duty if I don't bring certain facts to the notice of the W.H.O., heads of different nations and medical research workers of different countries.

Such a novel and marvellous cure is in existence since centuries yet it is most surprising that neither the Governments of different Nations nor Medical workers and the medical profession -- the custodians of our Nation's health have taken notice of the same so far. Scientific Investigations of this valuable remedy are most urgently needed for the welfare of the ailing humanity and especially in view of the impending danger of the AIDS bomb which is going to be more disastrous than even hydrogen or any neclear bomb.

So it is my humble and sincere request to the W.H.O. and the heads of different nations that they should take up urgent research work to find out on a scientific basis the fabulous medicinal qualities of our own Urine. Also they should find the ways and means to make this therapy acceptable and popular amongst the masses and save the ailing humanity from total annihilation especially in view of the impending danger of AIDS.

In these days of instant and fast communication and public contact facilities it should not be difficult to make alternate therapies, established medicine. The first step is to move the Govts. to include the subject in the curriculum in all the educational institutions. The Hospitals should provide urine therapy for treatment. Gujrat is the first and only state in India which has given official recognition to this Therapy.

There should be no confronation or hostility between different medical disciplines but respectful coexistence centred on the Welfare of the ailing humanity. Everything is imperfect in human affairs but co-operation and coordination between different disciplines can overcome all deficiencies and enhance their efficacy contributing to the happiness, well being and health of humanity.

So friends, if we want to become self reliant we have to find out an Alternate Therapy which will be safe, sure, simple and free. And all these qualities are present in **"SHIVAMBU"** or "URINE THERAPY".

Some time back I met well known. **Dr. Vasant P. Mehta M.D., M.S., F.C.P.S., F.I.C.S.** of Bombay who has taught medicine and surgery (rare combination) in the leading medical college of Bombay for more than 15 years, says that **urine Therapy** has played major role in his recovery from throat **CANCER** which he suffered about ten years ago. He narrated to me a very interesting episode he had with Dr. Praful Desai (Head of Tata Memorial Cancer Hospital, Bombay (India),) whom Dr. Vasant Mehta had taught when he was a student. When anybody asked Mr. Praful Desai as to whether Urine

Therapy is useful in the treatment of Cancer. He used to say "It's **"HUMBUG"**, One day Dr. V.P. Mehta asked him as to whether he knew any thing about Urine Therapy? His reply was in the negative. Mr. Mehta then asked him "When you do not know any thing about Urine Therapy what right you have got to call it "**HUMBUG?** He applogized to him for his attitude. Now he suggests Urine Therapy to **terminal** cancer Patients! Urine Therapy will hardly be helpful to serious terminal patients, but I know few lucky cancer patients who got cured completely by U.T. who where sent home by the physicans to die peacefully! U.T. works fabulously on all sorts of cancer provided it is done systematically and before the case is spoiled by other harmful treatment viz. operation, radiation and chemotherapy etc.

It is my sincere request to my delegate friends that they should try this therapy at teast on those ailments for which there is no known cure found so far and find for themselves the miraculous results. To name such diseases viz. Arthritis, Diabetes, AIDS, Vericose veins, vericose ulcer etc.

In the last month I came across a very peculiar news in the **Indian Express**. A patient was admitted in the leading hospital of Bombay for the operation of Appendicitis and along with Appendicitis one of his kidneys was removed by the surgeon without the knowledge of the patient! It was further reported that this is not a solitary incident. On investigation many more cases of such kidney theft may come to light! What does this indicate?

In the month of January there was a **startling** news in the leading newspapers of Bombay. That AIDS virus was found in the medicine prepared out of human blood plasma! The Govt. has ordered to get back from the market all the stock of that medicine.

We can well imagine the fate of the patients who had been treated with AIDS infected medicine.

Friends take it from me that one can remain immune to deadliest viruses like AIDS virus by drinking a glass of self Urine regularly!

MENACE OF HORRIBLE AIDS

I think this paper will be incomplete if I don't touch this disease **"AIDS"**

Friends, you will agree with me when I say that this small word of four alphabets has frightened the whole of mankind to such a great magnitude, that has no precedence in the human history! The increasing menace of **AIDS** poses a big threat to humanity's survival with dignity!

When the scientists all over te world, inspite of their best endeavour over almost half a century have not succeded in finding a sure cure for the dreaded CANCER, we can well imagine of the hopeless situation in the matter of a cure for this horrifying and super dreaded disease AIDS.

Friends, I have come across some cartoon pictures drawn by Cartoonists of international fame wherein they have tried to convey the horrifying situation

created by the menace of AIDS, in a very light vein. I am going to show you these cartoons during my presentation of the paper in the Congress.

You will be astonished to read the remark of **Dr. Alan Cantwell,** well known AIDS researcher who writes in his book **"AIDS" the Mystery and the solution"** that "I have noted that some AIDS patients do not have famous AIDS virus (H.T.V.L.) in their blood" further states" My belief based on research studies is that "**AIDS IS CANCER,** and **CANCER IS AIDS**". One possible reason for the emergency of the new epidemic of **AIDS** is that **MECICAL SCIENTISTS MAY HAVE UNWITTINGLY PRODUCED MORE VIRULENT AND MORE** contagious **bacteria** or Virus), by the widespread use of **CHEMOTHERAPY, ANTIBIOTIC THERAPY AND RADIOACTIVE THERAPY,** in the modern treatment of Cancer".

On reading the remark of Dr. Alan Cantwell that **AIDS is cancer and CANCER is AIDS,** I am reminded of having read the opinion of one Scientist, whose name I have forgotten, that "Cancer is not a disease but it is a biological phenomenon, and as such there cannot be a medicine for the same". I think he is perfectly right in his statement, but I would like to inform him that a sure cure for cancer is there, and that is patient's own Urine. And as the **AIDS** researcher Mr. Cantwell has correctly concluded that AIDS is cancer and cancer is AIDS. In view of this AIDS is also not a disease, but it is a biological phenomenon and hence no medicine will be of any help for this deadly and horrible disease, but **Urine Therapy** will surely be helpful to the **AIDS** patient!

When I had first declared confidently in my paper on Urine Therapy presented on 18th September 1988 in 2nd All India Congress on Alternate Mediciens hled in Bombay (India) at Tajmahal Hotel, that AIDS can be cured and must be cured by Urine Therapy I was unaware that some Urine Therapist has successfully tried this therapy on few AIDS Patients in the other part of the World! Yes, as mentioned by me earlier **Dr. Beatrice Bartnett and Margie Adelman,** two young, enthusiastic and courageous ladies are doing valuable research on Urine Therapy and have successfully tried few full blown AIDS patients with it.

According to me any AIDS patient can very safely undertake Urine Therapy as he/she will be the gainer and not the loser at any count, because once the doctors brand him or her as an AIDS patient he or she is to die sooner or later as there is no medicine or cure in sight so far for this horrible disease in any pathy. This therapy will be undertaken only by a courageous and rebellious patient who does not want to go home quietly and die off without a fuss, when told by the doctors that he/she is suffering from an "incurable disease". And he/she will surely succeed if he/she takes the treatment systematically, under proper guidance and from the early stage before spoiling the case by any other treatments. AND now **Dr. Beatrice Brtnett has conclusively**

proved that Urine Therapy works fabulous even on full blown AIDS patients.

So, the ray of hope has came in sight for the miserable and helpless millions around the Globe, suffering from this horrible, incurable disease.

Friends you will be shocked to know the few stories of miserable AIDS Patients that had appeared in the leading Indian Newspapers, which I am narrating below:

(1) One Doctor from South India who suffered from AIDS was admitted in one Govt. Hospital when the doctors and the staff members of the hospital came to know that the patient is an AIDS Patient they refused to attend on him, and he was forced to go home!

(2) In another case a patient was admitted in one of the Govt. Hospitals of Bombay. When the staff members of the hospital came to know that the patient is suffering from AIDS they refused to attend on him, leaving the patient to his fate unattended.

(3) One such case of a similar nature. A call girl (Prost) from Rajkot. (Gujrat State) suffered from AIDS. This was reported in the newspapers. It was further mentioned that she must have passed on the AIDS virus to atleast 300 persons who might have visited her in last few months. I had gone to Rajkot to see her for giving her guidance of U.T. I was told by the hospital authorities of Rajkot where she was treated, that the girl was first transferred to Civil Hospital Ahmedabad and from there she was sent to her native place in Nepal of course to die peacefuly without a fuss.

Friends, we don't have even the proper equipments in our country in sufficient numbers for the detection and diagnosis of this horrible disease. I can't imagine of the situation when the AIDS Patients will multiply in numbers in the years to come.

I shudder with agony and pain when I think of the helpless situation in which the AIDS Patients are placed when the staff members of the hospital refuse to attend on them and they are left to their fate unattended!

TALKING RANDOM & RAVE:

While writing this paper my thoughts are going to a great soul, Shri Chandrika Prasad Mishra Shastri, a brave freedom fighter. He had worked with Mahatama Gandhi and was jailed on several occassions by the British Rulers for taking part in Independence movement. Exactly 30 years before when he was around 50 years old, he suffered from several diseases viz. heart disease, diabetes, sciatica, gout, eye and ear troubles etc. After trying all the conventional therapies with no result he stumbled accross U. T. and got rid of all his ailments on a wholesale basis! He had such a tremendous impact on his mind after his fabulous recovery that, since then it has become a mission of his life to spread the knowledge and guidance of this therapy to the masses. For that purpose he is publishing a fortnightly titled "**SHIVAMBU MITRA**" in

national language Hindi regularly since several years. His writings are very much spirited and informative.

He has dedicated his whole life for spreading the knowledge of this wonderful therapy. He has also written a very informative book titled *"SWA-MUTRA CHIKITSA"* in Hindi. He is travelling throughout India giving talks on U.T. and holding seminars. He has done lot of experimentation and research on U.T. during his involvement of more than 30 years in this therapy.

At the age of about 80 he has health, stamina and vigour of a young person. In the last week I had a chance to meet this inspiring personality. I am giving below his address for the benefit of fellow delgates.

CHANDRIKA PRASAD MISHRA, Shastri,
ADANPUR, Maharaj Ganj,
VARANASI (U.P.). 221314 (INDIA)

I am very pleased to inform to you that in the last month I was lucky to have met a young, sincere, dedicated and a selfless Naturopath, **Dr. Shashi Patil from Kolhapur** in Maharashtra who has dedicated his whole life in the service and propogation of **SHIVAMBU** or U.T. Yes, he is conducting a **"SHIVAMBU UPCHAR KENDRA"** Urine Therapy Centre, a hospital with 15 beds. He has treated more than 6,000 patients suffering from incurable and hard to cure diseases like T.B., **LEPROSY, ASTHAMA, KIDNEY FAILURE, CANCER, DIABETES, HEART DISEASE** etc. in last fifteen years with a missionary zeal. I have seen testimonials of hundreds of patients testifying the miraculous recovery from their maladies.

He is not only a naturopath but also a poet and writer too. Yes, he has written dozens of poems on **SHIVAMBU** and has also written a three Act play *"EKACH PYALA SHIVAMBUCHA"* in marathi language. In the said drama he has given the full information and procedure about U.T. through dialogues in a very interesting and lucid manner.

I am hereinbelow giving his address, so that any delgate, friend visiting India, wishing to avail of his services can do so.

Dr. SHASHI PATIL, A.U.T. of NAT,
Shivambu Upchar Kendra,
Sane Guruji Vasahat, Plot No. 13,
Washi Naka Road: KOLHAPUR-416011 (India).

I know one more such Naturopathy Hospital in Gujrat State which is situated in Baroda, where the patients are treated with U.T. along with naturopathy. It is run by a team of dedicated self less naturopaths with missionary zeal. The address of said centre is also given below:-

Vinoba Ashram,
Gotri Road,
BARODA-390001 (India)

Recently I came across a very exciting recovery story of a person aged 38 years whose name is Surendra Gupta who suffered from severe terminal

osteo-arthritis. I am specifically using the word terminal because not only all his joints had become stiff, but in the last stage his jaw also had stuck up as such he couldn't open his mouth and hence eating food was out of question. He was sent home by the Doctors from **Jaslok Hospital** (A Prestigeous hospital of Bombay) with no hope of survival and was counting his last days.

Accidentally he came across one Urine Therapist named Lajpatrai Agrawal, who guided him to U.T. Within 100 days of treatment with U.T. he completely got rid of his incurable agonising malady. When I met him in the last month in his factory he was so much enthusiastic and thrilled to narrate to me his fabulous recovery story! Today he hasn't got even a trace of that incapacitating malady which had made him bed ridden for five long years!

In the month of December 1988 in Sunday edition of Gujarat Samachar (a leading newspaper of Ahmedabad, Gujarat State)., Thirty three cases of cancer cure, by urine therapy with names and addresses of the patients were reported.

In the book **MANAV MOOTRA** written by Mr. Ravjibhai Patel, testimonials of hundreds of patients are printed with names and addresses, testfying their miraculous recovery from diseases ranging from Asthama to Arthritis and Cancer to Kidney failure.

I would like to tell you a very interesting real story narrated to me by my Guru Kisonlal Tejpal.

There were two ladies, in relation they were daughter-in-law and mother-in-law. Both were widows and were living in a small village named **TULSISHYAM** in Gujrat State. They were of a very helping nature. They had announced in the village that anybody suffering from any disease may take away from them enchanted divine water and drink as medicine will get well. All the village folk young and old were very much benefitted by the divine water and the word spread to adjoining villages. The number of patients increased enormously and both the poor ladies were worried because the source of divine water was very much limited. The secret was that those obliging ladies were distributing their **own urine** mixed with drinking water! One day they disclosed this secret to all the patients and told them to drink their own urine instead of drinking theirs. All the people were very angry on hearing this and were bent upon beating the poor ladies, but were calmed down when they were made to realise that they were benefitted by drinking the urine of the poor, good hearted ladies! All had a hearty laugh.

One more interesting incident comes to my mind.

A friend of mine named Mr. A.B. (I am not giving his identification, as he may not like it). Who is serving on a very high Govt. post, got inspiration from me and started drinking and applying his own urine, without disclosing this adventure to his wife. After only few months of practise his wife commented that he is becoming younger day by day and his hair are turning black.

Still he had no guts to disclose the secret to his wife. I advised him to invite our family for lunch or dinner to their house, so that we can disclose the secret of his youthfulness to his wife, and accordingly on hearing my talk on the subject she has also become a staunch follower and propogator of this incredible therapy!

Friends, I forgot to tell you one more side effect of U.T. that occured in my case. I had gone grey since my child-hood due to heridity. Also I had started balding since few years. Now due to my involvement with U.T. not only my balding stopped, but I am getting black hair at bald places, and also my hair are becoming black. Though the process is very slow but is sure and steady!

Even though this paper is becoming bulky I can't resist the temptation of narrating to you a very thrilling recovery story of a patient who suffered from **Kidney failure**. His name is **Mr. B.C. Desai** aged about 45 years staying in Kandivali, a distant suburb of Bombay hailing from middle class family. About 4 years before he had a kidney trouble and on investigation it was detected that God had forgotten to give him second kidney. Yes, since birth he was living with one kidney only and that too had failed and was kept on dialysis for some time and was told to arrange for a kidney donor and huge amount of funds for the operation and hospitalisation charges. He had no means to undergo Kidney Transplant hence he opted for U.T. very easily. I am purposely using the word easily because his wife was drinking Urine since more than 25 years for keeping herself healthy and fit. So he already knew the fabulous medicinal values of Urine and hence started U.T. sincerely in right earnest under the guidance of a Urine Therapist. When his urine was examined after the treatment of one month the report was absolutely normal, and after the treatment of one month he joined his service. His physicians who had advised him kidney transplant couldn't believe their eyes when they saw that their patient was surviving without dialysis & without transplant! He is hale and hearty today. When I met him at his residence Mr. B.C. Desai himself and his wife both were very much happy and excited to narrate to me and my wife his thrilling recovery story.

While writing this paper my thought goes to one more great soul staying in U.S.A.; his name is **AMARSHIBHAI KHARECHA,** who is a writer and poet, and writes under the pen name *"ANABHIGNA"*. He is a great propogator and exponent of UROPATHY and a friend of mine.

I would like to narrate to you the incident by which he got attracted to this divine therapy, the same being very interesting and inspiring.

About ten years before he suffered from a very peculiar disease. He used to get fever of influenza every three months REGULARLY and would become weaker and weaker after each attack. Inspite of thorough and intensive, investigation, checkup and medication as per latest inventions in U.S.A., doctors could neither stop the reoccurrance of his fever nor could they find the cause of the same.

He accidentally stumbled across this divine therapy and got rid of his persisting malady forever. Apart from getting rid of his gripping malady, as a beneficial side effect he got rid of several small diseases. He got rid of his ear, eye and teeth trouble; At the age of 72 his teeth are so strong and healthy that he can devour one full sugarcane with his bare teeth!

Since the time he recovered from his mysterious sickness, it has become his mission of life to spread and propagate the message of this Divine Therapy.

When he came to know that Mr. Ronald Reagan was suffering from Cancer he had written a letter to him infroming him about the fabulous medicinal values of Urine and had sent him the book "SHIVAMBU KALP", written by Arthur Licoln Pauls. Looking to his fabulous recovery from cancer and his fine health, it is possible that Mr. Reagan might have taken a hint of Uropathy from our Mr. Kharecha and may have practised it!

I can't resist my temptation to narrrate to you one more very interesting and thrilling story of one cancer patient that had appeared in one Indian newspaper. One Mr. Bachubhai Galia staying in U.S.A. had cancer of liver and had spread to other parts of his body. His daughter being a doctor practising in States he was frankly told that there is hardly any hope of his survival. He had faith in Uropathy, so he came to India, got guidance of his treatment from Mr. Morarji Desai and strictly did Urine Therapy treatment for few months, got rid of his cancer and went back home in U.S.A. His physicians were utterly surprised to find their patient's incredible recovery! I have got the xerox copy of his thrilling recovery story with his photograph!

A very strange incident comes to my mind which might interest you very much.

Few months ago one doctor Mr. A. B. C. M.B.B.S., M.S. (I am not giving his identity for obvious reasons) practising as an E.N.T. specialist was introduced to me through a doctor friend of mine. I passed on the message of Uropathy and gifted him few books on the subject as per my usual habit. He gets patients for E.N.T. troubles from his doctor friends practising as general practitioners, complained to him that the patients which were referred to him for E.N.T. trouble never returned to them for any other treatment thereafter! The secret behind this strange happening was that my friend Dr. A.B.C. not only cured the E.N.T. troubles of his patients with Uropathy but also advised them to practise it for their other ailments.

When he met me in the last month after my introduction to him, he bowed down before me and said, "You have become my *GURU* for initiating me to this Divine Therapy! I have successfully tried it on not less than hundred patients not only for E.N.T. troubles, but on other ailments too chronic and acute!" I am happy and glad to get such an enthusiastic, courageous and open hearted doctor as a disciple of *CHELA*.

Friends, during those four years of my deep involvement with Uropathy, I have come across numerous strange, interesting and miraculous incidents

which I feel like telling to you, but because of limitation of time and space I must stop talking Random and Rave.

SOMETHING ABOUT ME

Friends, before I conclude this paper I would like to tell you something about me, which might surely interest you.

I am Advocate and Tax consultant practising in Bombay (India) I will be completing 60 on 14th October 1989. I have been keeping excellent health by practise of Yoga and Pranayama since more than 40 years, and now I am **growing younger** day by day because of my deep involvement with "*SHIVAMBU*" or **UROPATHY!** Yes, I am having the energy and stamina which I didn't have even in my young age! I jog 5 km. daily as a matter of routine. (De-aging phenomenon of Auto Urine Therapy).

I am fond of music, singing, sports, spiritualism, Photography, reading, writing, gardening, swimming, driving. I am enjoying every moment of my life. I sing Bhajans and play flute and even dance with my wife and children, and have received first prizes in dance competitions (Dandias) on several occasions. If I get sponsorship I intend to take part in the next Himalayan Car Rally which is one of the World's toughest car rallies. I occasionally go for swimming deep into the Arabian sea with my two children. But now because of my deep involvement in Urine Therapy most of my time is consumed by my mission to spread the knowledge and guidance of this wonderful therapy and thereby serve the ailing humanity in my humble way.

In the year 1983 on completion of 25 years of my tax consultancy, my clients had honoured and felicitated me for my sincere, devoted and honest service to them for over a quarter century. For that occasion they had arranged a grand dinner-cum-dance programme in which around thousand people had taken part. I have never treated my clients as clients but as friends. **To** them I am a **friend, philosopher** and **guide**, and now I am **PHYSICIAN** too!

There won't be slightest exaggeration if I say that I am a blessed soul! Friends I am going to live long and die young! De-aging effect-of uropathy!

For the purpose of propogating the knowledge of this therapy in the four corners of the Globe I have proposed to establish a charitable trust in the name of **"WATER OF LIFE FOUNDATION (INDIA)".**

I am freely available for lectures, seminars and consultations on urine therapy. I don't charge any fees for all the above work, which is a part of my Mission. Any one wishing to invite me for further information guidance and lectures, on the therapy in their country he/she may contact me on the address and phone nos. given below.

I am herein below giving the address and phone of the foundation, so that any one wishing to make a donation for the noble cause of propogating the

knowledge of this wonderful therapy in the four corners of the world and for eradicating disease from our planet, can act upon it.

Such contribution and generosity will be highly appreciated.

WATER OF LIFE FOUNDATION INDIA) (Proposed)
Chairman G.K. THAKKAR,
377-B, J.S.S.Road,
BOMBAY-400 002 (India) Phone:- (022) 290168 & 4229259

From Athens I am proceeding to U.S.A. to meet my only daughter and son-in-law who have settled there since few years, are staying in Germantown near Washington. The other idea of visiting States is to meet those two young, courageous and bold ladies, **Dr. Beatrice Bartnett** and **Margia Adelman** who are doing commendable and noble work of spreading the knowledge of this therapy, and doing valuable research on the same. I am in intimate correspondence with them who are like my adopted daughters. We are planning to start one Internatonal news letter on Urine Therapy. Also in our minds there is an idea of organising an International Urine Therapy conference in the near future. They have arranged my few lectures in States.

My visit to Athens and U.S.A. is sponsored by my friends and admirers who are in plenty! I hereby express my deep gratitude and thanks to them. My special thanks to my friends Sudarshan Dheer, Dr. C.M. Desai, Dr. Shashi Patil and Chandrika Prasad Shastri for the valuable suggestions made by them while writing this paper.

And last but not the least my profound and hearty thanks are due to Dr. Sir Anton Jayasuriya and the Senate of the Open International University of Complimentary Medicines for their kind invitation extended to me for presenting my paper before this congress and for honouring me with the Degree of Doctorate of Medicines.

I will conclude this paper with a passagge from a marvellous book written by **Dr. Arthur Lincoln Pauls** named **SHIVAMBU KALPA.** This is the book which inspired and inducted me into this wonderful therapy.

"This book however, will attempt to show why we should place the blame where the fault lies, within overselves. To quote Shakespare, "the fault lies not in our stars but in overselves, that we are underlings". Even if it is true that we lead 'Karmic' existence. **It is no excuse for walking around with closed eyes.**"

"It should not surprise us that the situation is as it is. Anything created with a vested interest in mind is open to all sorts of corruption, especially when it deals with the emotions and fears of man, as healing undoubtedly does."

"Abraham Lincoln however had a line for it." "You can fool some of the people all of the time, and all of the people some of the time, but you **can't fool ALL THE PEOPLE ALL OF THE TIME".**

So friends I rededicate this small booklet to those who are tired of being fooled, and are placed in hopeless situation with the hope that they will heal themselves by their own medicine.

Thank you,

Jai Hind

G.K. THAKKAR,

After the format of this paper was ready accidentaly I came accross a great soul by named Mr. Ashok Gaonkar who is an enthusiastic propogator of UROPATHY. He gave me a xerox copy of a newspaper cutting with a caption SAGA OF A GIRL WHO DEFIED DEATH, which had appeared in a leading newspaper of Bombay. The mysterious recovery story of the girl named Bharti Katbamna is so thrilling and hair raising that I am tempted to give the **gist** of the same in this paper with the kind cooperation of my printer Mr. Ramesh Radia.

The girl aged 23 was studying Speech Therapy in Nair Hospital Bombay, on finding a huge blood clot on her tongue was told by her doctors that she is suffereing from a mysterious disease known as IDEOPATHIC THROMBOCYTOPENIC PAERPURA which is even difficult to pronounce. In this disease Pletlet count drops dangerously low preventing the clotting of the blood. It results in bleeding from all orifices of the body. It could result in bleeding in the brain and resulting in death. For this horrifying Mysterious disease there is no known cure except STEROIDS! After trying Allopthy she also tried Homeopathy with no result.

At last her friend gave her the book WATER OF LIFE. On reading the same she courageously did Urine Therapy, and within a week she started feeling energetic, and in six months of treatment she regained Radiant health!

At present she is doing her Ph.D. in Audiology in America with no sign of the horrifying direase! She says "Not all the tests in America have been able to prove that I had this incurable disease" and further affirms "I must be the only person in the world with this disease, living without the aid of STEROIDS"! She is not aware that by drinking her own urine she was getting STEROIDS in its most harmless and natural form!

My new friend Mr. Gaonkar tells me that after reading the above story he has come accross few cases of this type of disease which he has cured by Uropathy!

The above story proves my small point that Urine is a Universal Cure!

BIBLIOGRAPHY

1) The Miracles of Urine Therapy with special section of AIDS by Dr. Beatrice Bartnett and Margie Adelman.
2) Shivambu kalpa by Dr. A.L. PAULS.
3) Manav Mootra (Auto Urine Therapy) by Raojibhai Manibhai Patel.
4) AMAROLI by Dr. Swami Shankardevanand Saraswati M.B.B.S. (Syd.)
5) The water of Life by J.W. Armostrong.
6) Shivambu cure, (Guide to Treatment and diet) by Dr. Pragji D. Desai, M.B.B.S.
7) Swamutra Chikitsa (Hindi) by Chandrika Prasad Mishra 'Shastri'.
8) Miracles of Urine Therapy by Dr. C.P. Mithal M.B.B.S.., MD.
9) Auto Urine Therapy by Dr. Pragjibhai Rathod.

DRA-1.

Mixing medicines

Union Health Minister C.P. Thakur's move to introduce Indian systems of medicine into the MBBS curriculum raises a controversy.

PURNIMA S. TRIPATHI
in New Delhi

FIRST it was Dr. Murli Manohar Joshi, the Union Minister for Human Resource Development, who bulldozed his way into the University Grants Commission (UGC) syllabus with a course in astrology. Now it is the turn of Union Minister for Health and Family Welfare C.P. Thakur to have his way with higher education – he wants to introduce a course in Ayurveda, Unani and Siddha in the MBBS curriculum. Impressed by the popularity of the Indian systems of medicine abroad, the Minister is all set to see his project through.

The move flouts medical ethics and a Supreme Court order which prohibits simultaneous practising of two systems of medicine. But that will not hinder the Minister's grandiose plans. "We are proposing wide-ranging changes in medical ethics for this," said a Health Ministry official. The Health Secretary will soon hold a meeting to evolve a consensus in this regard, the official disclosed. The government also proposes to approach the Supreme Court for a review of its judgment.

Consultations are under way with the Medical Council of India (MCI) to define the modalities of the order. In its letter dated November 30, 2000, the Ministry asked the MCI to "take necessary action to include the basic principles and concepts of Ayurveda, homoeopathy and Unani in the curriculum for MBBS students". The matter was discussed by the executive committee of the MCI on January 22 and a sub-committee was formed. "It is too important an issue to be decided by an individual; so a sub-committee consisting of two Vice-Chancellors and the principal of a medical college was formed," MCI secretary Dr. Manju Sachdeva told *Frontline*. The sub-committee got in touch with Vice-Chancellors and the principals of medical colleges across the country to elicit their opinion on the matter. Dr.Sachdeva said that in view of the importance of the issue, it would finally be decided only by the general body of the Council – which could take time.

Meanwhile, the Ministry of Health and Family Welfare has made necessary preparations to present the Minister's idea as part of the new health policy that will be unveiled in the monsoon session of Parliament. A meeting of State Health Ministers is scheduled to be held in New Delhi on July 12 to apprise them of the government's "look back to the roots" policy and discuss the changes proposed.

Disclosing this, C.P. Thakur told *Frontline*: "There is a need to sensitise students of allopathic medicine to Indian systems of medicine like Ayurveda, Unani and Siddha. We propose to include the teaching of Indian systems of medicine at the MBBS level in the All India Institute of Medical Sciences (AIIMS) on an experimental basis."

Since Dr. Thakur himself is a practising doctor, he is aware of the hiccups ahead, such as the problems that would be caused by medical ethics which prohibit the mixing of two streams of medicine by a doctor, and the Supreme Court order. "This was done to prevent quackery. But done properly, the two streams of medicine can be practised together with great results because the medicines prescribed in the Indian system do not have any side-effects", Dr. Thakur said. "We have sent a proposal to the MCI for an opinion. Once the government's proposal is finalised, the Supreme Court will be approached for a review of its judgment in this connection," he said. The plan could start unfolding by the end of this year and the Health Minister is confident of its success because as he says, "the Prime Minister himself is keenly interested in the promotion of the Indian systems of medicine."

Union Minister for Health and Family Welfare C.P. Thakur.

According to Dr. Thakur, the Indian systems of medicine have a great potential but they have not been exploited to their full potential yet. Besides, there is a great demand for Indian medicines abroad. "In two-three years' time we can export medicines worth Rs.5,000 crores. The potential is such that in five years' time we can increase our export to Rs.10,000 crores," he said.

The Minister said that the government had decided to set up a medicinal plant board, which would be based in New Delhi. The board will be headed by the Health Minister and will have representatives from the agricultural and forestry sectors. It will identify areas where medicinal plants can be grown and encourage farmers to take up the cultivation of these. For instance, Dr. Thakur said farmers who grew tobacco or opium at present would be encouraged to shift to medicinal plants which would fetch them similar returns. The board would have a corpus of Rs.100 crores at its disposal, which would be utilised to strengthen the infrastructure for dissemination of knowledge, modernise units engaged in the production of Indian medicines to facilitate export, and so on. The government also intends to introduce Good Manufacturing Practice (GMP) for the standardisation of Ayurvedic medicines. At present there is no system for

standardisation of medicines distributed by *vaidyas* and *hakims*. The Minister said this created a problem of credibility, which would not be there once the GMP came into effect.

The government also plans to grant more funds to the three existing Ayurvedic universities – Varanasi, Jamnagar and Jaipur – and strengthen colleges that are currently engaged in the teaching of Indian systems of medicine. The Minister feels that this stream of medicine has remained neglected by the medical fraternity. "There is great demand for our medicines in foreign countries," he said. He said that at an exhibition relating to alternative systems of medicine organised by the United Nations Health Conference in early May, in which 170 countries participated, the interest shown in the Indian system of medicines was overwhelming.

Outside the All India Institute of Medical Sciences in New Delhi. Opposition to the proposal to alter the medical education curriculum is growing among the faculty.

THE Minister's move has brewed a political controversy. Incensed faculty members of the AIIMS charge that they are being treated like guinea pigs. They have termed the proposal "yet another political gimmick" by the government to woo the votaries of Hindutva. "The Minister does not know what he is talking about. The two systems can never be mixed because they work on altogether different premises and different concepts," said a senior AIIMS official. Besides, the Minister cannot treat the AIIMS like his political laboratory; it is an autonomous institution created by an act of Parliament, and any changes in its basic structure would have to be approved by Parliament.

Officials of the AIIMS refer to the marathon debate in Parliament in February 1956 that led to the establishment of the institute. The then Health Minister, Rajkumari Amrit Kaur, had clearly and categorically said that the institute would teach only modern medical sciences. Replying to the suggestion by several members in the Lok Sabha on February 18, 1956 that the institute also take up the teaching of and research in Ayurveda and homoeopathy, she said: "This is an institute for the modern system of medicine and it cannot include any other system." But when several members, including Mohanlal Saksena from Lucknow-Barabanki, persisted with the demand to refer the Bill to a select committee, the Deputy Speaker had ruled: "Homoeopathy will have another institute. I am told by the Hon. Minister that similar institutions for Ayurveda have already been established elsewhere. Under these circumstances there is no purpose in referring the Bill to a select committee because it is a question of principle and policy."

Against this background, it is difficult to imagine how the Minister is going to implement his agenda. But he appears determined to go ahead. "The Director (of AIIMS) has been consulted and the process is on," said a Health Ministry official. The AIIMS administration, however, cites lack of funds to maintain the existing infrastructure and shortage of space to house its current manpower as also the fact that hazardous chemicals meant for its laboratories now lie in the corridors at great risk to people, to press the point that the idea of having more faculty members (to teach Ayurveda, Unani and Siddha) was not feasible.

The MCI too appears unsure about the proposal. "Understanding the basic principles and concepts of just one system takes so much time and effort. How will the students do it for two streams, which are based on different principles and concepts? It does not appear a very practical or feasible idea. It is more political in nature," said a senior MCI official.

THE votaries of the Indian systems of medicines, however, are delighted. "Better late than never," said a senior faculty member at the Jamia Hamdard University, where Indian systems of medicines are taught.

"This will remove prejudices about the system of medicine we practised and give us credibility. Besides, it will only be good for the patients because the two systems can actually complement each other without interfering with the line of treatment because Indian medicines have no side-effects," said Prof. Jameel Ahmad, Dean, Faculty of Unani Medicine at Jamia Hamdard. According to him and many others who think likewise, it is high time the government recognised the relevance and importance of the Indian systems of medicine and did something to promote them.

DRA – 1.

AN EXPLORATORY STUDY
FOR ASSESSING THE POSSIBILITY OF
POOLING BENEFITS FROM
DIFFERENT SYSTEMS OF MEDICINE

(A BRIEF OUTLINE)

Introduction

1. Around the world, there are a number of recognized systems of medicine. While most providers of health care in India restrict themselves to the use of only one of these, some ***use more than one system***. Moreover, many consumers of health care, on their own, tend to ***choose*** from the basket of services available from the different systems. These clearly indicate the ***existence*** of some ***providers*** and ***consumers*** who ***earnestly believe*** that each system of medicine has its own successes and failures. It is their case that a ***judicious use of different*** systems, with the approach of ***"pooling benefits",*** can be ***more helpful***. Expanding the idea further, one could set the long-term goal of an ***"ideal health care system"*** in which any person with a health problem can approach the "family health provider" and get the best possible care from the provider's health care system. Alternatively, he / she may be referred to another provider (or providers) practicing another system, to ensure delivery of a ***holistic*** and ***comprehensive health care*** as appropriate for the problem. Practitioners of different systems of medicine ***would accept*** this ***pooling approach***, only when they have ***convincing information*** on the comparative strengths and weaknesses of each system vis-à-vis each health problem. Therefore, ***obtaining such information deserves high priority.***

2. At present, physicians have very little ***knowledge*** for ***choosing*** the ***best option*** out of those available from the different systems of medicine. Further, the ***consumers*** of health care have been ***left to themselves*** for making the choice between different systems without any scientific information enabling them to make an ***informed choice***. They are even misguided at times by physicians because of some ***prejudices*** and / or the ***higher priority*** given to a particular system, owing to the ***loyalty*** to their own system. It is also possible that the practitioners' behaviour is in conformity with the specific requirements imposed by the guardians of the respective systems, as well as the laws of the land (e.g., rules under the Indian Medical Council). It is understandable that physicians in general lack the ***wider vision*** needed for providing the best care to their ***trusting*** clients, encompassing ***all*** the available recognized ***systems***.

3. Moreover, practitioners of different systems of medicine need a ***change*** in ***mindset***. They ought to realize that ***all systems*** are ***noble*** professions with the common aim of providing health care to the needy and have ***survived*** for years because they had the requisite ***support*** of ***satisfied customers*** for ***a long time***. Decrying any system without an in-depth study of the actual effectiveness of that system is ***unscientific*** and ***biased.***

4. A ***series*** of ***scientific studies*** on the effectiveness of each system vis-à-vis each health problem and wide dissemination and discussion of these findings are ***necessary*** to change this mindset, which has been deeply ***entrenched*** for a long time. The objective is to create an ***understanding*** and ***conviction*** resulting in co-operation for ***pooling of benefits*** from available systems of medicine by ***providers*** and in ***choosing*** of the system appropriate to the health problem, by ***consumers.***

5. These studies have to cover all aspects of health care viz., curative, preventive and promotional. It is proposed to take up studies on curative aspects first. Further, to start with, these may be restricted to three well-known systems of medicine used in India viz., western medicine (allopathy), ayurveda and homeopathy. Thereafter, other systems of medicine could be investigated. Another set of studies will be required to get similar information with regard to preventive and promotional care provided by different systems of medicine.

6. Adequate ***information*** is ***not available*** for proper ***planning*** and ***designing*** of even studies on curative aspects. Further, some basic questions about differences in diagnosis (labeling) of disease by physicians of the different systems and methods used for evaluating the effectiveness of treatment have to be answered to the satisfaction of all physicians.

7. Therefore, a necessary first step in the series of studies on curative aspects is to conduct an ***exploratory study*** that can throw light on (1) all such questions and (2) the comparative effectiveness of treatment options available from the three selected systems, for ***diseases*** that are quite ***common***. The ***focus*** on the more ***common diseases*** will help in pooling the benefits from different systems to ***reduce*** the ***sufferings*** of the ***maximum number of people*** and thereby increase the popularity of this pooling approach. This, in turn, will help to create a demand for extension of this approach for treatment of all diseases as well as to preventive and promotional care.

8. A by-product of this exploratory study will be information on (a) the prevalence of less common diseases (including epidemiologically important diseases) and (b) the incidence of serious and life-threatening disease occurrences, including those requiring emergency care. This information could also be used to plan well-designed studies to ascertain the comparative strengths and weaknesses of different systems for tackling these less common diseases or those posing emergencies.

9. The proposed exploratory study, and a series of studies which ought to follow on curative as well as preventive and promotional heath care, have the ***potential*** to ***revolutionize*** the ***delivery of health care*** and make it possible to achieve the ***long term goal*** of establishing the ***ideal health care system,*** which objectively pools benefits from different systems of medicine.

Objectives of the exploratory study

10. The objectives of this exploratory study are:

(1). to investigate the ***acceptability*** of western medicine, ayurveda and homeopathy among patients suffering from various diseases in the study area.

(2) to identify the diseases, if any, for which physicians from the above three systems would themselves like to ***refer*** the patient to a physician of another system.

(3) to identify the ***best treatment option*** out of those available from these three systems, for each of the diseases occurring commonly in the area and to study which of these best options are likely to be ***accepted*** by the physicians of all the three systems without any further investigation.

(4) to provide at least a ***preliminary assessment*** of the relative merits and demerits of the following four methods of evaluating diagnosis and treatment:

a) diagnostic tests before and after treatment (this may not be feasible for all diseases and all systems)
b) judgment of physicians regarding prognosis or cure
c) ascertaining from the patient the extent to which suffering / symptom has been reduced / eliminated [this is subjective but important from the patient's (sociological) point of view. If all patients ***accept a treatment as beneficial*** for a particular disease, a scientific evaluation may be needed only to ascertain whether there are any long-term ill effects of the treatment.]
d) study relapse rates and possible short-term adverse effects of the treatment.

(5) to provide some idea about the ***cost*** and ***duration of treatment*** and other factors which are important for the patient and may ***influence acceptance*** of the best and second best options.

(6) to identify, to the extent possible, ***adverse effects*** of treatment, if any, which need to be further investigated.

(7) to suggest ***suitable designs*** for further studies on epidemiogically important diseases for which best possible options could not be ascertained from this exploratory study because of inadequate sample size.

Study Area and Population – Design of the Study

11. The study is proposed to be carried out in rural areas to start with because the established treatment practices of large number of providers in urban areas are likely to interfere with the treatment given under the study. This choice has been made despite the much higher cost involved as well as longer time required for a rural study. The study is proposed to be carried out around Bangalore, south India. The total study population will be about 36,000 spread over 16 clusters of villages, with population of about 2,250 each, situated in four different directions and at varying distances from Bangalore.

12. For organizational and operational convenience, an entire cluster of villages will be allotted to each system of medicine. This allotment of entire villages to study one system may influence the reporting of acceptance pattern by patients. In order to study this aspect, each individual patient will be offered a choice between the three systems of medicine in another set of clusters of villages.

13. A study population of 36,000 has been chosen to have a fairly large number of sick persons for treatment under each system and to cover sickness during all seasons. The entire fieldwork for the study (implementation part) will be completed in about one year. Evaluation of effectiveness of treatment, analysis of data and preparation of report may take another 18 months.

Ethical considerations

14.The ***treatment*** of patients in the study will be ***strictly according to the practices*** adopted by the three ***recognized*** systems. ***No experimentation*** with new medicines or using another system will be allowed. An ***informed consent,*** in writing, will be taken from the patients about their acceptance of treatment from the system chosen. Those who do not accept will be offered treatment elsewhere under the system of their choice or referred to a suitable health facility. Emergencies and life-threatening problems will be suitably advised / referred. Thus, the design and conduct of the study will ***fully satisfy all ethical considerations.***

Technical Advisory Committee

15. A 10-member committee consisting of experts from the three systems, holistic medicine, sociology, statistics, clinical pathology, and the Consultants at the central office will provide guidance and advice at planning and implementation stages and at the time of finalizing the interim and final reports of the study.

Utilization of Results

16. The results of this study are likely to provide:

(a) the ***best treatment options*** available from the three systems of medicine for diseases that are ***common*** in the study area.

(b) a ***starting point*** for proper dissemination of these findings and utilization of these best options in a planned manner for diseases that are common in the study area.

(c) ***information for planning*** further studies required for (i) obtaining the best treatment options for some other diseases and (ii) for further confirmation of the findings, whenever needed for wider acceptance.

(d) the pattern of ***acceptance*** of the three systems by the people and the ***opinion*** of the physicians about non-availability of treatment for some diseases under their system

(e) useful ***ideas*** for planning the ***strategies*** and ***follow-up actions*** needed for obtaining ***wider acceptance*** of the ***best options*** by physicians, the regulatory bodies of the different systems as well as the people.

In all, the findings of this ***exploratory study*** are expected to lay the ***foundation*** and be a ***small step*** for the much ***bigger efforts*** required for achievement of the ***final goal*** of the ***ideal health care system*** that ***pools benefits*** from different systems of medicine, as envisaged in paragraph 1 above.

Cost

17. The total cost of the study may be about Rs.27 millions (27,000,000). (At an exchange rate of Rs.44 per $, this amounts to $.6,14,000.) This is calculated on the basis of April 2006 prices for goods and services in

Bangalore and may need revision at the start of the study. If the required sanction and clearance are delayed by more than six months, a cost escalation at the rate of 10% per year will become necessary.

18. A first installment of 30% may be released soon after the approval of funds by the funding agency and receipt of the necessary local clearances for conducting the study. A second installment of 25% may be released after three months from the start of the study. Other installments will become due on receipt of the later reports viz., 15% each after the 6-month and 12-month reports, 14% after the 18-month report and 1% after the full report.

EACH CULTURE HAS CATERED TO ITS NEEDS WITH AN INDIGENOUS RESPONSE

A WIDE SPECTRUM.....
DIFFERING LEVELS OF SOPHISTICATION

SYMBIOTIC
INTER-ACTIVE

FORMALIZED

- Strong Philosophical bases
- Theoretical framework well organised / recognized

→ Consistently validated in practice

→ Time-tested – many over 3000 yrs.

WELL-DOCUMENTED { Principles / Practices } Reviewed & Updated regularly.

AYURVEDA
SIDDHA
UNANI
YOGA
NATUROPATHY
HOMOEOPATHY

Recognized by Government of India

ACUPUNCTURE / ACUPRESSURE – Chinese
'AMCHI' SYSTEM – Tibetan
ENERGY HEALING – Pranic / Reiki / Johrei

NON-FORMAL

- Non-homogenous
- Localized
- Remedial

Tribal / Folk / Home / Herbal remedies.

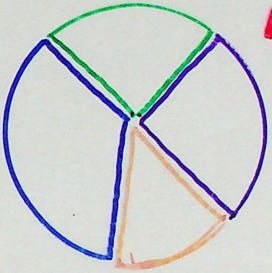
All these are widely practised in our country!!

Are we cursed or blessed?

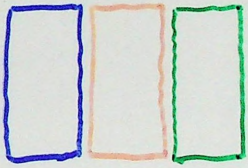
INTEGRATION OF ALLOPATHIC MEDICINE WITH TRADITIONAL SYSTEMS OF MEDICINE

TO INTEGRATE means

- to combine or form parts into a whole



Also, to bring or come into equal partnership

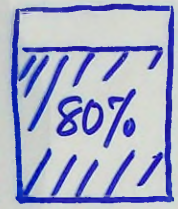


PRIMARY AIM

- to develop a system of Health care that enables

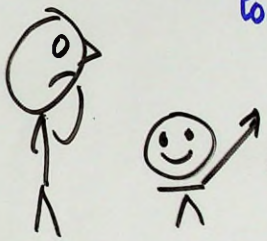
- National Health care system responsive to { peoples needs esp. poor.

1. CURATIVE / REMEDIAL LEVEL



- First aid
- Minor illnesses
- Chronic illnesses

A pill for every ill → to → an injection for every ill.



Modern medicine is good for
- Emergency / critical care
- Surgery
- Immunization
- Diagnostics

Yes – by co-operating for peoples health.
- by wise promotion / use
- by helping people understand
- by making yourself more accessible / available / affordable
- by utilizing the 'Established'.

2. At promotive, preventive, rehab:

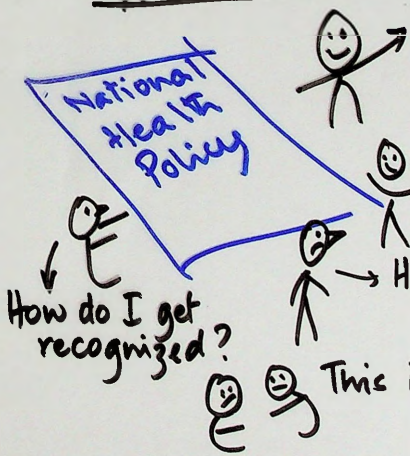
Cultural resonance
Individualization
Holistic approach
} favour TSMs

Develop
- Public Health perspective
- National Health program needs

Go into / Nutrition / Healthy life styles / Disease prevention.

3. Opportunities:

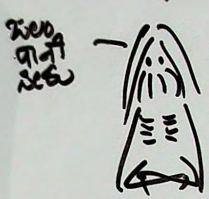
- recognizes some formalized systems
- encourages 'vertical' development.



We're interested. It's affordable!
It's decentralized!
We can participate!

What needs to be done:

a) Demystification:



He means.... drink more water

Why the jargon?

b) Education:

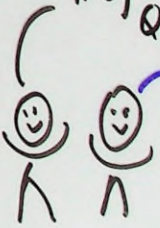
It's not so difficult after all! I need not loose sleep!

Get him to understand you

It is science .... only ... it's different!

It is 'scientific' too!

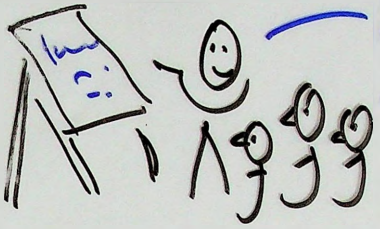
c) Quality Standards:



They're looking into Quality Standards

Now, I'm happy!

d) Rational use:

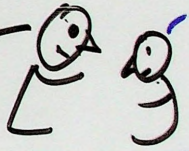


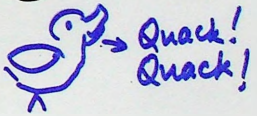
Let's be practical.

Here's the answer!

e) Grey areas:

Placebo / Nocebo
this is how it is used.





CONCLUSION:

- Address peoples needs
- promote positive { life values
- help people participate
- focus on - poor
  - needy
  - rationality

ALTERNATIVE PERSPECTIVES ON HEALTH & HEALING.

HEALTH = HARMONY.

WHY DO WE HAVE SYSTEMS OF MEDICINE?

→ TO MAKE SENSE OF DEATH & SUFFERING.

FUNCTIONS OF A HEALER:

↓ suffering
making sense of suffering.
} can be by different methods.

WHY DO WE NEED DIFFERENT SYSTEMS?

→ Importance of diversity.

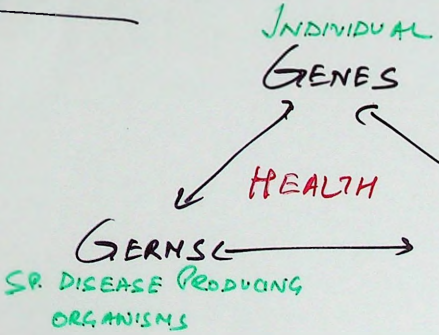
→ eg Biodiversity & food security.

⇒ PEOPLE HAVE DEVELOPED SYSTEMS OF MEDICINE DEPENDING ON THEIR PARTICULAR WORLD VIEW

⇒ EVERY SYSTEM OF MEDICINE IS THEREFORE LEGITIMATE

⇒ DIFFERENT SYSTEMS OF MEDICINE MAY HIGHLIGHT SPECIFIC AREAS OF HEALING / PHILOSOPHIES OF HEALING DEPENDING ON THEIR WORLD VIEW.

ALLOPATHIC



- Cause → Effect → looking at this in isolation
- objectivity over subjectivity
- claiming that this is the only science.

QUESTIONS ?!!!

Study of the effect of Prayer on Patients who sufferred from a Heart Attack

→ lesser pain killers used
→ lesser anxiety
→ shorter hospital stay

Trees and gallbladder surgery

→ lesser pain killers.
→ shorter hospital stay.
→ lesser surgical complications.

Reversal of atherosclerosis - Dean Ornish

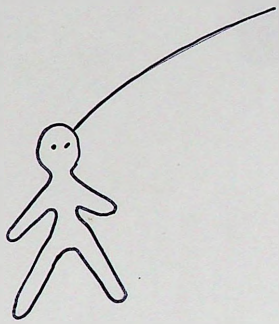
→ Angiogram proven reduction in block.
→ no requirement for surgery.

Stydy of temple Healers in acute psychosis - NIMHANS

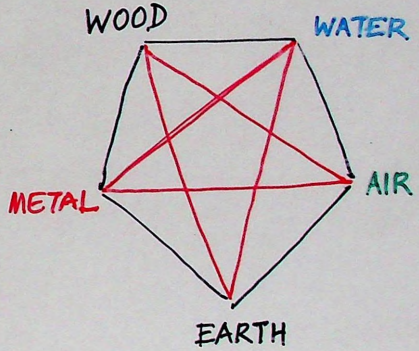
→ more efficient.

Schumacher's classific^{n}.

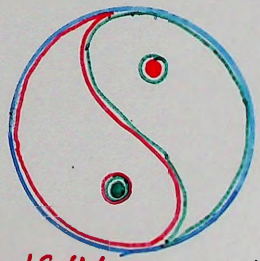
M = mineral



ACUPUNCTURE
ACUPRESSURE
SHIATSU
TAI CHI
FENG· CHI



Qi°
Tchi°

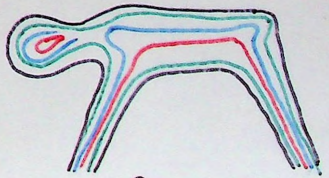


YIN
-ve / Moon / Soft / flowing /

YANG
+ / Sun / Hard / viscous /

+ Magnetotherapy
Herbal Medicine

MERIDIANS
LUO
AH-SHI
JINGWELL



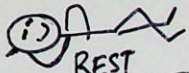
PRANA
IN THE BODY.

PRANA & THE PHYSICAL BODY

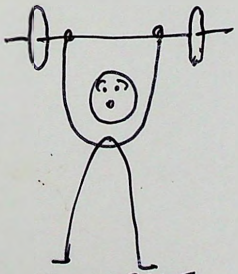
FOOD

- TIMING
- REGULARITY
- QUANTUM
- TYPES

LEISURE IS BEST ENJOYED WHEN THERE IS HARD WORK BOTH BEFORE & AFTER IT.
– Edison



REST & RELAXATION



EXERCISE

- WHAT?
- WHEN?
- HOW?
- WHY?
- WHERE?

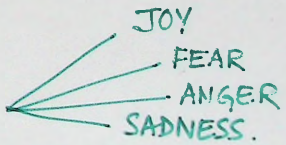
WORK

- POSTURES
- EFFICIENCY
- STRESS
- WORKAHOLISM / GOOFING OFF.

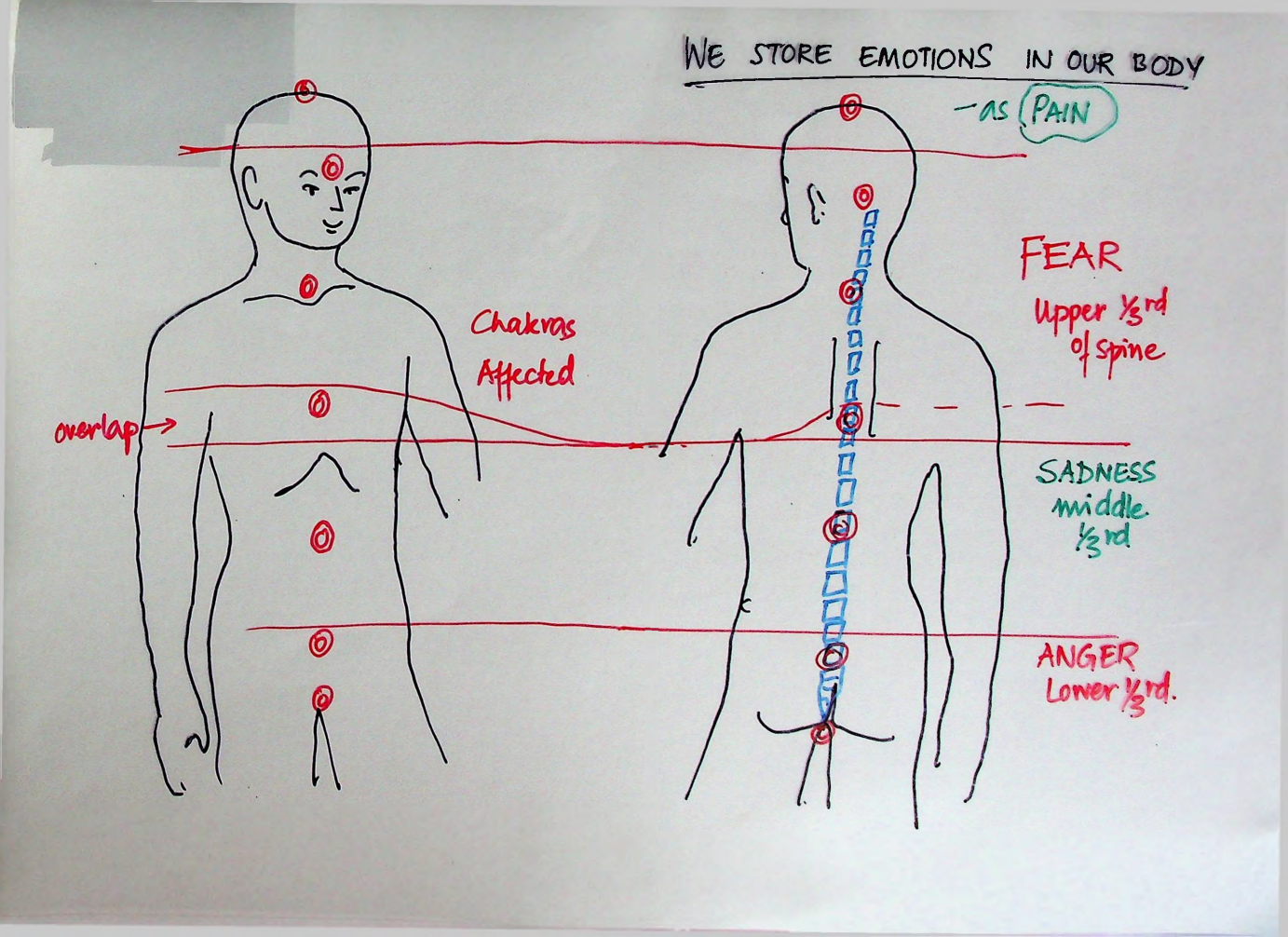
PRANA & THE MIND

GNANAMAYA KOSHA	INTELLECT	HEAD	LEFT BRAIN	CONSCIOUS
MANOMAYA KOSHA	EMOTION	HEART	RIGHT BRAIN	UNCONSCIOUS

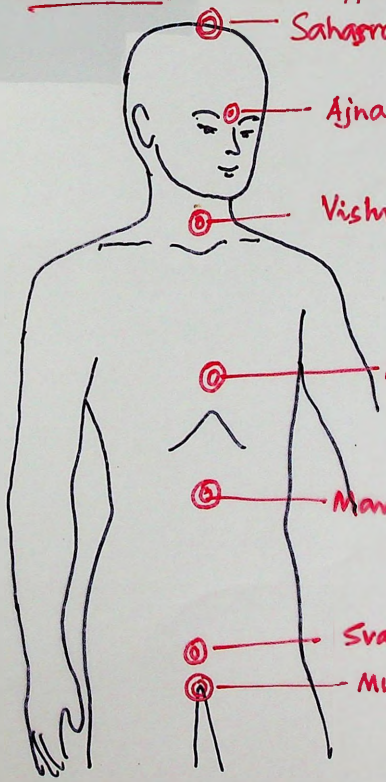
~ The Hierarchy.
~ 'BALANCE'.
~ I.Q. & E.Q. / EMOTIONAL INTELLIGENCE
~ THE 4 CHANNELS OF EMOTION



~ THE BODY-MIND.


WE STORE EMOTIONS IN OUR BODY
- as PAIN
FEAR
Upper 1/3rd of spine
Chakras Affected
overlap
SADNESS middle 1/3rd
ANGER Lower 1/3rd.

CHAKRAS - ENERGY VORTICES



- Sahasrara — VERTEX — TRANSCENDENTAL
- Ajna — FOREHEAD
- Vishuddha — THROAT

THOUGHT & EXPRESSION

- Anahata — HEART
- Manipura — SOLAR PLEXUS

INTERNAL REGULATORY

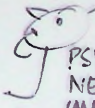
- Svadishthana — SEX
- Muladhara — BASIC

SURVIVAL

NERVE PLEXUSES AND ENDOCRINE GLANDS are at these locations

THEY CONTROL IMMUNITY & OTHER BODY REACTIONS

The Brain is connected to all these



So, that's PSYCHO-NEURO IMMUNOLOGY

LEARNING FROM ALTERNATIVES for better CHALLENGES HEALING

~ to consider / give due importance to...

1.	QUALITATIVE	Quantitative
2.	SUBJECTIVE	Objective
3.	CLINICAL data	Diagnostic aids.
4.	PLACEBO/NOCEBO/ HAWTHORNE/ FACTOR 'X' effects	Rational therapy
5.	HEALTH focus PREV. / PROM. / REHAB.	Disease - CURATIVE
6.	CULTURAL & SPIRITUAL DIMENSIONS	Physical / Mental / Social
7.	HEALING & HOLISM	Sectored approach
8.	PATIENTS PERCEPTIONS & ABILITIES	Physician's percep^{n} & abilities
9)	PATIENT PARTICIPATION IN HEALING	Medical team efficacy
10)	FAMILY / PEER CONTRIBUTION to HEALING	PATIENT'S EFFORTS & CO-OPERATION

~ A JUDICIOUS / OPEN-MINDED SYNTHESIS OF ALL FACTORS LEADING TO HEALING & WHOLENESS!

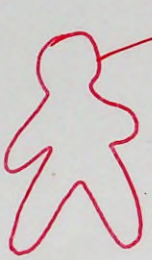
'NOCEBO' effect

- the negative (-ve) placebo.

- accompany all illness
- aggravate " " manifestations
- RETARD Healing processes.

'NOCEBO' effects are to be avoided.

M+X = plant



WE NOW UNDERSTAND -----

Humility
- the first step

'HEALING' is a WIDE concept.

Open-mind
- the next...

ESTABLISHED practices
are valid tools....

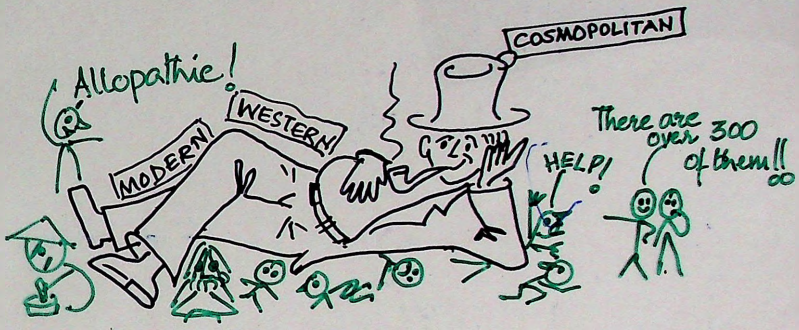
We do have the RESOURCES with us!

We CAN evolve answers!!

"IT MATTERS LESS WHAT TYPE OF DISEASE A PATIENT HAS, THAN WHAT TYPE OF PATIENT HAS THE DISEASE."

-HIPPOCRATES

HEALTH CARE & ALTERNATIVE SYSTEMS OF MEDICINE



- DOMINANT
  Historical { medicine for the 'company'
  medicine for the elite.
  medicine for people.

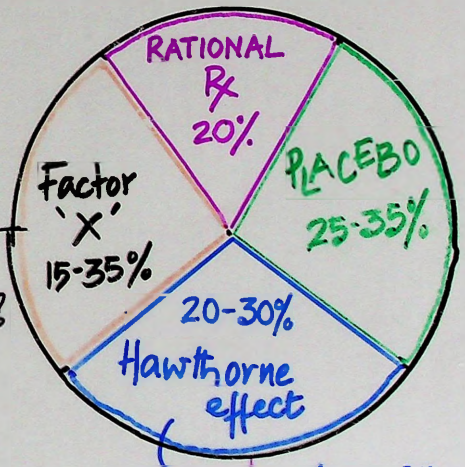
- DETERMINES our NATIONAL HEALTH POLICY.

- 'INDIAN' SYSTEMS
  - Stagnant
  - Suppressed] for centuries.

FACTORS IN HEALING

WICKENBERG CONSENSUS - 1988

(OR, WHY QUACKS & CHARLATANS SUCCEED)

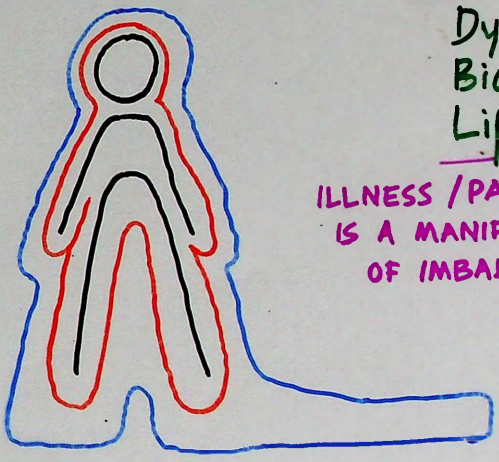


American journal of Medicine Oct '95
~ reports 50% relief from 'rational' therapy.

SOME ESSENTIALS

1. Prana

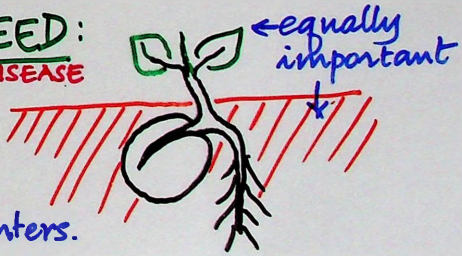
Tchi
Dynamis
Bio-energy
Life force



ILLNESS / PAIN
IS A MANIFESTATION
OF IMBALANCE / DISHARMONY

2. SOIL & SEED:

BODY — DISEASE



∴ · Subjective
· Qualitative
· Feelings / emotions are pointers.

LIFE IS AN ABSTRACT CONCEPT

3. HOLISM

- PHYSICAL
- MENTAL
- SOCIAL

] W.H.O. definition

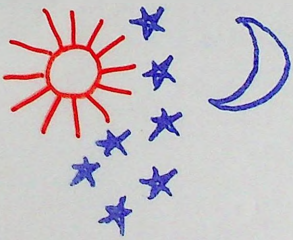
- SPIRITUAL
- EMOTIONAL
- POLITICAL
- ENVIRONMENTAL
- ECOLOGICAL
- OCCUPATIONAL

↓ expanding on it

↓ + recognizing other intangibles.

4. WIDE CANVAS:

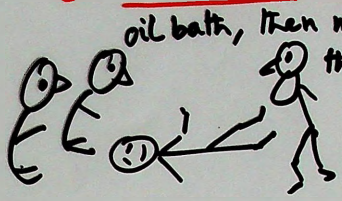
- accepting allied 'sciences'.



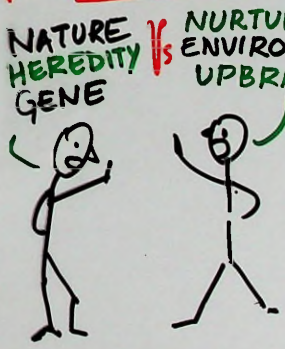
$4 = 2+2 \mid 6-2$
$= 3+1 \mid 7-3$
$= 1+3$
$= 9-5$
$= 0$

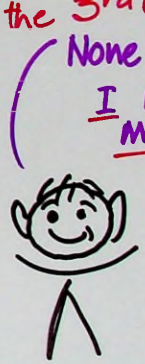
HEALTH IS A BROAD CONCEPT

3. CULTURAL RESONANCE :



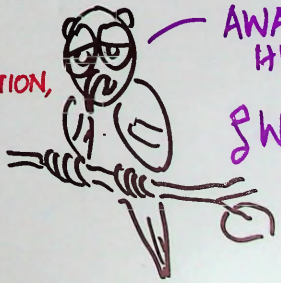
4. SPIRITUAL DIMENSION : - the 3rd Choice.





IF THERE ARE TWO COURSES OF ACTION, ALWAYS TAKE THE THIRD

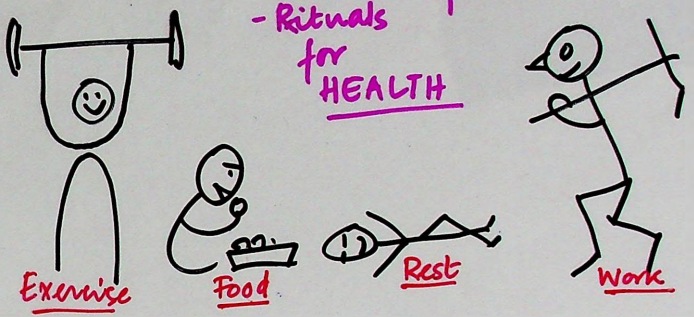
- Old Jewish Saying



5. HEALTH FOCUS :

- Behaviour patterns
- Rituals

for HEALTH

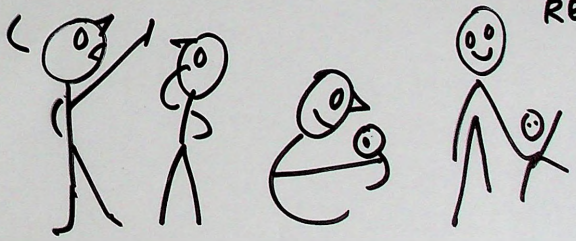


6. MEETS LOCAL NEEDS: Adaptation to

- resources
- needs
- individuals & families.

WE UNDERSTAND THAT!

IT MEETS OUR REQUIREMENTS



"HEALING" is A WIDE concept.


ANANDA MAYA KOSHA
'Bliss'
Divine?

m+x+y = animal

m+x+y+z = Human

MANOMAYA KOSHA
'Mind'

GNANAMAYA KOSHA
'Intellect'