

# Menus for Low-Cost Balanced Diets and School-Lunch Programmes

SUITABLE FOR NORTH INDIA

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NATIONAL INSTITUTE OF NUTRITION  
INDIAN COUNCIL OF MEDICAL RESEARCH  
HYDERABAD, INDIA

1984

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**MENUS FOR  
LOW-COST BALANCED DIETS  
AND  
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## PREFACE TO SECOND EDITION

The booklet entitled "Menus for Low-cost Balanced Diets and School Lunch Programmes" suitable for North India brought out by the National Institute of Nutrition has been quite popular.

The Nutrition Advisory Committee has revised the recommended allowedances of nutrients for Indians in 1968. The data presented in the book which was originally brought out in 1959 have now been updated in the light of these recommendations. Also since the prices of foodstuffs have been changing over the years, information with regard to cost of the various preparations has been worked out again based on the prices prevailing in Hyderabad in recent months.

We hope that the booklet will continue to be a useful source material for dietitians, social workers and nutritionists all over the country.

National Institute of Nutrition,  
Hyderabad.  
19 March 1977.

S. G. SRIKANTIA  
Director.

## PREFACE TO FIRST EDITION

A large body of scientific information which could be utilised for improving the dietaries in India has become available as a result of the efforts of research workers in India. Unfortunately, the people have not been in a position to make much use of it for want of authoritative publications which could enable the accumulated knowledge to be put to practical use. The Nutrition Research Laboratories of the Indian Council of Medical Research compiled nearly twenty years ago the results of analysis of Indian foodstuffs which have been published by the Government of India as the popularly known Health Bulletin 23. The bulletin not only gives information on the nutritive value of a large variety of Indian foodstuffs but also suggestions for the planning of satisfactory diets.

The present publication is designed to help the public in North India by giving practical hints on the preparation of nutritious snacks and meals. The preparations are of the type well-known to our people in North India and have been so designed as to be within the reach of most. It is hoped that this brochure will achieve the object of making the dietaries sufficiently varied and what is more important, provide a basis for balancing the diets from the nutritional standpoint.

New Delhi,  
10th September 1959.

C. G. PANDIT  
*Director*



## EXCHANGE LISTS\*

EXCHANGE LIST I  
FOR PRINCIPAL MEALS

## A. Cereal Exchange

- (i) Wheat (1 and 2)
- (ii) Bengal gram (3)
- (iii) Jowar, Bajra, Maize (4)
- (iv) Rice (5)

It is advised that the same cereal should not be used for both the principal meals in the day.

## B Pulse and Vegetable Exchange

- (i) Dal (6), Mint chutney (7), Vegetable bhujia (8)
- (ii) Dal with calabash cucumber (9), Charla (10)
- (iii) Curry (11), Green leafy vegetable bhurjee (12)
- (iv) Vadian (13), Turnips (14)
- (v) Rajmah (15), Raita (16)
- (vi) Dal with green leafy vegetables (17),  
Vegetable bhujia (8)
- (vii) Brinjal bhurtha (18), and Dal (6)
- (viii) Rape leaves (19), Raita (16)

## C Fruit Exchange

One ripe banana or mango or orange or guava.

EXCHANGE LIST II  
FOR LIGHT MEALS

## Snack Exchange

- (i) Wheat porridge (20)
- (ii) Wheat pulse ladoo (21)
- (iii) Khicheri (22)
- (iv) Pakodai (23)
- (v) Dosai (24)
- (vi) Potato gulabjamun (25)
- (vii) Aalu chole (27)
- (viii) Dahi vadai (26)
- (ix) Calabash cucumber halwa (28)
- (x) Basen omelete (29)
- (ix) Marunda (30)
- (xii) Poha (31)
- (xiii) Fruit chaat (32)
- (xiv) Pura (33)
- (xv) Sago vadai (23)
- (xvi) Khaman dhokla (35)
- (xvii) Green gram ladoo (36)
- (xviii) Sprouted green gram with jaggery (37)
- (xix) Dahi chidwa (38)
- (xx) Sprouted green gram (39)
- (xxi) Sweet potato pura (40)

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\* The numerals within parentheses refer to the number in the "List of Recipes" Details of preparation are also given in the same Section.

## RECIPES

### Exchange List 1

#### 1. CHAPATIE

	gm
<b>Wheat Flour</b> ...	200
Oil or ghee (Optional) ...	15-30
Water ...	as required

*Method:* Wheat flour is kneaded into dough with water. Small portion of dough is made into chapatie with rolling board and pin; placed on a flat iron pan heated on fire and the side turned when slightly baked. When both sides are slightly baked, it is roasted over burning charcoal or puffed with slight pressure with cloth. If oil is to be added, chapatie is rolled along with half a teaspoonful of oil and when one side is cooked, half a teaspoonful more of oil is added and chapatie fried from both sides.

The kneaded dough can be kept over night and 'Khamiri Roti' can be cooked just like ordinary chapatie.

#### 2. TANDOOR KI ROTI

	gm
<b>Wheat Flour</b> ...	200
Ghee or butter (Optional) ...	15-30
Water ...	as required

*Method:* Wheat flour is kneaded into soft dough and divided into small portions. The 'Tandoor' (big fire place made of mud) is heated by burning fire wood in it. Chapaties are made with hands using water and are stuck to innersides of hot 'Tandoor.' Chapaties are removed with cloth, when ready.

#### 3. MISSI ROTI

	gm
<b>Bengal Gram Flour</b> ...	85
<b>Wheat Flour</b> ...	115
Fenugreek leaves or soya leaves ...	100
Onions ...	30
Green chillies ...	5
Oil ...	30



Salt	...	to taste
Water	...	as required

*Method:* All ingredients, except oil are mixed and kneaded into dough. Small portions of dough are made into chapatie on flat board with rolling pin and placed on heated iron pan. Chapatie is turned when slightly baked; half a teaspoonful of oil is poured and chapatie fried on both sides. It can also be cooked in Tandoor.

#### 4. ROTI

		gm
<b>Maize or Bajra or Jowar or Ragi Flour</b>	...	200
Oil	...	30
Celery seeds	...	2
Salt	...	to taste
Hot Water	...	as required

*Method:* Flour and celery seeds are mixed with a little salt and divided into three portions; hot water in sufficient quantity is added gradually to one portion and kneaded for about five minutes to make into a dough. Kneaded dough is made into balls and then into chapties placed on a heated iron pan smeared with a little oil and spread with fingers. When cooked, a little oil is poured over uncooked side, turned and cooked. Similarly two more roties are made one after the other from the two remaining portions.

#### 5. COOKED CEREALS

		gm
<b>Wheat or Rice or Jowar (Whole grain)</b>	...	200
Water	...	as required

*Method:* Rice is washed once or twice with minimal quantities of water, then boiled in just sufficient water till cooked.

*Other Cereals* are pounded in a mortar till bran, husk, chaff etc. are released, winnowed free of bran etc., and the cleaned grain broken and boiled in just sufficient water till cooked.

## 6. DAL

Black Gram Dal	...	35
Bengal Gram Dal	...	35
Turmeric	...	1
Chillie powder	...	1
Onion	...	5
Ginger	...	2
Garam masala*	...	2
Oil	...	1
Salt	...	to taste
Water	...	as required

*Method* : The two dals are cleaned and cooked in water with salt, chillie powder and turmeric till very soft and semi-solid, care being taken to see that grains do not break; Chopped onion and ginger fried in oil are added to hot dal. 'garam masala' is then sprinkled over it.

## 7. MINT CHUTNEY

		gm
Mint	...	50
Onion	...	20
Green chillies	...	3
Green mango or dried pomegranate seeds	...	3
Salt	...	to taste

*Method* : All vegetables are washed, cut and ground together on a grinding stone with the addition of salt.

## 8. VEGETABLE BHUJIA

		gm
Brinjal or Cauliflower or Cabbage or Calabash Cucumber or Ladies Fingers or Tinda	...	75
Oil	...	5
Onion	...	15
Ginger (only for cauliflower)	...	3
Chillie powder	...	1
Coriander leaves	...	1
Turmeric	...	1
Salt	...	to taste

\* The preparation 'garam masala' is given on page 12.



*Method*: Sliced ginger and onions are fried in oil till golden brown; vegetable is washed and cut, salt, turmeric and chillie powder added and cooked on slow fire till soft. Chopped coriander leaves are added and the vegetable fried till all water is absorbed. Garam masala is sprinkled after removing from fire.

## 9. DAL WITH CALABASH CUCUMBER

	gm
Bengal Gram Dal	... 30
Calabash cucumber	... 75
Chillie powder	... 1
Oil or hydrogenated fat	... 3
Cumin	... 1
Turmeric	... 1
Garam masala	... 1
Salt	... to taste
Water	... as required

*Method*: Dal is cleaned and cooked in water till slightly soft, small pieces of calabash cucumber along with salt, chillie powder and turmeric are added and cooked till very soft and semi-solid in consistency; cumin is fried in oil and added to the above. Then garam masala is sprinkled over.

## 10. SHARLA

	gm
Small Potatoes	... 75
Oil	... 3
Chillie powder	... 1
Garam masala	... 1
Salt	... to taste
Water	... as required

*Method*: Chillie powder is slightly fried in hot oil, whole potatoes and salt are added and cooked with a little water till soft; fried for a little while and garam masala is sprinkled.

## 11. CURRY

	gm
<b>Bengal Gram Dal Flour</b> ...	20
<b>Butter milk</b> ...	600
Chillie powder ...	2
Oil ...	3
Turmeric ...	1
Coriander seeds ...	30
Onions ...	1
Garam masala ...	1
Salt ...	to taste
Water ...	as required
*Pakodai (Optional) ...	Ten

*Method:* Bengal gram dal flour is mixed with buttermilk salt, turmeric, chillie powder and the mixture is kept aside. Sliced onions and coriander seeds are fried in oil and mixed with the above. Plenty of water is added to it and cooked stirring all the time till thick, and till the raw flavour disappears. Garam masala is sprinkled. Fried pakodai may be added about five minutes before removing from fire.

## 12. GREEN LEAFY VEGETABLE BHURJEE

	gm
Fenugreek Leaves or Spinach or Bathua or ...	100
Cholai or Rape Leaves ...	75
Potatoes ...	3
Green chillies ...	3
Oil ...	3
Salt ...	to taste

*Method:* Sliced green chillies are fried in oil; green leafy vegetables are washed and cut, small pieces of potatoes and salt are added to it, covered and cooked on slow fire. Frying is continued for a few more minutes after the water is absorbed and the vegetables become soft.



## 13. VADIAN CURRY

		gm
<b>*Vadian</b>	...	30
Potatoes	...	75
Cumin	...	1
Turmeric	...	1
Garam masala	...	1
Oil or hydrogenated fat	...	5
Salt	...	to taste
Water	...	as required

*Method* : Vadian are fried in oil and kept aside ; cumin is fried in the same oil and potatoes, turmeric and salt are added and cooked till potatoes are half done ; then the vadian are added and cooked till soft and a little gravy remains. Garam masala is sprinkled finally.

## 14. TURNIPS

		gm
Turnips	...	75
Ginger	...	2
Oil	...	2
Turmeric	...	1
Green chillies	...	2
Coriander leaves	...	1
Garam masala	...	1
Wheat flour or maize flour	...	3
Sugar (Optional)	...	1
Salt	...	to taste
Water	...	as required

*Method* : Turnips are peeled, cut and cooked in water till soft; extra water is decanted; salt, turmeric and chillies are added and the whole is mashed with a ladle till no solid pieces are left. Sugar and maize flour are added and allowed to cook for a few minutes. Sliced onion and ginger fried in oil are added to the vegetable. Chopped coriander leaves and garam masala are sprinkled over.

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\* The preparation of Vadian is given on page 12.

## 15. RAJMAH

	gm
Rajmah or Rawan	... 55
Onion	... 30
Tomato	... 15
Chillie powder	... 2
Turmeric	... 1
Ginger	... 3
Oil	... 3
Garam masala	... 1
Salt	... to taste
Water	... as required

*Method:* Cleaned rajmah is soaked overnight, boiled till soft and kept aside. Ground onion and ginger are fried in oil, chopped tomato added and fried, then added to boiled rajmah along with rest of ingredients (except garam masala) and cooked for a few minutes. Garam masala is finally sprinkled. The final preparation should have a little gravy

Instead of rajmah, a mixture of equal quantities of rajmah and whole black gram may be used ; in such a case, onion and ginger should be chopped and not ground. No turmeric is added to this dal.

## 16. RAITA

	gm
Curd	... 115
Potatoes or Cucumber or Mint or Calabash Cucumber	... 55
Garam masala	... 1
Red chillie powder	... 1
Roasted cumin powder	... 1
Salt	... to taste

*Method:* Boiled potatoes are cut into small pieces and added to churned curd along with the other ingredients. If calabash cucumber is to be used, it should be grated, boiled, the water squeezed out and then added to churned curd. Cucumber and other vegetables are merely chopped and added to churned curd.



## 17. DAL WITH GREEN LEAFY VEGETABLE

	gm
<b>Green Gram or Green Gram Dal or Bengal Gram Dal</b>	... 30
Spinach or Bathua or Chulai	... 100
Oil	... 5
Onion	... 15
Green chillies	... 3
Salt	... to taste
Water	... as required

*Method:* Dal is cleaned and boiled till slightly soft; green leafy vegetable, chopped green chillies and salt are added and cooked till very soft, mashed with ladle or churner and cooked again for a few minutes. Chopped onions are fried in oil and added to the curry.

## 18. BRINJAL BHURTHA

	gm
Brinjal	... 75
Tomato	... 30
Onion	... 30
Chillie powder	... 1
Coriander leaves	... 1
Garam masala	... 1
Oil	... 5

*Method:* Brinjal smeared with a little oil is roasted on fire, peeled, washed, mashed and kept aside. Chopped onions are fried, tomato is added and both are fried for a little while; chillie powder, salt and mashed brinjal added and fried till bhurtha does not stick to the sides of the pan; chopped coriander leaves and garam masala are then added.

15831

## 19. RAPE LEAVES

		gm
Rape Leaves	...	85
Spinach	...	15
Ginger	...	5
Green chillies	...	3
Maize flour	...	3
Oil or ghee	...	3
Water	...	as required
Salt	...	to taste

*Method:* Rape leaves, spinach and green chillies are cut and cooked in plenty of water; extra is decanted off, salt added and the vegetable ground till finely mashed. Maize flour is added and cooked for about five minutes; fried ginger is added finally.

## GARAM MASALA

		gm
Big cardamoms	...	115
Black pepper	...	230
Cumin	...	230
Coriander seeds	...	230
Cinnamon	...	15
Cloves	...	5

*Method:* The cumin seeds are roasted; the other cleaned condiments are dried in sun; cardamom is peeled and all ingredients powdered finely and stored in air-tight tins.

## VADIAN

		gm
<b>Black Gram Dal</b>	...	230
Ash gourd	...	230
Black pepper	...	5
Red chillies	...	15
Ginger	...	30
Big cardamoms	...	5
Cloves and Cinnamon	...	2
Asafoetida	...	a pinch

*Method:* Ash gourd is grated and the water squeezed out. Asafoetida is soaked in the ash gourd water.



The dal is soaked, ground and beaten with hand till it becomes frothy (*Test*: A small ball of the beaten dal when dropped in water, will float and not sink).

The dal, powdered spices and the prepared ash gourd are mixed well. Using the asafoetida water, the mixture is made into small balls which are sun-dried on a clean cloth. After dry, they are stored in air tight tins. They can be kept for several months.

## Exchange List II

### 20. WHEAT PORRIDGE

	gm
<b>Broken Wheat</b> ...	85
<b>Green Gram</b> ...	30
<b>Milk</b> ...	115
Jaggery or sugar ...	30
Water ...	as required

*Method*: Broken wheat is roasted in a pan ; green gram and water added and cooked till the grains are soft ; jaggery is mixed with water, strained to remove impurities and added to the above. The mixture is cooked till semisolid ; then removed from fire and hot milk is added.

*Note* : Instead of jaggery a little salt may be added while cooking. Sometimes this preparation can be consumed without milk. The nutritive value will however, be appreciably lower if milk is not included.

### 21. WHEAT PULSE LADOO

	gm
<b>Roasted Bengal Gram Flour</b> ...	30
<b>Roasted Wheat Flour</b> ...	30
Jaggery powder ...	15
Water or milk as binder ...	as required

*Method*: All ingredients are mixed and made into small balls.

## 22. KHICHERI

	gm
Rice	... 30
Green Gram or Bengal Gram Dal	... 30
Water	... as required
Salt	... to taste

*Method:* Cleaned rice and dal are cooked in water with salt till the grains are soft and the water is absorbed. A little cumin is fried in ghee or oil and added towards the end (optional).

When Bengal gram dal is used, it should be partly cooked before rice is added.

## 23. PAKODI

	gm
Bengal Gram Flour	... 40
Vegetable (Brinjal, onion, potato, cauliflower, green leafy vegetables)	... 75
Oil (absorbed by pakodai)	... 15
Chillie powder	... 2
Salt	... to taste
Water	... as required

*Method:* Bengal gram flour, salt and chillie powder are mixed and made into a thin paste with water. Sliced vegetables are smeared with salt and chillie powder and kept for a few minutes; extra water of vegetables is discarded. The vegetables are dipped in the thin paste of Bengal gram flour and deep fried in oil.

## 24. DOSAI

	gm
Rice	... 55
Black Gram Dal	... 30
Oil	... 30
Salt	... to taste
Water	... as required



*Method* : Rice and dal are soaked separately in water overnight and finely ground together. The batter is mixed well, and salt and sufficient water added to make a thin paste which is then kept aside for a few hours to ferment. Ladlefuls are spread evenly over a heated iron plate on open fire, smeared with a little oil and cooked on both sides.

## 25. POTATO GULABJAMUN

		gm
Potato	...	55
Skimmed Milk Powder, or Khoa prepared from Skimmed Milk	...	30
Vanaspati (absorbed by Gulabjamun)	...	3
Jaggery	...	30
White flour	...	3
Butter	...	3
Baking powder	...	a small pinch
Water	...	as required

*Method* : Potatoes are boiled, mashed and mixed with white flour, skimmed milk powder, baking powder and butter to make a dough. The dough is divided into several small balls which are fried in vanaspati till dark brown. then left immersed in hot jaggery syrup for two hours.

## 26. DAHI VADAI

		gm
Curd	...	115
Green Gram or black Gram Dal	...	30
Oil (absorbed by Vadais)	...	10
Chillie powder	...	2
Roasted cumin powder	...	2
Garam masala	...	1
Salt	...	to taste

*Method* : Green gram dal is soaked overnight and ground well till it becomes frothy; small portions are deep fried and soaked in salted water for a few minutes; the vadais are pressed to remove water and oil and added to churned curd along with spices and condiments.

*Note* : These vadais can straightaway be put into sugar or aggerly syrup instead of curd. This preparation is known as Rasbarry.

## 27. AALU CHOLE

	gm
<b>Kabuli or White Gram</b> ...	55
<b>Bengal Gram Dal</b> ...	15
Potato ...	55
Onions ...	20
Ginger ...	3
Mango powder (Optional) ...	2
Chillie-powder ...	2
Green chillies ...	2
Tamarind pulp ...	5
Oil ...	3
Salt ...	to taste
Water ...	as required

*Method* : Gram and Bengal gram dal are soaked overnight and boiled till quite soft ; ground and fried onions, boiled dal, salt, chillie powder and boiled potatoes are mixed and cooked for a few minutes ; sliced ginger is added ; removed from fire ; whole green chillies, tamarind pulp and mango powder are added. There should be no gravy.

## 28. CALABASH CUCUMBER HALWA

	gm
Calabash Cucumber ...	75
<b>Skimmed Milk</b> ...	230
Sugar or brown sugar ...	30
Vanaspati ...	2

*Method* : Grated calabash cucumber is cooked with skimmed milk till very soft. Brown sugar is added and cooked further till all water is absorbed. Vanaspathi fat is added and stirred over a low fire till the halwa does not stick to the sides of the pan.



## 29. BASEN OMELETE

		gm
Bengal Gram Flour	...	55
Onion	...	15
Green chillies	...	3
Tomato (Optional)	...	30
Oil or hydrogenated fat	...	5
Salt	...	to taste
Water	...	as required

*Method:* Bengal gram flour is mixed with chopped onion, green chillies, salt and water to make a thin paste. Ladlefuls are spread evenly over heated iron plate smeared with a little oil and cooked on both sides.

## 30. MARUNDA

		gm
Roasted Wheat, or Roasted Groundnut, or Roasted Bengal Gram	...	30
Jaggery	...	30
Water	...	to prepare syrup

*Method I:* In this preparation, roasted wheat or groundnuts or Bengal gram can be used alone or in mixtures. Jaggery is boiled with a little water till thick and frothy, the roasted wheat added, mixed well and made into balls.

Puffed rice and pop corn may be used and amount of jaggery increased according to taste.

*Method II:* (Suitable where roasted Bengal gram or groundnuts are available piping hot).

Hot, roasted Bengal gram or groundnuts are mixed with powdered jaggery and made into balls using a clean cloth.

## 31. POHE

	gm
Beaten Rice	... 55
Peas or Potatoes	... 55
Onions	... 20
Mustard seeds	... 1
Coconut (optional)	... 5
Oil	... 3
Sugar (optional)	... 2
Turmeric	... 1
Green chillies	... 2
Asafoetida (Optional)	... 1
Lime juice	... 5
Salt	... to taste
Water	... as required

*Method*: Sliced onion is browned in oil, powdered asafoetida, chopped green chillies and mustard seeds are added and fried for a few seconds. Peas along with salt, turmeric and water are added and cooked till soft. Beaten rice is cleaned and washed and added to the cooked peas and cooking continued for a few seconds; sugar is added and the whole removed from fire. Grated coconut and lime juice are added and mixed well.

## 32. FRUIT CHAAT

	gm
Banana	... 15
Pototo (boiled)	... 30
Sweet potato (boiled)	... 30
Guava	... 15
Bilimbi	... 5
Lime or lemon juice	... 5
Chillie powder	... 2
Mango powder	... 2
Roasted cumin powder	... 1
Sugar (Optional)	... 2
Salt	... to taste

*Method*: All the fruits are cut into small pieces and mixed with spices; lime juice is added as required.



## 33. PURA

		gm
Wheat flour	...	55
Brown sugar or sugar	...	30
Aniseed	...	2
Vanaspathi	...	10
Water	...	as required

*Method* : Sugar is dissolved in water, wheat flour and aniseed are added to make a thin batter and kept aside for a few minutes. Ladlefuls are spread evenly over heated iron plate with a little vanaspathi and cooked on both sides.

## 34. SAGO VADAI

		gm
Potatoes	...	55
Sago	...	30
Green chillies	...	3
Coriander leaves	...	1
Oil (absorbed by vadais)	...	10
Salt	...	to taste

*Method* : Washed sago is soaked in just sufficient water for about half an hour to make the grains soft, and mixed with boiled, mashed potatoes, chopped green chillies, coriander leaves and salt; the mixture is divided into small balls, flattened between the palms of the hands and fried in oil till light brown.

## 35. KAMAN DHOKLA

		gm
<b>Bengal Gram Dal Flour</b>	...	55
<b>Butter milk</b>	...	140
Green chillies	...	3
Mustard seeds	...	1
Oil	...	3
Turmeric	...	2
Ginger	...	3
Asafoetida (Optional)	...	1
Coriander leaves	...	3
Cooking soda	...	1
Salt	...	to taste

*Method:* Bengal gram dal flour is soaked in buttermilk and allowed to ferment for eighteen to twenty-four hours depending upon the season; salt, turmeric, chopped ginger, soda and green chillies are added to the above and steamed till set (called Dhokla). Mustard seeds and asafoetida are fried in oil and poured over Dhokla which is then cut into small pieces. Coriander leaves may be added along with mustard.

### 36. GREEN GRAM LADOOS

		gm
<b>Green Gram Dal</b>		55
Jaggery	...	30
Coconut (Optional)	...	15
Water	...	as required

*Method:* Green gram dal is roasted and powdered: a thick syrup prepared with jaggery, is mixed with the flour and made into small balls. Grated coconut or pieces of other nuts may be added before making the balls.

### 37. SPROUTED GREEN GRAM JAGGERY

		gm
<b>Sprouted Green Gram</b>	...	55
Jaggery	...	55
Water	...	as required

*Method:* Green gram is soaked overnight, kept moist for two to three days so that it sprouts, then cooked with jaggery till all the water is absorbed.

### 38. DAHI CHIDWA

		gm
<b>Beaten Rice</b>		30
<b>Curd</b>	...	115
Jaggery	...	30

*Method:* Beaten rice (chidwa) is washed and kept for about five minutes to soften. Curd is churned, jaggery added then the soft beaten rice is added and mixed well.



## 39. SPROUTED GREEN GRAM

		gm
<b>Sprouted Green Gram</b>	...	1
Chillie powder	...	1
Garlic (optional)	...	1
Pepper	...	1
Turmeric	...	1
Onion	...	5
Tamarind pulp	...	3
Mustard (optional)	...	1
Oil	...	3
Water	...	as required
Salt	...	to taste

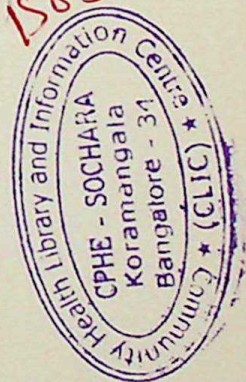
*Method:* The sprouted green gram is steam-cooked. Garlic, onion, mustard and pepper are ground, fried and added to steamed, sprouted green gram along with other condiments and cooked till raw flavour disappears, No liquid should remain in this preparation.

## 40. SWEET POTATO PURA

		gm
Sweet Potato	...	115
<b>Whole or refined Wheat Flour</b>	...	10
(Atta or Maida)		
Sugar or brown sugar	...	15
Vanaspati (absorbed by puras)	...	10

*Method:* Boiled and mashed sweet potatoes are mixed with flour and brown sugar; made into small chapatis and fried till golden brown.

CH-135  
284  
15831



## Part II

### Menus for Mid-Day Meals and Snacks for School Children

In this part, a few menus which can be used for school lunch programmes are suggested. The menus given here do not involve elaborate processing and cooking and are based mostly on ingredients locally available and acceptable to the people. These menus provide about a third of the daily calorie requirement and about half of the protein requirement of the school going child.

It has been calculated that the cost of the ingredients for the lunch per child per day would be about 45 p. To this may have to be added the cost of fuel and preparation and service. If, however, free supplies of skim-milk are available through UNICEF, CARE or similar organizations, the cost will be less. Further, the amount of milk or buttermilk can be given in double the quantities indicated in such cases. The costing of the items has been made on the basis of the prices prevailing in Hyderabad city during August 1976. It is suggested that a part of the expenses may be borne by the parents and a part subsidised by the State governments.

The accompanying table shows the several menus with their calorie and protein value and cost along with the distinctive number of the recipes, details regarding the recipe appear in the following pages. It has sometimes been stated that snacks alone for mid-day meals may not be much appreciated. Hence the menus have been grouped under three heads. (1) Mid-day meals based on mixed cereals, (2) Mid-day snacks and (3) Meal-snack combinations.



*Menus For Mid-day meals and snacks for school children*

Menus	Programme of feeding	Calories	Protein gm.	Approximate cost P.
<b>A. Mid-day Meals</b>				
1. Maize Roti (1) + Rape leaves (2) + buttermilk (7)		380	16	36
2. Khicheri (2) + Curd (6) + Vegetable Bhujia (3)		400	18	50
3. Porridge (11) + Vegetable bhujia (3) + buttermilk (7)		480	22	51
4. Bajra cooked (10) + Curry (4)	For three	430	15	26
5. Tandoor Ki Roti (8) + Aalu chole (5)	days in week	420	16	26
6. Missi Roti (9) + Curd (6)		560	17	41
<b>B. Mid-day Snacks</b>				
7. Wheat pulse laddoo (14) + buttermilk (7)		540	20	36
8. Toffee (21) + buttermilk (7)		430	22	62
9. Aalu Chole (5) + bread		370	14	38
10. Dahi Vadai (15)		470	30	62
11. Basen Omelete (13) + Toffee ( $\frac{1}{2}$ quantity prescribed in (21) + butter milk (7)		452	27	51
12. Toffee ( $\frac{1}{2}$ quantity prescribed in (21) + Aalu Chole ( $\frac{1}{2}$ quantity prescribed in (5) + buttermilk (7)		450	22	42

13.	Sweet biscuit ( $\frac{1}{2}$ quantity prescribed in (22) + Dahi vadai ( $\frac{1}{2}$ quantity prescribed in (15))	440	27	56
14.	Potato gulab jamun ( $\frac{1}{2}$ quantity prescribed in (16) + Dosai ( $\frac{3}{4}$ quantity prescribed in (17))	460	13	44
	For two days in a week			
15.	Basen omelete (13) + Toffee ( $\frac{1}{2}$ quantity prescribed in (21))	420	23	57
16.	Fruit Chaat (20) + Wheat pulse laddoo ( $\frac{1}{2}$ quantity prescribed in (14) + buttermilk (7))	430	13	43
17.	Marunda (18) + Khaman Dhokla (19)	560	27	55

### C. Meal-Snack Combination

For two days in a week to begin with, if items under group B are not acceptable by themselves.

18.	Missi Roti (9) + Curd (6) + Sweet Biscuit ( $\frac{1}{4}$ quantity prescribed in (22))	400	17	53
19.	Khicheri (12) + Curd (6) + Toffee ( $\frac{1}{4}$ quantity prescribed in (21))	450	22	44
20.	Porridge ( $\frac{3}{4}$ quantity prescribed in (11) + buttermilk (7) + Aalu chole (5))	440	22	34

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The basis on which the cost has been worked out is: cereals 1.50 per kg., milk Rs. 2.00 per litre, pulses Rs. 2.50 per kg. The other foods have been calculated according to the rates prevailing in Hyderabad city during August 1976.



## RECIPES

### 1. MAIZE CHAPATIE

		gm
Maize Flour	...	55
Oil	...	3
Salt	...	to taste
Hot Water	...	as required
Celery seeds	...	a little

*Method* : As for item 4, Part I, page 5.

### 2. RAPE LEAVES

		gm
Rape Leaves	...	85
Spinach	...	15
Maize flour	...	3
Ghee or Butter	...	3
Ginger	...	5
Green chillies	...	3
Salt	...	to taste
Water	...	as required

*Method* : As for item 19, Part I, Page 12.

### 3. VEGETABLE BHUJIA

		gm
Brinjals or Cauliflower or Cabbage or Calabash Cucumber or Ladies Finger or Tinda	...	75
Oil	...	5
Onion	...	15
Ginger (only for cauliflower)	...	3
Chillie powder	...	1
Coriander leaves	...	1
Turmeric	...	a little
Salt	...	to taste

*Method* : As for item 8. Part I, page 6.

## 4. CURRY

	gm
<b>Bengal Gram Flour</b> ...	10
<b>Butter milk</b> ...	275
Oil ...	2
Onions ...	15
Chillie-powder ...	1
Turmeric ...	1
Coriander seeds ...	1
Garam masala ...	1
Salt ...	to taste
Water ...	as required

*Method:* As for item 11, Part 1, page 8.

## 5. AALU CHOLE

	gm
<b>Kabuli or White Gram</b> ...	30
Potato ...	30
Oil ...	2
Bengal gram Dal ...	7
Onions ...	15
Ginger (Optional) ...	2
Chillie powder ...	1
Green chillies ...	2
Tamarind pulp ...	2
Mango powder (Optional) ...	a little
Salt ...	to taste
Water ...	as required

*Method:* As for item 27, Part 1, Page 16.

## 6. CURD

<b>Skimmed Milk, Powder</b> ...	15 gm
<i>ro</i>	
<b>Skimmed Milk</b> ...	180 ml
Water (to take milk) ...	90 ml
Curd ...	a little

*Method:* A little curd is added to luke-warm milk and kept overnight in a warm place.



## 7. BUTTER-MILK

<b>Skimmed Milk Powder</b>	...	7 gm.
<i>or</i>		
<b>Skimmed-Milk, Fresh</b>	...	90 gm
<b>Curd</b>	...	a little
<b>Water</b>	...	100 ml

*Method:* The curd is prepared, churned and diluted with water.

## 8. TANDOOR KI ROTI

		gm
<b>Wheat Flour</b>	...	55
<b>Ghee or Butter</b>	...	5
<b>Water</b>	...	as required

*Method:* As for item 2, Part 1, Page 4.

## 9. MISSI ROTI

		gm
<b>Bengal Gram Flour</b>	...	30
<b>Wheat Flour</b>	...	30
<b>Fenugreek Leaves or Soya Leaves</b>	...	85
<b>Oil</b>	...	3
<b>Onions</b>	...	5
<b>Green chillies</b>	...	2
<b>Salt</b>	...	to taste
<b>Water</b>	...	as required

*Method:* As for item 3, Part 1, Page 4.

## 10. BAJRA, COOKED

<b>Bajra</b>	...	85 gm
<b>Water</b>	...	as required

*Method:* As for item 5, Part 1, Page 5.

## 11. PORRIDGE

		gm
<b>Broken Wheat</b>	...	85
<b>Green Gram Dal</b>	...	30
<b>Vanaspati</b>	...	3

Cumin (Optional)	...	1
Salt	...	to taste
Water	...	as required

*Method* : As for item 20, Part I, Page 13.

## 12. KHICHERI

		gm
Rice	...	40
<b>Green Gram Dal or Bengal Gram Dal</b>		40
Ghee	...	2
Cumin	...	1
Salt	...	to taste
Water	...	to prepare

*Method* : As for item 22, Part I, Page 14,

## 13. BASEN OMELETE

		gm
<b>Bengal Gram Dal Flour</b>	...	85
Oil	...	2
Onions	...	20
Green chillies	...	2
Tomato (Optional)	...	40
Salt	...	to taste
Water	...	as required

*Method* : As for item 29, Part I, Page 17.

## 14. WHEAT PULSE LADOO

		gm
<b>Roasted Bengal Gram Flour</b>	...	55
<b>Roasted Wheat Flour</b>	...	55
Jaggery powder	...	30
Water or milk as binder	...	as required

*Method* : As for item 21, Part I, Page 13.

## 15. DAHI VADAI

		gm
<b>Curd (rom 30 gms. sklmmed-milk powder)</b>	...	180
<b>Green Gram Dal or Black Gram Dal</b>	...	55



Oil (absorbed by vadais)	...	1
Chillie powder	...	1
Roasted cumin powder	...	1
Garam masala	...	1
Salt	...	to taste

*Method* : As for item 26, Part I, Page 15.

#### 16. POTATO GULAB JAMUN

		gm
Potato	...	55
Skimmed milk powder or Khoa with Fresh Skimmed-milk	...	30
White flour	...	3
Vanaspathi (absorbed by gulabjamun)	...	3
Jaggery or Sugar	...	30
Butter	...	5
Baking powder or soda	...	a small pinch
Water	...	as required

*Method* : As for item 25, Part I, Page 15.

#### 17. DOSAI

		gm
Rice	...	55
black Gram Dal	...	30
Oil	...	15
Salt	...	to taste
Water	...	as required

*Method* : As for item 24, Part I, Page 14.

#### 18. MARUNDA

		gm
Roasted Wheat or Roasted Ground-Nut or Roasted Bengnl Gram	...	30
Jaggery	...	35
Water	...	a little

*Method* : As for item 30, Part I, Page 17.

## 19. KHAMAN DHOKLA

	gm
Bengal Gram Dal	30
Bengal Gram Powder	30
Buttermilk	140
Oil	2
Green chillies	2
Mustard seeds	1
Turmeric	1
Ginger	2
Asafoetida (Optional)	1
Coriander leaves	2
Salt	to taste

*Method:* Dal is soaked for 12 hours and ground; then mixed with Bengal gram dal flour and cooked as given for item 35, Part I, Page 19.

## 20. FRUIT CHAAT

	gm
Banana	30
Pototo (boiled)	30
Sweet potato (boiled)	30
Guava	30
Bilimbi	15
Lime	7
Chillie powder	1

*Method:* As for item 32, Part 1, Page 18.

## 21. TOFFEE

	gm
Roasted Bengal Gram Powder	15
Roasted Groundnut Powder	15
Jaggery Powder	20
Skim milk powder	30
Grated coconut	20
Water	as required

*Method:* Jaggery is made into thick syrup with boiling water, other ingredients are added, mixed well and spread evenly over a plate and cut into small cubes.





<i>English</i>		<i>Hindi</i>
14. Potato	...	Aalu
15. Rape leaves	...	Sarson
16. Spinach	...	Palak
17. Sweet potato	...	Shakarkandi
18. Tomato	...	Tamator
19. Turnips	...	Shalgam

## FRUITS

1. Banana	...	Kela
2. Bilimbi	...	Kamrak
3. Guava	...	Amrood
4. Lime	...	Nimbu
5. Orange	...	Santra or Narangi

## CONDIMENTS

1. Aniseed	...	Saunf
2. Asafoetida	...	Hing
3. Big cardamom	...	Bari elaichi
4. Black cumin	...	Kala zeera
5. Celery seeds	...	Ajwain
6. Chillie powder	...	Lal mirch
7. Chillie green	...	Hari mirch
8. Cinnamon	...	Dalchini
9. Cloves	...	Laung
10. Coriander seeds	...	Dhania
11. Cumin	...	Zeera
12. Dried pomegranate seeds	...	Anaardana
13. Garlic	...	Lasan
14. Ginger	...	Adrak
15. Mustard seed	...	Rai
16. Pepper	...	Kali mirch
17. Salt	...	Namak
18. Tamarind	...	Imli
19. Turmeric	...	Haldi

## MILK

1. Buttermilk	...	Lassi
2. Curd	...	Dahi
3. Milk	...	Doodh

<i>English</i>		<i>Hindi</i>
4. Skimmed-milk	...	Makhan nikala hua doodh

## MISCELLANEOUS

1. Brown sugar	...	Shakar
2. Coconut	...	Narial
3. Jaggery	...	Gur
4. Oil	...	Tel
5. Roasted groundnuts	...	Bhuni hue moongphalli
6. Sugar	...	Chini
7. Vanaspathi	...	Jamaya hua tel
Hydrogenated fat		