

My Enlightening Heart disease

Abhay Bang

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My enlightening heart disease

by

Abhay Bang

Translator

Dr. Arun Jatkar

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Twenty years have come and gone
and I am still at the dance
I guess that God just changed his mind
and gave me another chance.

And on that day I took a vow
to let go of the past,
to live my life and love each day
as if it were my last.

Jill Warren
(A cancer survivor)

The information in this book is based upon my medical knowledge and the understanding developed by testing some of it in my own life. However, human bodies, manifestations of disease and the response to therapy all may vary from person to person. Hence, those with heart disease are advised to decide level of exercise and choice of medicines in consultation with their physician.

Abhay Bang, MD.

Preface

(To the original Marathi book)

Three years ago I suffered a sudden heart attack. Did my heart disease really arise all of a sudden? Or was it happening each day for several years; only I became aware of it one day and thought that it happened suddenly? How did I feel when I became a patient? What cause did I discover for my heart disease? What did I do to recover from my heart disease? And how, instead of I treating the heart disease, did my heart disease itself treat and repair me? How did the close encounter with death affect me? And how am I living the renewed lease of life today?

This entire story was very private. But then not sharing it with my friends would amount to deliberately keeping them in dark about the risk of heart disease. An intense desire to alert them compelled me to write about it in the form of a long letter to a few select friends. Without my knowledge, a friend sent it to the leading Marathi daily *Maharashtra Times* which published that letter. When *Mr. Sada Dumbre*, the editor of the wellknown Marathi weekly *Saptahik Sakal*, read the letter, he suggested that I should write a much more detailed account of my heart disease. That detailed article, titled as *Maza Sakshatkari Hridayrog* (literally, 'My Enlightening Heart Disease'), was published in the 1996 *Diwali* special issue of *Saptahik Sakal*.

Carl Rogers, a well-known psychologist, used to say, "Things we consider most personal are the most general!" There was something in my personal story of heart disease that touched the heart of the whole society. As if everybody was suffering from the same pain, each one was searching for a remedy. The response to that article was unprecedented. The entire *Maharashtra* owned that article. This is a far more detailed version of that article in the form of a book. The search that began with my heart disease took me far beyond the realm of mere physical illness. Later on, that search beyond itself became the focus of my attention and the journey continued even after I wrote the article for *Saptahik Sakal*. I have included the details of that journey in this book. In addition, the final chapter of this book contains information that may be useful to the patients of heart disease and to people who are sincerely interested in this subject.

Writing this book has been a very joyful experience. My role is of a narrator. This is a travelogue describing the event of my heart disease and my journey into the depth of my own 'being'. To present a purely scientific description or a comprehensive philosophical position was not the intent of this book. Nor is this book a scientific discourse on medicine, yoga or spirituality. What I experienced is *the* theme of my narrative. I have tried to tell my story as honestly as I possibly could. Naturally, this story relates to my life and tells about the outer and inner places I visited during my journey. It does not mean that I intend to deny the existence of other paths and other places; I just don't know about them, I did not visit those places. I do not claim that the path I followed is the only right way. There is nothing 'right' or 'wrong' in this story; it is simply a narration of what happened.

And this story isn't over yet. Something new happens each day. This is my story as of the 4th of September, 1998. Tomorrow, on the 5th of September, something new could happen. How could I possibly guess that today?

I must mention one thing. More than a thousand readers wrote to me after they read my letter in *Maharashtra Times* and the article in *Saptahik Sakal*. Though I wanted to, I not able to reply to these letters. I could not respond to this avalanche of personal letters while carrying on my work among the tribals in the Gadchiroli district. I regret the fact that while I thoroughly enjoyed the warmth and affection expressed in these letters; I could not reciprocate on an individual basis. Each letter was dripping with emotions! What could I possibly write back to them? And how? It was as if Lord Krishna had come to the tiny, modest hut of Vidura! I do not know how to be a good host to Him! It seems I will always remain indebted to these readers.

I see a long line of people, who already are suffering or are most likely to suffer from a disease like mine. I have attempted to narrate the story of my heart disease in the hope that it will ease their journey to some extent. If that really happens, I wish to dedicate this service to life itself which blessed me with heart disease and then brought me out of it by holding my hand.

Shrikrishnayanmastu.

(May this story be my humble tribute to Lord Krishna.)

4th of September, 1998
Shodhgram, District Gadchiroli
442-605, India

Abhay Bang

Acknowledgments

Many individuals have made important contributions to the making and shaping of this book.

During and after my illness, my wife Rani remained steadfast by my side and looked after me. She lovingly bore the burden of my exploration and journey without complaining. Sometimes she made useful suggestions, but never insisted; never interfered with whatever I did. She is the closest witness to my journey; she is also my most intimate audience.

I wish to remain forever in debt of my teacher and physician Dr. Bidwai, my spiritual guide Vimalatai Thakar and of Vinoba, who met me several times during this time by way of his books and unfathomed to me the deeper meaning of spirituality and Sanskrit texts.

I learned from the writings of Dean Ornish and several individuals and organizations involved in the field of yoga. Perhaps the letter I wrote to my select friends might have remained as a personal and private account revealed only to that closed circle and might never have led to this book. However, Mr. Pralhad Jadhav arranged to get that letter published in Maharashtra Times and then Mr. Sada Dumbre saw to it that I wrote a detailed article for Saptahik Sakal. Mr. Dilip Majgaokar of Rajhans Prakashan tried to reach me several times while I was working in the woods of Gadchiroli, insisted that I ought to write this book and took on the responsibility of publishing it in Marathi. Prof. Suresh Pandharipande, Dr. S. P. Kalantri, Mr. Sada Dumbre, Mr. Vivek and Mrs. Neela Phadnis read the Marathi manuscript and made several useful suggestions.

Dr. Arun Jatkar, a Marathi scientist working in the US for nearly thirty years, took upon himself the responsibility of translating the Marathi book into English. His selfless inspiration and the commitment to perfection revealed so often during the process of translation has amazed me. I just can't thank him enough. It is due to his untiring efforts that this English version has become possible.

Thousands of readers and patients urged me on during direct contacts as well as by way of letters. The oft-revised manuscript was carefully typed on computer by Mr. Balvant Surve.

The scientists, sages, saints and intellectuals in whose thoughts and experiences I sought strength and support at every step are my predecessors. I continue to seek guidance from them as I follow the path.

Without all these people, this book wouldn't have been possible!

Abhay Bang.

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Appendix 1

Selected Scientific Studies about Heart Disease

Studies of heart disease in people of Indian origin, insulin resistance and 'Syndrome X' have been mentioned earlier in the text of this book. Synopses of some other important studies are presented below -

1. **Framingham Study:** In 1949 a study was initiated in Framingham, a city 20 miles away from Boston, MA, USA. Back in 1949, Framingham was a city of 24,000 inhabitants. The investigation was directed at finding out what leads to heart diseases and who are most likely to be affected by heart diseases. A total of 5209 men and women aged 30 to 62 were selected for this study using the statistical sampling methodology and they were subjected to a full battery of tests. Complete accounts of what they ate, what they drank and the minute details of their lifestyle were recorded. They were put through full medical check ups and again the complete accounts of their life were recorded every two years. This study has been going on for the past 49 years. Out of the original 5209 subjects of this study many died during the past 49 years; many others became afflicted with heart disease or other diseases. These illnesses were diagnosed by the attending physicians or came to light during the medical check ups that took place every two years. The extensive records of innumerable minute details of the 5209 subjects and their lives yielded invaluable information about who is likely to be afflicted by heart disease and why. It became possible to establish the relationships between heart disease on one hand and the factors outside human control (gender, heredity, age) and the factors within human control (increased cholesterol, lowered HDL, smoking, obesity, lack of exercise, diabetes and high blood pressure).

The original 5209 subjects gave birth to children during the course of this study. These were also included in the study. The study has now been extended to include the grandchildren also. Participation of three generations in the study is helping the researchers understand the effect of heredity also.

Information gleaned from the Framingham Study has been used in the construction of the questionnaire in Section 7.2 (Check Your Horoscope for Heart Disease).

2. **Seven Country Study:** But what are the reasons for heart disease outside USA? In order to find an answer to this question, a seven-country investigation was initiated during the late 1950s. A total of 12,000 middle-aged people with widely different lifestyles from Finland, Italy, Greece, Japan, Netherlands, Yugoslavia and USA were included in this investigation. The investigation went on for several decades. Heart disease was found to be most prevalent in Finland and USA, while least prevalent in Japan, Italy and Greece. Assuming that the lifestyle of people in the Mediterranean countries (Italy and Greece) must be least susceptible to heart disease, the investigations were also directed towards finding out the factors that are beneficial to heart.

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3. **Roseto Study:** A large number of immigrants from Italy have settled in a rural community of Roseto in Pennsylvania, USA. In 1950, these immigrants represented an assemblage of tightly knit family units, adhering to their traditional Italian lifestyle and kindred spirit. Everyone in this community felt secure. Researchers found that the rate of occurrence of heart disease among the Italians in Roseto was much smaller than that among the white Americans in nearby town of Bangor. The following factors seemed to protect the Roseto Italians from heart disease - (1) use of olive oil and fish in diet, (2) close relationships within families, (3) emphasis on retaining social and cultural traditions brought along from Italy and (4) stress-free living (singing and dancing, lack of dangerous psychological inhibitions and siesta - a nap in the afternoon after lunch).

A researcher named Wolf predicted that in course of time the traditional lifestyle and close-knit family ties of these Italian immigrants will dissolve away, they will mainstream into the stressfully competitive lifestyle of white Americans and the incidences of heart disease amongst them will rise. Twenty-five years later, Wolf's predictions came true.

4. **Migrant Studies:** Susceptibility of people in Japan to heart disease was found to be very low. Was it due to some hereditary factors? Many Japanese have now settled on the islands of Hawaii. Though their genetic heritage is Japanese, their lifestyle has become American. A study of these Japanese immigrants to Hawaii showed that after their lifestyle became fully Americanized, the incidences of heart disease rose to the same level as among the mainland Americans.

Results of a study conducted by Deepak Bhatnagar and his associates in Punjab, India and in United Kingdom also showed corroborating evidence. Heart disease was relatively rare among those family members that continued to live in rural Punjab. However, it was much more prevalent among the members of the same families who migrated to major cities like Chandigarh in Punjab or immigrated to United Kingdom. Immigrants to major cities in Punjab or United Kingdom exhibited high incidences of such risk factors as high cholesterol levels, obesity and blood sugar. Incidence of heart disease was found to be more prevalent among the Punjabi immigrants than among the white or the black population of United Kingdom. It became clear that these Punjabi immigrants had a 'safe' lifestyle when they lived in rural Punjab. But there are some risk factors specific to their physique that seem to express themselves in life-threatening manner regardless of whether they move to major cities in India or to United Kingdom. The country of residence - whether India or United Kingdom - makes no difference. No matter in which country they choose to live, the lifestyle of well-to-do, educated and modern urban population is the cause of high risk to life.

5. **Alamedia Study:** Berkman and Seim studied 4775 white Americans in the Alamedia county of California, USA. After an extensive check-up, the researchers assigned a 'social network index' to each subject on the basis of whether they were married or single, their relationships with other family members, friendships, participation in church activities and social relationships. These people were revisited after 9 years. Death rate among those who had low social network index was found to be twice as

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When Bhagawad Geeta says that even if tainted, svadharma is better than any other dharma. (Though in most Indian languages 'dharma' also means 'religion'), Bhagawad Geeta does not allude to Hindu religion or Moslem religion, Christian religion, etc. 'Dharma' of each person is different. The two hundred people sitting in front of me here represent two hundred different dharmas. What was my dharma ten years ago is not my dharma today. As contemplation and experience changes one's attitudes and passions, the earlier dharma fades away yielding place to a new dharma. Nothing is to be done out of stubborn adherence to one thing.

Following another man's dharma, howsoever great and noble it may appear, does not benefit me. Sunlight is dear to me. Sunlight is beneficial to my growth. And the Sun is worthy of my respect. But, if I leave this earth and try to go near the Sun, I will be burned in the sun's heat. On the other hand, living on this earth could be ignoble; the earth is nothing in comparison to the sun and the earth is not self-illuminated. But as long as I am not able to withstand the sun's radiance at a close distance, I must remain on the earth and achieve higher goals. If someone said to a fish, "milk is more valuable than water; so you should live in milk", will a fish agree to living in milk? A fish can live in water. It will die in milk.

Another person's dharma is not to be followed because it appears easier to follow than one's own dharma. What appears as easy is often an illusion. If a man is unable to feed and protect his wife and children and therefore decides to renounce the world and become an ascetic, it will be a sham and he will find it very hard to live like an ascetic. At the slightest chance his desires will take over. He who renounces the world and retreats to a forest simply because living like a normal person in a society is too burdensome will first build himself a small hut. Then he will erect a fence around the hut to protect it. And gradually he will find himself recreating the same conditions of living from which he had sought to escape. If a person is genuinely disinterested in the ways of the world, then the life of an ascetic is not difficult. And one can indeed find statements in Vedas that say renunciation is easy. But the psychological inclination is the main point. One's dharma is a reflection of one's genuine, natural bend of mind. The question is not what is high and what is lowly; not what is hard and what is easy. There ought to be a genuine upliftment, a genuine transformation.

Some people who are devout but not necessarily rational ask, "if renunciation of this world is better than war and bloodshed, why didn't Lord Krishna turn Arjuna into an ascetic? Was it impossible for God?" Nothing was or is impossible for God. But if Lord Krishna had turned Arjuna into an ascetic, Arjuna's own efforts wouldn't have been involved. God gives man a choice. It is up to man to make the effort. Joy is in one's effort. A child likes draw pictures. It doesn't like someone to hold its hand. If a teacher solved all the problems for students, how will the students learn mathematics? Parents and teachers should give instructions. God offers suggestions to us from within. He does nothing more than that. What is the point in God shaping and baking each pot like a potter? We are not pots of clay. We are living, sentient beings.

The second canto of Bhagawad Geeta presents us three supreme theses - (1) Atman is everlasting and ceaseless, (2) Body is banal and (3) Svadharma is indestructible. While the first two are to be understood via the faculty of reasoning, the thesis about Svadharma entails physical involvement. I had talked briefly about svadharma during our last

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meeting. nature endows us with our svadharma. One does not have to seek svadharma out. It's not like we fell right out of the sky and simply started walking around on this earth. This earth was well populated before we were born; there were our parents and there were our neighbors. We were born in this continuously flowing stream. By being born I have received the gift of a dharma - to serve my parents, to serve the society in which I am born. Svadharma arises along with our birth. One might even say that svadharma is waiting for us even before we are born; because following svadharma is the primary purpose of our life. We are born in order to answer the call of svadharma. Some thinkers liken svadharma to a wife. Just as the relationship with wife is unbreakable, so is our relation with svadharma unbreakable. I think even this simile is not too fitting. I think of svadharma as the mother. It's not like I choose my mother. She is already there. Howsoever she may be, it is undeniable that she is my mother. We have no other shelter but svadharma. To shrink away from svadharma is suicidal. Only with the support of svadharma can we go forward. That's why no one should abandon svadharma and that is a basic law of life.

Svadharma is so easy that one should be able to follow it effortlessly. But various temptations come in the way, so we find it hard to follow svadharma or if we do follow svadharma, toxins of temptation poison our endeavors. Many are the external facets of temptation that strew our path with thorns; but on closer inspection one finds that at the root lies our narrow-minded focus on our body. My love does not extend beyond me and those who are related to my body - my spouse, my children, my parents, my brothers and sisters and other close relatives. Anyone and everyone outside these narrow walls appears as an alien or an enemy. And my narrow-minded focus on my body also apprehends only the physical body of those I consider as mine. Caught within the grip of this double-edged focus on body, we mentally construct tiny cesspools of various kinds and various labels. Nearly everyone engages in sort of activity. But no matter what, these remain tiny cesspools. They are only skin deep. Someone turns national pride into a cesspool and lives within it. Brahmin-nonbrahmin - a cesspool; Hindu-Moslem - a cesspool. Wherever you look you see these cesspools of every imaginable variety. as if we just can't live without these cesspools. And what is the effect of that? The effect is same all over - they bred the germs of lowly and despicable thoughts and destroy the healthy svadharma.

- Vinoba (from Discourse on Bhagawad Geeta).



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CHAPTER 1

The Heart Attack

1.1

On the morning of April 18, 1995, I left home for my daily walk. We have named our settlement in the forest of *Gadchiroli* district '*Shodhagram*' - The Research Village. That's where we have established our hospital facilities, our research center and the *vyasana-mukti-kendra*, the center for helping people quit harmful habits such as alcoholism.

I walked right up to the entrance gate of the *Shodhagram* settlement. Our two Alsatian dogs *Shera* and *Soni* ran ahead of me while our two Pomeranian dogs *Mita* and *Rupi* sauntered right behind. *Shodhagram* is surrounded by greenery. People believe that the '*Dandak Aranya*' described in the great Hindu epic *Ramayana* is none other than this forest surrounding *Shodhagram*. A narrow, winding path of red '*murum*' stone runs across the forest from *Shodhagram* to the nearby village *Kudakvahi* and this is the path we take every morning.

After walking only a short distance I felt a sudden sensation of pain in the chest. It felt as though someone had gripped me in a very tight embrace. The pain soon spread to the left arm. In the past, I had felt a pain not too different from this one on a few rare occasions, and it had been diagnosed as heartburn caused by acidity. I sensed that the pain today was rather sharp as though the heart muscle itself was hurting. I wondered if it was 'angina'. I returned to our quarters and chewed several antacid tablets. If this pain were nothing more than a heartburn, I thought, the antacid tablets would soon neutralize the acid in my stomach and the pain would go away.

I left for a walk again a little later. Now *Rani*, my wife, also accompanied us. I had barely walked a hundred steps before the pain returned. Should I tell *Rani*? I forced myself to walk a little more. But the pain soon made it impossible to walk any further. "*Rani*, I can't walk any more! My chest hurts when I walk!" I said, and something snapped in my mind right there and then. This was not acidity. This was a "heart attack"!

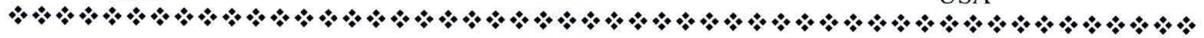
I knew it was a heart attack. My mind knew it was a heart attack. My body knew it was a heart attack. And yet, something inside me refused to accept it without any scientific, medical evidence. With slow and deliberate steps we made it back. I was immediately hooked up to the ECG (electrocardiogram) machine. The nurse tore off the chart and handed it to me. Both *Rani* and our nurse *Nanda* looked on with curiosity and a considerable anxiety. With wires still taped to my chest, I began to examine my own ECG. We did not have any other cardiologist on our staff as yet and *Nagpore*, the nearest big city where one could have a qualified cardiologist examine the ECG, is 200 km. away from *Shodhagram*. My ECG did not speak of a 'normal' heart. The S-T segment of the ECG had slipped off the 'normal' position. So my chest pain wasn't innocuous after all. As soon as I mentioned this to *Rani*, she announced - "We are leaving for *Nagpore*! Right now!"

With a great flurry of activity the preparations for our journey began. *Anand*, our elder son, was in the ninth grade and had gone away to the city of *Gadchiroli* for his final

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examinations. We couldn't meet and tell him anything before we left for *Nagpore*. We somehow managed to convince the nine-year old *Amrit*, our younger son, that we would be back the same evening or latest by the next morning. I asked *Rani* to pack a couple of books on heart diseases. "What do you need those books for? There are well-qualified doctors to treat you there!" she said. "Yes, but I need to understand what's wrong with me", I replied. I slipped a tablet of Sorbitrate under my tongue. It helps increase the blood supply to the heart. I explained to *Rani* what to do should my heart suddenly stop or should I suffer an intense pain in the chest on the way to *Nagpore*. She also packed a few emergency medications and we left for *Nagpore*.

While the car raced towards *Nagpore*, I kept looking through the text on ECGs. What was the meaning of the change I saw in my ECG today? I suddenly remembered that twenty years ago, when I was preparing for my degree of M.D., nothing other than ECGs and the texts on ECGs was important to me and to my colleagues. To detect the subtlest changes in ECGs, to interpret these changes and to diagnose the associated heart maladies had become our most passionate pastime. We would toss the ECGs at each other and dare one another to diagnose the problems from them. It was a very thrilling pastime. But I had lost my touch with ECG during the past fifteen years. *Shodhagram* is situated in the middle of *adivasi*¹ (aborigine) settlements and one rarely comes across a heart disease patient, leave aside a patient who has suffered a heart attack. So it had been ages since I had looked up a text on ECGs.

The Hindu epic *Mahabharata* tells a story of *Arjuna*, the greatest archer. When *Arjuna* and his brothers and cousins were being taught archery, *Arjuna* alone could see and aim an arrow at the eye of a bird sitting in a tree. *Arjuna* alone had learned not to allow the sight of the tree, the branches or the leaves or any sounds interfere and to keep his attention steadfastly glued to the bird's eye. Today, I had become *Arjuna*. In that text on ECGs, I could see nothing other than the minor change I had noticed in my own ECG and my mind was busy trying to interpret those changes. What will be my diagnosis? Deep inside me there was turmoil. What's happened to me? Is it going to be something quite serious and sinister? Deadly?

It was afternoon by the time we reached *Nagpore*. We went to see Dr. *Bidwai*, the senior cardiologist. Twenty years ago, he had taught me all he knew about heart diseases. He had treated me like his own son. He thought I had come to pay him a curtesy visit. He was delighted to see me, his favorite student, and proceeded to tell me all about a new patient of his. I stopped him and said, "Please examine me. I had pain in my chest this morning."

He was surprised. I was only 44 years old. He wasn't prepared to accept that his favorite student *Abhay* could be suffering from a heart disease. He delved deep into my medical history, examined me thoroughly and also checked me out on the ECG machine once again. His face grew serious. My chest pain was diagnosed as "Unstable Angina - Non-Q Wave Infarction". ('Infarction' is an area of tissue that is dying due to insufficient

¹ Many tribes of aborigine people inhabit the inaccessible areas - woods and hills - of India. 'Adi' means 'from the beginning' and 'vasi' means 'resident'. Adivasis of Gadchiroli district belong to the tribe called 'Gond'.

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blood supply). "You must get admitted to the hospital immediately", he said. There was no longer any doubt. It was real and it was serious. I had to be admitted to the hospital immediately.

As I was leaving Dr. *Bidwai's* office, I noticed two thick, red-cover books on his desk. These were two volumes of the famous book 'Heart Disease' written by Eugene Braunwald. I had wanted to read this book for a long time, but had never had the opportunity. Today, many questions were raging in my mind. "May I borrow these two volumes?" - I asked. For a moment he seemed to ponder over the wisdom of letting a patient read about his own condition. But he was a professor to the core. How could he ever tell his student not to read those two volumes? "Do take them along", he said. *Rani* carried those two hefty volumes for me. By four in the afternoon, I was lying in a hospital bed. I had become a heart disease patient. Me, a heart disease patient!

Both *Rani* and I were sullen with grief and anxiety. One thought possessed me - I might suffer a massive heart attack right here in the hospital and die in the next forty-eight hours; maybe next week. What then? What will happen to *Rani*? What will happen to *Anand* and *Amrit*? How could I possibly leave this world so soon? Without fulfilling my responsibility towards them? Our research institute SEARCH, its undertakings, our unending efforts to help *adivasis* kick the alcohol habit... What's going to happen to all that? Do I have the right to die like this?

The more I thought, the more I understood the significance of what had happened and suddenly I sensed the real danger. I had not 'lived' my life yet and death was already at the doorstep! It seemed like my life had just begun. Only yesterday I was that little boy walking into the *balmandir* - the school for little children. There! That's me with a schoolbag on the shoulder. And that little boy is going to die soon! Oh No! Not so soon, oh please! I have so much to do, so much to learn, so much to understand. And with so much yet to do, the end is already here! With no warning whatsoever, the sand had shifted beneath my feet. The very building I called my life, all my assumptions, everything I had taken for granted, all the calculations I had made.... It was all falling apart.

I was not prepared to die. I had taken it for granted that I was going to live a long life and had been simply postponing, even avoiding the real living. I was sort of saying all along, "Let me do just this, just this much and just so much today and tomorrow I will start living a real life." So everything I had done so far had been like a casual rehearsal of a play called 'life'; it hadn't been even a dress rehearsal. And already the curtain was about to fall!

1.2

Not just the fear of death, but many other questions harassed me. How come this happened to me? What could I have done to deserve this punishment? And why didn't I, a medical doctor, wake up any sooner? Did this morning's episode really come about 'all of a sudden'? Did it pounce upon me without prior warnings of any kind? I started remembering the past events one by one ...

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Yesterday was April 17, 1995. I was sleeping on our terrace². Our younger son, *Amrit*, got out of his bed around two in the morning and came out to lie down beside me as he does quite frequently. He still needs the security of his parents' company at bedtime. I cuddled him and softly patted him to sleep. That's when I felt a sudden pain in my chin. I thought nothing of it and tried to go back to sleep. The thought of what this pain might turn out to be the very next day did not occur in that half asleep - half awake state of mind.

I had noticed some pain in my chest for the past few days while riding a bicycle or while playing team sports. The pain used to be located in the middle of my chest and used to spread to my left arm. In medical terminology, such a pain is called 'angina'. When the supply of blood to the heart is reduced due to constrictions in arteries, (reduction of the internal diameter of arteries) one suffers from angina. One experiences the sensation of angina when the heart does not receive the full complement of the blood supply it needs - for example during a period of hard physical labor or after dinner or when one is sexually aroused.

But calling my pain 'angina' had posed a few problems. Many times, when I was engaged in an intense physical activity such as jogging or exercising with 'bull worker', I had experienced no such pain. A year ago, I had climbed 1500 steps to the top of *Raigadh*³ and had felt no pain whatsoever. I had taken my ECG several times and nothing 'abnormal' had been detected. Yet some doubts had lingered in my mind. So I had consulted a friend of mine who is a cardiologist. He had twice submitted me to a 'stress test', in which a person's ECG is taken while the patient is made to exercise on a treadmill. The treadmill is a machine, which makes one walk in place. A belt runs continuously under your feet. You grip the handle bar and start walking in order to avoid falling down. The belt speed can be varied from 'very slow' to 'very fast'. By tilting the platform upwards, more strenuous walking exercise such as climbing up the stairs or a hill can be simulated. The faster the belt is made to run, the faster you must walk, which begins to strain the heart muscle. No matter how 'fit' your heart and the blood vessels are, your heart rate soon begins to rise above the normal resting rate, requiring more supply of blood and the attendant supply of oxygen to your heart muscle. If the blood vessels are constricted, supply of blood to the heart muscle will not keep pace with the demand and the ECG pattern will deviate from normality as a result. Both the times I took this test, my ECG had appeared normal. So, it was concluded that my chest pain must be due to something else other than angina. The best conjecture was that it was a sensation of heartburn caused by hyperacidity. Now, while lying in the hospital bed, I began to regret that we had ruled against angina a little too early - after just two such tests. With a much more intensive stress test, we might have arrived at the correct diagnosis a full year ago!

My blood had been tested for cholesterol and blood sugar a year ago. My cholesterol level was found to be 244 mg. A level between 150 and 240 mg. is considered

² Many houses in India have a balcony or a flat terrace on upper floors. During the warm months, it is customary to sleep in the balcony or a terrace rather than inside a bedroom because few houses, even in 1995, have such luxuries such as fans or air conditioners.

³ Raigadh - a well-known fort in Maharashtra, built on a mountaintop. The great Maratha warrior king Shivaji was coronated there in 1650 AD.

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'normal' in an adult my age. However, there are two kinds of cholesterol - HDL (high-density lipids) and LDL (low-density lipids). HDL is a 'good' kind of cholesterol, while LDL is a 'bad' one. A high level of HDL is essential for a healthy heart, while a high LDL portends potential heart trouble. My blood report did say that the LDL level was higher than normal and the HDL level was lower than normal, which should have set off an alarm in my mind. But I had somehow convinced myself that a total cholesterol count of 244 was not so bad after all. All I needed to do, I thought, was to control my temptation to feast on the milk cream⁴. "If only I had been more watchful, I would not be lying in this hospital bed right now", I repented.

Nearly two years earlier, it was discovered that I suffered from diabetes. The finding had come as a shock to me and my mind had refused for quite some time to accept that I was a diabetic. The inability to break down and to metabolize sugar is not the only thing that characterizes diabetes. Diabetes also promotes the constriction of many blood vessels. I had indeed begun to take medications for my diabetes and that had brought my blood sugar under control. However, I had knowingly neglected the other precautions, especially those necessary for avoiding the thickening and consequent constriction of blood vessels. But I had been a workaholic then. I had devoted myself to the cause of eradicating alcoholism and its social ills amongst the *adivasis* and I was consumed by the ideal of bringing about a tremendous social change. I was examining a large number of patients every day. I was prescribing and applying to them the rules and regulations of a healthy lifestyle. I had no time to practice what I preached. I did not even feel the need to follow those rules and regulations.

And then, while lying in the hospital bed, I remembered things from five years ago. In 1990, I had spent three months in USA for studies. I carried back huge trunks filled with books, notebooks and research publications. When I arrived at the airport in New York, my flight for India was waiting. There are no porters to cart away a passenger's luggage at airports in Western countries. So I loaded my heavy trunks on a handcart and started pushing it towards the check-in counter. At one point, I had to push really hard because the concrete pathway sloped upwards. Suddenly there was a shooting pain in the chest. I barely managed to continue pushing the cart. A little later the pain abated considerably. It made me worry. That was the very first time I had sensed a pain my chest. "What could this chest pain be?" - I wondered, "certainly not a heart disease! I was only thirty-nine. How could I even think of a heart disease at such a young age?" Besides, my US health insurance had lapsed just a day earlier. If I had sought medical help simply because I had felt chest pain, I would have been

⁴ In India, even today, homogenized and pasteurized milk is available only in big cities. In most households, a milkman delivers 'fresh' milk each morning - fresh from the udders of a cow or a buffalo. Buffalo milk is generally 'richer', i.e. creamier; cow's milk is given only to babies. One can never be sure whether the vessel in which the milkman carried the milk had been thoroughly cleansed or whether he/she had thoroughly cleansed the hands before milking the animal or whether the animal was perfectly healthy. As a first line of defense against any germs that might arrive via milk delivered at your doorstep, the milk is first boiled before using it for any purpose - for drinking or for lightening a cup of tea. As the boiled milk cools, a thick layer of cream collects at the top. That layer of thick cream is a 'delicacy' to me, as it is for a countless number of people in India.

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placed in a hospital and a battery of tests would have been administered to me. Medical treatment is so expensive in USA that it would have bankrupted not just me, but my future seven generations! So I had to make a very hard decision.

My flight was waiting at the departure gate. I boarded the plane and sat down in my seat. I reached India safely, without any medical incident. A few days later I saw my cardiologist friend. He put me through the paces of the 'treadmill test' till I was bathing in my own sweat. But the ECG turned out to be 'normal'. We both agreed that the chest pain I had felt at New York airport was nothing to worry about. Looking back, it seems that it was the very first presentation of my heart disease. "If I had not ignored its significance and had begun a proper treatment then and there", I thought, "the state I was in today wouldn't have arrived. It had been foolish of me to ignore the first warning signs".

Going further back, I remembered that ten years ago, when I was thirty-four or thirty-five, I had begun to sense that my body was no longer in the fittest condition; I no longer had the strength I once had; muscles had begun to lose their tone. It was just after *Rani* and I had both finished our post-graduate studies in medicine in USA and returned to India. We were busy with preparations for the work we had planned to conduct in *Gadchiroli*. I thought I should commence a regimen of daily exercises and sports. But then, I was only thirty-four. A 'mission of life' waited for us. We were ready to go at it full speed ahead. Exercise could wait. Sports could wait. It was time to devote ourselves to our avowed mission. "There will be plenty of time to attend to exercise and sports later on", I had rationalized, "and I will certainly take up regular exercises later on". So I remained apathetic to the idea of exercise at the age of thirty-four, when I was probably best able to exercise my body.

My mind roamed further back. Twenty-five years ago, when I was in a medical school in India, I had read in a book on pathology that constriction of blood vessels (atherosclerosis) typically begins after the age of fifty. However, postmortem examinations conducted in the west on children who had died at the age of one to three had shown that the process of atherosclerosis could begin even at such an early age. The implication was that the care and concern to avoid heart diseases should begin when one is still a baby! When I had first read this twenty-five years ago, I had easily convinced myself that this was nothing more than an American fad. It can't happen in India. People in India live a 'natural' lifestyle, not an artificial and stressful lifestyle like they do in USA. We in India don't need to worry about these heart diseases. Later, much later, when I would be past fifty, I will need to be careful, but now. Not when I was only twenty.

Today, as I remembered all this, I felt sad and sorrowful. Nature had tried to warn me again and again. But each time I had ignored the warnings. I had avoided doing anything and had chanted the only mantra I knew, "later!". What if I had not ignored those warning signs? What if I had not avoided facing up to them? Indeed, if I had not avoided what needed to be done then, death would not be knocking on my door now. Why did I not wake up earlier?

The sad truth was that I had refused to open my eyes then and now I was lying in a hospital bed.

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1.3

In twenty years since I started practicing medicine I had diagnosed serious maladies in thousands of patients. I had also witnessed hundreds of deaths. But now, for the first time in my life, I was the patient and I was gaining a first hand experience of the fear of death. I carry in mind a dim and foggy reckoning of how seventy hours had passed in grim anticipation of an impending heart attack. Everything around me felt unreal. The lines of demarcations between truth and hallucination had become very faint. "Am I going to die?" - I had thought the first night in this hospital, "this could very well be my last sleep. If the heart attack strikes while I sleep, I will not see the morning. What I see around me right now might be my last vision!" I kept talking to *Rani* till late in the night and after that I kept awake reading. Since there was every possibility that I might pass away sometime during the night, I wanted to 'live' as much as I could!

Some ten or twelve years ago, while I was in USA, I had seen a Gary Cooper movie 'High Noon'. The plot revolves around three dangerous criminals who escape from a prison and plot to come back to take revenge against the sheriff who had caught them in the first place. The entire town becomes obsessed with fear of these hardened criminals indeed returning. The very thought of it strikes a terror in everyone's heart. There is no actual violence, no actual fight in the movie. But the dark shadow of a bloody fight holds one in a vice-like grip. I think that's how I felt about the impending death. Will the death strike? How? When? And what will happen when the death does arrive? This game of life will be over once for all?

What had always felt like a dull routine now appeared very beautiful and highly desirable. I still remember the very first breath I drew when I woke up after spending a night in the hospital. That breath brought the awareness that I was still alive. I turned my neck and stretched my legs. I can still use my muscles! I can make movements with them! They are mine! I looked downward. I could feel the muscles in my neck contract to let me turn the neck downward. Oh! This life is beautiful! I can turn my neck whichever way I want! Why had I not experienced this joy before? Now, if I am given a second chance, I will savor the very joy of it every time I turn my neck...

During my stay in the hospital I craved for a meeting with my sons. The day after I was admitted to the hospital I said to *Rani*, "Please call the children and have them come to see me." She wanted me to settle down in the hospital first. "If they come and see you like this, they will be terrified", she said, "They will think their father has contracted a deadly heart disease. Better wait till your condition stabilizes." I am generally not aggressive or stubborn. But my desire to see my children was so strong at that time that I said to *Rani*, "I must meet my sons right now!" and I turned my face away from her.

Rani understood. She arranged for our sons to come to *Nagpore* from *Gadchiroli*. Little *Amrit* ran towards me calling out in his sweet voice, "*Nyena*⁵!" Children

⁵ Pronounced as 'Nye-naa'.

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call me 'Nuena'. *Rani* is from *Andhra Pradesh*⁶ and her native tongue is *Telugu*⁷. In *Telugu*, *Nyena* means father. "*Nyena*", *Amrit* asked, "what happened to you? Did you get a heart attack?" *Anand*, our elder son, showed a remarkable understanding and tried to tactfully silence his younger brother's pure-hearted questioning. I held them both firmly in my arms. Many people say that one can't happily close one's eyes forever without first seeing the children to the heart's content. There is also an idiom like "the quest of my eyes was satisfied". Up until now, these expressions had been mere words to me. In order to know them in your heart, you must personally experience the full potency of these idioms.

I suddenly remembered that when we decided to build a hospital for *adivasis* in *Shodhagram*, the *adivasis* told me what bothered them most. "*Doctorsaheb*⁸", they said, "the government hospitals admit the patient, and throw out his relatives. But we want to live amongst our relatives and die amongst our relatives". So, when we did finally build a hospital for *adivasis*, we built a series of little huts, where a patient could indeed live with his or her relatives. The *adivasis* were greatly thrilled and overjoyed by our idea. Now I realized that not only the *adivasis*, but I too needed the company of my own flesh and blood when a life-threatening disease looked me in the eye. I could see the *adivasis* of *Gadchiroli* in my mind. I could almost hear the old *adivasi* village leader *Sambhaji Darro*⁹ ask, "So you too are like us, eh *Doctorsaheb*? " I answered, "Yes, *Darro Patil*¹⁰, we are all alike!"

My mother accompanied by my brother and his wife came to see me. My father followed them. My mother is seventy-two. What must she have felt when she saw me, a mere forty-four year old, lying in the hospital bed with a heart condition? I dared not see her eye-to-eye. I was sick and yet, in many ways, I felt guilty!

My wife *Rani* was a constant companion during my stay in the hospital. What would happen to me should my health take a turn for the worse was far less important to me than the question, "What will happen to her?" But she had no time to vent her own grief and anxieties. She shouldered the entire burden with admirable self-confidence; never revealing the immense mental stress and agony with which she had to cope, kept a smiling face and managed everything efficiently. We had been married for eighteen years. I fell in love with her once again as I lay in the hospital bed. I didn't want her to be away from me even for a moment. Was it because I needed to hold fast to some support in those days when the threat of death hung over my head? I can't tell. But one thing is certain. If death were to close in on me, I wanted my wife to be nearby.

1.4

⁶ Andhra Pradesh - One of the southern states of India. Our Gadchiroli district is almost on a tristate border shared by Madhya Pradesh, Andhra Pradesh and Maharashtra.

⁷ Telugu is the language spoken by the majority of people of Andhra Pradesh.

⁸ 'saheb' or 'sahib' is an epithet signifying high respect. So a common man would address a medical doctor as 'Doctorsaheb'.

⁹ Pronounced as Therr-Ro (i.e. both 'r' s pronounced distinctly).

¹⁰ Patil is a traditional title of a village chieftain. Many people in Maharashtra use Patil as their last name or the family name. In Gujarath, it is same as 'Patel'.

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On the one hand, I felt a certain tension in my mind; I didn't feel afraid, but sad and poignant at the thought of my life slipping away from me. On the other hand, I was behaving as if nothing had happened to me, as if I was admitted to the hospital for something laughably frivolous like minor cough and colds. I was talking to people, I was laughing a lot and I was reading a lot. I was hovering on the border between life and death and felt like soldiers who experience no pain at the moment of death because their minds are already desensitized.

I was resting in bed and taking medications. For three days in a row I felt no chest pain. Not only did I slowly begin to entertain the probability of beating the odds of death, but I even started wondering whether the chest pain I had felt so intensely three days ago was real or simply a figment of my own imagination! So, on the fourth day, I carried out a secret experiment on my own. To be honest, I am ashamed to tell anyone about this, but I must tell. I had to know for sure that the chest pain I had felt was really angina and not a simple muscle spasm. First I paced my own room back and forth several times. I counted my pulse as I walked faster and faster. I was hoping that nothing would happen. But as soon as my heart rate sped up to 110, the chest pain returned. I immediately stopped my experiment and lay down in bed. My heart disease was real and the diagnosis made by Dr. Bidwai was accurate. Looking back, I realize that my experiment was a foolish one and makes me feel ashamed of myself. How risky it was! But it also makes me laugh at myself. I had hoped to discover that there was nothing seriously wrong with me. Oh, how one clings to wishful thinking at a time like this!

My grief was twofold. Death was unwelcome to me, just as it is to any other human being. Even more hurtful was the fact that I was a well-qualified and experienced medical doctor. That I had misdiagnosed myself earlier was both insulting and embarrassing. Why did my interpretation, my judgement, go wrong? I had not been just a 'good student', but had stood at the top of my class in every examination in medical college, both in India and abroad. But what's the use of all those honors if I could not diagnose my own problem correctly? I was wrong all these years! And it wasn't just me who had misdiagnosed my condition. My friends who had specialized in cardiology had also been wrong. How could this have happened? This was the second reason that embarrassed me and made me grieve.

Despite the fact that I was a medical doctor and despite my frequent suspicions, medical tests failed to confirm that my chest pain was due to angina. Why did our diagnoses turn out to be wrong? Ample exercise during the treadmill test had not produced the symptoms of angina and the ECG had shown no signs of change from the ECG obtained when I was at rest. And this is precisely what had misled us all. As I read the book on heart diseases by Dr. Braunwald, I came across some eye-opening information.

The sensitivity of the treadmill test is only 75%. That means if a very large number of patients suffering from the heart disease were given the treadmill test, then this test will indicate, on an average, the presence of a heart disease in only 75% of such patients. (In other words, the test will not detect the presence of a heart disease in 25% of patients, even if the patients did have the heart disease)! For a test to be fully sensitive, every patient who has a heart disease must test 'positive' for heart disease. A simple ECG has sensitivity of 30% and the treadmill test has a sensitivity of 75% when used for testing angina patients.

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However the medical textbooks which I owned did not mention this fact. Only Dr. Braunwald's textbook, written on the basis of a very broad and deep study of heart diseases, contained this valuable information. Moreover, a recently published study on this subject considers a treadmill test to be no more than 55% sensitive! In the absence of this information, we had blindly believed in the results of treadmill tests! Even though the chest pains suggested angina, we had relied on the fact that the treadmill test results was negative and had therefore ignored the warning signals my heart was sending.

In medicine, a patient's own account of his ailment is called 'history'. This history is important to a proper diagnosis. However, with an ever-increasing reliance on mechanized testing and a substantial rise in the number testing protocols, we physicians have slowly begun to downplay the patients' own accounts, i.e. the medical histories. What happened in my own case was no different than what is happening in the case of patients at large. My colleagues in the medical field and I downplayed the significance of my 'history' and unhesitatingly relied on the treadmill test.

While lying in the hospital bed, I read Braunwald with an insane avidity for the first three days. In that time, I had read nearly eight or nine hundred pages out of the most informative fifteen hundred pages that this book contains. I sensed many of my misunderstandings being dispelled once for all and darkness being replaced by illumination. That made me smile. Such is the joyous glory of knowledge. And at the same time, there lurked some hideous thoughts in my mind, "How long would I be able to taste this joy? Is it already past my time to enjoy this edification?"

Questions nagged me one after another. "What is my true diagnosis? What's happened to me? A downward slippage of the S-T line in the ECG by, say half a millimeter, could very well be a random instrumental error and may have nothing to do with my heart condition. How nice it would be if that indeed were what had happened in my case!" The second question was more serious - "How much life do I have left?" In a mad frenzy I turned the pages of Dr. Braunwald's book and searched the answers to my nagging questions. Dr. Braunwald has tabulated the probabilities of survival a month, a year and five years after the onset of angina. He also spells out the probabilities of fatality associated with various sets of symptoms. I was trying to decipher my own prognosis from the vast array of information Dr. Braunwald had provided. I was trying to decode how much time was left at my disposal.

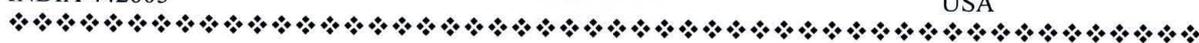
1.5

Two more questions bothered me - "Why should this suffering be *my* lot? How on earth did this *happen* to me?" My parents, both in their seventies, are still healthy. My aunts and uncles are seventy, seventy-five and eighty years old and hale and hearty. My grandmother, who passed away two years ago, lived to a ripe old age of one hundred and seven! And I am only forty-four, I am not fat, I don't smoke, I don't live in any urban area, I live amongst the aborigines and I do social work. So I was quite convinced that I wouldn't fall a prey to the ailments that generally afflict those who are wealthy and enjoy an abundance of food, i.e. the obesity and heart disease. I had tacitly believed that I was well protected from these ailments. These diseases afflict others. Those who contract these

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diseases are people of different ilk! I firmly believed that I was going to enjoy a disease-free, healthy life at least until I was seventy-five or eighty. So the question "Why did this happen to me?" was most nettlesome.

During the next several days I found my answer after a lot of reading, searching and contemplating. Just as an archeologist finds more and more important ancient relics and artifacts when he keeps digging deeper and deeper, many forgotten and ignored historical aspects of my present distress came into focus.

Laboring under an illusion that they posed no danger to me, I had become blind to the warning signs. There were two major risk factors - I am a male and my age is over forty. These were part and parcel of mine. In addition, I had developed symptoms of diabetes a couple of years earlier. Diabetics carry an extra risk of atherosclerosis (narrowing of blood vessels). This is caused by an increase in the amount of cholesterol in the blood. Cholesterol deposits form a layer on the inner linings of major blood vessels, effectively narrowing the blood passages. My blood cholesterol level had reached 244 milligrams.

Now, if you have your blood tested for cholesterol, the pathologist's report will most likely say that the 'normal' level of blood cholesterol is 150 to 240 mg. My cholesterol level was very close to this 'normal' level. How could it be construed as a sign of a disease?

My reading led me to realize that I had grossly misunderstood the meaning of this word 'normal'. As applied to the blood cholesterol level, 'normal' does not, by any stretch of imagination, imply physical wellness or fitness. It is a technical term in statistics, where it means something very different. When a large number of Americans were tested for their blood cholesterol level, tests showed that it exhibited a 'normal distribution'; results for nearly 95% of the population lay between 150 and 240. It does not mean that the blood cholesterol level of a physically fit person would lie between 150 and 240. A large number of Americans who suffer from heart attack(s) belong to the population whose blood cholesterol level lies between 150 and 240 mg and it is a top-ranking killer in America. And, in medical profession, we had been mistakenly thinking that a blood cholesterol level between 150 and 240 was normal, as if it were a clean bill of health! And we had been telling our patients to make sure that their blood cholesterol level lay between 150 and 240. It is clear to me now that we were, in effect, telling our patients that by keeping the blood cholesterol level between 150 and 240, they would be just as likely to suffer heart attack(s) as an average American!

An investigation known all over the world as the 'Framingham Study' (authored by Dawber, Moore and Meadors in 1951) showed that during the last fifty years, no one whose blood cholesterol level was below 150 mg. had suffered a heart attack. The probability of a heart attack increased as the blood cholesterol level increased above 150 mg. This study also showed that as the blood cholesterol level increased beyond 150 mg., the probability of a heart attack increased. Reading this made me realize that all these years my blood cholesterol level, 244 mg. was well above the 'risk level'. Only I was under the illusion that my blood cholesterol level was 'normal', so I was safe!

Why should my blood cholesterol level have increased? I knew that the blood cholesterol level increases in those who eat meat, those who smoke, those who are obese,

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those who have sedentary habits and therefore lack proper physical exercise, those who must cope with mental stress and those whose life style is highly competitive. I did not belong to any of these groups. My diet was one hundred percent vegetarian. But, in our family, my mother, my aunts and my grandmother had nothing but praise for milk. Since childhood I had developed a weakness for milk and fatty milk products such as ghee. My grandmother always told me a story of her own father - my great grandfather. He had a strong physique. He was a landlord in a village in Khandesh¹¹. Once his house was attacked at night by a band of wandering marauders who had come armed with swords. My great grandfather carried no weapons and was alone at home. As the fiends ran upstairs to grab hold of my great grandfather, he climbed to the third floor of his house and noticed his horse standing on the ground. Without a moment's hesitation, my great grandfather jumped on the back of the horse and was thus able to escape capture by the gang of marauders.

My grandmother must have told me a countless number of times that my great grandfather used to polish off a bowl of ghee during the course of every meal and that's why he was so strong. She obviously insisted that we children must also eat ghee and lots of it. Once I started attending the medical college I knew better; I had scientific facts at hand. Whenever I told my grandmother that eating ghee was unsafe for health, she rejected outright anything I told about the scientific reasons. A couple of years before she passed away, I asked her how old my great grandfather was when he died. She said, "He died when he was thirty-two. He had a sudden chest pain while he was eating his meal, his neck drooped to one side and before anyone could figure out what was going on, he was gone!" I felt sure my great grandfather had died of a massive heart attack. I realized in no uncertain terms what can happen if you consume a bowl of ghee at every meal.

Right away I reduced my consumption of ghee. But I had not controlled my weakness for milk. Also, I loved sweets¹² and ice cream. Animal products such as milk, butter, ghee, animal flesh, eggs, chocolates and coconut oil contain huge amounts of cholesterol. These may very well have contributed to the high cholesterol level in my blood.

One often hears that there is no connection between fatty foods and heart trouble, because so and so eats lots of fatty foods, but has not suffered from a heart disease. Another common adage is that in the good old days, people consumed a lot of milk, butter and ghee, but nothing ever happened to them.

And indeed, one does observe that such statements are not entirely false. My own grandmother, who lived to be 107, regularly consumed milk and ghee. Of course we had never measured her cholesterol level. My mother is also a devoted fan of milk and ghee. But her cholesterol has not increased to unsafe levels. In fact, her HDL is close to 60! Extremely safe! On the other hand, there is my great grandfather who had passed away long before I was born. He consumed lots of ghee every day, probably had a very cholesterol level and died of a massive heart attack at the age of 32. So, in one family, I see four different pictures in four consecutive generations. Why?

¹¹ Khandesh is one of the five major divisions of the province of Maharashtra and lies northeast of Mumbai.

¹² A large number of sweets in India are made from milk products with a high fat content.

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The cells of liver remove the low-density lipids (LDL), i.e. the undesirable portion of cholesterol, from the blood. The ability of liver to remove LDL from the blood stems from the presence of 'LDL receptors' on liver cells. And the number of such receptors is hereditary.

If your liver cells carry a large number of LDL receptors, then the liver can very effectively remove LDL from the fatty foods you consume. Most probably, my mother and my grandmother had inherited this ability. Even when they consumed high-fat diets, their cholesterol does not increase to unsafe levels. On the other hand, people with few LDL receptors, (for instance my great grandfather and myself); will see a dangerous rise in their cholesterol. Thus, the same high-fat diet affects different people differently, depending upon the number of LDL receptors on their liver cells. Since one does not know which group one belongs to, a safe thing to do is to avoid the high-fat diets and to thereby control the LDL levels.

That in the old days people were not adversely affected by a diet rich in milk and milk products like butter and ghee is not entirely true. Many like my great grandfather probably died young. I don't think anyone kept a count. *Rani's* own two uncles died of heart ailment at a young age. Both were landlords, they ate sumptuous meals. There must have been many like them. Those that died young were forgotten. We see the ones that lived on and draw a wrong conclusion that the health is not affected by high-fat diets.

The high-density lipid portion of cholesterol also exerts its influence on one's health. My HDL count was very low, around 30. My mother's HDL count is 61 while one of friends has a HDL count of 71. Obviously, they face a substantially lower risk of heart trouble. Raising one's HDL count is a tough task. Regular exercise helps. I did not exercise. My HDL count had slipped to a very low value. Despite a highly dangerous level of cholesterol for years, I carried an illusion of immunity from heart diseases and kept on indulging my taste for milk and sweets.

How much hard physical labor did the people in the old days do? Hard physical labor of walking 10 to 15 kilometers a day, carrying water over a long distance¹³ and farmer's chores was a regular regimen of exercise. Large joint families and the close ties with one's own clan, tribe, caste or the village community offered a safety net that protected one from unrequited mental anguish and anxieties and in general fostered an attitude of contentment with life. This was a very effective protection against the ill effects of a high-fat diet. But, someone like me lacked such a safety net.

1.6

Medical science knows that a lack of exercise and work environment that involves sitting in a chair most of the day expose one to the risk of a heart disease. Though I worked amongst the aborigines of *Gadchiroli* district, the work I did was not the kind that

¹³ In the old days and even in not-too-old days, availability of tap water in one's own residence was extremely rare in rural India. Both men and women carried empty pitchers to a nearby river or a stream or a well, filled them with water and carried them on their heads or shoulders. In many places, 'nearby' meant a distance of a few kilometers.

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would make one sweat. I had no time for a regular exercise. The 24 hours of a day were not enough to do what I wanted to do. Reading was important to me, examining the patients was necessary and social work and research were my primary responsibilities. To run an institution, to meet two to three hundred people a day, to carefully read piles of paper each day, to give lectures and to participate in meetings and to be on the run all the time - these were all important activities for me. But what about my body? It did hunger for food. It did not ask for physical labor and exercise. And even if it asked for it, I didn't hear it. I used to exercise regularly till I was seventeen. I used to play football (soccer). Once I entered the medical school, my exercise stopped. Since then, I had not exercised on a regular basis for the last thirty years. I thought it was remarkable that I had stopped exercising after joining the medical school. It was as if I had assumed that from then on, the physicians and hospitals would take care of me; I was free to be absolutely irresponsible; I had no need of exercise.

But then, why should the body *need* an exercise at all? To be honest, I have felt a certain disdain and apathy toward any kind of physical labor since my childhood. And indeed, why should one have to engage in any form of hard physical labor in this age of machines? Intellectual activity having assumed a high level of importance, physical labor seems to have been exiled from the lifestyle of the middle class. The joy of sweating profusely from a hard physical chore pales into insignificance before the delights of watching television or reading a book while comfortably seated in an easy chair. One instinctively recoils from the hideous prospect of pain and sweat and tears.

From the creation of a class of *shudras*¹⁴ thousands of years ago and burdening it with hard physical chores to the creation of a class of white-collar *babus*¹⁵ in modern India, it seems that the Indian society in general looks down upon physical labor. This disdain for physical labor is seen in Indians everywhere. Today, the children of Indian immigrants in UK woefully lag behind their peers (of all-British parentage) when it comes to physical exercise.

But what harm could a lack of exercise possibly cause? During the last ten years scientist have uncovered some totally unexpected truisms. The cells in a human body do not respond too well to a hormone known as 'insulin' as a result of a reduced physical activity. That leads to an increase in the blood sugar. In other words, it leads to diabetes. In order to compensate for the weakened response to insulin, the body secretes more insulin. A chronic (ever present) surplus of insulin leads to narrowing of blood vessels, increase in blood pressure, increase in cholesterol, atherosclerosis, and finally to a heart disease. Medical scientists call this entire litany of ailments 'Syndrome X'.

¹⁴ The lowest social class in the old traditional Hindu society. This class was barred from several activities that the upper classes could engage in, such as education, priesthood, administration, warfare, business and even farming. Shudras were thus reduced to performing nothing more than the lowest and the dirtiest menial chores.

¹⁵ 'Babu' is generally an honorific epithet applied at the end of one's name. A very large number of middle class Brahmins of Bengal, perhaps the first ones in nineteenth century India to embrace English education, qualified for government jobs as clerical staff the British needed to administer India. Since then, the term 'babu' has also assumed a derogatory connotation, "a white-collar, good-for-nothing-else snobbish clerk who thinks he is a very important person because he has a government job".

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However, Dr. George Sheehan, a well-renowned expert from USA, calls this litany of ailments by the name 'Exercise Deficiency Disease'. Just as a lack of vitamins causes specific diseases, a lack of physical activity and exercise causes Exercise deficiency Disease. High blood pressure, diabetes, high cholesterol and heart disease - all unite inside the body. Its external symptom is the collection of fat in the stomach cells, which presents itself in the form of increased diameter of stomach; the circumference of stomach becomes larger than the circumference of one's waist. A large number of well-to-do people of Indian ancestry are today suffering from Syndrome X. I had become an example of Syndrome X.

1.7

One more of my illusions was dispelled while I lay in the hospital bed. For the past seventeen or eighteen years, I had been working hard to provide health services to aborigines in the *Gadchiroli* district. If one asks, "What are the major illnesses that afflict the Indian society at large?" the answer will include malnutrition, anemia, tuberculosis, leprosy, malaria, dysentery, typhoid, pneumonia and so on. By contrast, heart disease is perceived as being common amongst the westerners and the wealthy upper classes. I had never perceived heart disease as being important enough to worry about in the context of India. But when I was diagnosed with angina, I began to remember what I had allowed my mind to forget or to ignore.

A brother-in-law of mine, who used to teach management courses in a college, suffered a fatal heart attack only a few days ago, at the age of 53. A 55 years old cousin of mine, who was a sales manager of one company, had a heart attack and passed away two years ago. *Tushar Khorgade*, one of the volunteers at SEARCH, told us that his brother-in-law had suffered a heart attack. How old do you think he was? 37! *Vivek*, my nephew, was born six or seven years after me. When he was little, I used to delight him by picking him up and carrying him around on my shoulders. He grew up to be a handsome, vivacious young man full of joy and gusto. Used to do farming in the jungle land of *Madhya Pradesh*¹⁶. *Vivek* died of heart attack at the age of 37! And, while I was writing all this, we received the news that my cousin's husband passed away - heart attack at the age of 46!

It was an unwelcome consolation to me when I realized that just about every educated middle class person who came to see me in the hospital had at least one person in his or her family who had suffered a heart attack. Many of my visitors themselves or members of my visitors' families had undergone a bypass surgery. I was witnessing a new phenomenon. Heart attack was striking at a progressively younger age. We used to consider heart attack as something that happened after the age of 60. But now I was seeing heart attack strike people in their fifties, forties and even thirties! One of my classmates at the medical school had his first bypass surgery at the age of 48. He had his second bypass surgery only recently!

¹⁶ Madhya Pradesh is one of the larger states, located at the center of India with the state capital in *Bhopal*. Large tracts of Madhya Pradesh are covered with thick forests. Mountain ranges *Vindhya* and *Satpuda* running across the state were, at one time in the ancient past of India, major barriers to the spread of Aryan civilization southward.

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This began to make me wonder. What on earth is going on? Why are these people, the 'cream of the society', dying of heart attack at such a young age? Is there an epidemic of heart disease in India?

An intensive survey of over-40 men in Delhi and Madras found that one in five had diabetes and one in ten had a heart disease. No other population sample in the world has shown an evidence of such a high proportion of people suffering from these two ailments. Many such surveys conducted in India since 1970 have shown that the proportion of men suffering from diabetes and/or heart disease is on the increase. Every decade there is an increase and the age at which these diseases are encountered is continuously decreasing. Now an Indian male is facing death by the time he reaches his thirties or forties. I was one such male.

Nearly fifty years ago, USA witnessed a similar wave of heart disease. The economy was thriving after the end of the Second World War, the standard of living had increased, there was plenty of food for every one and the machines had just about eliminated the need for any hard physical labor. Some people have dubbed this American lifestyle as a 'lifestyle revolving around the triad of car, TV and supermarket'. The automobile had eliminated the need for walking. People sat in front of a TV and watched entertainment programs too frequently punctuated by commercials, drove their cars to supermarkets, bought everything they saw in the commercials and ate those things sitting in front of a TV. Due to this lifestyle, the number of people in the USA who suffered and died from heart diseases considerably increased during the decade from 1950 to 1960. During the next ten or fifteen years, the Americans found the underlying reasons to be smoking, diet rich in animal fats (milk, butter, cheese, eggs and meat), increased levels of blood cholesterol and exercise-less lifestyle. An exercise-less lifestyle was recognized as a risky lifestyle. An office, a chair, a drawing room, a sofa and a bedroom are the most dangerous places, because a large majority of people in wealthy nations dies in these places. With this realization, the American society began to make conscious changes in lifestyle.

What happened in the USA fifty years ago is happening in India today. A large class of well-to-do people has arisen in India. The upper middle class and the middle class together make up 200 million people in India today and that's nearly as many people as the population of entire USA! This America in India is rapidly learning and internalizing the American lifestyle, wealth of food, freedom from physical labor, alcohol and smoking. The automobile, TV, refrigerator and restaurants promoting eating out have come to dominate the modern life. It is cultivating a culture that de-emphasizes exercise and physical labor and emphasizes gluttonous eating. And along with that there is a rising ambition fed by a tremendous competition in career. Given the busy schedules and deadlines that rule their careers with an iron hand, it is no wonder the upper middle class and middle class people in India are experiencing a mental stress that is no different then the one that the westerners suffer from. That is why we are seeing such an increase in heart diseases amongst the Indians.

But there must be yet another reason lurking in the background. Indians seem to be much more vulnerable to heart diseases than the westerners that have adopted a lifestyle of conspicuous consumption. Thousands of Indians have now settled in UK, Singapore,

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Canada, South Africa and the USA. A vast majority of these Indians has attained the middle class or even the upper middle class standard of living in those countries. Their lifestyle is deeply influenced by the wealth of those countries. When comparative studies were conducted on the whites, blacks and Indians with more or less similar lifestyles in UK, the medical scientists found that the incidences of diabetes and heart diseases were highest in the Indians. When the parents and grandparents of these Indians lived in rural India, diabetes and heart diseases were relatively rare amongst them. However, on adopting the lifestyle of well-to-do westerners, they proved to be far more vulnerable than the whites and blacks.

The same picture has emerged in Singapore, South Africa and Canada. And it is emerging in urban India too. It is now an established opinion of the medical science that there must be some genetic or hereditary factors that predispose Indians to diabetes and heart diseases. The explanation of a sudden wave of heart diseases in India thus lies in genetic predisposition and the new lifestyle of the middle and the upper middle classes in India.

1.8

In spite of all these reasons I didn't feel as if I completely understood the reasons for my sickness. Why should a person, who wasn't driven by the lure of money or by a highly competitive career, who lived in a rural settlement of aborigines, who found happiness in providing health care and carried out his own research at his own pace, who lived a life free of intense desires and stress, be afflicted with a heart disease?

A search for this reason was a delicate task. Was I really free of intense desires and stress? If I were, then why did I not feel at peace with myself for the last few years? Indeed, I wasn't at peace with myself for the past four or five years. Life felt tasteless the way a feverish person finds food tasteless. I must confess that I was feeling sad and frustrated in some strange, indescribable way for the last few years. It was as if the very juice had been sucked out of life. Why? and whence? My mind began to search for answers.

When I was in my twenties, I participated actively in the campaigns led by *Jayaprakash Narayan*¹⁷ and *Vinoba Bhave*¹⁸. Life was blooming in every direction. After receiving the degree of M.D. I married *Rani* and devoted myself to a full time social work. It was an immense 'rush' and I felt like I was 'high' all the time. Success, or no success, the joy of devoting oneself completely to social work was so intense that words can't describe it. We felt exactly as *Kusumagraja*¹⁹ has beautifully expressed in his lines -

¹⁷ Jayaprakash Narayan was a devout follower of Mahatma Gandhi and a dedicated member of the National Congress party led by Mahatma Gandhi. After Gandhi's death in 1948, Jayaprakash Narayan dedicated himself to the mission of '*Sarvodaya*', a holistic upliftment of the entire nation.

¹⁸ Vinoba Bhave, another devout follower of Mahatma Gandhi and an intense believer in the Gandhian ideals of truth, chastity and nonviolence, remained aloof from politics. He founded his campaign to bring about a peaceful revolution in the *Upanishadic* teachings that everything in this world belongs to God and man is simply a trustee. He appealed to people's altruistic impulses. He walked the length and breadth of India and persuaded many landlords to donate land to desperately poor peasants, so that they could till the land and be self-sufficient.

¹⁹ Kusumagraja (... to 1999) was highly revered in Maharashtra for his poetry, which touched the hearts and minds of millions.

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Burning embers we firmly held
In hands, as in sturdy bowls
And on and on we madly rushed
Down the path of cherished goals.

From where, then, did this sadness, this frustration, arise?

We were in our early thirties when *Rani* and I went to the US for higher education. The time we spent at the Johns Hopkins University was simply divine - a period of pure intellectual ecstasy. Students from seventy-seven different countries, world-renowned professors and a constant pursuit of knowledge gave one a real rush. Academically, I ranked first in the university. Our professors were sure that *Rani* and I were destined to accomplish something really special in the field of public health. In my mind stirred no other sensation but pure joy and eager anticipation. From where, then, did this sadness arise?

When we returned to India, we founded SEARCH in the district of *Gadchiroli*. The next ten years passed swiftly as we buried ourselves in providing health services to aborigines, researching the myriad health problems the aborigines and other villagers faced, campaigning for the abolition of alcoholic beverages from these rural areas and developing the beautiful location of *Shodhagram* for SEARCH. Work increased way beyond our abilities to handle it. We built a hospital for the aborigines. Our research on health problems in rural areas earned us an international recognition. We succeeded in getting alcohol legally banned in Gadchiroli. SEARCH became a benchmark in the arena of public health. But what was happening to my mind while all this was going on?

I began to remember and to relive this span of ten years. Soon after this phase of my life had begun, the sense of self-satisfaction had slowly begun to fade. I began to lose the sense of well being. What was the reason? I had forced upon myself something unnatural, something that wasn't my own self. And the change I had begun to experience was a reaction to this unnaturalness, this not-me-ness of whatever I was forcing upon myself. What was this unnatural thing? What was this 'not-me' thing?

Soon after we founded SEARCH in *Gadchiroli*, we also made an attempt, in deference to frequent requests from the state government of *Maharashtra*, to improve the government-provided health care system (which included the district hospital and a primary health care center). During that early period, we had to face and to cope with the government bureaucracy, its incorrigible tendency to practically prevent us from doing anything worthwhile, extreme delays, unimaginable laziness, corruption and even its shamelessly machiavellian scheming to brand us as criminals. For two years we felt as if we were allowing a hideous worm to crawl and slither all over our bodies. Finally we disengaged ourselves from it, but several scars remained. For two years we had been immeasurably unjust to ourselves. Did that cause all this sadness and frustration? And what happened after that?

The deeper I thought about this, the scarier it felt. A boil had developed on my mind; it was filled with pus and was ready for a lancing. My mind was not prepared to take the final step, but it had to be taken. I had to admit to myself what I had begun to recognize as the truth.

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As the scope of the work we started in *Gadchiroli* kept on expanding, my own self, the very I-ness of mine, changed too. This 'highly successful I' was quite different from the 'natural I'. They drifted further and further apart and increased my stress level. There was a palpable eagerness to see the results of our research on rural aborigines implemented nationwide as well as worldwide and to see the ban on alcohol in *Gadchiroli* applied to the entire state of *Maharashtra*. And to make this happen, I was simultaneously operating at two widely different levels. On one level I was living among the aborigines of Gadchiroli. On the other level, I was living the life of an intellectual, a life of a scientist, among the policy makers in *Mumbai*²⁰, Delhi, London and New York. 'I' was stretched like a rubber band. This experience was highly stressful; the work itself was a joyless dollop of pure starch. But I had accepted it temporarily, thinking that it will lead to something useful for society. And no end to what I had accepted only as a 'temporary' situation was in sight.

As time went on, I was tempted by ambition. I was tempted by the passion for success. I was determined to reach some goal. I didn't know what that goal was; so no matter what point I reached during my journey, I found no satisfaction of having 'arrived'. There was a persistent, haunting feeling that what I wanted to achieve was quite different from what I had actually accomplished. There was a constant feeling that a very different, unique 'something' was going to happen in my life and I was anxious for 'it' to happen. There was a persistent dissatisfaction and an ever-present yearning. My own work was no longer a spring of joy. It had become a means of some external success and therefore a source of worry and anxiety. Until this stage in my life, I had never consciously entertained any thought or anxiety about what my social work might bring about; nor had I ever felt concerned about it in any manner; all I had been aware of was a sensation of pure and simple blissfulness. And now it seemed like I was working only for the fruit it might bear; I had lost that earlier sensation of pure and simple blissfulness.

Emotions and sentiments were replaced by thought, by rational thinking, by logical thinking. It was as if I had divorced myself from the emotional richness of my experiences and had rendered every experience, every sensation an intellectual activity. I had slowly lost touch with my own feelings; I had stopped feeling my own emotions. I began to think about and to intellectually analyze my emotions. Instead of living and fully enjoying each moment of my life I had begun to think about it. It was as if I had forgotten the joyful notes of music and tidal sweeps of literature. Exiled from the luscious world of emotions, my mind experienced only the depressing pathos of sad emptiness. This in itself was not a disease; it was only a warning sign. But I was ignoring this danger signal emanating from deep within me. And that's why the stress level had increased till it became intolerable. Is it likely that that the stress and depression had metamorphosed into my heart disease?

My friend Dr. *Anita Avchat* sent me a book to read while I was confined to the hospital. It was the famous book 'Love, Medicine and Miracle' by an American surgeon Dr. Bernie Siegal. Bernie has written how cancer patients were miraculously treated with nothing more than sheer will power and mental exercises. He says that our mind exerts a tremendous influence on our body. Many cancer patients were found to have suffered bouts of depression

²⁰ Mumbai, formerly known as Bombay, is the capital of the state of Maharashtra.

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on a journey from Calcutta to Delhi on foot. His disciples in Calcutta bid him a gala farewell. He was scheduled to reach Delhi in three months. His followers, in anticipation of his arrival in Delhi in three months, organized a committee to plan a grand reception ceremony. The committee started a fund raising campaign for this grand reception. But he arrived in Delhi in only ten days after leaving Calcutta. His followers, wonder-struck and awed, were beside themselves in admiration and praise of the master. "Long live the Kutta Maharaj!", they shouted with joy.

"Maharaj, how did you accomplish this miracle of traveling from Calcutta to Delhi on foot in mere ten days? And how did you get all those bruises?" - asked one of the followers of Kutta Maharaj.

"I didn't make this journey so rapidly of my own accord", answered the Kutta Maharaj. "When I made my first stop after leaving Calcutta, I was tired and hungry. But, as soon as I entered that town, all the dogs there started barking at me furiously. They even started chasing me away. With a pounding heart I ran fast. When I reached the next town, I was hopeful that I could rest there for a while and catch my breath. But the dogs in that town were even more vicious. They sank their teeth in my flesh! And that's the secret of my miraculously rapid journey. I was not able to stop and rest anywhere between Calcutta and Delhi!" - Kutta Maharaj somehow managed to get these words out amidst crying and panting.

Competition in today's world is like his kind of running and 'reaching Delhi' in this manner is called 'success'. And I hear that the 'Kutta Maharaj' soon died of heart attack.

For the competition-based economy (which we have adopted from the developed world) to succeed, selfishness, greed and ambition need to be fired up in the heart of every individual in the society and that fire needs to be constantly fed. The lethal dash for 'advancement', propelled by sheer selfishness and greed, generates an intense stress, which leads to a heart disease. Not only that this fate applies to those who lead a competitive life in big cities like Mumbai, Pune and Nagpore, but even a social worker in the woods of Gadchiroli had not been able to escape it.

In the Oscar-winning role in the movie "On Waterfront", Marlon Brando says something that I found very fascinating: "Charlie, ... I could have been somebody"! It shows a yearning to become or to be something or someone other than who and what I am right now. I am *somebody* at this instant, but I find no satisfaction in it. I have no relation with that somebody and I am sad that I am not someone different, someone else. I chase that mirage and let my own relationship with myself snap off.

This desire to become 'a great personage', to become 'successful' is motivated by the innate need to prove that one is different from the others, more significant than others, richer or more endowed than others. To be like others, to be one of the others, is to become 'common'. To become 'uncommon', I need to become different. I need to emphasize, not our commonality, but what is unique to me and to differentiate myself from others. I start building a wall of my uniqueness around myself and thus become a prisoner inside this wall

approximately 100 miles southeast of Mumbai. Though he had to retreat somewhat ingloriously from the USA, many of his books and spiritual discourses are highly inspirational.

²² In Hindi, "Kutta" means a dog. "Maharaj" is an Indian equivalent of both "His Highness" and "Your Highness". Thus "Kutta Maharaj" would translate literally as "the top dog".

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of uniqueness. This solitary confinement within the wall one builds around oneself turns dangerous and fatal to the heart..... Suddenly I began to see clearly the reason for my own sickness.

Unbeknownst to me, I must have handed over my natural life and my mental state of blissfulness to this modern civilization. First I stopped exercising my body and began to ignore its needs. Then I began to run after 'success', became a workaholic and somewhere in that pursuit lost my state of blissfulness. In the Sahara of intellect and reasoning, I became a stranger to the emotional side of my personality. As time went on, the preoccupation with 'I' and 'Mine' kept on increasing. It became a barbed wire fence and I lost the feeling of oneness with the world. And surprisingly, with the loss of my 'congruity' with the world, I lost the touch with my own self. I had no relationship with my own self; I had lost my own home. My integral, whole, healthy life had shattered into pieces. All this while, one internal organ, a compass, was trying to tell me that something was terribly wrong. But I kept ignoring it, kept on pushing ahead. I do believe that this loss of relationship with my own self must have been stressful and the stress, combined with depression, most probably led to my heart disease.

But it wasn't my heart alone that was sick. The entirety that was I was sick!
And now I was in this hospital as a patient!

1.10

One day *Rani* came in fuming with anger. The lift operator of the hospital had demanded to see her 'visitor pass'. Since she had not brought that pass along, the lift operator had asked her to step out of the lift. My room was on the third floor of the hospital. Without the lift, there was no other way for her to come and see me. She was torn between caring for me and putting up with the insult she felt due to the lift operator's rude refusal to let her ride in the lift. Of course the lift operator's refusal had the support of hospital rules. But, up until now, both *Rani* and I had moved about in hospitals as physicians. Today, our roles were reversed. I was a patient and *Rani* was a patient's relative, a visitor. And it was our turn now to taste what patients and patients' relatives must feel day in and day out.

The word 'hospital' comes from a Latin word, which means a 'guest'. Hospitality includes everything that makes a guest feel welcome. But the construction of hospitals often does not reflect the spirit hospitality. Take a hospital ward for example. To make it easy for a doctor or a nurse to see thirty or forty patients at one glance, thirty or forty sick, moaning, weeping and barely clad patients are kept in one hall, with no respect for their pain, privacy or the need for peaceful and quiet sleep. A jail warden wants such a convenient arrangement to all the prisoners at one glance and so does a cattle herder, to see all the cattle at one glance. Indeed, to understand why the aborigines in Shodhagram liked our idea of building separate huts where a patient and his or her relatives could be housed, one has to become a patient!

After a week had passed without any 'incidence', Dr. *Bidwai* decided to discharge me from the hospital. *Rani* brought my discharge card. I read "DM with IHD" written on it and felt like a branding iron had burned a brand on my chest. It was an

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abbreviation of my ailments - Diabetes Mellitus with Ischemic Heart Disease. I knew my diagnosis, but after seeing my discharge card I realized for the first time that I had become a permanent member of the crowd of thousands of faceless patients. Until now, I had almost mechanically stamped these letters on the papers of hundreds of my patients. I had never been aware of how the patients themselves felt after becoming aware of their own diagnosis. To the physicians like me, diagnosis and treatment were purely intellectual activities, not emotional investments. Our diagnosis was an intellectual feat, very much like Sherlock Holmes solving the riddle of a murder. Sherlock Holmes never had to think about how the murdered person may have felt. We had never experienced a patient's illness on an emotional plane. Today I was a sick patient, and I was beginning to understand a lot of things.

I was moved to *Rani's* brother's home in Nagpore. I was kept on the ground floor in that two-story house, so that I wouldn't have to go up and down the staircase. As if my heart had become fragile like glass!

While I was recuperating, many people came to see me. As I looked at them, my mind did some simple mathematical calculations - "How old would this person be? Maybe 55? How much longer would this person live? At least 20 years. How lucky this person is!" I found myself envying everyone for the assurance of life he or she seemed to carry. I did not feel assured of even a single day.

Whenever a friend or a relative was leaving me, I felt a pang. I used to feel I may never see him or her again, this might very well be our last meeting. I used to bid them farewell in my mind.

Some visitors used to bring a breeze of enthusiasm. They used to make me laugh. They used to assure me that everything would turn out all right. My mind used to forget the throbbing awareness of my sickness and I used to think that perhaps I would indeed survive this sickness just as these people are telling me. But many others would come in with somber expressions on their faces, if it were an Indian tradition not to appear cheerful when visiting a sick person! They would sit with me and mirror all the pain and anxiety I was feeling inside. They would speak to me in barely audible whispers and I would read the grim question "God! What's going to happen now?" written on their faces. They would tell me the tales of how someone closely related to them suddenly died of heart attack. As they left my room, they would make it a point to remind me that this is a very dangerous sickness, there's no guarantee of survival from this disease and that I should take every care. I used to feel that they didn't come to make me feel cheerful, they came to perform the last rites for me.

We call Dr. *Chari*, *Rani's* father, *Bawa*. He is 71 years old. He was a very popular 'family doctor' in Chandrapore. He has now retired from his practice. He has recently been diagnosed with cancer. He was taken to UK where it was decided at the end of all tests not to subject him to any treatment, because he doesn't have long to live. He came to see me. I am his youngest son-in-law.

Bawa showed no sign of sickness or worry. He talks to me in make-do Hindi because I don't speak Telugu and he doesn't speak Marathi. But his talk was very amusing. He said, "Abhay, I know I have to go soon. So what's the point in wasting time in crying?"

My Revelatory Heart Disease

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And why fear cancer? Every one dies of this or that illness. It's good that I now have the label of cancer. Otherwise I would die without any reason!"

Bawa's attitude has not ceased to amaze me. This man does not read anything spirituality and philosophy. All his life he examined and treated patients with tender loving care, took care of his family and enjoyed the company of people in Chandrapore to his heart's content.

His love for people and his desire to see people are both strange and strong. He lives these days with his son in Nagpore, but every now and then he slips out of Nagpore and boards a bus to Chandrapore. He is a stranger in Nagpore. Chandrapore is his place. And he prefers to ride a bus to the car his son owns. He says, "If I travel by car, who would I meet? When I ride a bus, I meet thirty or forty people in one trip!"

From where he does get his irrepressible courage and all-pervading love? I salute my father-in-law with a great respect. I said to myself, "I want a piece of this spirituality. I am in great need of it."

One of my friends is a physician. He came to see me. We have been buddies since we were in the medical school. Love of music and literature of *P. L. Deshpande*²³ brought us together forever. In the medical school we spent a lot of time together organizing music concerts. Now he had to come and see me lying in a hospital as a heart disease patient. He didn't say much. After he had left, his mother told me that he had cried like a baby, right in the hospital, when he heard that I had suffered a heart attack. But when he came to see me, he made no show of his emotions; he did not let me see his sensitive side.

Some visitors used to bring much happiness with them. Our friend *Ranjan Darvekar* came to see me. *Ranjan* knows the magic of making people laugh. You never know when he would crack a joke in the midst of a conversation or when his humor would suddenly turn into a philosophical statement. He said to me, "It's a pity you got a heart attack at such a young age. Abhay, you made one blunder. For the last twenty years, you gave your heart to just one girl! Your heart has been sitting in one place and is now rusty! Look at me. I keep my heart moving from one girl to another - I give it to one girl today, to another tomorrow! That's why my heart has no disease!" And he said all this right in *Rani's* face!

Many friends used to say, "Tell us if you need any help!" They wanted to help, but didn't know exactly what they could do to help. Men do not understand how to care for someone, how to express affection through small talk, small gestures and seemingly insignificant actions. Women are naturally gifted in this department. Men behave very awkwardly and in an unnatural manner at times like this. And if they can't think of anything, they start talking about politics!

Many visitors expressed such a keen sense of curiosity that it appeared to me much stronger than their concern for my health. They would drag me into a discussion about how this disease comes about. They had a full-fledged physician at their disposal to satisfy their curiosity. And as luck would have it, the physician was confined to bed! Well, so far so good. But then they would ask me what complications could possibly occur in this kind of a disease and I would have to tell them about all the probable complications. Even that

²³ P. L. Deshpande (... - 2000) was a gifted littérateur of Maharashtra.

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wouldn't satisfy some people's curiosity. "What exactly happens then?" - they would ask. Then I had to tell them how one (i.e. me!) could possibly die if the heart stopped beating altogether as a result of the heart disease. Fear and eagerness would shine on their faces as if they were watching a horror movie. Some even dared to ask me, "Now that you don't have any certainty about future, how exactly do you feel?" or "What do you feel like doing in whatever time you are left with?" Not a word of this is an exaggeration. I became convinced that the people whose unique personalities Mr. P. L. Deshpande describes in a humorous vein in his most entertaining book *'Vyakti aani Valli'* must have met him in real life. Sometimes a thought used to cross my mind, "One could write a fancy novel describing these facets of human psyche", and immediately my mind would say, "What good is it to me now?"

When no one was around, my mind would once again be possessed by this ever-dreadful basic question. My mind used to engage itself in the same game of numbers - "What's the probability of death? What is the probability of me surviving for another year? Would I live for at least five more years? What would I do if I stayed alive?"

1.11

Dr. *Bidwai* is one of the senior heart specialists in India. When I was a student, legends of Dr. *Bidwai's* sharp intellect used to be told in *Nagpore* and *Chandigadh*²⁴. However, during my stay in the hospital in *Nagpore*, I often observed that his heart was bigger than his intellect. While speaking about what attitude a physician must cultivate, he once said, "If your patient dies, but your eyes do not brim with tears while meeting your patient's family members, you should seriously consider an occupation other than medicine." Dr. *Bidwai's* views were radically different from the commonly preached and observed cold-blooded norm in the medical field that a physician should remain emotionally uninvolved in a patient's welfare.

Dr. *Bidwai* administered the treadmill test to me after I had been in the hospital for two weeks. In the second stage of the test it became abundantly clear that my heart was not getting a sufficient supply of blood. The question now was whether to perform an angioplasty or a bypass surgery. Dr. *Bidwai* weighed each option carefully and with as much concern and affection as a mother would while caring for her child. Dr. *Bidwai* decided to have an echocardiogram done. Results of the echocardiogram were encouraging. It meant that though the heart was starved of blood supply, no part of the heart muscle was dead. While looking at my echocardiogram Dr. *Bidwai* drew *Rani* to a side and exclaimed with gleefully like a child, "*Rani*, it looks like we wouldn't have to perform a bypass surgery on *Abhay!*" *Rani* later told me that while I was taking the treadmill test, the test results were showing positive indications implying serious problems with my heart. Dr. *Bidwai*, feeling thoroughly disappointed by the treadmill test results, was seen banging his fist on the table. The same Dr. *Bidwai* was absolutely thrilled when the echocardiogram test showed a 'normal'

²⁴ Chandigadh is the capital of the state of Punjab, India.

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state of affairs. Listening to *Rani's* account brought tears to my eyes. "Why do you wish to be so deeply involved in my welfare?" - I felt like asking Dr. *Bidwai*.

Dr. *Bidwai*, *Rani* and my sister-in-law *Padmaja* flew with me to *Lucknow*²⁵ Post-graduate Institute of Medical Science. Dr. *Bidwai* had started the department of heart diseases in this institute some years ago and many experts in this place were Dr. *Bidwai's* students or colleagues. Dr. *Mahant*, now a famous cardiac surgeon at this institute, was the one to whom I had handed over the charge twenty years ago upon completion of my residency at this institute. Dr. *Nakul Sinha*, a specialist in angioplasty, was going to treat me.

Finally it was May 10. At 8:30 in the morning they strapped me onto a stretcher to take me to the angiography room. It gave an odd feeling. Being a physician all these years, I was used to looking down at patients who lay in a bed or on a stretcher. Today, as I looked up while lying down on the stretcher, people's faces, the room, the ceiling, the lights on the angiography table, the faces of doctors looking down at me, in short everything, appeared awfully strange. Everything in my life had turned topsy-turvy.

The angiography procedure was begun. A tube was inserted in the large blood vessel in my right hip and it was slowly pushed upward till its tip reached my heart. I was fully conscious and was looking at that tube on a large screen. Dr. *Sinha* gently introduced the tip of the tube into coronary blood vessel that supplies blood to the heart and injected a dye. Like a lightening flashing across the sky, a web of twisting and curving blood vessels appeared on the screen for a moment. The camera snapped that picture. Another injection and a quick view of the coronary blood vessels appeared on the monitor screen. Another photograph was taken. In this manner they took pictures from all possible angles - it became a video film. Then the doctors left me there and hurried to carefully review and to evaluate all those pictures.

While we anxiously waited for the news, Dr. *Nakul Sinha* came in and told us that out of the three major vessels that bring blood to the heart, two had a 30% blockage. However, the third had a 95% blockage. That was the one posing a real danger and was responsible for my ailment. The surgeons at the institute had decided to insert a catheter tube and to unblock that blood vessel by angioplasty. Just in case a bypass surgery became necessary, Dr. *Mahant* was ready to perform that operation.

There was no choice. The heart disease was proved with a 100% certainty and of all the possible measures available today, this was the most appropriate one. *Rani* signed the consent forms on my behalf. I bid her farewell. Once again I lay down on the angioplasty table. Six heart specialists were working on my case. Dr. *Bidwai*, who had taught all of us, held my hand in his and sat down next to me. No anesthesia was administered to me, nor were my eyes covered up or closed. I was able to watch my heart, its pulsations and lines of electro-cardiogram on the screen in front of me. I watched as the tip of the angioplasty catheter entered my blood vessel and reached the 95% blockage point. It stopped there and started opening up the blood vessel at that point. Almost 80% of the block was removed, but no more. I could see everything. The surgeons discussed the strategy among themselves and

²⁵ Lucknow, located approximately 300 miles southeast of New Delhi, is the capital of the state of Uttar Pradesh, India.

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decided to increase the pressure on the blockage. The pressure kept increasing to three times what was being applied so far. Then to four times, to six times, eight times ...

Suddenly everything was quiet in the operating room. The surgeons faces were covered with masks, so I couldn't observe them, but I could see that there was distinct change in their movements. Dr. *Bidwai* stood up. I could see on the screen that while the last portion of the obstacle was being removed, the blood vessel had suffered a severe internal tearing. The torn lining remained suspended in the blood vessel and was itself causing the obstacle. This was the most terrifying complication in the angioplasty procedure. MY BLOOD VESSEL WAS TORN!

I felt a pit form in my stomach. The moment of death had arrived! My heart was still pulsing, I was watching it on the screen. But the next contraction of my heart could be its last. It could happen any moment now. I was going to watch the last contraction of my heart and then it was going to stop beating altogether. The very last moment of my life was here ..

I could feel the icy fingers of fear. Everything that held me anchored to life was snapping up. "I will be gone" – my mind began to think, "I wouldn't be here to enjoy, to experience, to live the next moment. I will descend into darkness. What will happen next?"

Like a spring of water gushing forth, I felt a sudden flow of words course through my mind –

Aum! 'That' is complete. 'This' is complete.

From completeness arises completeness.

Even when completeness is removed from completeness, completeness remains.

Aum! Peace! Peace! Peace!

This was a mantra from *Ishavasya Upanishad*²⁶, which I used to chant as a prayer at dawn during my childhood in the Ashram. I had not understood its profound and mystical meaning up until now. As it bloomed of its own accord in my mind, its deep meaning began to unfold before me -

"This universe is infinite and the divine principle pervading this universe is also infinite. Both are blissfully complete. One arises out of the other. If infinity is subtracted from infinity, the infinity remains undiminished. There is no limit, nor end to this play. I am also a part and parcel of this infinity. So I too have no beginning and no end. Where is then a room for fear? Aum Peace!"

I also remembered reading in Stephen Hawking's book the scientific deliberations about the beginning of the universe. The vast expanse of the universe we see today did not exist billions of years ago; everything had condensed into an infinitely dense point mass. Then there was a colossal explosion, which the physicists call 'big bang', and that marked the beginning of the universe we live in today. That primordial explosion released an immeasurable amount of energy. The same energy coalesced into elementary

²⁶ *Ishavasya Upanishad* appears as one of the scriptural texts in the 'Shukla' branch of the 'Yajur Veda'. Following the ancient vedic tradition of naming an Upanishad, *Ishavasya Upanishad* is named after the very first word of the very first mantra that appears in it. The mantra quoted above is the last mantra in this Upanishad.

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particles, which coalesced into atoms. From the rearrangements of atoms came about the various chemical elements and also the stars, suns, planets and this earth. As time flowed on, my physical body took shape at one moment. I am also made of the same elementary particles. Even if this physical body dies, those basic building blocks will remain in this universe. They have no 'death', no 'end'. They may not exist in the form of this physical body, they will assume another form. But they will remain. They will remain forever. Where then is death? I am immortal in the form of these elementary particles. I am indestructible. I was, I am and I will be. The death of this physical body is nothing more than a change from one arrangement of atoms and molecules into another arrangement. Only a rearrangement! What reason is there then to be sad or afraid? Someone must tell about this last experience of mine to people. Death is simply dissolution of one arrangement of atoms and molecules; only a dissolution of one arrangement of atoms!

These thoughts not only comforted me, but also boosted my morale. Those thoughts became a pillar of strength to lean against, a solace and a shelter. I felt the warmth of that shelter. The fear of death abated. The mind gained its restfulness. I was ready for my dissolution present.

1.12

The next three or four hours the surgeons tried to repair the torn blood vessel. When their efforts to rejoin the torn ligaments were unsuccessful, they spliced the torn blood vessel using a one-inch long tubular shunt (a narrow passage) of titanium. It did the job, the blood vessel became fully functional again and the flow of blood resumed without any interruption or constriction. I was brought into the operating room at 8:30 AM, I was taken off the angioplasty table at 7 PM. My physicians had been sweating with worry and anxiety, while I had been simply watching the entire episode as if it were a game. I was alive. The dissolution of my atomic arrangement had been successfully avoided.

I was extremely tired. I lay in my bed at night in the intensive care unit. Tubes dangled from my arms and legs. Lines representing the pulsing of my heart appeared and disappeared on the monitor screen. I was still alive. *Rani*, sitting by my bed on a stool and utterly exhausted, finally rested her head on the side of my bed and fell asleep. Suddenly, at 2 AM, I felt a shooting pain in my chest. The pain quickly grew in intensity like a gathering storm and spread first over the entire chest and then to my jaw and both the arms. I called out *Rani's* name. She struggled to get off the stool and called the night shift nurse and the doctor in. By then my pain had become excruciating. For the first time in my life I experienced such a sharp pain of a heart attack. I looked up at the ECG monitor. The S-T wave had dipped down, the T-wave looked upside down. The beating of my heart had become erratic. There was absolutely no doubt - on the very first night, right after the angioplasty, I had suffered a heart attack.

The pain had grown way beyond my capacity to bear it. *Rani* told me later that my face was drained of all blood and looked blue. I looked up at the nurse and the doctor. They both stood stunned and stymied. I was a VIP patient and my life was in danger. That had thrown them in utter confusion. I was aching with sharp pain, but I was not afraid. I was

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fully alert, every cell in my body was alert, every cell in my body wanted to live. I realized that I must take the initiative.

"Sister, start the oxygen. Put a tablet of nitroglycerine under my tongue..." - I started telling them rapidly. *Rani* ran out to ring up Dr. *Nakul Sinha*. The nurse and the doctor quickly followed my words and moved fast. "Take the ECG. We must be able to see later what this attack was..." I told them. They took the ECG and handed me the chart. The chart showed that leads number one and two going into the heart weren't receiving an adequate supply of blood. Was it an infarction or just insufficiency? Someone slipped a tablet of nitroglycerine under my tongue. In five minutes I could feel the pain recede and ebb away. In about fifteen minutes, the ECG was back to normal.

The storm had raged and passed. At this time too, my heart had survived. But I had had a glimpse of what my future could be even after the angioplasty. I was still far from 'safe'. But I was exhausted and needed a little sleep. I wasn't going to quit fighting. If I stayed alive in the morning, I was going to keep fighting for my life.



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CHAPTER 2

Ornish

2.1

My angioplasty operation took place on May 10. I was discharged from the hospital on May 14. I had no control over what might happen in future; all I could do was to take the medicines regularly and to wait for what may come. I myself was a patient. It was a matter of *my* life and death, and yet, there was nothing more *I* could do. There was a thirty-five percent probability that the blood vessel that had been fully opened by angioplasty could once again become blocked within a year. And the other two blood vessels that were only partially blocked were liable to bring on a crisis any time. I had received the danger signal on the very first night after angioplasty. So the probability of another heart attack weighed heavily on my mind. And that could mean either a sudden death, or, if I received sufficient warning, one more angioplasty operation or a bypass surgery!

The miracle of modern medicine bestowed upon me a new opportunity to live, but didn't liberate me from the disease. Medical science says that diabetics like me are likely to succumb within five years even after angioplasty. It left me with no other recourse but to keep on taking my medication and to anxiously wait for the thirty-five probability of death to finally catch up with me. There was no way to improve my odds beyond the limitations of the treatment I was undergoing, and this feeling of helplessness was infuriating. I wanted to live, but the grim probabilities facing me were depressing. All the books on heart disease mention that those heart disease patients who become depressed often die; those who remain optimistic and contended survive. Yes, I wanted to survive, I wanted to live, but where do I find the hope to grab on to?

As luck would have it, one book had reached my hands when I was in the hospital. This book, 'Reversing Heart Disease', written by an American doctor named Dean Ornish, is quite popular in the USA these days. Nearly three months prior to my hospitalization, I had made a booking to receive that book purely out of my interest in medical literature. It fell in my hands when I was a heart disease patient in the hospital and I had started reading it avidly while I lay in the hospital bed. This book gave me, not only a hope, but also an assurance, that I could indeed survive my heart disease. This book caused a revolutionary change in my treatment beyond angioplasty.

Dr. Ornish's treatment is based on the rationale that a heart disease is a result of one's lifestyle. Medicines and surgery do not strike at the root causes; they merely provide a temporary relief from the symptoms. Since the root causes of the disease remain active in a patient's life, blood vessels often tend to become constricted or obstructed a few years after angioplasty or bypass surgery. Also, these procedures are fairly expensive. So, in order to strike at the root causes of the heart disease, Dr. Ornish suggests the following collection of measures:

1. Vegetarian diet. Less than 10% of the total caloric intake should come from fats and the intake of cholesterol should be reduced to zero.

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2. No smoking; no alcohol.
3. Regular exercise and yogic postures.
4. 'Pranayam' (bringing the involuntary act of breathing under one's voluntary control), 'Shavasan' (a yogic posture of lying down like a corpse in order to achieve a state of total physical rest) and a change in mental attitude.
5. Getting in touch with one's own feelings and making an emotional investment in the welfare of others around you.
6. Seeking spiritual satisfaction in life and practicing 'dhyana' (practice of emptying the mind of all thought) for attaining spiritual satisfaction.

There is no dearth of those who loudly advertise their own 'systems of treatment' and claim huge successes. Everywhere in India one comes across professionals as well as amateurs, who confidently advise you to follow their own brands of infallible treatments. Since their claims are often highly exaggerated and mostly unfounded, I am very apprehensive about them. Dr. Ornish, on the other hand, had tested the validity of his hypothesis scientifically and had gathered irrefutable evidence. When the 'before' and 'after' computerized coronary angiograms and PET scans of heart disease patients treated by Dr. Ornish were examined by unbiased physicians, it was found that obstructions in cardiac blood vessels of 82% of patients had diminished in size and menace. This evidence has been certified as medically sound and statistically valid. In the words of one of Dr. Ornish's patients, "not only did the cardiac blood vessels become unblocked, but the heart itself opened up and the entire life became joyful!" Indeed, little would be gained if only the disease disappeared, but the patient's life remained joyless. In Dr. Ornish's own words, "this isn't merely a treatment of heart disease, but a project of changing the entire lifestyle of a patient".

Dr. Ornish's own story is also worth reading. He was a brilliant student in high school. He wanted to become a medical doctor, but suffered a nervous breakdown under the stress of studies and intense competition. He became depressed, began to contemplate suicide. Having lost all hope he left the college and stayed home, vegetating.

His sister was learning yogic exercises from an Indian swami. With nothing better to do, Mr. Ornish also went there and learned yogic exercises. In only fifteen days he began to feel much better. Since then he was drawn to yoga and Indian lifestyle. He finished his college education and joined Harvard medical school. He kept up with yogic exercises, quit eating meat and drinking alcohol. While he was in the third year of the medical school, he dropped out for one full year. He tried the regimen of vegetarian diet and yogic exercises with a group of heart disease patients for one month. The results were very encouraging. He returned to medical school, completed his coursework and received the medical degree. Now he tried his experimental treatment in a much more organized manner. Once again he obtained very good results. He then completed his M. D., and founded an independent institute. There he practiced his experimental approach to the treatment of heart disease patients with scientific rigor and proved that this treatment not only brings not only a symptomatic relief, but also effectively reduces the blockage in coronaries and opens them up. A scientific paper based on this study was published by Lancet, a leading medical journal

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in U. K., which gave worldwide publicity to Dr. Ornish's Method of treating heart disease patients.

I encountered Ornish at the right time in my life; I found his book convincing and liked it. He showed me the way to treat myself, he handed me a definite regimen to follow and filled my heart with hope. I was eager to live and the Ornish method offered a chance to live; the uncertainty brought about by my prognosis was dispelled. I decided to stake my life on the Ornish game.

2.2

On May 13, the fourth day from my angioplasty, I finished reading Dr. Ornish's book. I got out of the hospital bed and asked my sister-in-law to fetch me a paper and pen. Right there and then I wrote down some goals for the next one year -

1. Reduce weight from 72 kg. to 65 kg.
2. Eliminate milk and ghee from my diet and to make other changes.
3. Reduce the daily food intake to less than 2400 calories.
4. Bring the blood cholesterol level below 150.
5. Bring the blood sugar level below 120 mg. on empty stomach and below 180 mg. on full stomach.
6. Exercise every day for half an hour and practice yogic postures for fifteen minutes.
7. Learn 'shavasana', 'pranayama' and 'dhyana' and practice them every day.
8. Get in touch with my own feelings. Get rid of mental stress and reestablish the happy state of mind.
9. Learn music.
10. Turn the attention to spirituality.
11. Bring about a change in the outlook and basic mental attitude. Try to turn every chore and every task into 'karmayoga', i.e. a divine mission of selfless action from which all expectations of benefit to oneself are effortlessly excluded.
12. Study scriptures like Bhagawad Gita, Upanishads and devotional literature composed by various saint-poets.
13. Keep coronaries open, so that I should not suffer angina again and should be able to reach the fourth stage of treadmill test effortlessly.

I have been trying out the Ornish treatment for the past three years. Now I want to tell how I did it, exactly what I did and what results I obtained.

I did not take lessons from just one Guru. I searched many paths. I adopted only that which I found convincing and tried it out on myself. When I was confused, I sought counsel and guidance from the seniors well known for their personal advancement in spirituality. So, whatever I have tried is a collage of many paths. My experimental attempts have benefited from the counsel and guidance from many people. But I have kept a meticulous record of it all.

A major credit for my success in these experiments goes to two people - Dr. *Bidwai* and *Rani*. Dr. *Bidwai* always welcomed my outside-the-norms-of-medical-

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establishment experimental approaches with an open mind and he always encouraged me in my endeavors. Since this treatment implies a complete change in lifestyle, it would have been impossible to do it without help and active cooperation from *Rani*. She firmly declined every invitation I received from out of town and abroad during the first year of my treatment; she made all the arrangements at home that were necessary for my treatment and took every care of me. She used to say, "I will not debate the validity of whatever you are trying to do, but I will do everything to ensure that your health improves and that you stay free from any danger."

My eyes are filled with tears as I write this. During my sickness, she had cried out only once. She was waiting anxiously outside the operating room when I was undergoing angioplasty. On learning that there was a crisis because my blood vessel became torn, she could no longer control herself. She sobbed and wept and said repeatedly, "this shouldn't have happened". Had she not lost her control even during this crisis, she would not be human!

This entire effort was, on one hand my struggle to stay alive. On the other hand, it was a journey to the monastic lifestyle in Gandhiji's ashram where my life had begun. The 'healthy lifestyle' recommended by Dr. Ornish was, to a large extent, similar to the lifestyle in Gandhiji's ashram.

The result obtained on treating myself is a result based of an experiment with sample size of one patient. It can't be deemed as a 'scientific evidence'. Nor do I make such a claim. Dr. Ornish has provided the necessary scientifically valid evidence. My intent is to share with others one patient's experience of following this treatment. Though I tried it out as a treatment of my heart disease, it did not remain limited to the 'treatment' only. I have not stopped following it even now. Something new happens every day. So I have decided to tell my story up until now.

2.3

Where shall I start? I have decided to start from where I got started and to continue in the same order in which I progressed.

After I returned from *Lucknow*, I stayed at my parental home in *Vardha*¹. My stay at home in *Vardha* permitted meetings with many people. It also gave me an opportunity to visit two most important places in my life - *Vinoba's* ashram in *Pavnar*² and *Gandhiji's* ashram in *Sevagram*.

My childhood was spent in *Gandhiji's* ashram in *Sevagram*. My early education was completed there. I had known every tree there as my playmate. I had spent time in every hutment in that ashram. I visited them all and felt as if I was meeting my long-lost relatives and friends. Finally I entered '*Bapu-kuti*', the hut in which Gandhiji himself used to live. I was familiar with every inch of that austere and sacred dwelling. I felt I had

¹ Vardha- The town in Nagpore district of Maharashtra, India, where my parents had settled after leaving Gandhiji's ashram in Sevagram.

² Pavnar - A small place in north-eastern Maharashtra where Vinoba Bhave had established his ashram.

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truly returned home! I sat down in *Bapu*³'s sitting room. I could sense his presence in that room. I could envision him turning the spinning wheel and drawing a long, continuous thread. I could also see him sitting down cross-legged and writing something. The feeling was very intense. I quietly got up and without disturbing him, went out to sit in the veranda. I saw the trees around *Bapu-kuti*. Many of them had been mere saplings when I was a child and had grown along with me. They had been growing older like me for the past thirty or thirty-five years. They swayed in the breeze; they spoke to me; they invited me to join them.

The day I was admitted to the hospital as a heart disease patient, I anxiously awaited my fate. In those dreadful moments fraught with worry, fear and anxiety, *Rani* had asked me what my last wish would be in case the fate frowned upon us. I had answered, "If I die, please bury my ashes and bones under some tree near *Bapu-kuti*".

I had returned to *Bapu-kuti* in person. But no matter when I die, my last wish will still be the same. If and when that happens, I will be one with the trees in this ashram. Remains of my body will exist in the form of these trees. Perhaps I will be in the leaves or the flowers or even in the trunks of these trees; I will be everywhere in these trees. Right here, near *Bapu-kuti*, I will sway in the breeze for hundreds of years; I will bloom here; I will breathe here.....sitting in the veranda of *Bapu-kuti* I experienced it all.

I was in a deep emotional dive. I asked *Bapu*, "Bapu, where did I go wrong?"

I received an answer - "You will be cured. You will once again be perfectly healthy."

"What should I do from now on?" - I asked.

The answer came, "Rid yourself of all desires and hand yourself over to God."

I stopped asking questions and began to etch *Bapu*'s answers on my mind.

What was this dialogue that I had engaged in? Was it my own 'inner voice'⁴? Whatever it was, I received an assurance and guidance.

2.4

My first and foremost goal was to make changes in the diet and to thereby reduce my weight and the girth. When I was a student, I weighed 58 kg. My weight shot up to 70 kg. within the first three years of getting married. Then it slowly increased to 73 kg. and stayed there for the next 15 years. I wanted to reduce my weight to 65 kg. It became my hobby to look at each person's stomach and to contemplate whether that he/she will develop 'syndrome X'. I began to notice that the girth of every person over thirty years of age was on the increase.

We were at the *Delhi* airport on our way back from *Lucknow*. I was fully engrossed in my hobby of observing the stomach of every passenger. Suddenly my attention was drawn to a passenger waiting to board the flight to *Jaipur*⁵. He seemed to be about fifty

³ *Bapu* - literally, 'father'. *Gandhiji*'s disciples always referred to *Gandhiji* as their 'father' (*Bapu*) in the spiritual sense.

⁴ Inner Voice - a term *Mahatma Gandhi* often used to imply the voice of one's own conscience, unfettered by any dilemmas, unperturbed by any desire, grief, joy or fear and flowing like a clear, unpolluted, pristine stream.

⁵ *Jaipur* is a famous large city in *Rajasthan*, one of the western states of *India*.

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years old, but his stomach and waist were narrow like a young girl of fifteen! My eyes riveted on him as if I was watching a great wonder. I drew the attention of *Rani* and my sister-in-law *Padmaja* to his stomach. They laughed at my silliness.

I said, "Just watch what I do now!" I left the line we were standing in and approached him. I congratulated him on his excellent figure and the narrowness of his waist and stomach. He was genuinely surprised and looked at me apprehensively. Once he was convinced that I wasn't making fun of him and that my congratulation was sincere, he lightened up and began to chat with me with great enthusiasm. He was an officer in a bank. He opened up every secret to me - his narrow waist, his work, his family and his family problems. From a distance, I noticed that *Rani* and *Padmaja* were thoroughly amused by my "silly" behavior, but I didn't mind it at all. Like *Arjuna's* sight transfixed on a bird's, I could see only one thing - the girth of the stomach!

The girth of the stomach is now a very important issue. All the other symptoms of 'Syndrome X' - high blood pressure, resistance to insulin, increased blood sugar, high amount of cholesterol and even heart disease - are internal to one's body; they are not obvious to anyone's eyes. But a large girth (central obesity) is a sign that can be discerned from outside, it can also be measured easily, in one's own residence. A narrow waist like that of a lion was once considered a mark of physical beauty and physical fitness. Science is now confirming the sanity of that opinion. So how wide should be one's waist?

One has to obtain the ratio of the perimeter of the waist to the perimeter of the buttocks (waist÷hip ratio). The perimeter of the waist is to be measured midway between the lower ribs and the pelvis; the perimeter of the buttocks is to be measured at the widest point. If this waist÷hip ratio is 0.85 or smaller, one is on a safer ground. Now, women's hips are naturally wide and therefore they can attain the waist÷hip ratio below 0.85 relatively easily. However, as soon as the stomach begins to bulge out, men have a hard time maintaining the waist÷hip ratio below 0.85. They enter the unsafe zone (ratio larger than 0.85) relatively quickly and as soon as the waistline increases, their lifeline becomes shorter!

My waist÷hip ratio was 0.92; it was in the danger zone. In order to reduce both the weight and the waist÷hip ratio, I went on the diet recommended by Dr. Ornish. As a first step, I drastically reduced the fats in my diet.

I had made up my mind on May 13, while I was still in the hospital in *Lucknow*, and from that moment of decision I eliminated milk, my favorite thing, from my daily diet. I used to drink almost a liter of milk every day. I would often drink milk directly from the milk vessel. After we got married, *Rani* was amazed to see me drink milk that way in the kitchen. When I announced from my bed in the hospital in *Lucknow* my decision to quit drinking milk, my sister-in-law couldn't believe that I would ever quit this passion of such a long standing. But my milk habit faded away almost effortlessly. When I felt the need for milk, I began to substitute the powder of skimmed milk. Skimmed milk has no fats and no cholesterol. Now I use skimmed milk for lightening my cup of tea. For yogurt also, I use skimmed milk. My consumption of milk - skimmed milk - has come down to 300 ml., so that my intake of cholesterol and calories from milk has dropped dramatically. I also quit taking sugar, ghee, sweets and even ice cream and drastically reduced the intake of any fried foods.

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I was supposed to consume no more than 20 grams of oil in a day, and even that was supposed to be non-hydrogenated oil. So naturally the question was which oil would be best to use. There are three kinds of fatty acids in fats. Saturated fats are abundant in animal fats - meat, eggs, milk, butter and ghee. Fats that freeze quickly and turn solid (ghee, coconut oil, vegetable oil) are also saturated fats. These are especially harmful to the heart, because they cause an increase in blood cholesterol. The other two kinds of fats - monounsaturated and polyunsaturated - do not increase blood cholesterol. These should be included in the diet, but no oil is good for the heart and one should limit their use.

After studying the analyses of cooking oils generally used in India (Chapter 7, Section 5), I reached the conclusion that it is best to use a mixture of peanut or sesame seed oil, sunflower seed oil and mustard oil in equal proportions for cooking in order to avoid heart diseases. Those who are afflicted with heart disease or those who wish to control their blood cholesterol level should use such a mixture of oils in controlled amounts. These people should not consume more than four teaspoons (20 grams) of such a mixture of oils a day, whether it is used for seasoning the vegetable dishes, spreading on bread, for frying any snacks or is taken via pickles and preserves. And meat, eggs, fish, fried foods and sweets made milk products are of course a no-no.

Claims that 'Saffola'⁶ oil is protective for the heart are lies. 'Saffola' oil is rich in polyunsaturated fatty acids. Polyunsaturated fatty acids used to be considered as 'protective to the heart'. Later on it was discovered that there are two kinds of polyunsaturated fatty acids - 'Omega 6' and 'Omega 3'. Excessive consumption of 'Omega-6' fatty acids leads to heart diseases as well to cancer. 'Omega-3' fatty acids are good for the heart. However, 'Saffola' oil is rich in 'Omega-6' type of fatty acids, while mustard oil is rich in 'Omega-3' type of fatty acids. It should be used within the limits mentioned above.

My mother often feels sad that I quit eating ghee and anything containing ghee. Women yearn to feed their loved ones the best food they can cook. But they find it hard to reconcile the traditional perceptions of 'good' and 'bad' cooking with the recommendations of medical science. Our neighbor, *Sulabha vahini*⁷, who is now in her late fifties or early sixties, is very fond of *Rani*. Since I had to quit sweets, ghee, milk etc. because of my diabetes and heart disease, *Sulabha vahini* felt very sorry for me. In an effort to console me she said, "*Abhay*, in childhood we want so many things that we can't get. We grow up and are able to afford them, but no longer able to enjoy them. In our house, we did not have a lot of mattresses. When we had guests staying overnight, the guests were given the mattresses to sleep on and I had to sleep on bare floor. At such times, I used to think that when our finances improve, we could all afford to sleep on plump, soft and comfortable mattresses. Now we can afford those expensive mattresses, but I have a problem with my spinal discs.

⁶ Saffola is brand name of a cooking oil highly advertised in India.

⁷ In Marathi, 'vahini' means the wife of one's brother. Many times, when several families live in neighboring dwellings, people develop close ties with each other and one may affectionately call a neighbor as 'brother'. His wife is then looked upon as one's 'vahini', respected and esteemed as much as would one's real sister-in-law. When elderly people in one family refer to some lady in another family as 'vahini', the children start using the same epithet for her. The epithet 'vahini' follows the person's real name - such as 'Sulabha vahini' - the lady's name is Sulabha, and she is referred to as 'Sulabha Vahini'.

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The doctor tells me to sleep on a hard, stiff bed; not a plump, soft bed. And there goes my dream forever!"

2.5

The need for including 'fiber' in the diet is often mentioned in the literature on healthy diets. I realized that calories and proteins were not the only factors of significance. The Indian National Institute of Nutrition recommends that a daily diet should include at least 40 grams of fiber. In the context of diet, fibers fall into two categories:

1. Fibers that do not dissolve - These are found mainly in the wheat husk. These soften the stools and eliminate the problem of constipation. Once the wheat flour is sifted, the fibers are lost and the flour thus sifted (called 'maida' in India) contains no fibers. So the soft, white bread made from 'maida' is bad and the brown bread made from flour containing the wheat husk is good for health.
2. Fibers that dissolve - These fibers reduce the blood cholesterol and also control the amount of sugar that can be found in blood immediately after a meal. These fibers occur mainly in unpolished rice, whole lentils and beans and to a lesser extent in carrots, sweet potatoes, potatoes and vegetables. Seeds of fenugreek are abundant in these fibers.

As I read along, I realized that eating foods devoid of fiber - bakery products made from 'maida', sugar, milk and fats, sweets, meat, fish and so forth - meant stressing the body with unnatural diets and inviting a 'disease of modern culture'. (Also see Chapter 7, Section 8).

I had to quit eating practically every kind of food that I liked. In a way, I had cultivated a taste for precisely those foods that were actually worth avoiding! I had indulged my taste buds to the point of getting thoroughly spoiled. Now the time had come to change both the habit and the liking.

I increased the proportion of fiber-containing items, leafy vegetables, spinach, sprouted lentils and fruits in my diet. I started eating four spoonfuls of fenugreek seeds. The abundance of fiber in fenugreek seeds helps reduce the blood sugar and cholesterol.

One hypothesis that the proponents of 'nature cure' or 'vegetarianism' often advance appeared deserving of thoughtful reflection to me. The body of modern-day human beings is, to a very large extent, modeled after the body of the earliest human beings. It takes thousands of years for the evolution to bring about biological changes in a human body. No significant biological change has occurred in the body of human beings during the last ten thousand years. Our body is no different than that of the earliest human being. The human race has passed through such stages as hunter-gatherers, cattle herders and farmers. However, rapid industrialization over the past hundred years or so has most radically changed our lifestyle as well as our diet. While we live in a body of the early humans, we want our lifestyle to keep pace with modern times. This is a very strange and unmatched combination indeed! If you attach the body of bus to an aircraft engine and try to make the vehicle run at the speed of an aircraft, surely the body of the bus will suffer so much wear and tear that every nut and bolt will snap or come loose.

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Who is our ancestor? Thirty million years old bones of a female were discovered in the vicinity of Lake Victoria in Ethiopia. According to the scientists, this female is the oldest human being whose remains have been discovered to date, so in a way, she is our oldest ancestor. They gave her a name - Lucy. DNA analysis of a large number of people in various parts of the world shows that nearly 97% of our genes are same as those of Lucy. Our roots are in the body of Lucy!

I began to think about what Lucy's diet might have been. Her body was made to subsist on what kind of food? There was no agriculture in her days. So one can rule out wheat, rice, lentils and oilseeds. Salt, sugar and pepper were unknown. There were no cattle ranches, so there was no milk and no ghee. No one had good weapons, so hunting for meat wasn't easy either. What then did our great, great, great grandmother Lucy eat?

Her diet may have been very much like that of the apes, chimpanzees and gorillas. Lucy probably ate everything edible that could be obtained from the naturally growing plants in her habitat - leaves, roots and fruits. Probably her diet included lots of fruits. Has anyone ever seen monkeys and cows that live on such a natural diet suffer from ailments like constipation? In terms of basic biology, the body of modern man is still compatible with the same kind of 'natural' diet. So the question is, how do we bring our diet more or less in line with Lucy's diet?

In *Shodhgram*, we sponsored contests for preparing meals as close to Lucy's diet as possible. Many people took part in these contests. They used to do the shopping on Sundays. On Mondays they let their imagination loose and cooked very innovative foods that included leafy vegetables, salads, chutneys and soups. Once we had a contest of making porridge without any milk. I saw so many varieties of porridge made from vegetables that I was thoroughly amazed.

My reading introduced me to a new finding - antioxidants. When food is metabolized in our body, i.e. when it is acted upon by digestive enzymes, free oxygen radicals are released. These negatively charged oxygen radicals combine with the LDL portion of cholesterol and help the formation of obstructions in blood vessels. Free oxygen radicals can also cause cancer. They play an important role in diseases and in aging of the body. When foodstuffs are fried in boiling oil, these free oxygen radicals are formed. However, there are certain ingredients that counter the action of free oxygen radicals and protect the body from damage. Such ingredients are called 'antioxidants'. Antioxidants have now become an active field of research and a beacon of hope. The findings to date indicate that fruits, green vegetables, and vitamin E, vitamin C and beta-carotene (vitamin A) act as antioxidants. So, in a way, modern science is leading us to a very specific kind of diet! Lucy's presence is still felt in every cell of our body even after a million years!

2.6

I discovered three more tricks to improve my eating habits.

It is important to reduce the caloric intake to reduce weight, but without starving oneself. I therefore began to start my meal with vegetable soup, salad, fruits, cucumber, carrot and so forth. I would touch other things only after finishing these. I began

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flesh, makes us dance to its dictates? The tongue is like a litmus paper. Its function is let us know the taste of the food we place in our mouth. We must not hand over the authority to decide what we should or should not eat to this litmus paper!

2.7

I wanted to bring my weight down to 65 kg. by December of '95. Sometime between May (when angioplasty was performed) and December, I came across the latest report published by the World Health Organization (WHO). It made me realize that I had been ill informed about the 'normal weight', just as I had been ill informed about the 'normal cholesterol level'. This latest report of WHO showed that what had been regarded as 'normal weight' thus far also fell in the danger zone of the scale. An ideal weight is not to be judged in terms of kilograms alone. It has to be judged according to a person's height. So, a parameter called 'body mass index' has been proposed as an indicator of normality.

$$\text{Body Mass Index} = \frac{\text{Weight in kilograms}}{(\text{Height in meters})^2}$$

Up until now, a body mass index of 25 for a man and 28 for a woman was considered 'normal'. Last twenty years my weight hovered around 73 kg., so that my body mass index was 24 and yet I had suffered a heart attack. The new WHO report stated that one's body mass index needs to be below 22 in order to avoid diabetes and heart disease. It meant that I had to reduce my weight to 62 kg, not 65 kg. I changed my goal accordingly.

Results of a 12-year study based on monitoring of 320,000 men and women over thirty were published only recently in the New England Journal of Medicine, a number one American periodical in the field of medicine. The conclusion of this study was this - *For every one-point increase in the body mass index over 21, the risk of heart disease increases by 10 percent. However, a numerical value of the index below 18 implies malnutrition.* My goal of reducing the weight to 62 kg meant keeping the body mass index at 21.

qq

CHAPTER 3

Living in the Moment

Sitting quietly
Doing nothing
Spring comes and
grass grows
by itself

A Zen Haiku

3.1

I had turned to *yoga* because I wanted to live. Dr. Ornish had prescribed *yogasanas*¹ and *dhyana*. During my stay in *Sevagram* in childhood, I had learned a few *yogasanas*, but I had never practiced them with any kind of regularity. I didn't know what exactly was meant by 'yoga', but I had heard that that the practitioners of yoga acquired the ability to control the heart rate. So I was hopeful that by practicing yoga, I could restore the health of my heart.

¹ *Yogasana*: a yogic posture. The science of hatha-yoga talks of 64 different postures or *yogasanas*, which tone different sets of body muscles. Hatha-yoga also claims several healthful benefits of these postures if practiced properly and regularly.

There was no one to teach me yoga in the woods of *Gadchiroli*. Following the suggestion of my father, I wrote to honorable Ms. *Vimalatai Thakar*² and asked her where and how I could learn yoga. She recommended *Dr. Phadnis* of *Pune* and *Dr. Gunde* of *Kolhapur*. Both of them offered me an excellent guidance. *Dr. Bharati Amte* gave me some books, cassettes and the addresses of the *Yoga-vidya-dham* (The House of Yogic Knowledge) in *Nasik* and the *Bihar School of Yoga* in *Munger*. In a book store I came across two excellent books written by Mr. B. K. S. Iyengar - 'Light on Yoga' (a book on on yogasanas) and 'Light on Pranayama'. With the help of these books and cassettes, I began to learn yoga by myself. There is a general admonition in this field that one should not try to get involved in the practice of yoga and pranayama without the benefit of mentoring by a guru, because one is likely to make grievous errors in the absence of proper coaching. These errors can pose serious risks to one's well-being. But I had no other choice. I had to stay in the woods and follow *Ekalavya's* path³. I picked out twenty yogic postures, which I thought might be most useful to me and began to practice those every day. The yogic postures toned my muscles and gave me a feeling of a certain control over my own body. I followed my morning walk up with *surya-namaskaras*⁴, other yogic postures and finally with *shavasana*. *Shvasana* is simply a posture in which one lies motionless on one's back like a '*shava*' or a

² Ms. Vimalatai Thakar is well-known in India as well as in several Western countries as a teacher of yoga. She is a disciple of J. Krishnamoorthy and well-versed in Hindu scriptures including Upanishadas. She emphasizes the practice of yoga, even by householders, both men and women, in order to make any progress on the path of spirituality. She had walked alongside Vinoba Bhave the length and the breadth of India in order to convince wealthy landowners to donate land to poor peasants. Though her first name is Vimala (the pure one), she is often referred to by everyone as Vimalatai, the elder sister Vimala, as a mark of deep respect for her spirituality and her teachings.

³ Ekalavya: a character in the great Hindu epic 'Mahabharata'. When the royal teacher taught the art of archery to princes, Ekalavya, who belonged to the tribe of aborigines, observed it from a distance and practiced what he saw. He became extremely skillful in archery and surprised all the princes as well as their royal teacher.

⁴ Surya-namaskara: One of the yogic posture, which is in fact a highly stylized form of prostrating oneself. The routine is comprised of measured movements that form a complete cycle, taking a practitioner from an upright position to a prostration and back to the upright position in a manner that stretches the muscles of hands, chest,

corpse. Because of the linguistic association of this posture with '*shava*', it had never appealed to me during my childhood. It never caught my fancy, nor did I ever think of any benefits accruing from it. But, that was my childhood perception. Now my own world had turned upside down. It was necessary to learn and to experience everything anew. Who knows, I thought, perhaps I might find the right path in what I had abhorred during childhood. Since it was a question of my life or my death, I was not only ready to try everything; but I couldn't wait to try everything out.

In the beginning, I used to lie in my own bed and try to attain the posture of *shavasana* while instructing my mind to become still. But I could hear the sounds of pots and pans in the kitchen, I could hear my wife *Rani* talking to someone, I could hear the noise my children made. Distractions like these wouldn't let me focus my attention on *shavasana*. So I moved to the study in the basement of the house and it offered me privacy and lack of distractions.

My own attempts to instruct my mind to become still and to lie motionless like a corpse often resulted in my falling asleep at first. Sometimes the mind would wander off on its own and led to a disruption of mental discipline necessary for the *shavasana*. When I used to become aware of such a disruption, it used to make me angry with myself. So I started playing the cassettes and following the instructions that fell on my ears. It prevented my falling asleep and the wanderings of my mind. After using the cassettes for about twenty days, I didn't need them any longer. I could play those cassettes in my mind.

Shavasana involves relaxing the muscles one by one. As the tension accumulated in each muscle is let out, a stress-free state of ease and comfort is reached. I

stomach and the back. Traditionally, this routine is repeated a minimum of twelve times at dawn, invoking the twelve epithets or 'names' assigned to the sun (*Surya*) god in the Vedas.

found out that no matter how much of tension is gotten rid of, the muscles could be relaxed still further. I began to wonder how much tension and stress we allow to build up in our limbs! While relaxing the wrinkles between my eyebrows, reducing the pressure inside the eyelids and relaxing the muscles of my jaw, I was struck by the realization that up until now I had never been aware of how much tension we needlessly carry.

Maintaining the *shavasana* posture for ten to fifteen minutes was an experience of an incomparable happiness. My entire body felt as if it was born anew. I got into the *shavasana* routine after yogic postures in the morning. In the afternoon, I practiced *shavasana* again after lunch and followed it with a nap for fifteen minutes. That brief nap was far more refreshing than an hour-long siesta!

(In America, they arrange a lunch seminar. That means they insist on working even through the lunch! In Italy, Greece and Spain, there is a custom of an hour-long siesta after the lunch at mid-day. Americans succumb to mental stress and heart diseases, while in Italy, Greece and Spain the percentage of heart disease patients is the lowest among all the developed countries).

I also discovered that *shavasana* in the bed at night helped me fall asleep quickly and led to a very restful sleep. One can learn to sleep well! I asked myself how I managed it for the first 45 years of my life without acquiring this basic skill.

I used the cassettes on *shavasana* made by various people. They offered many new and useful suggestions. Some of them had embellished the technique with new steps. The basic relaxation technique in *shavasana* is to focus the attention on one limb at a time, to experience the sensation at that location and to coax it into a relaxed state. Some people have used a beautiful word for this - '*avayava-dhyana*'. (In Sanskrit, '*avayava*' means a limb).

Indeed, as you focus your attention on each limb, not only does that limb relax, but the mind stops wandering around. It is as if that limb fills up the entire mind, which is the essential description of a *dhyana*. *Shavasana* is a mental exercise more than a body posture.

I came across a cassette titled '*Yoga-nidra*' made by *Mr. Vishvas Mandlik* of *Yoga-Vidya-dham* of *Nasik*. ('nidra' means sleep). I liked the technique of *yoga-nidra* so much, that I mail-ordered the cassettes and books on this technique from the Bihar School of Yoga, where this technique was originally developed. *Yoga-nidra* includes positive auto-suggestions in addition to *shavasana*. The logic behind these auto-suggestions is that when one repeats a chant in a fully relaxed but waking state, it exerts a very deep influence on one's mind. So I made up a chant for myself - "I will practice yoga and dhyana and I will become perfectly healthy". Later, I added a few more words to my chant - "I will practice yoga and dhyana and I will become perfectly healthy, I will live to be 100 and I will do - my duty without desiring a benefit for myself". (The Sanskrit word for 'duty without desiring a benefit for oneself' is '*nishkama karma*'). I followed the method of Stephen Covey⁵ to make up my own mission statement and started chanting that mission statement during the practice of *yoga-nidra*. During *yoga-nidra*, the body is fully relaxed, but the mind is fully alert and receptive. It is like a hypnotic trance. The chanting of your own mission statement in such a state of consciousness allows your mission statement to penetrate deep in the mind a to take a root there.

I found one more step in *yoga-nidra* very useful - focussing the attention on breathing after one has relaxed the body by means of '*avayava-dhyana*'. Breathe in very

⁵ Stephen Covey is the author of a highly popular book, "Seven Habits of the Most Successful People", published by in

slowly, breathe out slowly and keep a count. As the mind is focussed on breathing in and breathing out, it does not wander and this activity itself becomes a *dhyana*.

Both body and mind are 'rejuvenated' by *shavasana* or *yoga-nidra*. I became aware of one more effect. Having dropped the guard and disabled the defenses, the body lay perfectly still, breathing went on automatically at its own natural pace and the mind remained still. I then began to realize that everything was happening without *me* doing anything. I was not carrying the burden of my body or the mind! I had a sudden realization of what *Tukaram*, one of the poet-saints of *Maharashtra* wrote in the 17th century, "God, you are my staff when I walk, you are the one who carries my burden!"

I wasn't breathing, *I* wasn't doing any willful effort. And yet, everything was running smoothly. Someone else was making it happen, someone else was shouldering the responsibility of my life. I was simply an existence. I simply experienced my existence. I simply was. And this was a blissful state of being - an effortless existence, without any exertion, without any tribulations. As saint *Tukaram* said, this was indeed "a gentle wave of happiness in the lake of blissful joy".

If such a state can last for fifteen minutes, why can't it be experienced all the time? *Shavasana*, by removing all tension from life, trains one to experience the joy of simply being, simply existing. That indeed is a spiritual experience.

If I were given the responsibility of selecting a candidate for Nobel Prize, I will award the Nobel Prize for both Medicine and for Peace to the person who developed the technique of *shavasana*. But, that person never took out a patent for it, nor did he attach his own name to this technique. He left no trace of himself. He had to be the master of the art of self-effacement, a '*nishkama-karmayogi*' indeed!

Though I had started a regimen of a morning walk and yogic postures and *shavasana*, I did not rely on these alone. I took my medications regularly. Once in a while I used to be overcome with worries or I used to feel that I was losing ground. If there was any sensation of pain in the chest or if for any reason I felt extremely tired, we resorted to ECG right away. Though I was a physician struck by a serious illness, I was a physician nonetheless, and before I knew it, that physician in me would start considering the odds of another heart attack. When everything seemed to be going right, suddenly in December of '95 my heart began to beat irregularly; extra systoles began to appear right in the middle of a regular beat. Both *Rani* and I felt very worried. We called on *Dr. Bidwai* again. However, once he assured us and told us not to worry, I accepted those irregular heartbeats. They pop up now and then even now.

As time went on, I began to realize that I had a much better communication with my own body. I understood the way my body sang its tune and I knew if it was out of tune even slightly. As a physician, I diagnose my patients every day. But I was becoming aware of my own body at a far subtler level. This deeper and subtler understanding of my own body was not a result of my medical education. This was a natural language, a language without words, which every living animal can understand. Many patients can understand it, if they have not lost their touch with their own selves. Yes, our body can and does talk to us a lot about itself.

This realization helped boost my confidence that if my heart ever became sick again, I would know it. Once my mother heard me talking about my illness. She said, "Please don't talk about such morbid things again in my presence. I can't bear it." I said, "Mother, I am talking about what happened to me in the past. Now I am not sick anymore. And if I were to suffer from another heart attack, I will know about it far in advance, so you have no cause for worry."

What I said to my mother was not a mere consolation to ease her mind. I do feel confident of what I said to her. Now I rely on internal signals to a much greater extent. And my internal signals are telling me that my heart is all right. That reduced my worries and built up my confidence.

Why did I take Dr. Ornish so seriously? He wasn't telling anything that the ancient Indian science of yoga had not told already. However, my reliance on modern science had closed my mind to the traditional medical lore. What then brought about this change?

I was in a dire need. I desperately wanted to live, I wanted to live a healthy life and I knew the limits of modern medical science, I had a firsthand experience of it. So my mind had become receptive to the idea of experimenting.

But why Dr. Ornish's method? Why not any other?

First of all, there existed in mind a latent attraction towards *yoga* and *dhyana* since long. One may call it an 'Indian influence'. So my mind readily agreed to experiment with it. I wouldn't have been ready to experiment with the 'magnet' method⁶.

Secondly, Dr. Ornish wasn't like other proponents of what modern medicine considers as 'unorthodox methods'. Unlike many charlatans, Dr. Ornish didn't say, "Our scriptures say so" or "Trust me!" He backed up his claims with scientific evidence. His

experimental methodology was faultless, his scientific evidence was inarguable and his claims derived from that powerful combination appealed to me. Dr. Braunwald's book on heart diseases and Dr. Ornish's research papers used the same language with the same fluency.

Thirdly, Dr. Ornish didn't speak of only a freedom from physical illness. I knew how fleeting the physical health could be. I had developed a keen interest in problems that transcended the physical fitness. I saw in Dr. Ornish's techniques a path to the fulfillment of the physical, mental and also the spiritual needs.

Also, the lifestyle that Dr. Ornish recommended included vegetarianism; it was a lifestyle that minimized one's needs, a lifestyle that emphasized disciplining both the mind and the body, a lifestyle that brought about a genuine union of people with one another. That lifestyle was in sync with my own social convictions. And that is why I experimented with Dr. Ornish's methodology and the lifestyle with enthusiasm and determination.

3.3.

Up to this point, it was relatively easy to talk about my efforts and to narrate my experiences. It was all about the diet, the exercise and the body. But from here on I am going to try telling about *dhyana* and my spiritual experiences. This is not my forte. This was an unfamiliar path. I was often confused, lost my way, doubt overwhelmed me, came back to the same point again and again instead of making any progress; I was exhausted and frustrated. But I also saw a dim light in the distance. So I kept trying. This was a journey within and I am going to narrate it just the way it occurred.

⁶ The 'magnet' method:

I had harbored a curiosity and an attraction for spirituality, *dhyana*, and *samadhi* (a state of wakeful trance) for a long time; but since I was all wound up in the day-to-day tasks of living, I had labeled this agenda as something to be done later in the life. However, Dr. Ornish had placed a heavy emphasis on *dhyana*. And I didn't think there was going to be anything like 'later' in my life. Probably I was already in the 'later stage' of my life! At any rate, I didn't want to die just yet; but there was no guarantee as to when the death might strike. I did not wish to die without experiencing what *dhyana* might offer, so I began to seek out the paths of *dhyana*.

I started off with *dhyana* as a treatment to cure my heart disease, but slowly the object of my search changed. "What is the meaning of my life?" "How will I have a revelation of the divine?" "How will I attain what *yogis* call a state of freedom?" I grew eager to find answers to these questions before death caught up with me. With the hope that *dhyana* will provide me the answers and that I will certainly see the other side of this mundane and banal existence, I redoubled my efforts. I was always aware of the sword that hung over my head.

I began with the practice of *pranayama*⁷ and *dhyana* in accordance with the cassette made by a Christian nun named '*Vandanmata*'. This involved sitting alone in a quiet place and focussing the attention on the activity of breathing. The cassette suggested that one should associate with each inhalation and exhalation the sentiment "this is what unites me

⁷ Pranayama: Breath is considered 'prana' or the life force in the science of yoga. 'Ayama' is simply a technique of regulating. Thus 'Pranayama (prana + ayama)' is the technique of regulating the breath. Ordinarily, breathing is an involuntary activity of the body. But, a practitioner of the technique(s) of pranayama can bring the activity of breathing under one's own conscious control.

with the universe". The cassette also recommended the repetition of the mantra 'So-Hum'⁸ in order for that sentiment become well-established in the mind.

I had heard a lot about *vipashyana*. I attended a ten-day retreat in *Igatpuri* and learned about two methods of *dhyana* - *anapana*⁹ and *vipashyana* - along with a smattering of Buddhist ethics. From the Bihar School of Yoga I learned the technique of *empty mind dhyana*. Through some books and cassettes I obtained from the USA I learned some techniques of *dhyana* and the technique of 'imagery and visualization'. I also read what *Acharya Rajaneesh* has written about various techniques of *dhyana*. The best guide I met was of course *Vimalatai Thakar*. Not only is her mastery in this field is well recognized, but her style of offering guidance with loving care and not demanding anything in return in the form of loyalty or faith was most appealing to me. I received her guidance through books and letters as well as personal visits.

I sat down each morning to practice *dhyana* in a quiet place. The basement of our house became my special place for practicing *dhyana* and for my own studies. There was in my mind an acute sense of curiosity and a thirst for a vision. I had no real idea of what it

⁸ So-Hum: Literally, "That I am {su(h) aham}". It is an awareness that a disciple should cultivate in his mind after the guru has taught him "That thou art (Tat tvam asi)". It is a basic tenet of Hindu spiritualism (*adhyatma*) that while our body is made up of flesh and bones; and while this body senses, feels, thinks and remembers; it is still an entity that ultimately perishes. But we are all endowed with something that is imperishable - a soul, which is termed 'atman'. when everything is stripped away from our existence, what remains is this everlasting, everpresent and indestructible atman. And that is what we are in reality. The first step on the path of spiritual growth is thus the identification of one's self, not with the body, not with any worldly accoutrements, but with this atman. The next step is to realize that an atman is nothing but the cosmic soul, brahman, enclosed within the body. When body perishes, atman becomes one with brahman, just as the air inside a pitcher becomes indistinguishable from the air outside the pitcher once a pitcher is broken. This is not meant to be a mere intellectual activity. An aspirant must internalize this tenet and overcome every physical and mental obstacle to his identification with everything else in the universe. Someone who has reached that level of realization is essentially established oneness with the entire universe and commandments such as "love thy neighbor" are just as needless as telling someone "love thyself".

So-Hum is also the sound one makes when one inhales and exhales. The phonetic identity of "su(h) aham (That I am)" with the sound of one's inhalation and exhalation must have led to this unique memorization technique for internalizing the basic tenet of spirituality.

⁹ Anapana: Literally, "non apana"

meant, nor was it very clear to me that I indeed had an expectation of something special to happen. All I felt was a nebulous desire that something ought to happen, that some divine principle ought to be revealed to me, that this uneasiness of my mind ought to end.

And talk of the obstacles! Even when my eyes were closed, the noise of whatever happened outside bothered me. If someone yelled in the house, if a pot or a pan crashed to the floor, if a motorcycle roared as it passed by our house...each noise evoked in my mind a reaction, a certain sense of anger over the disturbance. I soon found that a nice trick suggested by *Dr. Phadnis* was very useful - Change the way you react to these disturbing noises. Don't just fret and fume, don't say "what a nuisance!" Simply stop thinking about the noise and listen to it calmly - like you are listening to the birds calling each other. Slowly these noises ceased to bother me.

In the beginning, I was not able to sit in the lotus position for my *dhyana*. My legs were very stiff. When I was young, *Vinoba* himself had once tried to teach me how to sit in the lotus pose, but I had not been able to. I should have been able to assume at least the *Siddhasana* pose. However, when I tried that, one knee would stay far above the ground, my legs used to get sore and fatigued and in five or ten minutes they used to become absolutely numb, forcing me to break out of the pose. In the *Vipashyana* camp, one had to sit in a proper pose for an hour at a time and during a typical day, there would be ten to twelve such one-hour sessions. It was an excruciating torture for me. I used to think, "I can't even sit in a simple pose; how am I going to practice *dhyana*?"

A daily struggle began to slowly limber up my legs, so that after three years, I could easily sit in the *Siddhasana* pose and maintain that pose for a long time without feeling

any sensation of pain. I also found that folding up a *chadar*¹⁰ into a narrow, 3-inch thick roll and resting the base of the spine on it was the easiest way to assume the *Siddhasana* pose. As a matter of fact, *Iyengar's* book does mention this ploy. But it took me a long time to actually try it out and to recognize its importance. Indeed, it is not enough to have someone to guide you. To accept it, you should feel a need for it deep inside you. You have to open the doors of your mind and let that teaching enter. Then you need a practice to internalize that teaching. It took me three years to overcome the simple problem of how to sit in a relatively easy pose such as *Siddhasana*.

I began the practice of *Pranayama*. To read books, experiment, experience whatever happens and move ahead - that became my path, a path of stubbed toes and hurtful woes. I was learning to focus my attention on inhaling and exhaling and to see it as a vehicle of uniting with the nature or with the divine principle. The incoming breath is called '*puraka*' (the 'filler-upper') in the yogic parlance. It came from the nature outside and I began to see that it brought with it the gift of life. I accepted it as if it were blessed by God himself and consciously carried it deep inside my chest. When I exhaled, I envisioned I was letting go my ego, the one that cried out for self-identity, and an incorrigible separateness from the rest of the universe. It facilitated, exhalation by exhalation, envisioning a state of union with the nature, a state of total dissolution of the self in the nature. Though this cycle of inhalation and exhalation is continuous and involuntary, this was a conscious effort to assign a new meaning to it. Was this practice of *Pranayama* really a conscious effort to assign the process of breathing a new meaning? I wondered. Could it be, that *Pranayama*, far from being a conscious effort to assign a new meaning to the process of breathing, is actually a means of

¹⁰ Chadar: a relatively thick piece of woven cloth, usually the size of a bedspread. Depending upon the roughness of the weave, it is either used as a floor covering to sit upon, or as a bed spread or it is wrapped

experiencing, both physically and mentally, the true meaning of the process of breathing - a process of achieving oneness with the nature?

Swift movements of the mind, the mind running helter-skelter during the practice of *dhyana* is an amazing thing. You secure a quiet place and sit down in the *Siddhasana* pose, you close your eyes and you train your attention of the incoming breath and the outgoing breath. But does the mind sit still? No! Is it like a gust of wind or is it like a drop of mercury? No matter what you do, you can't catch it with your fingers and you can't hold it in your fist.

You start the *dhyana* practice. For a few moments, you experience a silence, a silence devoid of any thoughts. You feel good. You say to yourself, "Wow! I have got it! For the past so many seconds, there have been no thoughts coursing through the mind!" And suddenly you realize that this too is a thought and your mind has not been quiet and still after all and a what you have had has been only an illusion of a quiet, empty mind!

Then you give up on the idea of emptying your mind of all thoughts. You decide to simply observe its movements without getting involved or trapped in its games. For a few moments, every thing is quiet, the mind is still. And then a thought peeps in like an innocent little squirrel - "The inventory of medicines is down. Will have to order more from Nagpore." The thought pops up, but I simply look at it and it disappears. Another one pops up - "The *palash*¹¹ was in full bloom today. Looked so marvelous! How apt is its English name - Flame of the Forest!" I keep looking at this thought also and it too disappears. Suddenly I feel as if an ant is creeping up my left thigh. My mind speaks up - "What could this be? An ant? Would it bite me? Oh no! When one is practicing *dhyana*, such illusions will

around the body for protection from cold on a winter night.

surely arise. Shouldn't be taken in by it. When Buddha sat down for his fiercely austere practice, what fantastic and fearsome illusions tried to distract him! But hey! I am no Buddha...." But I haven't moved my thigh even a little bit and that sensation of an ant creeping up the thigh is gone. Another thought enters - "See! if you do not let your mind be distracted by these thoughts, you do succeed! That sensation of an ant vanished by itself! Yes, you are surely progressing in the practice of *dhyana*! You did it! You let the ant run away..."

Thus starts the play of your mind.

During the course of my reading, I came across several techniques of *dhyana*. There was something useful in each technique and it made me feel fresh and good after I tried it out. But as I read more and tried out many things, I became quite confused as to which one of out of this whole slew of techniques and rites was the most appropriate for me. I wanted to practice *dhyana* and become very adept at it, but there were so many ways to get there. Which path should *I* follow? There wasn't a whole lot of time left for me and it was getting even shorter as each day passed by without a firm, unhesitating commitment to any one path. It pained me. I needed to know which path would finally lead me to a 'grand vision'.

My practice of *dhyana* was accompanied by my daily regimen of reading, yogic posture and *pranayama*. It helped me see their interconnections. As I progressed on all four fronts, I was visited by new experiences such as sudden spells of uncontrollable euphoria and fleeting moments of sudden awareness that I had 'sensed' something totally

¹¹ Palash: name of a deciduous tree native to the wooded areas in India. In March, new leaves sprout and by April its bright red and orange flowers are in full bloom, ready to spew the pollen.

different while looking at something quite ordinary and familiar. Once I was gripped by a feeling that I was inside a soundless, peaceful vacuum, but as keenly awake as I had never been and that my mind was completely void of any thoughts. This experience was like floating on a sea of happiness and it lasted for nearly forty or fifty minutes! My mind eagerly asked, "What is this? Is this what they mean by *dhyana*? Is this what they mean when they talk about '*the experience of a blissful state*'? I tried several times again to recapture that sensation, that experience of a blissful state, but success eluded me.

Books on various techniques of *dhyana* caution the reader against such momentary and elusive experiences. These are nothing more than a passing scenery on the way. One should not become infatuated by them. It is likely that such illusions of bliss are spawned by the heightened sensitivity of the mind or by the intensification of one's anticipation of a something grand, something out of this world. My friend *Anand Nadkarni*, who is an expert in psychiatry, called it 'a trance'. *Vinoba* calls such experiences '*pratibha darshan*'¹². It's not 'the vision', but only an accreditation signifying that the train of one's progress is on track. However, one ought not to remain in its thrall; one is better off leaving these alone and moving on. You can't relive those transient moments of rapture, one can't recapture them by force. When I understood this, the lingering temptation of such experiences fell away.

During the course of my progress, questions used to cloud my mind sometimes and doubt used to darken it further. But then, a convincing answer used to present itself. Perhaps these answers were always there; only the questions had never occurred to me before. When I grew sufficiently curious and began to search for answers, the right answers seemed to appear at the right time. An answer appeared to me sometimes in what I was

reading, sometimes in someone else's experiences, sometimes in a simple sentence or a phrase somebody uttered, sometimes in someone's teachings and sometimes in nature. When questions began to arise and the mind began to thirst for answers, answers followed right behind.

Things began to fall in place one after the other. I read some books by *Vimalatai Thakar*. Her booklet '*dhyanamaya dainandin jeevan*' (*Daily Life In Dhyana*) is an incomparable gift to those who wish to make a progress in the practice of *dhyana*. '*Mahaguhame(n) Pravesh*' by *Vinoba* came across to me as a priceless book. It dispelled many illusions and fanciful notions about *dhyana* I had accumulated. *Dhyana* is not the practice of a specific technique, nor the following of a specific path. It is a state of consciousness wherein you grapple the very essence of your existence and fully experience that which lies beyond words and beyond thoughts. It is futile and meaningless to draw up a timetable for attaining such a state. You can only cleanse your mind and wait for that event. Uninvited and unannounced, without forcible efforts, that 'grand vision' is suddenly yours to experience. You can't make it happen and you can't make it happen a moment sooner by trying hard. You need to plough the soil and wait for the rains. You can't make the rain.

This much became clear to me. I had not had the 'grand vision'. The rains had not arrived yet. Perhaps I was still in the process of yoking the oxen to a plough. But the acceptance of this advice lightened the burden of expectations and anticipations I was carrying. The confusion grew thinner. I once again approached the daily practice of *dhyana* with a renewed enthusiasm. On several occasions, my attention became focussed with little effort. But, there are no guarantees when it comes to your mind. Some days it behaved like a stubborn mule and no matter what, my mind would not remain still and its multiple strands

¹² Pratibha-darshan: literally, an apparition of one's intensified faculty of imagination.

would not converge at one point. On a day like that, there was nothing else to do but to let go of the practice.

3.4

When I was still a student, I had read '*satyache prayog*' (*Experiments in Truth*), an autobiographical book by *Gandhiji*. A lot of water had flown under the bridge since then. I felt the urge to read it again. I was hopeful that his experiences would guide me in cleansing my mind.

I received many useful things from *Gandhiji's* autobiography. But one of his statements made a deep impression. In a meeting with Rom* Rolan* he said, "God is not a person, God is a principle." In my earlier readings, this statement had completely escaped my attention. I had no definite opinion about God's existence or non-existence. Whenever I thought about God, my mind could conjure up only a deep-seated impression of a shining eminence seated on a heavenly throne, etched in my childhood memories by scriptural stories and ubiquitous pictures. Though the intellect and the reason would not permit a belief in such an impression of God, I was never able to deny God's existence. So I remained in two minds over this matter. But when I made a conscious note of *Gandhiji's* statement, I suddenly felt that though God may not be some shining eminence sitting on a heavenly throne, but if God be some basic principle, He must surely exist. But if God is a principle, what principle is God? And what form does that principle take? In another instance, *Gandhiji* says, "Truth indeed is God!" I thought this statement was unusually bold and based on personal experience. All faiths proclaim that God is true, but *Gandhiji* says Truth indeed is God! If

Truth is God, then verily, God must exist, because there is no doubt that truth exists. In fact, whatever exists is, 'the truth'. Does it mean "Whatever is, is God?"

It was a radical sensation! Gone was the doubt about God's existence that my scientific training had planted in my mind. *Gandhiji* had turned the traditional equation "God is Truth!" around and proclaimed "Truth is God!" In the parlance of mathematics, it was absolutely correct, and, with that proclamation, all my doubts and confusions ended as if a beam of bright light had suddenly been flashed. Indeed, if Truth were God, then God could be sought, God could be seen, God would be revealed, God could be experienced!

In his commentary on *Ishavasya Upanishad* ('Ishavasya Vritti', literally 'The Attitude or the Passion of Ishavasya'), *Vinoba* has provided a penetrating insight into the unity of Truth and God. at one place he says, "Is God the Truth or is Truth the God? One is a terminology of philosophers, the other is the terminology that aspirants of spirituality use."

Even if both mean one and the same, the viewpoint emphasizing "Truth is God" is more useful for the aspirants of spirituality. One can always begin with the search for Truth. Since God transcends any qualitative description, one can't begin with the search for God.

Gandhiji had said, "God is a principle." What did he mean? In Sanskrit, the word for 'a principle' is *tattva*'. 'Tat' means 'that'. 'Tattva' means 'thatness'. That 'That' is 'the existence'. The existence of whatever 'is', is God. It is this easy! Isn't it interesting?

The meaning of many difficult concepts quickly unfolded in my mind. Truth is everywhere, because whatever is, is Truth. And these trees, this hill, this wind, these people, even this ant.. all these are truth. For a fleeting moment, and only for a fleeting moment, the doubt flashed, "So *all these* are God?" And my mind said, "Yes, *all these* are

God!" The statements such as "God is omnipresent" or "*Ishavasyam idam sarvam*" (the opening mantra of *Ishavasya Upanishad*, which means " Verily all this is God") signify the same meaning. I had been reading this all along, I had been chanting this all along, and how is it that its meaning had never dawned on me?

A wonderful *Haiku* in Japanese goes like this -

I said to a tree,

"Tell me about God!"

And the tree burst into a blossom.

The blossoming of the tree told what God is. The very 'is-ness' of that tree, the blossoming of that tree, is indeed God.

And what meaning had I grasped while lying in the operation room on the angioplasty table? After the big bang of creation, elementary particles were born out of that tremendous explosion of energy and they became the very substance of this universe. Everything in this universe is made up of the same electrons, protons and neutrons. So science does not doubt that one and the same truth prevails in this universe. In fact, to articulate a single theory which explains everything in the universe is the ultimate goal of science. That theory would be a revelation. Would it be the revelation of God?

Science and spirituality indeed go hand in hand!

I found one of Einstein's comments very captivating - "*A human being is part of a whole, called by us the 'Universe', a part limited in time and space. He experiences*

himself, his thoughts and feelings, as something separated from the rest - a kind of an optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest us. Our task must be to free ourselves from this prison by widening our circles of compassion to embrace all living creatures and the whole of nature in its beauty."

3.5

Along with my practice of yoga and *dhyana*, I kept up y reading on books about spirituality. I read the complete text of the translation of *Patanjali's sutras* and explanatory notes and fully explained meanings of those sutras. I felt a strong urge to learn Sanskrit. My main anchors were *Vinoba's* discourses on *Bhagawad Gita* and his booklet '*Ishavasya vritti*'.

Ishavasya-vritti is worth its weight in gems and diamonds. Eighteen verses of *Ishavasya Upanishad* propound a philosophy that is very rich in content. *Vinoba* wrote a fitting commentary on it in the fewest possible words. And he did so in order to make it accessible to *Gandhiji*. The rich philosophy of *Ishavasya Upanishad*, an aspirant like *Gandhiji* and the preceptor like *Vinoba*, is a threefold confluence, whose sanctity is hard to match.

I recite *Ishavasya Upanishad* each morning. It is so laden with meaningful thoughts that it moved *Gandhiji* to write, " If all books were to be destroyed and only one was to be spared, I will choose *Ishavasya Upanishd* for safekeeping. When I recite in the

morning, I feel as if I bathed my mind clean and my entire day feels like I were starting the life anew.

3.7

I felt my life was short. It worried me that my life might end too soon - it made me feel afraid and sad. If and when death does approach me, will I feel the same way? And why did I think that a life of 45 years up to that time was 'short'? The tragedy of life is not that it ends so soon, but that we wait so long to begin it.

My act of living, I realized, consisted of a series of moments, but I had not lived a single moment fully. I began to notice that at any moment, we are busy doing one thing and our mind is busy with something else. When we are in the shower, we are thinking of the speech we are going to give today, we might be reading the paper while eating a meal, and we might be thinking of rising prices while we are in the company of our family. In fact, we do not live in that moment; we are engrossed in thoughts about some imaginary world. We have turned the physical act of living a given moment into a mental activity of thinking about that moment. Even when we are eating the most delicious chocolate we think, "How delicious! If only I could have more of this chocolate!" We actually live that thought; while we let the experience of the chocolate fade away in a fast-receding background. Alienated from the experience of actually living any given moment, we complain that there is no joy in life, or that life is too short.

I began to gain some perspective of my own problems.

I wondered if it is possible to master the art of living any moment fully. We are always in exile from a moment of actual living. Suddenly a word flashed in my mind -

'kshanastha!' - anchored in the moment or living in the moment! (in Sanskrit, 'kshana' means 'a moment'; the suffix 'stha' connotes the 'stasis' - so 'kshanastha' means 'one stabilized or anchored in a moment'). We need to be anchored in a given moment, we need to live that moment fully.

Every day I stand outside the house early in the morning. I stand in the garden. I see a dim light begin to brighten up the horizon. Silhouettes of trees appear as if they were painted against the dim horizon. I feel a slight chill in the air. I smell the faint fragrance of flowers. I stand still taking all this in and feel grateful that I was granted one more day, I was granted this very moment. This is His piety and this is His gift. I had been a pariah to this life. Now, I am *at* this moment, *in* this moment. I am one with my surroundings. I am a part of my surroundings. What lies without and what lies within are but one. A feeling of oneness with everything around me floods my mind.

Even one such moment is so rich and joyful that it suffuses the mind with the spiritual meaning of a line written long ago by one Marathi poet "*kshana eka pure premacha, varshava ghado maranancha*" (Of love, suffice a single moment, death may come in a bursting torrent). But how often do we live a moment such as this? Was this moment a special moment? Or was it just like all other moments that make up a whole day? I believe that it was just like all the other moments, but my ability to fully experience a given moment is heightened at that particular moment and so I am able to live in that moment much longer than in any other moment of the day. Why can't this moment appear more often? Perhaps it does, but my eyes are waiting in anticipation of something else.

Is every moment so rich? So bursting with joy and romance? If it is, then it is my fault that its riches are simply wasted upon me. I am the one who throws away the most joyful thing that each moment brings and then I complain that life is short!

This moment is all that there is. We keep looking forward to something different, something 'out of this world', something absolutely thrilling and never taste the thrill of the present moment. I saw a very fitting cartoon once. It shows two monks, one young and one old, sitting side by side. The young monk seems to be looking to a side, as if he is waiting for something out-of-this-world to happen, waiting for some divine revelation. The old monk says to him, "Nothing happens next. This is it!"

A thought began to take shape in my mind - if we master the art of fully experiencing and enjoying a given moment, it would be like a big bang of the moment. Just as tremendous energy is released when an atom explodes, so would a tremendous joy be released from the explosion of a moment. But for that to happen, one must live with fully conscious awareness of the moment and not in the dreamland of thoughts. One would have to become '*kshanastha*', i.e. anchored in a moment. Could I do it? All the techniques of *dhyana* essentially teach one to be sensitive to the experience of that moment, they teach one to become '*kshanastha*'. That is the goal of *dhyana*. If God is ever revealed via *dhyana*, that revelation must be of the same texture and consistency as the experience of truth in that moment due to one's heightened sensitivity. God, I thought, could not be different from truth.

And I am fully aware that all this is still on the intellectual level. I am not at the level of living fully in a moment. I do not see anything more than some rare glimpses of what it could be like.

I was getting ready to sit down for *dhyana*. I often use a flower as an object on which to focus the mind. I picked a *champak* flower from its tree. Just one flower is enough for my practice. The champak flower! Its white beauty, the golden yellow hue at its center and its undeniable fragrance suddenly transported me to my childhood of forty years ago. The color and fragrance of the flower I was holding in my hand led me straight back to my childhood memories, memories of the very delicateness of a joyful time in life. Holding a champak flower in hand is like sitting in a time machine! It always takes me back to my childhood. A champak flower is thus a twofold joy for me.

Suddenly a thought popped up - "What happened to my 'anchored-in-the-moment' state? Instead of experiencing the champak flower the way it is at this very moment, I was using it as a vehicle for re-experiencing my childhood memories. The fragrance of the flower was a more powerful vehicle than mere words, because the sense of smell is far more primitive than man's faculty of rational thinking. Obviously, the security of childhood memories was more precious to my mind, I loved my childhood more than the *champak* flower. But then, what of this flower I was holding in my hand? What of this moment? That moment was fleeting away - not tasted, not experienced, but simply wasted.

I checked my slide into another train of thought. I did not want the *champak* flower to turn into a means of losing myself in childhood memories. That flower is first and foremost a flower, it is entirely a flower, it is nothing but a flower. It lives in this moment, it exists *at* and *in* this moment. As much as this universe *the* Truth, the flower-ness of that

flower is Truth too. So that flower is the truth, just as God is the Truth. And to live in the Truth of this moment ought to be my practice.

It began to dawn on me that *dharana*, the endeavor of looking at the flower with my entire attention focussed on it, is really a practice of experiencing the Truth of this moment or of living in this moment. *Dharana* is the study of the art and science of becoming anchored in this moment. Becoming anchored in the moment, becoming '*kshanastha*', is *dhyana*.

The *champak* flower became a vehicle of my spiritual journey!

A question arose in my mind today - To be natural, to be non-artificial is like becoming what? Animals and plants are driven by natural instincts. Is becoming natural same as becoming and behaving like animals?

Nobel Laureate Octavia Paz says in one of his poems -

... But the butterfly

did not know it was a butterfly.

There was no thought in the mind of the butterfly.

It just flew.

Animals and plants lack enlightenment. Their behavior is entirely natural, because the concept that they could behave in any other manner does not enter their soul. Even though they live a natural life, they themselves have no awareness that they are living a natural life. Living naturally without being aware of it can't be a goal of human life. If that

were to be the goal, then one could argue that becoming a lifeless rock and simply lying down motionless would be an even higher goal!

Man can and is also propelled by natural drives; but apart from that, his imagination and his intellect make him aware of something in addition. However, man's distinction from animals and plants does not end there. Man is a part and parcel of whatever is happening inside and outside him; and in addition he is conscious of it all and that is the greatest distinction of man. He is aware of the self. So man is Truth like a plant or a rock, but, besides that, he is wakeful and self-conscious Truth. Truth that is aware of itself is man!

Is this self-conscious Truth the soul? Does *dhyana* awaken this self-consciousness? Does this universe possess this self-consciousness? And if so, is cosmic self-consciousness God? Is revelation same as experiencing the oneness of individual self-consciousness and the cosmic self-consciousness?



CHAPTER 4

The Vision

"Why does man look for God? Why does man, in every nation, in every state of society, want a perfect ideal somewhere, either in man, in God, or elsewhere? Because that idea is within you. It was your own heart beating and you did not know; you were mistaking it for something external. It is the God within your own self that is impelling you to seek Him, to realize Him. After long searches here and there, in temples and churches, on earth and in heaven, at last you come back to your own soul, completing the circle from where you started, and find that He whom you have been seeking all over the world, for whom you have been weeping and praying in churches and temples, on whom you were looking as the mystery of all mysteries, shrouded in the clouds, is the nearest of the near, is your own self, the reality of your life, body and soul... By means of spiritual disciplines the individual soul ultimately recognizes its oneness with the Universal Soul."

- Swami Vivekananda (1896)

Jnana Yoga.

I read and I experiment on my own self. I have become a laboratory! And some things are becoming clear to me.

I recently read two books, 'Seven Habits of Highly Successful People' and 'First Things First', written by Steven Covey, who is esteemed as *the Guru* of Modern America. Both these books are highly popular for a variety of reasons. The four basic squares described in these two books have become a rage in the field of management science.

Steven Covey has described some ways of searching one's own self. I liked the exercise of writing, after gaining a profound understanding of one's own self, a 'mission statement', which will reveal one's own life goal (not a career goal). The reader is asked to prepare this mission statement after considerable churning of mind. Covey has suggested several steps for such a churning. Covey recommends that the understanding one gains about oneself after going through all such mental machinations be put to words in the shape of a personal mission statement.

After such intense churning for several days I finally wrote out my mission statement. It turned out to be a spiritual experience. In a way I put in words my own philosophy of life - what I want to live for, what I wish should happen in life and how I wish to live. When you read it over and over, you can see for yourself how and why your life went astray and using the mission statement as a pole star, you can redirect yourself.

I had a new experience today. The science of yoga deals with *kumbhaka*¹, the time that elapses between inhalation (called '*puraka*'²) and exhalation (called '*rechaka*'³). Yoga talks about three kinds of *kumbhakas* - '*antarkumbhaka*'⁴ (the period of time for which

¹ Kumbhaka - pronounced as koom-buh-k(uh).

² Puraka - pronounced as poo-ruh-k(uh). Literally, one that fills (the lungs) in.

³ Rechaka - pronounced as ray-chuck. Literally, one that empties out (the lungs).

⁴ Antarkumbhaka - Literally, the internal kumbhaka (i.e. kumbhaka while the air has been held inside the lungs).

the breath is held after inhalation), '*bahya-kumbhaka*⁵' (the period of time for which the breath is held after exhalation) and '*kevala kumbhaka*' (the holding of breath that occurs of its own volition). One can't force a '*kevala kumbhaka*' to occur. If it occurs at all, it does so by itself, no conscious effort on the part of a person who is learning the technique of *pranayama*, the control of breathing, coming into play. I am still not adept at '*bahya-kumbhaka*'. It makes me gasp for air. But I managed the '*antarkumbhaka*', (holding still after bringing fresh air inside the lungs by breathing) reasonably well. I had been practicing it for many days and slowly prolonging the duration of time for which I could hold the breath in. Today, after taking a deep breath, I suddenly felt a certain sensation of utter peace during the few moments of '*antarkumbhaka*'. It was as if the mind, devoid of any thoughts, had turned into a cloudless sky. It was the simple awareness of my sheer existence floating in space like a bird cruising up high with its wings fully spread out. There was no flutter, no ripple, no rustle, no bustle; just peace, serene and translucent and quiet. This experience, lasting for ten to twelve moments after each intake of breath, was totally new. I had just gained a glimpse of why *kumbhaka* was so important.

Kumbhaka permitted a feeling of peacefulness for a few moments, but it would not last through the entire cycle of inhalation and exhalation. Sudden flashes of thought would interrupt the stream of silence. Sometimes a train of thought and sometimes a flutter of words - flutter of words like tiny pieces of shredded paper fluttering in a breeze. A persistent cacophony of words cluttered my mind. I realized that they would not let me enjoy a state of silence and peace.

⁵ Bahya-kumbhaka - Literally, the external kumbhaka (i.e. kumbhaka after the air has been expelled out of the

Why do these thoughts and words arise? I could see that they came needlessly crashing in even though I had not invited them. As soon as the slightest interlude of quietness and peace befell, these thoughts would bubble up from the very bottom of the mind. Thoughts. Messy, undisciplined thoughts, without a purpose and quite meaningless. They fatigued me. They frustrated me. And many times two thoughts would shoot out simultaneously like two claxons or public loudspeakers and there would be nothing but an infuriating noise. A perpetual flourmill⁶ grinds out the words. But that is what my mind has been doing for a long time, it's a habit that dies hard.

These thoughts not only broke my concentration, but also made me tumble away from a state of acute awareness of the moment. My intention was to experience Truth by practicing *dhyana*, but instead, these thoughts littered and muddied my mind. These thoughts were not the Truth; they were mere bubbles in the form of word-symbols someone had fashioned for verbally expressing what an experience of that Truth is like. Thoughts and words they brought up to the surface were mere substitutes for the real experience of Truth. They were forgeries. And they had turned on me like *Bhasmasura*⁷. They flooded my mind and robbed me of an experience of Truth.

lungs and a fresh quantity of air is yet to be brought in by taking a breath).

⁶ Flourmill - In rural India, and even in several urban areas of India, it is still uncommon to buy flour directly from a grocery store. Instead, people buy the grain from a grocer and take it a flourmill to have it ground into flour for making bread. So, a flourmill is still a common fixture of rural as well as the urban settlements.

⁷ Bhasmasura – Pronounced as bhuss-ma(h)- seur. Literally, 'a demon of ashes'. The author is alluding to a tale from the Hindu mythology. A demon once did severe penance, which pleased Lord Shiva. Lord Shiva revealed himself to the demon and asked what boon the demon was seeking. The demon asked for a strange boon – anyone on whose head he chooses to place his hand should turn to ashes. Trapped by his own words of promise, Lord Shiva had no alternative but to grant the demon this boon. The demon became known as Bhasmasura – (bhasma = ashes, asura = demon). The legend goes on to tell that Bhasmasura, blessed with this boon, soon began to eliminate his opponents one by one. He became an extremely evil and terrifying despot on the earth. His ambition knew no limits. Soon he wanted to ascend to the position of Lord Shiva himself, rule over the entire universe and to mate with Lord's eternal consort, Parvati. So Bhasmasura tried to place his hand on Lord Shiva's head. Lord Shiva himself was now terrified and asked Lord Vishnu to come and help. Lord Vishnu incarnated himself as *Mohini*, a young woman of stunning beauty. As Bhasmasura watched the prettiest, well-endowed figure of Mohini playfully prancing around and bouncing a ball, an uncontrollable lust arose in his heart. He approached Mohini and asked her to accept him as her mate. But Mohini would consent to his advances if and only if he learned to dance like her. Bhasmasura readily agreed and started following Mohini

And why does mind prefer to verbalize the experience of Truth rather than remaining immersed and anchored in that experience? I remember reading a novel written by *Rajendra Yadav*⁸. The character of a writer in this novel says, “The writer in me never leaves me alone. He sits astride my neck and constantly nags me. My every moment is filled with one thought – ‘how am I going to put this experience to words?’ When my only son died and his body was to about to be cremated, my mind wondered how I would convey this grief in words?”

I looked inside me. Leave aside all the other instances, but even when I lay in an easy grip of death on the angioplasty table, I had coined the word ‘*anu-visarjana*’⁹ for death when a life-threatening complication had unexpectedly occurred. Another thread of memory took me back to April 18, 1995 – the day I first felt an intense pain in the chest. While I was busy studying my own ECG, I worried about the possibility of a heart attack. But at the same time, I kept thinking, “How awful! I have to look at my own ECG! This is like that Russian surgeon!” (I had read somewhere that a Russian surgeon, who had camped by himself near the North pole, suffered an attack of appendicitis. In order to stay alive, he had to operate on his stomach while watching it in a mirror). A sentence had suddenly sprung in my mind, “I am in the same condition here as that Russian surgeon!” Indeed, even in the shadow of death, the mind does not let go of this habit of articulating words and sentences. As soon as the mind registers an experience, words follow like bubbles rising up from the bottom of a body of water. I must have an obsession of organizing every experience in a tidy

thorough every step of the dance. When Bhasmasura became fairly adept at the dance, Mohini showed him the final pose, in which she placed her hand on her own head. Overwhelmed by the raging lust, Bhasmasura became oblivious to the implications of that pose, placed his own hand over his head and was promptly reduced to ashes, thanks to the boon Lord Shiva had granted him.

⁸ Rajendra Yadav -

⁹ Anu-visarjana – Literally, a dissolution of atoms. The author had thought of death as a dissolution of one arrangement of atoms and remaking of another arrangement while a life-threatening complication occurred during the course of angioplasty – See Chapter 1, page -

package of words! The habit of thinking had turned into a cancer of the mind! It was a parasite that drained away the peace of mind and robbed me of any opportunity to fully experience an experience!

And then it came to me – there is no organ called ‘mind’, made of flesh, bones, cartilage and blood in my body. This constant chaos of thoughts is what we call ‘mind’. These thoughts and the reactions that follow these thoughts, the continuous train of brain waves, the electrical impulses that jump across the neural synapses are collectively known as ‘mind’. The mind keeps me ever occupied; it tortures me. It’s the root cause of all my unease, my discomfiture and my frustration. It gobbles up every moment of life. That moment is the Truth, the experience of that moment is the Truth. But I am not living in that moment. I am living in the verbalized reactions to each moment.

Did I say that I am living? I should have said, “I am wasting my life!”

I began to see that there is no peace, no ease, no ‘living’, unless these constantly rattling trains of thought are stopped. Will *dhyana* make them stop? How?

4.2

To be honest, *dhyana* is not an intellectual activity. But my intellect was not ready to sit back quietly. It was trying to understand *dhyana* in terms of its own rationality. Slowly I began to see the connections between the science of yoga and the modern psychology. I read about the ‘Rational Emotive Therapy’ (RET) developed by Albert Ellis, a world-renowned psychologist. According to him, our thoughts fashion our emotions and our moods. These thoughts are simply what we say to ourselves – a kind of self-talk. If we pay attention to this self-talk and consciously tune it up and suitably tweak it, our emotional responses change appropriately. It was interesting to learn from RET that we ourselves

mould our emotions by repeating to ourselves the patent sentences (such as “I am truly hapless”, “I couldn’t manage that”, “I wouldn’t be able to do that”). Listen to your own self-talk and you will understand how a sentiment gets molded. Rephrase your sentences and your emotions will change too.

As I proceeded with my practice of *dhyana*, I saw that there was a lot of truth in what Albert Ellis says. I started to experience it in my personal life. I was able to verify that there indeed is a very close relationship between the thoughts and the emotions.

How does my mind work? The mind can’t be seen, but the behavior, the actions and the gestures can be seen. Usually, emotions are behind actions. I shout angrily. Before the angry shouts and angry gestures, the emotion of anger has already flooded the mind. This angry emotion, or the attitudinal illness, or as *Patanjali* calls it, the *chitta-vritti*¹⁰, can be known via sensations that the body experiences. The emotion of anger can be known and experienced through such manifestations as a sensation of warmth felt in the ears, rapid breathing, a rustling sensation all over the body and a pounding in the head.

But how does anger arise in the mind? As we retrace the progress of our thoughts moment by moment, we realize that something sparked off the explosion of anger. That spark could be a thought that had flashed across the mind, or, as I said earlier, our own self-talk. Someone behaves in a manner that I disapprove. That usually does not directly arouse the feeling of anger. But it spawns a sentence or a part of a sentence in my mind. It is like an actor speaking something to himself on the stage, (an 'aside'), "This person must have

¹⁰ Chitta-vritti – In Sanskrit, chitta = mind and vritti = attitude, passion. According to Patanjali, who systematized the science of yoga and left behind a manual of step-by-step yogic practice in the form of 108 formula-like aphorisms, yoga is a practical science of controlling or regulating the chitta-vrittis. Chitta-vrittis are attitudes or passions that rule the contemplative complex, which consists of all the mental transactions and the neural machinery that stages these transactions. Regardless of whether Patanjali of the bygone age knew human anatomy the way medical science knows it today, his aphorisms make a serious student of his manual realize that rather than a commonplace word like 'mind'; 'chitta', involves the entire neural-muscular-glandular organic complex.

a very low opinion about me!" That sentence works like a spark. The mind is already laden with the gunpowder; a sentence like this or some memory or some visual image from the past ignites the fuse, and people recognize the explosion of my anger by the way I shout. But, before that explosion occurs, a whole chain of events has already taken place in my mind in less than a second.

External event → a thought in the mind/visual image → feeling/attitude → external action

The science of yoga assigns a high level of importance to the two links in this chain - thoughts and feelings in the mind. Both yoga and psychology emphasize a control over these two links in our reactions to external stimuli. I began to study and to understand how such a control or regulation is achieved.

Patanjali said, "Yoga is *nirodha*¹¹ of chitta-vrittis, the passions of mind. Freedom from the passions or emotional responses arising in the mind is verily the yoga. But how does one become 'free' of these passions or emotional responses? It does not happen by forcibly suppressing them. A forcible suppression creates an internal stress, an internal pressure, which invariably leads to an explosion sooner or later. So how can *dhyana* help?

A sudden spurt of emotion is often accompanied by emotion-specific physical sensations. Reactions of our body are always in sync with the prevailing emotion; be it anger, fear or a sexual desire. Reactions of our body are faithful and loyal to the prevailing emotions. Sometimes we tend to suppress or deny the true nature of our feelings. Anger is

¹¹ *nirodha* - In Sanskrit, the noun '*nirodha*' has six different shades of meaning: (1) arrest, confinement (2) restraint, control (3) obstruction, opposition (4) hurting, punishing (5) annihilation and (6) aversion, detachment. While restraint, control, obstruction and opposition are preliminary steps, Patanjali's main emphasis is the cultivation of a sense of detachment from all passions of mind. When a yogi can remain completely free of the bondage of his mind, when a yogi can detach himself/herself from the slavery to whatever the mind demands, the mind and the games that mind plays become ineffective. It is in this sense that the passions of the mind are 'annihilated' - they become as if dead to the extent that a yogi is no longer distracted by the passions of the mind, a yogi's behavior is not dictated by the attitude or mood of the mind. In other words, a yogi is free of the passions of his own mind.



generally regarded as undesirable, so I tend not to accept that I was angry. We can, in a way, cheat our mind. But the responses of our body promptly betray what is really going through the mind.

An American system, known as 'sensitivity training', teaches how to recognize our true feelings. Some years ago I had received 'sensitivity training' at three different training centers. If we pay a very close attention to the thoughts arising in the mind and the accompanying physical manifestations, we can understand what is really going on in the mind. Suppose some event filled me with fear. Since I know that fear is a sign of weakness, something that would make me look lower than the rest of the people, I do not wish to accept that I am afraid. But a pit in the stomach and the sudden breaking into sweat tell me the undeniable truth about the state of my mind.

But what about the freedom from an emotional storm and its dangerous explosion or a harmful action resulting from it?

I attended the *Vipashyana* retreat second time. This time it was more useful than my first attendance. Some new nuances came to my attention.

First assuming that (mind) = (thoughts) + (reactions) = (words, sentences, visual image) + (breathing, sensation of chill, heart palpitations, etc.) and then experiencing the verity of this division of 'mind' into two components helps us understand our mind.

In *Vipashyana*, you learn to observe and to experience the physical manifestations that accompany your emotions. So, it is similar to the 'sensitivity training'. We experience our emotions or passions of our mind via physical manifestations such as the standing up of body hair, body tremor, a sudden sensation of chill, a sudden glow of warmth,

sweat and changes in the breathing rate. You learn not to suppress these, but to quickly recognize them in their gross as well as subtle forms. It is very important that you simply observe them without becoming involved with them. It is important that you don't let them snowball. You learn to detach them from your mind and you become an uninvolved spectator, an impartial witness. The better you get in performing the role of an uninvolved and impartial witness, the easier it gets to stem the chain of events that leads to an emotional outburst and the subsequent physical actions.

The self-talk that precedes the rise of a feeling or an emotion and the accompanying physical manifestations is the root cause of this passion of the mind. We are usually unaware of this self-talk. It occurs almost at the subconscious level. Therefore, we remain unaware of the fact that a specific self-talk or a visual imagery and the subsequent chain of events have begun in the mind. *Dhyana*, be it '*Anapana dhyana*¹²', according to the system of *Vipashyana* or the *dhyana* according to Patanjali's system of yoga, is a practice of consciously observing and recognizing what is going on at the subconscious level. Practice of *Dhyana* thus means becoming sensitive to the transactions that occur at the subconscious level and recognizing and understanding them while we are fully awake and conscious. How odd and yet how true!

If I do not try to suppress the self-talk, but witness it consciously in 'real time'; if I recognize what it is and what its potential is; then the entire chain reaction arising from that self-talk will be stemmed. That seed sentence will simply arise and disintegrate without sewing the seeds of further events; I will remain totally neutral.

One could compare the self-talk and the accompanying physical manifestations of feelings that the self-talk evokes to tidal waves. If, instead of letting

¹² Anapana dhyana -

yourself drown in these waves you simply observe them like a silent, neutral witness, you remain free and safe from their storm-like destructive power. The thoughts come and go ceaselessly. That doesn't stop, but they become ineffective. I began to realize this or something very close to it is what Patanjali meant when he said "Yoga is the 'nirodha' of chitta-vrittis". Bhagawad Gita also talks about a person whose mind is still¹³. A notion began to take shape in my mind that Bhagawad Gita is also referring to the same process of disabling the power of our thoughts to sway our mind. And I could now understand, sketchily, but in the language of psychology, how the practice of yoga can help me attain such a state of mind. And I could relate all that to my own mental states.

I recognized that the science of Yoga and the modern psychology are very similar. Who would you admire? The practitioners of Yoga who lived thousands of years ago and discovered this Truth and developed a whole science to attain that Truth; OR the modern psychologists who rediscovered the same Truth and developed modern scientific methodology based on it? One may admire either of these two groups. I consider myself fortunate that both the traditions were accessible to me. In India, the confluence of the two mighty rivers Ganga and Yamuna is considered a holy place and I felt as if I was bathing in a confluence of these two sacred rivers. Neither of them was alien to me. The Ganga is mine and so is Yamuna!

4.3

I used to yearn for the full illumination. "Should I go to the Himalayas and practice *dhyana* over there?"- I used to muse. Once I wrote about this to *Vimalatai Thakar*. She wrote back, "The bondage is of the mind." The implication was clear - the bondage to

¹³ The word in Bhagawad Gita is 'sthita-prajna', which literally translates as 'one whose intellect is still, one

our feelings and to our thoughts exists in our mind. And here I was thinking that I ought to go to the Himalayas in order to seek the ultimate freedom! It only served to give my mind one more excuse - "I haven't gone to the Himalayas, I am still wrapped up with the affairs of this world, and therefore I can't be free". The games our mind plays!

I made a conscious effort to understand the games mind plays. What happens when I sit down to practice *dhyana*? After a brief period of peace, a thought sneaks in. Another one follows on its heels. In the beginning, I am aware that these are only thoughts. Like scenes from a movie, they appear on the screen of my mind and disappear. But soon this awareness, this alertness vanishes and I start to think of these thoughts as the reality. I begin to dive deep in them. In sync with the swings of thoughts, my mind begins to voice its reactions such as worry, happiness, anger, and so forth. In fact, I live inside my own mind far more than I live in the external world of reality. Once the mind ceases to be neutral towards these internal thoughts, they seem real to me and I get trapped in their web. I become like little children, playing a pretend game and getting so absorbed in it that they begin to fight over the imaginary things. What *Vimalatai* said is true - the bondage exists only in the mind. Nowhere else is the bondage a reality.

When an actor recites his dialogue on the stage, he normally does not lose the awareness that it's a dialogue of a stage character, not his own thoughts. A heartbreak in the play does not prompt the actor to commit suicide in real life. On the stage of his real life, he acts out the role of 'I'. This character speaks many dialogues to itself. These dialogues, spoken to oneself, are what we call thoughts. Albert Ellis calls these thoughts the sentences one speaks to oneself. They have no separate, independent existence. And yet, how quickly

whose mind is not swayed by anything?.

we confuse them for reality! And how much we react to them! How easily we get tangled in their web! How much pain we suffer! How much pain we cause!

Dhyana is an exercise of observing these dialogues of the mind with studied indifference. Thoughts emerge, act their role out on the stage of the mind and disappear behind the curtain. The important thing is not to let oneself become attached to them, not to invest one's ego in those thoughts. Assuming the role of a neutral, unbiased witness should stem the tide of all reactions. The important thing is to observe the mind as if one is watching a play - to watch with great alacrity, but with the aloofness of an unbiased spectator. J. Krishnamoorthy calls this a 'Choice-less Awareness'.

What is supposed to happen as a result of this choice-less awareness? I realized that the practice of *dhyana* slowly cultivated a new habit of mind. This habit begins to permeate and stay on during other hours of the day, other activities of the day. Without any fanfare and without any conscious effort, *dhyana* begins to influence all other moments of life. The habit of remaining 'non-aligned' and neutral calms down the tendency to be distracted, to be swayed by the external and internal stimuli.

Yoga-sadhana¹⁴ is a very effective mental exercise, a training of the mind. What do I do when I lie down in the posture of '*shavasana*'? I relax my body and keep my mind alert but stress-free. A stress-free body, a stress-free mind. This habit grows on you and starts to exert its influence at those hours when you are not practicing *dhyana*, when you are not sitting down for the Yoga-sadhana. It brings a fresh and stress-free wakefulness to life.

¹⁴ Yoga-sadhana: (pronounced as sah-dhuh-na) In Sanskrit, 'sadhana' means a conscious effort to achieve something. More specifically, 'sadhana' connotes a conscious effort directed at the spiritual growth, a conscious devotion to God, meditation, contemplation, etc.

The science of Yoga tells a sadhak¹⁵ to focus his/her attention on some tangible entity or activity or a process such as some real object, a favorite idol of God, some repetitive sound or the activity of breathing in order to focus and fix the mind in one place. This is well and good, because these things constitute the Truth. But the thoughts that arise in the mind while you are trying to focus and fix your mind in one place defocus the mind. Why is a sadhak told to observe these thoughts? One is seeking the Truth. Are these thoughts then the Truth?

It came to me all of a sudden that each thought has two distinct components. Arising of thoughts in the mind is a real event - as real as breathing, as real as the sound that is heard loudly and then fades away. That's why observing thoughts is same as looking at the Truth.

Arising of thoughts in the mind is a real event. But are the contents of those thoughts also the Truth? It occurred to me that the content of each thought is not necessarily the Truth. Just as a thought could contain an essence of reality, a thought could also be founded in sheer imagination or on a perversion or distortion of reality. I may fancy that I am standing at the top of the Mount Everest. That I thought of such a thing is Truth, but my standing on the top of the Mount Everest isn't. It is just a flight of fancy. That's why I ought to observe the content of a thought like a neutral observer. Therein lies the freedom of the mind.

4.4

¹⁵ sadhak: (pronounced as sah-duh-uck) - a practitioner of spiritual pathways, a seeker of divine truth, an aspirant.

I understood all this and I began to think I am soon going to reach the stage of liberation. But that was not to be! Mind is very deceptive and I ought to share with you yet another experience of my misapprehension.

I was making an effort to attain such a stage that my ego would fade away, the thoughts that arose in my mind during the practice of *dhyana* would subside and I would experience a blissful peace and solitude. Sometimes I used to feel as if I had made a distinct progress towards this goal and I used to feel highly pleased about it. But only a few days later the old nemesis would return. The thoughts would not subside, no matter which technique of *dhyana* I followed. There was no escape from the thoughts. Slowly, a certain sense of dissatisfaction began to take hold. *Dhyana* was nothing more than an illusion and revelation and liberation and peace were merely verbal deceptions....the mind began to wail in despair. How could it then be peaceful?

I read a lot, I searched a lot and I asked a lot of people. They did their best to answer my questions. But I hadn't had my own 'experience'. I hadn't found my own answer. There was this unending conflict in my mind. A new race had started; a new search had started. It lasted for a long time - for nearly a year and a half. On many occasions I ended up frustrated. I began to think that, maybe, *dhyana-marga* isn't what I had come to believe it to be and I ought to give up on it.

And then, one day, it was as if someone had turned a switch on. What am I running after? What new thirst has my mind spawned? Even if this thirst is for spirituality, as long as it is a thirst, isn't it bound to make my mind restless? And is this thirst truly spiritual or is it simply an illusion?

I could not empty my mind of all thoughts, because that is unnatural. Thoughts are food of the mind. Thoughts are the sustenance of the mind. Mind is nothing but

a ceaseless flow of related as well as unrelated thoughts. How could then mind be a free of thoughts?

Words and sentences that well up in the mind are what we call thoughts. But the words and sentences are not the only things that arise in the mind. Certain passions accompany these words and sentences. Reactions rooted in the memories of old experiences are the passions. Passions thus aroused are consonant with some sentences and dissonant with other sentences. That we desire certain things and that we do not desire certain other things is the so-called complex of love-hate relationships. Thoughts that arise in our mind incessantly are not the impediment to spirituality. The real impediment is the love-hate complex of reactions that accompanies these thoughts. Our 'passions' are the impediment. So we need liberation, not from thoughts, but from our attitudes of love, hatred and thirst that follow these thoughts. Sage *Patanjali* said, "*Yoga* is the obstruction or prevention of our attitudes." He did not say "Prevent or obstruct your thoughts!" The teaching of '*anapana sadhana*' in '*vipashyana*' is also the same - "do not get involved in the thoughts that arise in the mind, simply observe them, be totally neutral towards them. "This is like sitting on the bank of a river and simply watching it flow by, not jumping into it, not getting caught up in the current, not getting sucked into any whirlpools. Don't try to stop the flow of the river of your thoughts. If you try to do that, you will be acting against the very nature of things. It will build up a tremendous pressure against any wall you put up and will finally break that wall down. It is far better to learn the art of pulling yourself out of the thought-river and simply observing its flow with safe neutrality.

It is impossible to eliminate thoughts and sensations or to prevent their emergence; it is a useless effort. If one engages in that kind of effort, that effort itself becomes a new 'passion' and defeats the very purpose of one's *sadhana*. To witness your

thoughts without getting sucked in their whirlpools is *vipashyana*. And *dhyana* is in essence the practice of witnessing your thoughts without getting involved in them. *Dhyana* is not a practice of concentrating your total attention on a single thing, nor is it a devoted effort to reach a thoughtless state of mind. And it certainly isn't a campaign for attaining revelation. It is simply practicing the art of neutrality.¹⁶

The key to solving the riddle of *dhyana* thus fell in my hand one day and it made me realize that I had been chasing a mirage, and that was the source of my dissatisfaction. I had been battling against an illusion and therefore there was no hope of winning! The remedy is to quit fighting and to understand that one has been fighting an illusion.

Vimalatai Thakar, Vinoba Bhave, J. Krishnamoorthy and Mr. Goenka, the instructor of Vipashyana, had all said the same thing. They had indeed provided the answers and I had been reading those answers too. However, my mind had not been ready to understand and to internalize their answers. To continue the effort without losing hope is *sadhana*. It would be a gross error to say that I realized this answer through my efforts. When one strives ceaselessly, it brings on fatigue, it opens one's eyes, it makes one surrender, it makes one humble and the answer silently blooms in one's mind when the mind is filled with the attitude of humility.

I sensed a certain leap in my intellectual clarity. The unrealistic expectations about liberation and revelation began to ebb away and the utterly disturbing hankering of my mind began to abate. Now there was less confusion, less doubt. I was able to see the path

¹⁶ It is important to remember that this is author's personal experience. It follows the meditation techniques developed by Buddhist monks and to some extent it contradicts the conventional interpretations of Sage Patanjali's 'Yoga-sutras'.

more clearly and I knew where and how I was going to reach at the end of my journey. All that was needed now was to follow that path with unwavering practice.

4.5

I must tell what did and what didn't happen as a result of practicing Yoga.

I don't know whether the practice of Yoga leads to the vision of the Divine as one normally thinks of 'a vision of God' based on what one reads in scriptures and other writings. But it certainly benefits one on the physical and psychological levels. I can say from my own experience that it makes the body healthy, it gladdens the mind and it makes life appear as if abloom with a distinct freshness. Now why should the practice of Yoga deliver such delightful gifts?

Do you remember that the carefree, blissful innocence of childhood, the passion of adolescence and the stamina and the optimism of youth were very positive experiences that made you feel as if life were bristling with newness and freshness? How easy it was to feel a sense of closeness to a pet rabbit, a parrot or a dog when we were children! How quickly one could relate to them! It was easy to become one with the pet animals when one wasn't constantly engaged in nursing one's ego. I was riding my bicycle to the college one day and I suddenly heard a song sung by *Lata*¹⁷ - it was playing on a radio in one roadside *paan-shop*¹⁸. I felt as if I was touched by something divine. That divine sensation entered through my ears and made every chord in my body vibrate like the strings

¹⁷ Lata: Lata Mangeshkar, the most celebrated lady vocalist of India who has sung zillions of songs in Indian movies. (In most Indian movies, while accomplished singers sing the songs, the actors and actresses merely lip-sync. No effort is ever made by the producers of movies to hide this fact. In fact, the names of these 'background singers' are most publicly touted, because that's what draws the crowds to a theater. Several weeks prior to the release of a movie the songs are released and played on radio stations and TV stations to hype the people to go see the movie).

of a *tambora*¹⁹. The whole world was bathed in a glimmer of light. I stopped, got off my bike and just stood by the roadside, my mind floating on the notes of Lata's song, my mind awash in the shimmering world around me. So acute was my capacity to register the subtlest nuances of the environment and to be touched by a single note of a song when I was young! That was the age when I was highly optimistic about bringing justice and happiness to the entire world. I was ready to fully immerse myself without a moment's deliberation in anything that mattered. This intense sensitivity, this ability of the strings of my heart to start vibrating by a slightest pluck nourished and enriched my life as a young man.

In later life, my ego began to assert itself without my being consciously aware of it. I did not register the division of my world into 'I' and 'mine' on one side and 'everything else' on the other side. Slowly, the sensitivity and the ability of my heart to be easily touched by anything became fainter and fainter. I learned to accept it as 'maturity', 'wisdom of age' and 'practical mindedness'; but the juices went on drying up.

Practice of yoga made those juices flow again! It refreshed everything. I am inclined to believe that the practice of yoga and pranayama bring on such a transformation in one's life because they enable one to stay awake and extremely sensitive, not only to the mere ambiance of every moment, but also to the very essence, the 'is-ness' of every moment. The statement, "*This is it, nothing happens next!*" is the entire teaching of yoga. The awareness of this moment, this breath, this sensation, is the ultimate truth of this moment. Yoga wakes up the mind so that it can fully receive the truth of the moment. Practice of yoga is learning to sense the subtlest experience of every moment, a sensitivity training. It enables the practitioner to envision Truth, with this body and these eyes at this instant and at every

¹⁸ paan-shop: a shop where one can buy a delicious concoction made by wrapping several condiments in a betel leaf. (paan = leaf). The idea is to slowly chew it and enjoy all the delicious flavors released by mastication and to finally swallow it. However, if the package contains tobacco, it can't be swallowed and one must spit it out.

instant. (Makes me wonder whether this is what they refer to as 'revelation' and 'vision'). One begins to find happiness in the things and events just as they are; one is rejuvenated. Even if you brush aside the claim that yoga is a spiritual, 'other-worldly' experience, the fact remains that yoga does bring joy and elevation of spirit on the psychological and the physical levels. And how does a joyful mind help? Vinoba once made a beautiful statement - "That mind will be filled with joy when all the grief in the world is removed is an illusion. When the mind is joyful the grief will disappear!"

Dhyana tunes up the 'tambora' of mind and body!

* * *

Different techniques of dhyana increase the sensitivity of different sensory organs. Some focus on increasing the sensitivity of sight (*trataka*), some focus on sound (i.e. the sensitivity of hearing), some focus on the experience of touch (*vipashyana*) and some others focus on transactions of the mind. It is my personal experience that dhyana increases the sensitivity of all the sensory organs and systems and also enhances the intensity of sensory receptions. Colors of the very same flower appear more vivid and hold the attention more firmly. The same note or sound touches a deeper chord.

But this is an enhancement of only the sensory experiences. (And in the West, the instructors of 'sensuality' training have indeed been teaching dhyana as a means of enhancing the joy of sex).

Vimalatai has often cautioned that what is usually taught as '*dhyana sadhana*' is an exercise of concentration. It is useful, but that it self isn't *dhyana*. *Vinoba* has said, "I do not support the claim that the process or practice of *dhyana* in itself is spiritual, because it

¹⁹ tambora: a drone instrument, invariably an accompaniment of any Hidustani style classical music recital.

can also be used for the selfish gains here and now. Therefore, unless it is yoked to the devotion to God, *dhyana* does not become a pathway to spirituality."

* * *

It is somewhat embarrassing to tell in too great a detail about one more of my experiences during this period. However, as Carl Rogers says, the matters we regard as 'private' and specific only to us do in reality relate to everyone's life and are therefore universal! Since sexuality belongs to this category, I am going to take it for granted that what I have to tell is pertinent to all.

I am a man. Therefore, apart from all the social influences to which I have been exposed since birth, I am a male on the purely biological level. In childhood, in adolescence and in youth, that biological male identity was always alive and kicking inside me. I am also a married man and I have experienced all the joys and frustrations only a married man would know and I have experienced the intensity of sex drive and desires. Even though I grew up in the monasteries of *Gandhiji* and *Vinoba*, I never regarded *brahmacharya*²⁰ as my goal. Due to my education in medicine in India and abroad and the influence of Western thought on my psyche, I have always regarded sex as a necessary life force, an important factor in human life. So I unquestioningly accepted the swings (waxing and waning) of my sex drive and the joys and frustrations that accompanied such oscillations.

While I embarked upon the practice of *dhyana*, *pranayama* and so forth after my bout with the heart ailment, my sex drive began to ebb away, unbeknownst to me, without any conscious efforts to drive the sex desire away. The intensity of sexual desire or passion diminished. The frequency of sexual union diminished. Slowly my biological

identity as a male calmed down. Earlier, there used to be a 'charge' of sensuality around all the events and experiences in my life. Not that I did not want that aura of sensuality, but it did begin to grow dim. I don't know whether this was good or bad; nor did it depend upon what I willed or wanted. But one thing it did for me was that I began to see the world around me without this ever-present tint or hue of sexuality. The forcefulness and the intensity in relationships grew weaker.

Just as I don't know whether this was good or bad, I don't know for sure why it happened at all. Was it the result of my age? Was it because of my diabetes? Was it a side effect of beta-blockers (my medications)? Or was it the effect of changes in my diet? Could it have been brought upon by the practice of *yoga* and *dhyana*? Usually, the regimens such as changes in diet, exercise, *dhyana* and reading of scriptural texts are prescribed for the unerring observance of *brahmacharya*. I was following those regimens as a means of defending myself against heart disease. However I noted that these regimens had affected my sex drive. Surely there must be a connection between the two. I felt the need to read and to understand what *Gandhiji* has written on this topic in his booklet '*Mangala Prabhat*' (literally, an auspicious dawn) - "Every one ought to remember what brahmacharya really means. It means a behavior consonant with the quest for *brahman*, or the ultimate Truth. Governance or the reigning in of all senses is a special meaning that is derived from the original meaning of brahmacharya. It would behoove everyone to forget the grossly incomplete and insufficient notion that brahmacharya is nothing more than the abstinence from sex."

4.6

²⁰ brahmacharya - the conventional meaning of brahmacharya is abstinence from sex. I, as a translator of this book chose to use the original Sanskrit word here for reasons that will become apparent by the end of this

I ought to also tell what dhyana did not do for me. I have not been able to completely empty my mind, nor have I been able to make my mind absolutely still. And I have not experienced what is termed as a 'trance' or *samadhi*.

Though I achieved a satisfactory health and a joyful state of mind through the practice of *yoga* and *dhyana*, I still don't think that the aberrant straying of my mind has diminished. I understood at the intellectual level what the ancient sages of India meant by '*soham*' (identification of oneself with the cosmic principle of *brahman*, so that one is truly one with everything else in the universe). However, that intellectual understanding has not reached the level of my psyche, my attitude towards everything around me, or my behavior. The closer I look at this cage of my ego, the harder it appears to penetrate. Though I know that the separation of 'I' from everything else in the universe is a mere illusion, that knowledge alone is not sufficient to break down the cage of 'I' and 'mine'.

And how strong is this cage! How irrevocably it separates one from the rest! When I was named '*Abhay*' in my childhood, each time I heard that name being pronounced, each time people around me described this '*Abhay*' and each time people passed judgements on this '*Abhay*', a bar of this cage was firmly put in place. Each bar around me increased my separation from others and from the rest of the universe. And this cage, built around me without my awareness, without my willing it consciously, had now become unbreakable. It has become a standard of weight in reference to which I now weigh every event, every person. And this happens long before I know it. It has become a 'reflex action'. My intellect may repent afterwards, but my reflexes defer to 'I' and 'mine'. I can see my mind flying around inside this cage, I can see it bumping against the walls of this cage and falling down. And yet the ego stands undiminished. *Dhyana* has not liberated me from my own ego.

section.

Elimination of ego and the attachment to 'mine' and the realization of oneness with the universe is my liberation. How will that state be attained?

Ishavasya Upanishad says, "There is no illusion, no loss of the faculty of reasoning and no grief for that knower whose soul (*atman*) is one with all the elements of this universe, who sees and experiences only the eternal oneness." But the mind does not settle in such awareness of universal oneness and liberation. Intellectually, I know what this universal oneness is, how does it become one's permanent state of mind?

Should I or should I not tell? Perhaps those who claim to be or are touted as being the 'accomplished ones' in this field will be hurt by my confession. But I have observed that many who practice yoga, are also possessed by their own likes and dislikes, jealousies, affections and hatreds, egos and anger. One could say that these people have not reached a high level of perfection, and therefore examples of such people can't be used to denounce *yoga* as an imperfect pathway. But I am not interested in judging the others. I wanted to clean my own pot; it was not getting clean. I was rubbing it harder and harder, but the stains would not come off. My mind did not get cleansed.

I began to think that though the intellectual understanding of the principle of *Brahman* and the benefits of practicing *dhyana* are necessary and important, love and devotion are vital for cleansing the mind and for cultivating an attitude of purity, humility and generosity. Love liberates man from the bondage of selfish interests and bonds him to others; devotion bonds him to God and to the whole universe. So it is important to transform the intellectual understanding and *dhyana* into devotion to God. By that alone will one attain a state described by Saint *Tukaram* - I have become as tiny as motes and as enormous as the sky!

Though my intellect had found its answer, my mind remained unsatisfied. Why and whence does this hankering arise? What is lacking? My soul was still searching.

Two books written by the world-famous psychologist Eric Fromm, 'Man for Himself' and 'Art of Loving', are advocates of spirituality. Fromm states that *as long as man was as ignorant (and naïve) as the flora and fauna of the earth, he had no problems. But when, during the course of evolution, he realized that he was in some way different from nature, his status became greatly elevated compared to that of the plants and animals. And at the same instant he became separated from the rest of the 'creation' as far as the level of awareness is concerned. Having thus left the womb of creation, he suffers the pain of loneliness, separateness and bond-breakage. But he can't reenter the mother's womb and once again attain the state of not-knowing. He has no pathway to return there. He can only go forward. The greatest spiritual challenge for man is to find a cure for this separation and alienation.*

From adds that *Love is a cure for the alienation and separation. (Love) joins the alienated, lonely human to other humans and solves the original problem. That's why love is man's primary need, man's hunger. Love between human beings, love between humans and animals, love between humans and the environment is the cure for alienation.*

The Greek mythology tells the story of King Midas. King Midas wanted to be very rich. He asked God for a boon - anything I touch should turn to gold! God told him not to ask for such a boon, but Midas was insistent. "So be it!", said God. Midas was very pleased. He came into the palace. He touched a bowl of copper and it turned to gold. He touched a chair and it turned to gold. He touched the bed and it turned to gold. Soon there was a huge pile of gold. The king's joy knew no bounds.

The king was hungry. An attendant brought him a plate with delicious food piled on it. As soon as Midas touched the food, it turned to gold. He touched a glass of water and it too turned to gold. The king sat in front of a pile of gold, hungry and thirsty.

Just then his little girl came running towards him, hands spread apart to cuddle up with him. She hugged her father. The king naturally pulled her towards himself and she turned into a golden statue. Midas started crying!

Modern man is like King Midas. Since he has the golden touch of science and technology, he can create wealth wherever he goes. But his daughter, the emotion, is lost to him. There are no relationships. So he remains emotionally hungry and thirsty. Success, progress, wealth, - they are but a mirage and no matter how long he chases this mirage, he can never satisfy his thirst, because he is thirsty for love, thirsty for a relationship.

Just as the North Pole of a magnet seeks out the South Pole, man seeks for a mate at various levels. The void in the heart is filled by the relationship of love between man and woman, and by friendships. From this point of view, all spiritual practices are also a search for a mate. Human soul seeks out the cosmic soul. A devotee yearns to be one with God. The word 'yoga' is derived from the Sanskrit verb 'yuj'. 'Yuj' means to join. *Yoga* and *dhyana* bestow upon the practitioner an experience of oneness and free him from the tyranny of separation.

Why does one experience peace and joy while practicing *dhyana*? In a state free of stress and strain, the disturbances caused by one's desires and wants are absent. There is nothing to be done during that sitting. Then one is aware only of the existence of one's own self and that of the universe; that awareness is devoid of any disturbances. In this state, the individual ego is united with the cosmic soul. It is an embrace without any ripples of passion

or desire. The ties that cause stress are undone, loneliness is over and what remains is only the sensation of being one with the universe. That's what bestows a blessing of peace and joy.

* * *

What exactly are the fear of death and love of life? Today I started thinking. What are we afraid of losing at the time of death? This body? The limbs and organs of this body? I stared at them. Is this hand me? What if the hand were to burn away without a trace of pain? In my mind, I chopped my limbs one by one and burned them away. To my surprise, I could not imagine any pain, grief or sadness. My hand was on fire and I watched it burn like a log of wood! I felt certain that love of life couldn't be same as love for my limbs or the collection of limbs and organs that we call 'body'. Surely I need this body to live, it is useful to me for living, but this body is not life!

Is love of what I own the same as love of life? I did not own those things in the past and even then I lusted for life. And I will lust for life tomorrow when these things are gone. So what exactly is life that I lust for?

And then it came to me - it is the experience of living that I lust for. A cassette of music in itself is not a thing of joy. It is the experience of listening to music that is joyful. Owning this cassette is only an assurance that I will be able to listen to music at will. But I often forget that and get very attached to this cassette, to other things and to this body. A little reasoning dispels the illusion. One loves not the instrument of living, but the act of living, the experience of living.

But what is 'an experience of living'? At the moment of that experience, what exactly happens that I wish for again and again? Sensory organs such as eyes and ears experience pleasant sensations of sight and sound, but what makes those sensations pleasant?

We meet people that we like and the moments of their company are very desirable to us.
Why?

It is beginning to dawn on me that life is a continuous series of experienced relationships. These are my relationships with people, things, sounds, memories and ideas. The experience of these relationships is what I desire. Life is an experience of these relationships. So what is desirable is not this body, not these things, but the experience of relationships that develop via the body and the things.

That clarifies some things. This relationship or love is what frees one from the cage of loneliness, even if for a few moments. And that is why it is desirable, nay, important. When there is no relationship, no connection, no love, man's life becomes lifeless garbage and it kills him. The power of love is a blessing. Whether someone will love us or not is not under our control, but it is certainly under our control to love someone. So the key to living is in our own hands!

Some possess this power, this energy to love. They can easily connect with others emotionally. Their problem is solved immediately. But most people lose this power, this energy. While chanting the mantra of 'I', 'mine' and 'to me' the 'I' becomes separated from every one else. How can there be a salvation for those who can't forget or transcend the 'I', those who are incapable of connecting and becoming one with others?

This was not just a philosophical question for me. It was my problem, my situation. I was haunted for years by a nagging awareness of this situation and I wondered whither lay my salvation.

Those ancient Indian sages who developed a pathway to spirituality must have been just as accursed as I was. They must have discovered a pathway to becoming one with the universe. There are two ways to free oneself from the cage of one's own ego - spiritual

awakening and love. Spiritual awakening can occur on various levels via various pathways - on the intellectual level via reason and reflection, on the level of awareness via *dhyana* and on emotional level via devotion. An aspirant can liberate himself/herself by following any of these three pathways depending upon his/her attitude and ability.

4.8

I can't sustain the state of spiritual awareness for long and soon I return to the world of my ego, my ambition, my dissatisfaction and my pain and suffering. I feel like the spider in the children's tale that keeps trying to scale a wall and keeps falling down. How can I sustain the spiritual awareness at all times? I am not like those 'liberated souls' to whom God revealed himself. Must I forever keep climbing up and falling down?

This question often bothered me. Hope could be one way to resolve this situation - a hope that one day I will reach the top. The alternative I discovered is this - there is no 'place to be reached', no destination to arrive at. This journey, this climbing up and falling down, is in itself the destination of each moment. Nothing else happens, nothing else will ever happen. Therefore, whatever 'happens' within me and around me is itself the revelation!

There is yet another recourse for attaining a permanent state of oneness with the universe - devotion to God. The lasting state of spiritual awareness attained by those who follow the path of reason and contemplation and the path of yoga can also be attained by devotion to God. By 'devotion to God' I do not imply a stupid naivete or blind faith or an observance of rituals and rites. What I am referring to is the ability to sense the presence of God everywhere at all the times and to bring one's behavior in concordance with that vision. I fail to achieve that feat. The intellect and ego are the two major impediments. What is

needed is a total surrender of my ego, a sacrifice of my ego. But I don't have what it takes to surrender or sacrifice the ego. When I read the devotional poetry of Saint Tukaram, I realized how high and intense his devotion to God was and that brought tears to my eyes. When one looks at the Himalayas and takes in its height and glory, one is made acutely aware of one's own puniness and it makes one feel very humble. That's exactly how I feel whenever I read Saint *Tukaram's* poetry.

So I do have one last resort. If the paths of dhyana and reason and contemplation do not liberate me, the path of devotion is the final resort. What reason and effort can't achieve, devotion, surrender and sacrifice will. But to attain that attitude of sacrifice, the ego will have to be washed away. As saint Kabir has said,

With soap and water the body can be clean

But how pure can it be if the stain's within?

* * *

Today I read a *bhajan*²¹ composed by Saint *Kabir* and it totally overwhelmed me. "This indeed is an answer to my situation", I thought -

Saints! my trance is so easy!

I didn't close my eyes; I didn't close my ears

Nor suffered the pain of slightest labors

With open eyes, I recognized His smile

And I simply stared at His beauty.

Wherever I wandered, it was my pilgrimage

Whatever I did was my service to Him

Lying down to sleep my prostration before Him

I offered no other worship to Him

Whatever I said was chanting of His name; hearing, His contemplation

My eating and drinking, only His *Puja*

I saw no difference between home and wilderness

No notion of duality for me

My mind was filled with the eternal word

I discarded the robes of stained desire

Asleep or awake, they stay attuned,

the strings of my awareness.

How does one attain a state such that every moment of life becomes an offering to God? How does one attain a permanent state of mind such that one never needs to sit down to practice *dhyana* with eyes and ears closed? How can one sustain the feeling such that God is seen all around one? *Kena Upanishad* says, "Through every sensory experience and through every intellectual transaction God must be known, understood and experienced." It would be worth our while if and only if God could be realized here and now, while we live in this body and while we are able to see with these eyes.

I am still searching. Sometimes the yearning is strong and I feel that the whole day is gone, but I have not experienced that state. Sometimes I feel peaceful. Sometimes I feel His presence, even if only for a few moments. This is an assurance. As Saint *Tukaram* says, "He who stands for a moment at God's doorstep attains liberation."

²¹ bhajan - a devotional composition, which is meant to be sung.

Today I got tired of calming down the constant unruly behavior of my own mind while I was trying my best to attain the vision of God via *dhyana*. I thought, "This is not for me! *Yoga* and *dhyana* help maintain the physical health and a joyful, pleasant, relaxed attitude. That the practice of *yoga* and *dhyana* restores beauty to life and lifts the burden off one's mind is a great benefit, but it does not lead to a vision of God. At least it doesn't work for me in that manner. I should leave this road and follow a different path. Perhaps the path of devotion will help me."

I was obsessed with this thought for a couple of weeks, but continued with the practice of *dhyana*. One day a new significance of *dhyana* dawned on me. Various techniques of *dhyana* render various sensory organs more sensitive and those sensations become increasingly clarified and attain a high level of purity. The practice of 'sight-*dhyana*' cleanses the faculty of seeing. The practice of focussing attention on the sense of touch (*vipashyana*) makes the sense of touch becomes keener and cleaner. It is easy to understand that the sense of touch becomes keener. But how does it become 'cleaner'? After all, we comprehend what the skin senses only with the help of our mind. If the mind is turbulent, the high level of noise garbles the signal coming from a sensory organ. Mind's own noise adds confusion to the signal. *Dhyana* helps the mind become neutral and objective. That eliminates, or at least lessens any confusion in the reception of signals.

The world around me is the Truth and the means of understanding and comprehending it are my sensory organs and my mind. Therefore *Vinoba* calls these the doors of the body that let the light in. To make these instruments sensitive and clean is to develop the faculty of perceiving Truth as is. *Dhyana* and *yoga* help us perceive the Truth

more clearly. As I pointed out earlier, I had already accepted that Truth is God. And a high fidelity perception of the universe is the vision of Truth, which is the vision of God!

Once again I had gone the whole circle of clarification and purification of my faculty of 'seeing' and I was able to see clearly. I understood how *dhyana* takes one closer to God. There is no God external to this universe. *Dhyana* empowers the practitioner to 'see' God in whatever exists and happens all around at that very moment.

God is nowhere outside this universe. The universe is brimming with God. God doesn't have to come from somewhere outside so that I can see him. When my 'vision' is clean, clear and keen, He will become apparent to me where He is and as He is. God will have to become installed in my vision and my vision will have to be instilled with God. And this is *yoga*; this is devotion.

" Let God accompany wherever the mind wanders!", says one saint.

* * *

This morning it occurred to me all of a sudden that it is easy for me to accept that the attribute-less, unmanifested Divinity is complete in itself. But, it is not easy for me to accept that the manifested, attribute-rich and well-morphed universe that surrounds me is also complete in itself and just as divine; I have a hard time experiencing God in this universe. This fully morphed, attribute-rich universe elicits a reaction from me and that reaction is in the form of love-hate complex and the likes and dislikes. The notion of God as a formless, attribute-less entity appeals to me; it suits my temperament. Since that entity has no form and no attributes it elicits no reaction from me, I can remain unperturbed. But the notion of God as a manifest and fully formed entity does perturb my mind and that perturbation manifests itself in the form of my reactions.

And here is a real conflict. Those who follow the path of devotion to a manifest deity say that worshipping an abstraction is hard, so a concrete form is essential. But my position is exactly the opposite. When can I see God that exists in the concrete, manifest forms? When will I experience what *Ishavasya Upanishad* says - '*Ishavasyam idam sarvam*' (All this is permeated by God)? When will I reach a state of mind such that 'all this is permeated by God' is my lasting experience?

This yearning, this unrelenting query as to when I shall receive a vision of the divine is a constant irritation in my path to spirituality. In reality, that vision is all around me at this very instant! Only I can't see it, I can't feel it. When shall I receive the gift of that vision? When will this curtain between the Truth and I disappear?

* * *

Idol worship was simply appalling to me. I had just about never engaged in idol worship. *Rani* loves to worship an idol of God. Though I never opposed her, I used to make fun of her from time to time. I really hated the rituals and rites that are a part and parcel of idol worship. To me, the notion of an invisible divinity that permeates the entire universe was far more satisfying than imagining that God is residing in one little idol. So my worship, if you call it worship, was a worship of a formless, nameless, attribute-less divinity.

This was also a part of my psyche. I liked a person of flesh and blood much less than the person's natural or spiritual self and a person's psychological make-up. The ailment of a patient, rather than the patient himself or herself, held my interest. Since I was conditioned far more by the rational thought than by emotions or sentiments, I was naturally drawn towards the notion of a formless, nameless, attribute-less God.

In the 10th, 11th and the 12th chapters of his commentaries titled '*Gita-pravachanas*', *Vinoba* has discussed in detail the topics of idol worship, worship of a manifest

God and the worship of an un-manifested God. When I read *Vinoba's* explanations of these topics, my objections founded upon the so-called rational thought began to weaken. *Vinoba's* commentaries are so precious that one ought to read them in their original form. According to him, the divine entity permeates an idol just as it permeates the entire universe, so the idol is a microcosm of the universe. Though diminutive, an idol is still a complete form, not a tiny fraction of God; it is a small print edition. That explained idol worship a little bit.

I found that Saint *Jnaneshvara* even more fascinating. If an idol is a microcosm of the universe, Saint *Jnaneshvara* dignifies an even more easily accessible symbolic form - God's name! *Jnaneshvara* tells how beneficent is chanting of God's name -

"If you chant God's name with steadfast devotion, surely God will be merciful to you"

Or

"There is no other path like the path of chanting God's name, following any other path is wasteful"

Or

"Chanting of God's name bears the fruit; it turns everything around you into God's abode"

This philosophy was totally incomprehensible to me and yet it filled me with an acute sense of curiosity. Starting with the notion that this is not the universe, but it is only an illusion, the universe is the body of God; the sages had proceeded to envision the universal divinity in an idol and then to realize it via chanting of God's name. That such a feat is possible was appealing to my reason and emotion both, though I have not internalized it as my faith. And from where shall acquire an attitude of devotion that is needed for it?

* * *

My intellect has a good understanding and my eyes can see clearly. And yet my mind can't stay anchored in that awakening. When I think of God, when I think of Truth,

it is as if a current of electricity flows through my body. When I recite *Ishavasya Upanishad*, all the doubts vanish and the meaning of life comes into a sharp focus. But why doesn't this state last all day long? When I am engrossed in other thoughts and in my daily work, my mind assumes an attitude pertinent to that situation and it no longer stays anchored in God-awareness. So, a mere intellectual understanding is not useful; that awakening must become a lasting state of mind. The mental attitude must change.

I have reached the very edge of the terrain of intellect. I can see the land that lies beyond, but my intellect can't take me there. My confidence in my faculty of reasoning and my ego are getting weaker. I ask, "Why is it that my intellect, which is very useful in every other aspect of life, is too feeble to carry me beyond?"

What vehicle do I have that will take me to across? I want that God-awareness to become a permanent state of mind. I want that attitude, that awakening, that vision; not just an intellectual knowledge.

I am at the very doorstep of devotion. But I can't bring myself to step into that suite. The mind is reluctant to let go of the reason. It fears and hesitates. My feet grow weak. I can see what lies beyond, but can't force my feet to saunter across. How can there be a true God-awareness without devotion?

4.10

I detested the rituals and rites that accompanied '*upasana*', the worship. In my eyes it was a thoughtless, blind faith. And my highest ideal was rationality. I regarded anything that wasn't rational as a debasement. I hated the rituals and the offerings of leaves, flowers, grains of rice and lamps and all the hocus-pocus.

Of late, I began to question this position. Is this a blind faith or is this a symbolic worship? Did I truly believe that an expression of sentiments and thoughts in the

form of symbols is a trashy notion? I had accepted so many symbols of modern times! In chemistry I had learned that the letter 'H' was the symbol of hydrogen gas. Though I knew that the letter 'H' was not in itself the hydrogen gas, I used it as a symbol of hydrogen and understood all the chemical formulae and equations using such symbols. And isn't the arena of words and language a land of symbols? If I accepted a flag as a symbol of my nation, why was it illogical to me to accept an idol or a flower as a symbol? There could be no objection to accepting a symbol as long as one is mindful that a symbol itself is not the thing it represents. When that mindfulness is lost, blind idol worship begins. Events like feeding an idol of Lord Ganesha a glass of milk are celebrated; waves of erecting statues and smashing the statues roll in. I began to feel that if one can harbor, sustain and nurse the sentiment that an idol represents the divinity of the entire universe, an idol ought to be acceptable as a means of envisioning divinity. Representing divinity by an idol seemed to me as a very sensible and sentimental instrument fashioned by the civilization.

And I also began to understand that in the marketing-oriented, pleasure-seeking modern-day civilization, even morality, sentiments and rationality have been reduced to the level of mere commodities. Commodities can be bought and commodities can be trashed. Everything has becoming a thing to be exploited. Nature, land, forest, air, sky, all are 'commodities'. Even God is a commodity! Use it when needed and throw it away as soon as the need is no longer present! And making everything a commodity delivers neither the joy nor the satisfaction. No matter how many such new commodities are brought out; their innate worth, their essence is being lost and these commodities are turning into a lifeless trash.

Contrary to this, the older civilizations followed a different path. They endowed the 'mere things' with 'sentiment'. They invested the idols with a divine sentience.

They invested a wristband with the sentience of a sister²². They made a leaf, a flower, a coconut and kumkum the instruments of '*puja*' (a special offering of hospitality to God).

In childhood, I had stayed at my aunt's place in a small village. She was an old-fashioned lady. I was playing with the other children in her household and someone unknowingly knocked a glass tumbler down, causing it to shatter. My aunt grieved over that. "I have had that glass tumbler for twelve years!", she cried out. A question such as "Is a cheap little glass tumbler used for twelve years still valuable to you?" would have been totally out of line. What it cost to buy was not the issue. It was no longer a 'thing' for her, it had become an entity that had its own personality, its own right to exist; in my aunt's way of thinking, that glass tumbler deserved a 'human right' to exist unmolested. My aunt was upset with us because we had violated the rights of that glass tumbler to exist!

That glass tumbler meant something to her. She herself and her culture had attributed that significance to a mere glass tumbler. Oxen, cows, trees, leaves, river, all had a special meaning in that culture. And they all had a spiritual significance over and above their worth as mere physical entities.

Not only the things, but also the actions have significance on a different level. Many years ago, we had visited the city of Kyoto in Japan. A housewife had performed the well-known 'tea ceremony' for us there. This is a very intricate form of hospitality and every movement, every action of the hostess performing the tea ceremony, has a special meaning. She explained it all to us. Preparing the tea, offering it to a guest and drinking of tea thus served has become the most sophisticated ritual, the highest level of hospitality in Japan. This is the symbolic meaning attributed by the civilization to a seemingly ordinary process. In the

²² There is an annual ceremony called 'rakhi-bandhana' (tying of a band of threads by a sister on the brother's wrist) which is performed in every Hindu household. It represents sister's love for her brother and serves to remind the brother that he has a duty to respect her and to protect her.

absence of the accompanying sentiment, it is a mere drinking of tea that one could buy even in a dirty little roadside tea stall in India.

My rational distaste for the symbols ebbed away. On the contrary, I began to experience that symbols serve a useful purpose. Those symbols were just as before; only my ability to experience the sentiment of devotion was developing.

I have installed an idol of Lord Krishna in my basement. I started placing a flower at its feet every day. That idol of Lord Krishna symbolically represented the universe, the Truth. The flower represented me. I wished to transcend my ego and to dissolve in the universe. That was the meaning of my symbol-based worship.

* * *

Last night, we lost electricity all of a sudden,

Lights went out everywhere.

I stepped out of the house.

Darkness, huge as a mountain, stood in front of me.

In it, I saw *Lord Krishna!*

In the darkness I saw *Lord Krishna* as a cosmic vision.

He was everywhere; He permeated everything.

This morning, I sat down to practice *Dhyana*.

In front of me was a tiny, dark idol of *Lord Krishna*,

full of beauty, full of love.

He was playing the flute.

Light streaked through the window.

The dark image bathed in the light.

He had shed away his cosmic identity.

He had become a tiny idol for me.

He was near me. He was in front of me. My eyes could absorb all of him.

Lord Krishna made himself visible to me.

The same *Lord Krishna*,

same yesterday, same today.

there and here,

Occupying the universe and also present in this idol,

everywhere, and near me,

and also inside me.



CHAPTER 5

Svadharna¹

For 'vision', Truth is soul.

For prayer, Truth is God.

For living, Truth is 'Dharma'.

- Vinoba Bhave

- (Ishavasya Vritti, Vinoba's Discourses on Ishavasya Upanishad)

5.1

During the course of *sadhana*, I sensed the drive and motivation for the daily work grow weak. Now and then I wondered, "Should I retire from regular work so as to pursue the path of spirituality?" How should one pursue spirituality without letting the motivation for daily work grow weak? While this question was important to my personal life, it became even more crucial as my responsibilities related to social work began to pile up. Several questions began to trouble me. If I continue to pursue the path of spirituality, would the enthusiasm with which I am supposed to carry out my daily chores and duties of my chosen career eventually vanish? Should I or should I not engage myself in the practice of

¹ svadharna - pronounced as sv(uh)-dharm(uh). This Sanskrit term literally means one's own dharma. The term 'dharma' has several shades of meaning including diverse notions such as the psychological inclination or nature, aptitude, duty, mission, career, assigned work, chosen work and so forth. The translator therefore

dhyana and *yoga*? Should I disengage my self from my career as a physician and a social worker? What is my *svadharma*?

In the course of my readings, I came across an interesting observation made by *Vinoba*, "The thought that the path of action impedes *dhyana* falls short of reality and it needs to be amended. After disengaging from all the worldly responsibilities and the duties that accompany such responsibilities one can attain the state of trance via the path of *dhyana*. But it should be possible to attain a similar or an even more glorious state of trance when one is engaged in discharging one's worldly responsibilities. If your actions and deeds involve physical labor and if you are disinclined to partake and acquire more than what you really need, your deeds will be in the same category as *dhyanyoga*. Whatever is generated, created or achieved via physical labor should be respectfully dedicated to the entire society. When one willingly and happily dedicates something to the society, that act of dedication acquires a spiritual dimension; regardless of whether one is offering goods or services. Spiritual life does not mean renunciation or abandonment of one's responsibilities, it only means the detachment from your own selfish interests in your deeds."

I had been reading *Ishavasya Upanishad* every morning. It says right out - *One should desire to live a fully active life of 100 years!* One should desire to be engaged in action, performing deeds for 100 years! An idler has no right to live! You will live for 100 years if you remain active.

I found answers, not to just one, but two questions. I found a key to a long life and my question regarding renunciation was also answered. But in what kind of activities should I be engaged?

believes that it would be best to use the original Sanskrit term rather than any one single English word, which would not fully cover all aspects of 'svadharma'.

In *Bhagavad Geeta* it is said that *one should recognize one's svadharma and direct all the activities towards fulfilment of one's svadharma.* In his discourses on *Bhagavad Geeta*, Vinoba had said, "*Svadharma is a natural endowment. No one needs to search for svadharma. We didn't simply fall out of the sky and started walking around on this earth.... To serve the society in which you are born is your dharma. Svadharma is an adjunct of your birth. One might even say that your svadharma is waiting for you to be born, your svadharma is the mission for which you are born, you are born for the fulfilment of your svadharma.*"

When I was in the medical school, I harbored a nagging feeling that I was in the wrong place. I had several other interests - music, literature, social work and so forth. Study of medicine did not hold my single-minded attention and I could not bring myself to be thoroughly engrossed in it. I did not know what exactly I should do. (To say it in today's parlance, I did not know what career I should choose). I was lost for an answer and it left me very disturbed.

Fortunately, Vinoba was alive and well at that time. I went to see him one day and asked him, "I don't understand what my *svadharma* is. How and where do I look for *svadharma*?"

My question brought a smile to Vinoba's face. He said, "You don't have to hold a big lantern and go out in the dark looking for *svadharma*. If you have to go out looking for *svadharma*, there is something fundamentally wrong. Your *svadharma* is already there; you just don't see it, you don't recognize it because you are stubborn. Open your eyes and you will recognize it."

I was not able to see or recognize or understand my *svadharma* at that time. To be really honest, Vinoba's words were incomprehensible to me at that time. I thought that

I ought to choose *svadharna* on the basis of what I like to do and what I do best, as if this was an aptitude test. I thought my liking was the main criterion. And Vinoba was pointing out to me how illusive that is. It is a misapprehension that you are the whole and sole arbiter of your own life and *svadharna* is not to be determined by stubbornly continuing to belabor under that misapprehension. I am ordained in my *Svadharna* by my natural inclinations and my duty to the society in which I was born and brought up. All I need to do is to let go of my blind insistence and to recognize and accept what I was born to do. We refuse to accept this simple fact and waste our entire life chasing something else altogether. That's what Vinoba was asking me to open my eyes to.

5.2

At Johns Hopkins University in USA, I took a course in management science along with the courses related to my career. I was impressed by management philosophy and management techniques that were taught in that course. Today the teachings of American management science have spread and are in use all over the world. It emphasizes a system of incentives in order to motivate workers. Higher profits, higher wages, promotions, status and fame often serve as powerful incentives and people will walk an extra mile in the hope of benefiting from these incentives. If they benefit, the whole society will benefit and that is well and good. Economist Adam Smith, who is regarded as the father of modern capitalism, professed that people are motivated by their self-interest to work hard and that creates wealth and enriches the society.

But there is something wrong with Adam Smith's philosophy and I began to realize it from my own experience. These incentives incite in people's mind an intense desire for financial gains and excessive greed. One could say that the power of incentives lies in

their ability to incite such desires and greed. Desire and greed compel a man to work extremely hard. But greed, once aroused, is insatiable and desire knows no limits. Oscar Wilde was right when he said, "There are only two tragedies in life - one, not to get what you want and the other, to get it!" Under a management system based on a scheme of incentives a man remains deeply unhappy and unsatisfied even after working extra hard.

Tolstoy, a well-known Russian author, has written a beautiful story 'How Much land Does A Man need?' which I remember reading in my childhood. At that time it was only an entertaining story; now the truth contained in that story pierced my conscience -

Pahom was a hardworking farmer. When he learned that very fertile land could be bought cheaply in the next province, he sold his own farmland and went to that province. He bought the farmland there and busied himself in farm chores. Soon he was able to sell this new farm and buy an even larger farm in another place. Repeating this a few more times, he became fairly rich.

Soon he heard from travelers about a far off country where poor aborigines lived and the land was very fertile. The travelers told Pahom that the aborigines did not know how valuable such a land could be to someone. Pahom began to dream about limitless land to cultivate. His wife said, "We have everything. We have plenty. Why do you want to chase after yet more land?" Pahom said angrily, "You have to put up with inconvenience if you want to progress." Pahom left his wife and children, gathered up a lot of money and gold and set off in search of this limitless wealth.

Pahom reached the land of the aborigines. Just as the travelers had told him, the land was lush with huge crops. Pahom was so impatient that he could not sleep. He got up very early the next morning. The aborigines and their chieftain had already gathered. Pahom offered the chieftain a bag of thousand gold coins and asked for the land. The

chieftain agreed with a smile, but said, "Whatever land you can walk around and encircle from sunrise to sunset will be yours." Pahom was overjoyed, but kept quiet. He didn't want the aborigines and their chieftain to know what big fortune they were giving away! The chieftain continued to explain the rule fully, "If by the sunset you do not reach the same point from which you started at sunrise and you fail to complete the circle, you will get no land and your gold coins will not be returned either." Pahom made a note of the risk in his mind.

As soon as the sun appeared on the horizon, Pahom took off and started walking eastward. He walked briskly. He paid no attention to the birds chirping around. His mind was busy figuring out how wealthy he was going to be.

By ten o'clock, Pahom stopped to drink water. He ate a little. He had covered quite a distance eastward from the starting point. Now he turned left, i.e. northward. He picked up the pace and walked quite far by two o'clock in the afternoon. He brushed aside the thought of eating lunch because he didn't want to waste any time. He kept walking. He wondered whether he should turn left again. But he knew the land under his feet was very fertile. He wanted to walk a little more and encompass some more land to the north. The land seemed to call out to him! He didn't notice how late it already was.

Pahom remembered that he must encompass the land from all four sides in order to obtain it. He turned left and started walking westward. He picked up speed again. He was almost running now. To lighten his load, he dropped the bags of food and water. He cast away the jacket he was wearing. Pahom watched the progress of the sun across the sky and kept running. He was dripping with sweat.

Soon it was evening. Pahom turned southward. Now he was trying to complete the fourth side of his traverse. An enormous land was going to be all his. But the sun had almost reached the horizon. Pahom's feet were tired. His chest was rising and falling rapidly

and he could feel sharp pangs of pain in his breast. He reminded himself of his wife and children. He focused his mind on the glorious farm he was going to own. He summoned up all the strength that was left in him and then some more and started his last dash. All the people were watching the sun. Will Pahom complete his traverse?

Pahom gritted his teeth and ran the final distance. He reached the starting point just as the sun dipped below the horizon. A wild cheer rose from every aborigine. They knew of no one who had won this much land. They danced with joy.

Pahom lay still on the ground. the aborigines became silent. Thei rchieftain approached Pahom and said, "All this land is now yours according to the rule I told you." But Pahom had died of exhaustion.

The aborigines dug a hole long enough to bury Pahom. They lowered his body in the hole and covered it with soil. The chieftain looked at the six foot long hole that was now covered up and sadly commented, "He really needed only this much land!"

We are all Pahoms. And even if we do not start that way, the society turns us into one. The land each one of us covets is different. Some covet money, some desire status, and still others strive for fame. That land gives us a run of our life. If the Pahoms do not run, who will grab these lands? Therefore we must lust after a land. That is the principle of management! The driving force of greed is necessary to make everyone work hard!

Is it really necessary? Do we not have any alternative but to become Pahom? Should man's destiny be such a grievous tragedy?

For me this was not a mere philosophical question. It was a question of life and death for me. Driven by the work-impulse that the modern world had instilled in me, I had turned even my social work into a field of temptation. I had run breathless so that I could

do more social work. I had shed away all other facets of life because they had become burdensome. I had raced to cross the finish line ahead of everyone else and almost reached the line of death! The difference between Pahom and I was that Pahom died and I survived. But I did not wish to become Pahom again.

This was like a tight knot in a rope. People in the modern world work themselves to death in order to fulfill their selfish desires. Take away the incentives, these carrots, and the motivation for work is gone! That is why socialism failed. But what about the fact that the temptation of personal gains does not bring satisfaction, no matter how hard one works?

Ego (power, fame, respect), self-interest (money, wealth, comforts), thirst and competition are like four horses yoked to the chariot of today's economic order and these horses are allowed to run wild. These perversions will leave the rider of this chariot forever grieving in pain and suffering. Like the tragedies in Greek mythology, the destiny of modern man is pain and suffering on the psychological level and heart disease on the physical level.

What is the remedy? If not greed, then what other motivation can there be for the world to function? This is the most imponderable question facing the modern world.

While reading *Ishavasya Upanishad*, I paused at the familiar lines - "*One should desire to live an active life of 100 years, fully engaged in useful work. This alone is open to you and there is no other way. Actions do not bind a man, the desire for the fruit of one's actions does.*"

And suddenly it struck me. The answer is '*Nishkama*'² management! Surely there is a need for management; but not the kind that fans the fire of greed. What is needed is a management style that motivates people to work with aspirations and ambitions that are not driven by greed or selfish interests. What is needed is an economic order that excludes greed and selfish motives. This is what I would call '*nishkama* management'. Mankind will have to develop the art and science of *nishkama* management. Is *nishkama* management possible? Is *nishkama* management feasible? Will *nishkama* management be effective and beneficial to both the individual and the society?

I have not found answers to these questions as yet. Mahatma Gandhi spoke of 'trusteeship' as a way to put the principle of *nishkama* management into practice. What he meant by it is this - "Think of yourself as a trustee of your body, your talent, your skills, your profession and your wealth. As a trustee, you are responsible for taking a good care of these, it is a responsibility placed on your shoulders by nature herself. As a trustee, you are not the owner and you don't have the right to do with these what you will. So you ought to use these and carry out all the transactions in this world the way a highly conscientious trustee would." Reducing this notion of trusteeship to practice could turn out to be the key to *nishkama* management. Any attachment ultimately leads to pain and suffering like Pahom's. But there must not be a withdrawal from action³. Can one turn himself into a trustee of his own life, rather than an owner and user?

One ought to be engaged in the affairs of this world, and *Ishavasya Upanishad* tells us how to prevent one's engagement in the affairs of this world from becoming burdensome and stressful - *renounce this world in His name and enjoy what you receive.*

² Nishkama - Pronounced as 'nish-kam(uh)'. This Sanskrit term means 'devoid of desire'.(kama = desire, nishkama = without desire).

That one should remain mindful of God, withdraw oneself away from any attachment to the fruit of one's actions and then enjoy what one receives is the key. This attachment is like a scorpion's sting. Once you remove the sting, you would come to no harm even if the scorpion crawled all over your body! The poison is not in our actions, it is in our attachment to the fruit of our actions.

So renounce this attachment in His name and enjoy what you receive! But even when I am agree with this commandment, how do I bring my attitude in accordance with it? It's a giant leap for me!

I am yet to experience such a drastic change in my own attitude and I am yet to find a way to correct this situation. The mind sticks to old habits and will not let go. Attachment to the fruit of my actions has been its lifelong habit. And people all around me and people everywhere else are similarly 'conditioned' by this same habit. So how will a change in attitude come around? How can the scorpion's sting be removed?

There is a technique to teach the mind. Just as you can slowly train your body to bend and flex by practicing yogic exercises every day, you need to train your mind to let go of the sense of attachment by engaging yourself each day in some activity from which no personal gain or profit is feasible. That's how you practice the art of renunciation each day. Do something every day that is not going to be profitable to you personally. Now, will I become *nishkama* in this manner?

5.3

Initially I studied the scientific reports of a few select research projects (see Appendix 1) that have made large contributions to the present-day understanding of heart

³ in other words, the body, the talent, the skills, the profession and the wealth of a person must remain

disease. Therefore, during my subsequent reading of *Bhagavad Geeta* and *Ishavasya Upanishad*, and the pursuit of spirituality I became more keenly aware that these two scriptures are 'scientific' in analyzing, diagnosing and remedying the human condition.

Professional work can lead to stress and that stress can lead to heart disease. But from where and how does the stress come about? The scientists found that overwork was not the cause of stress. The stress was due to responsibility, lack of time and the lack of sufficient help at work. The scientist found that control and freedom were even more important factors. Those who were in positions of control and could decide for themselves how much work to do and how long to work had a relatively mild form of stress while those whose fate was determined by someone else suffered a far higher level of stress. Two well-known studies in the USA - Health Examination Survey and Health and Nutrition Survey - showed that heart attacks were four times as likely amongst those who were overstressed at work as that amongst the rest of the population.

Once the factors most directly responsible for causing stress at work were understood, it was realized that work per se was not harmful, but the expectations of personal gains from working spawns the burden of responsibility and timeliness. Work without an attachment or expectation of personal gains would be relatively stress-free.

The fact that how one should work, how long one should work and how much work one should do is decided largely by someone else generates stress at work. In a large industry, large corporation or a large bureaucracy, any person who must work like a cog in a large machinery finds work very stressful due to the loss of freedom. Therefore a worker should enjoy freedom and be empowered to make decisions both in planning and execution of work. If the workplace is conducive to giving and receiving assistance when needed, work

judiciously invested in the affairs of this world .

generates little stress. In other words, the human need for love and relationships does not vanish even at the workplace.

Work does not kill. However the workplace environment and the nature of work in a modern society definitely harms man.

Freedman and Rosenman examined the relationship between a person's psychological make-up and heart disease. Their study encountered two personality types that are poles apart. The scientists termed these polar opposites as 'Type A' and 'Type B'. People with 'Type A' personality traits were found to be very highly vulnerable to heart disease.

What are the 'Type A' personality traits? -

- Obsessed with the idea of achieving goals that are nebulous
- Tremendous hunger for success, progress in career, and social recognition
- Competitive
- Always in a hurry
- One track mind
- Hostility, anger and enmity

These traits fit the personality of a modern-day executive!

Next the researchers found two most dangerous traits of the Type A personality - hostility and pessimism. How do these traits express themselves? They express themselves in the form of utterances such as "This world is wretched" or "These people are wretched"; in the form of distrust of others; in the form of negative feelings about others; in the form of frequent outbursts of anger and a marked hostility towards everyone. All these are angels of death!

Two researchers named Grossarth and Matticek found that fatal heart attacks are ten times more likely in people who overemphasize logic and intellect and deny

their own emotions than in the rest of the population. Therefore, there is no escape from heart attack without closely examining one's own mind and emotions and cleansing them.

Ornish's study proved that one could cleanse the mind and emotions and change the course of physical deterioration even after the symptoms of a full blown heart disease have expressed themselves. It has been experimentally proved that amongst the Type A people, the frequency of heart disease can be reduced by changes in personality. Now, aren't yoga and pursuit of spirituality a means of cleansing the mind and changing the personality?

The overall effect of Ornish's therapy on health is extremely beneficial because it includes several positive aspects. These include a change in diet, change in personality, physical exercise, cessation of smoking, *shavasana*, relaxation techniques, *dhyana* and gatherings of small groups where people can get in touch with their own emotions and bond to each other.

Western researchers have discovered several factors responsible for heart disease. Some are related to an own individual's psychology and that individual's personal habits; some are universal and apply to the entire society. But this is still like finding stained or worn out scraps of cloth that are parts of a garment and the current medical treatments are like treating each scrap separately. For each 'risk factor' there is a separate pill, a different medicine and a different treatment. What is needed is not this piecemeal approach, but a holistic treatment, a totally different philosophy of life, a totally different lifestyle, a totally different social organization. Regardless of whether you adopt the Gandhian philosophy of living or you subscribe to Ornish's therapy; the bottom line is that you need a holistic lifestyle that emphasizes

curtailment of overindulgence, natural diet, physical exercise and labor, sense of detachment and bonding to other human beings in love and duty.

5.4

I found Dr. Ornish's mantra "Change your lifestyle to escape from the peril of heart disease" very convincing. I liked his medicine and it proved very useful to me. Fortunately, educated people in urban settings are beginning to develop a liking, though in a fairly small measure, for a change in lifestyle. Some highly motivated individuals are indeed changing their diet; they are taking an active interest in exercise, yogic postures, and *dhyana*. And since all this meshes very well with social traditions of India, many Indians are drawn to it relatively easily even though many find it hard to actually practice it on a regular basis. Is this the answer to heart disease and perverted lifestyles? When the entire society is perverse, can lonely individuals live a healthy lifestyle like islands within an ocean? I began to often wonder about this.

For the sake of my health, I must avoid sweets, milk and milk products and fried foods. When I go to someone's house or office, tea is invariably offered. It does contain sugar and cream and is often accompanied by biscuits that are sweet. If you travel in India by train, you can't escape the barrage of soft drinks.

In shops, new varieties of processed food appear every day. Foods and desserts that used to take a lot of work and time to prepare at home were prepared only on special occasions in the old days. But now, you can buy these in the shops any time you feel like it and the only effort you need to make is to open their containers. If you go to a restaurant, you don't have to do even that much. And now-a-days you don't even need to go

to a restaurant. There is a home delivery system. All you have to do is pick up the phone and call. The arms of the food processing industry have now reached inside the households.

Since large Indian and foreign corporations, motivated by the potential for immense profits, have entered the arena of processed food, new eating habits are being popularized with the use of promotional techniques, commercial jingles and discount coupons. In anticipation of a huge market for processed foods in India, late Mr. Rajiv Gandhi decided to permit foreign corporations to enter that market. Did he ever imagine that his decision would bring heart disease and hundreds of thousands of fatalities in its wake? Even more ironic is the fact that in order to get rich, we buy the stock of these corporations and thus own a piece of our own death!

I remember reading about an amazing snake. The legend has it that this snake begins to swallow its own tail and thus literally eats itself! Our relationship with this processed food industry is similar to that - we are the shareholders, we are the producers, we are the salesmen, we are the customers, we are the consumers and we are the victims!

In the age of this food industry, in the age of market economy and in the midst of the civilization that worships pleasure and creature comforts, how am I or anyone else going to resist temptations and stick to a healthy diet?

Why do these advertisements sing praises of foods that are harmful to health? To make people's desire for ease, comfort and pleasure more intense so that they will be more indulgent. Why should people be more indulgent? So that more goods can be sold to them and larger profits can be made. And we buy shares of these companies. Why? Because we want to share the profits. Why? Because we want to get rich fast. Why do we want to get rich fast? Because someone else is already rich and we don't want to lose in the race for the riches! And we sincerely believe that without a race, without a competition, men will not feel

motivated to work; without greed men will not compete and without competition there is no progress.

There is a glitch somewhere. Once you get stuck in this, you don't have time stop and think. Like that dog in *Acharya Rajnish's* story, every one is running the race in order to stay alive.

But why do we need to win in a competition? Why do we have to win race? What goal do we wish to reach? And once we arrive there, what do we wish to do next? When a Thoreau or a Gandhi leaves this mad race and asks us these questions, what answer do we have?

An industrialist from Mumbai came to the forest of Gadchiroli on a vacation. He saw an aborigine sleeping under a tree on the banks of a stream in the forest. The industrialist shook him up and said, "Get up! Don't just lie there like a lazy bum!"

"And what shall I do then?"

"Get to work!"

"What will work do for me?"

"You will earn money!"

"And what will money do for me?"

"You can invest that money and make a huge profit!"

"And what will the profit do for me?"

"You will be rich!"

"And what will the riches do for me?"

"You can buy a car!"

"And what will a car do for me?"

"You can take some time off from work and go into a forest like me to relax."

"But I am already doing that....."

The original questions remain with us. If wealth in the modern world is derived by exciting people's greed, selfishness, competition and a desire for sensual pleasures, is this kind of wealth likely to make man happy?

When you live in a society that constantly excites these desires, how can one individual live a natural, stress-free and spiritual life?

5.5

"There is enough on this earth for everybody's need, but not enough for everybody's greed." - Mahatma Gandhi.

Weakening of desire and greed and turning away from unnecessary 'wants' are crucial to my spiritual development. But the individual spiritual goals must translate into societal goals - the social order that incites desires and greed must be transformed into one that promotes a healthy lifestyle and cultivates pure minds. These societal goals are an inseparable component of the individual spiritual goal. How could an individual's pursuit of spirituality remain aloof from the responsibility of cultivating spiritual values in the society? The treatment recommended by Ornish is silent about this societal aspect.

Here's where I think Mahatma Gandhi outshines all others. He adopted for the purification of mind eleven 'commandments' distilled from the Hindu texts and we recite them in our evening prayers at Shodhgram. Our prayer is as follows:- "With an attitude of humility and firm resolve shall I observe the principles of nonviolence, truth, brahmacharya

and physical labor; I shall not steal, I shall not acquire and accumulate anything in excess of my need, I shall refrain from acquiring a taste for luxury, I shall not succumb to fear, I shall deem all religions as equal, I shall use what is grown or made in my own homeland and I will heed the sense of touch."

But each of these commandments is extremely difficult to obey. The society I live in must be such that there will be few or no impediments to the observance of these commandments. How can the commandment to refrain from acquiring and accumulating in excess of my need compete against the message with which my society persistently barrages me - "Earn More and Buy More"? Our social behavior is diametrically opposite to the glorious teachings of *Ishavasya Upanishad*.

Ishavasya Upanishad tells us, "With a sense of detachment; enjoy only that which you rightfully merit; do not covet anyone else's wealth."

The society tells us, "Earn more; be desirous and greedy, be jealous about others' wealth and strive to acquire it for yourself."

Ishavasya Upanishad tells us, "Aspire to live an active life of 100 years, fully engaged in work."

The society tells us, "As far as possible, shirk physical labor and seek a life of leisure and pleasure."

Ishavasya Upanishad tells us, "Man's deeds are not binding. It is the desire for the fruit of one's actions that become a binding."

The society tells us, "Actions are to be performed, deeds are to be done for the exclusive purpose for obtaining the expected results. The stronger the desire for fruit, the more intense the involvement in those deeds. So pour oil over the fire of one's desire for a tangible gain from the deeds you perform."

Our social values motivate a person to behave in a manner that is exactly opposite to the teachings of *Ishavasya Upanishad*. If *Ishavasya Upanishad* is correct in what it says about a man's goal in life and the path to reach, then it is absolutely clear that today's social values would not make a man happy. What should be the values of the society in which I live and how should that society function if I do not wish to die of heart disease? I began to see this very clearly.

I shouldn't be eating anything that is sugary, fried or rich in milk fats. I shouldn't touch anything is made from flour that has nothing but starch, I should stay away from foods devoid of fiber. And that means I ought to avoid white bread, biscuits, chocolates, ice cream, butter, cheese, fritters, *samosas* and *puris*. And the food industries (dairies, bakeries, food processing plants and restaurants) must change their product lines. Their products must deliver fewer calories, contain less sugar, less cholesterol and higher amounts of fiber. The advertisement businesses ought to change the emphasis of their advertisements and promote health rather than make the food industry's current products appear highly desirable to consumers.

Tobacco products and alcohol are sold at every street corner and have also entered every household via television advertisements. This ought to be changed. Vehicles like cars and scooters and public conveniences like elevators and escalators discourage me from walking and tempt me away from exercise while entertainment from television programs promotes sedentary habits. These too ought to be changed.

The message that encourages excessive consumption of goods and services out to be changed; the messages that induce people to buy, buy and buy and messages that emphasize leisure over useful activities ought to be changed. The society pressures people to earn more, to acquire and accumulate more, to blindly chase wealth, power, fame, status,

praise and respect and promotion and even to act against one's better judgement in order to gain such things. The society not only conditions and encourages people to act in this fashion, but it also does not hesitate to punish those who wouldn't go with the flow. And all this is destructive for me.

Poverty causes hunger and malnutrition. If a poor woman is under-nourished, children born to her are low birth-weight babies. Nearly 35% of all the babies born in India have a low birth-weight; they weigh less than two and a half kilograms (five and a half pounds) at birth. Compared to the normal birth-weight babies, the babies with a low birth-weight are several times more likely to suffer from heart diseases in adulthood. Thus poverty, malnutrition and under-nourishment of mothers-to-be lead to high incidences of heart diseases, and these things ought to be changed.

A selfish, lonely person, a person cut off from contact with others dies from heart disease. Since relationships with others are necessary for a healthy life, the so-called 'free economy' that breeds competition and selfishness and severs the relationships based on affection and care for others must be considered as a life-destroying force. What is conducive to a healthy life is not the extreme individualism, but the teaching that unites them in a fellowship of affection, respect, human concern and love for each other - "Aum! Let us protect each other. Let us eat together. Let us act as one." We do not need around each one of us the cage of selfishness and loneliness, even though it has been given such pretty names like individual freedom and free economy.

No need for this so-called 'free economy'! What we do want is the freedom of humanity!

In May of 1996, I wrote to a few of my close friends about my bout with heart disease and my experiences during recovery. My intention was to alert them, so that they may not repeat the errors I made in life and not suffer the way I did. Some of them forwarded my letter to newspapers and had it published. They believed that I had indeed pointed out what was wrong with the whole society. Several friends and even casual readers who did not know me wrote to me that my letter served to alert them about the errors of their own lifestyles. Some people who were suffering with heart disease wrote, "I read the story of my own heart disease in your letter." Many asked for my advice regarding the treatment they were receiving. Two very senior and well-known physicians wrote to me, "I have kept your letter in the shrine at home. Reciting your letter has now become a part of my daily worship at home."

I saw that my experience of heart disease and its treatment was useful to humanity at large. Many are sick as I was, many are headed the same way I was. They are my fellow patients. I asked my self, "What is the best way to help my fellow-patients? What will turn my fellow sufferers my fellow travelers on the path of meaningful recovery?"

The calamity that struck me three years ago is not a mere personal experience any more. It is growing into a universal tragedy. Incidences of heart disease, diabetes and high blood pressure have reached an epidemic proportion in India now. The Indian society will have to face the onslaught of these health problems and learn how to treat them and, even more importantly, how to avoid them. The lifestyle will have to be reformed and it will become necessary to learn, accept and live a lifestyle that eliminates the causes of heart disease, reduces the stressfulness of daily living and harmonizes social relationships with the environment. In the twenty-first century this is going to be the main challenge for the health services and the health industry. In Shodhgram we have made a beginning; we are slowly

learning to live such a lifestyle. As I worked with and treated the aborigines in this region and as I researched the techniques of eradicating sicknesses, I also sought a way for me to live a healthy and happy life.

My work and pursuit of spirituality became one and the same.



CHAPTER 6

Peace

We must never cease from exploration;
and the end of all our exploring
will be to arrive at where we started
and know the place for the first time.

T. S. Eliot

(Four Quartets)

6.1

Why am I narrating my psychological and spiritual journey? I sincerely feel that unless I describe it in detail, the entire story of what caused my heart disease and how I came out of it will not be complete. Without regaining both the meaning of life and the joy of living, my heart wouldn't have been repaired. And had it been repaired without those two things, I would have been forced to live with a patched-up heart and an unhappy mind, which wouldn't have been a healthy life. Merely a healthy heart muscle was not enough for me. It was important to me that my heart the physical muscle and my heart the psychological entity and in fact the entire living, breathing, feeling person that I am became one healthy and whole entity. My practice of *yoga* and *dhyana* and the somewhat nebulous understanding of Truth and God I gained along this journey are indivisible from my heart and the joy of living. Before undertaking this journey, my personality was like a collection of different pieces. This

journey reassembled all those pieces and brought wholesomeness to my personality. My wounds were healed. My sadness had stemmed from the fact that I was cut off from the universe, I was myself a torn personality and it lay shattered in pieces. Pursuit of spirituality offered me a vision, howsoever fleeting, of the omnipresence of God and that momentary experience made my life whole. It relieved my stress, my hankering and my pain. It restored my joy. And along the way my heart was cured.

It's been three years now since I was given a new lease of life. How am I doing today?

I am physically fit. I weigh 58 kilograms; my blood cholesterol level is 149 milligrams, and the HDL level is 47 milligrams. The ratio of cholesterol to HDL is approximately 3:1, which is deemed as the safest. The blood sugar is well under control. I can jog and ride a bicycle without any distress whatsoever. *Dr. Lele* invited me to his clinic in Mumbai and put me through the stress thalium test, the most rigorous test for detecting heart disease, present or imminent. The results of that test showed that my heart was normal and all the blood vessels in my heart were free of any obstruction.

I am doing all the work and seeing through all my responsibilities as before, but I feel a lot less stressed. I am far less anxious to make something happen; my yearning to get somewhere in life is considerably reduced.

I am at peace. The uneasiness is substantially reduced. I am trying to live only in this moment.

My journey along the path of *yoga* and spirituality continues. I am still tilling the field of my mind. No rain has fallen, but this act of ploughing is in itself a beautiful experience. I haven't reached some lofty position along the path of spirituality, nor do I know

if I ever will. And I don't know if there is any place one is supposed to ultimately reach on this path.

There is hope in my life. Life feels joyful and complete. And there is a desire to live a lot longer and to discover a lot more.

Out of the thirteen resolutions I had made while I lay in bed on May 13, 1995, I have either fulfilled or have done my best to fulfil twelve. The only resolution about which I haven't been able to anything is to learn music. And that's because I haven't come across anyone in Gadchiroli from whom I could learn music. And there are some more things I want to do in life. I have a strong desire to go hiking in the Himalayas. I want to learn music and Sanskrit. I would like to be able to do the physical labor of farming and grow enough grain and vegetables for my family. I want to be able to do many such things. After my bout with heart disease, many new ideas about providing health services to the natives of Gadchiroli and proposals for research projects have been taking shape in my mind. But now I no longer feel a compelling sense of urgency or stressfulness. Once you know how to keep pace with time and learn to dance with time, your steps are never out of sync.

What is my daily schedule?

I get up around five in the morning. I read scriptures for about half an hour and then take a 40-minute walk. My walk in the forest is one of the high points of my day. When I return from my walk, I do *yogic* exercises. After the bath, I practice *yogic postures and shavasana*. The next half an hour is spent in *pranayama* and *dhyana*. The body and mind try to become one and seek attunement with the cosmic principle. Sometimes I feel it happen and sometimes I feel like I am chasing a mirage; but it is an extremely enjoyable experience nonetheless. My daily work begins around nine in the morning. After lunch at noon, I spend half an hour on nap and *shavasana*. I end my work at six p.m. After that we

engage in a group prayer session at Shodhgram. At night I spend some time with my children after dinner and then read for about an hour to hour and a half. I once again do *shavasana* and by ten I am asleep.

6.3

I have come to the end of the report of my journey. But what about the question that launched this journey in the first place? When I felt an acute pain in the chest on April 18, 1995, I was overwhelmed by the fear of death. What about that fear of death? Have I overcome the fear of death?

The sudden probability of death had shaken me to the core. But was it indeed the fear of death? It wasn't the fear of the moment of death or the fear of death itself. I had been there and back. On the angioplasty table, when the death was imminent, I had rationalized that death was only dissolution of one atomic arrangement. There was no pain in it. There was no suffering in it. So what was I afraid of?

It wasn't the fear of death. I was afraid of losing the life because of death. I loved life. I wanted to live some more. There was a whole lot of living to do. I was sad because all that was going to slip right out of my hands. That's why I had felt unsafe and afraid. Why be ashamed of what I had really felt?

Now I don't sense that fear or lack of safety. I deliberately chose to say 'I don't sense it'. I can't be sure that the sense of fear or the lack of safety isn't lurking somewhere in my mind unbeknownst to me. But I feel I am at peace. Will my mind be at peace when the moment of death comes again? The greatest minds fall prey to fear at that moment. How will I fare?

In '*Mangal Prabhat*' Mahatma Gandhi writes about *abhay*¹, "All fear is because of this body. If we could lose our sense of attachment to this body, we would be fearless." About *aparigraha*² he writes, "Our body is also one kind of acquisition³. Out of our wanton desire for the pleasures of flesh, we sustain this body. Once our desires for sensual pleasure and enjoyment weakens, we no longer need the body.... The entire universe is filled with the soul. Why should the soul then confine itself to the cage of a human body? And why should one engage in all kinds of shenanigans just to hold this cage up?"

I have not reached such an exalted level of spiritual development. Gandhiji had, and therefore he was able to say "He Ram!"⁴ when bullets pierced his chest. And how would I behave in such a situation? Would I be able to remind myself, would I be able to live up to the teaching that says "The day which we fear as our last is but the birthday of our eternity"?

This is a subject of keen scientific interest. In *Lancet*, a world-renowned medical journal, one often finds interviews of celebrated scientists. One of the questions that an interviewer asks is "How do you wish to die?" Most of the interviewees tell that they wish to die in sleep or of a sudden and fatal heart attack. But one scientist had answered that he wished to die while he was fully conscious and fully awake; he wished to experience the

¹ Abhaya - in Sanskrit 'Abhay' means 'no fear' (fearlessness). Readers will have noticed that it also happens to be the first name of the author of this book.

² Aparigraha - pronounced as u(h)-purri(ck)-gr(uh)-h(uh); in Sanskrit, literally, non-acquisition and non-accumulation.

³ In the sense that it helps us satisfy our desires for sensual pleasures.

⁴ Mahatma Gandhi was assassinated on January 30, 1948. The assassin fired his pistol at Gandhiji's chest just as the evening prayer meeting led by Gandhiji was ending. The people who happened to be standing within an earshot of Gandhiji heard him say the name of Lord Rama as he collapsed. Gandhiji loved to sing a devotional song dedicated to Lord Rama during the evening prayer meetings. Also, to die with the Lord's name on the lips is a Hindu ideal.

moments before death and the moment of death. He did not want to miss that great experience.

Anil Avchat, a very good friend of mine, once wrote to me, "Vision of death is the most searing and the holiest experience. Everything unholy burns to ashes in it."

There is a legend of Saint *Eknath* -

Someone went to Saint *Eknath* and said, "We are ordinary folks. Our mind is always occupied with thoughts of worldly affairs and with unholy thoughts. How do the saints like you remain free of such thoughts?" Saint *Eknath* said to him, "Stop thinking about the saints, because I can clearly see that you are going to die in just seven days." The man thought to himself, "A great personage like saint *Eknath* can't be wrong!" That man went home and tidied up his affairs. He said good byes to his friends. He begged the enemies to forgive him. He gave away what he could to charities. On the seventh day, saint *Eknath* went to see him at home. The man lay in bed, waiting for the death to knock on his door. When he saw saint *Eknath*, he said, "I will be gone by the end of this day." Saint *Eknath* asked him, "So how many times did unholy thoughts cross your mind?" The man said, "What unholy thoughts? All I could think of was my certain death in seven days!" Saint *Eknath* said, "We saints also see death all the time, therefore we can stay free of unholy thoughts and free of sins."⁵

And my best wishes to everyone are these - Everyone should see death at least once!

6.3

⁵ There is a well-known Sanskrit Subhashita - "Gain knowledge moment by moment and accumulate wealth drop by drop, but follow your dharma as if death has already grabbed you by your hair!"

I returned to Nagpore on the 20th of May 1995 after my angioplasty operation in Lucknow. Soon *Rani* and I started thinking about what we should do next. To be psychologically prepared for the possibility that I may suffer a major heart attack any time in future was absolutely necessary. Lack of medical help in the forest of Gadchiroli meant that if I suffered a major heart attack while living in Shodhgram, chances of my survival would be very slim. Should we then continue to live and work in Gadchiroli district? Or should we settle in a big city where modern medical facilities are readily available? My life would be more secure there, but I would have to abandon the work I had embraced until now. So what should we do?

I wasn't looking forward to death. But I did wonder whether it was worthwhile to live long if the price was to forgo the goal of life itself. Why should I accept an emotional death today out of fear of physical death sometime in future? We made up our mind to spend the rest of our lives there in the district of Gadchiroli. I don't consider this as a sacrifice. It was a clear and easy decision. We knew that if we had to give up the pursuit of the goal of our lives, life would be unbearable to us. *Ishavasya* said very clearly - "Wish for a meaningfully active life of a hundred years. For an embodied soul, this is the only path. There is no path other than this!" I had no other choice, but I could certainly hang on to the desire to live for a hundred years pursuing my own mission!

During the month of April of 1995, *Rani* and I had to suddenly go away from Shodhgram so that I could receive a proper medical attention. We were away from Shodhgram for nearly a month and a half. There was no guarantee that I would return alive and well. During those days, all the staff members of 'Search' worked with an amazing motivation and an excellent sense of unity. No one jumped the sinking ship. All the programs continued just as smoothly as before. How vain I had been, laboring under the

misapprehension that unless I did something myself, it wouldn't be done right! How false was my belief that I had to be there for anything to be accomplished! *Rani* has a limitless enthusiasm and an exemplary get up and go. After my return to Shodhgram, we chalked out a new three-year project. It got going with a tremendous gusto. I was back at work.

6.4

I am still doing the same old work. Rural health services and allied research work, patient care at 'Search', helping people quit harmful habits such as drinking and smoking, education of young men and women in rural areas - in fact all the programs in which 'Search' is involved, are right on track. There is an old adage in the Zen sect - "Before revelation, I used to chop wood and fetch water. And after the revelation I still chop wood and fetch water."

I am far, far away from a revelation. I do the same work I used to do before, but my understanding and my attitude have changed a little. Though fully involved, I feel less entangled in the sprawl of our activities. Sometimes I feel angry and sometimes my expectations are not met. Many times my mind gets sidetracked into wishful thinking and dreaming or it develops an irrational attachment to work and its results. But as soon as the mind wanders into the territory of aspirations, ambitions and expectations, I sense dissatisfaction and stress gaining ground. Then I check myself and throw away the unnecessary baggage. That always brings more pleasantness to life.

In fact, I have begun to understand how futile it is to force oneself into struggles out of stubborn bullheadedness. If we learn to float easily in the stream of life, we automatically reach our destination. Try swimming stubbornly and out of sheer bullheadedness and you suffocate as the water enters your nose and mouth. But the stream of

life has no signs that could inform us about its direction and speed. If you do nothing irrational and simply learn to easily float in this stream, you can understand what this stream is all about, where it is taking you and how. I slowly began to realize this simple truth.

The confusion in my mind about the fear of death, about the purpose of my life and about how I should live my life was over. My reason saw the answer, but I wouldn't say I have laid my hands on the answer. The difference between seeing the path and reaching somewhere by actually walking that path is same as locating New Delhi on a map and actually arriving there. Intellectually I am convinced that this universe, the cosmic Truth behind it and I are one and the same. But, has the ingrained habit of seeing myself as someone different from this universe really gone? To be continuously conscious of, to sustain in attitude and to follow in daily practice what is understood intellectually is a very long and arduous journey. I repeatedly experience how much like mere clay this body and mind really are. The reason runs a thousand miles ahead, while the body and the mind slowly crawl forward. Habits of body and mind don't change easily, the body and the mind revert to old habits again and again. But the mind doesn't lose hope. In this striving, in this journey, I experience plenty of joy. Perhaps I will not be able to go the full distance in this lifetime. What guarantee can I give that my body will last till then? But, if each day, each moment, became a destination in itself, there will no longer be a need to reach anywhere else. I progress at the speed of a tortoise. I am not a hare. I don't have that dynamism. Nor will I gain that kind of speed. But that doesn't worry me. The tortoise crawls, it is still crawling.

My journey continues. Many times I get trapped in the web of illusions - sometimes due to the circumstances and sometimes of my own doing. But in a few days I see the light and I am free from the web of illusions. Who can tell whether I am going round and round like a pair of oxen turning a millstone or whether I am on a spiral staircase, arriving at

a slightly higher level at the end of each circular lap? And even if I reach the same spot from where I started, I arrive there with a new understanding, a new realization.

I still can't bring myself to see God everywhere and in each one around me. I can't bond with all the people with total love. I know that love bonds people, but my reason falls short of that feat. My ego is still there, it hasn't vanished, nor does it seem likely to vanish forever. It butts in again and again and becomes an obstruction. But I am improving. I relish the joy of changing myself a little bit each day; I relish the joy of sculpting myself a little bit each day.

I always remember what Jesse Jackson, an African-American priest, had said back in 1984 - "Friends, forgive me for my shortcomings. The Lord is yet to finish the job of molding me."



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CHAPTER 7

Some useful Information and Techniques for Maintaining or Restoring Health

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(*) = *Take this test and find your own answers.*

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7.1

Diagnosis of Heart Disease

Symptoms of Heart Disease -

No.	Symptom	Detailed Description
1.	Sudden Death	<ul style="list-style-type: none">• The heart stops beating.
2.	Angina	<ul style="list-style-type: none">• One or more of the three major blood vessels that supplies blood to the heart close up, resulting in insufficient blood supply to the heart muscle. While walking or exercising or doing heavy labor, a sensation of pain is felt in the vicinity of the heart - in the neck, in the arms, in the jaw or in the chin. The pain subsides after a few minutes of rest.
3.	Heart Attack	<ul style="list-style-type: none">• A sudden blockage of a vessel supplying blood to the heart muscle completely cuts off the blood supply to at least a portion of the heart and that much portion of the heart muscle becomes permanently useless.• Acute pain in the chest lasting for more than half an hour. Chest pain accompanied by sweating, vomiting and exhaustion. Many times, such chest pains can also arise due to extreme anxiety, injury to chest muscles or hyperacidity and gas generation in stomach. Sometimes, no pain accompanies an onset of a heart attack (silent infarction). This can be very deceiving to both the patient and the physician.
4.	Weakening of the Pumping Action of Heart	<ul style="list-style-type: none">• Becoming out of breath during hard physical labor or in bed. Swelling of feet.
5.	Heart Irregularity	<ul style="list-style-type: none">• Heart palpitations, pulse beats irregularly or very rapidly.
6.	Heart Block	<ul style="list-style-type: none">• Sudden slowing of the heart (down to 30 to 40 beats per minute), dizziness, unconsciousness.

For a long time I had felt sad and guilty because the diagnosis of my own heart disease had eluded me for many days. Then the internationally renowned medical journal 'Lancet' brought out a special issue on heart ailments. The guest editor of this journal is regarded as a heart disease specialist all over the world. He had written, "Last year when I suffered a heart attack, I put off seeing a physician for 72 hours despite persistent chest pains. I felt very guilty about my own stupidity. So I asked ten internationally renowned heart specialists who had suffered a heart attack to recount their own experiences. All ten specialists had either misdiagnosed themselves, or had avoided any testing or had put off the treatment."

In the company of these 'lazy' world-famous heart specialists I felt far less guilty! But I realized for good that we physicians often go wrong when it comes to diagnosing ourselves.

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Tests for Diagnosing Heart Disease -

No.	Test	Ability of the Test to Correctly Diagnose the Presence of a Heart Disease
1.	History (information supplied by a patient). Chest pains can also be due to reasons other than a heart disease.	Suspicion of a heart disease.
2.	Physical Check-Up	Suspicion of a heart disease.
3.	ECG - patient in a resting position. This test is not sufficiently sensitive. Many times, the test gives a negative result, even though a heart disease is present. On the other hand, some deviations from a supposedly 'normal' ECG pattern are traceable to reasons other than a heart disease. So the limitations to the usefulness of an ECG test are twofold. When ECG does not produce a definite diagnosis, further tests are necessary.	In the presence of Angina - 30% In the presence of a heart attack - 80%.
4.	Treadmill Test - walking on a moving belt	55% to 75%
5.	Echo Cardiography Test - with patient at rest as well as while walking on the treadmill	85%
6.	Stress Thallium Test - A thallium injection after the patient has pedaled hard on an exercise bicycle	80%
7.	Coronary Angiography - a tube is inserted in a blood vessel and then the blood vessel is photographed. The sensitivity of this test is considered to be 100%; however, it fails to diagnose coronary spasms and blockages of very small blood vessels in the heart.	100%

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7.2

Check Your Horoscope for Heart Disease¹

(Those who do not suffer from a heart disease at present should fill out this questionnaire in order to assess the risk of a heart disease over the span of the next ten years. If you do not have some information, try to obtain it and try to answer as completely as possible).

Name Male Female Date

	QUESTION	SCORE
1.	Your Age is <u>57</u> Years : See Table 7.2.1 to find your score for this entry. <i>For the score on all the other questions, see Table 7.2.2</i>	+13
2.	Did anyone in your immediate family (father, mother, brother or sister) suffer from heart disease before the age of 55? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	+5
3.	Do you smoke? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	0
4.	Do you exercise every day for 30 minutes or more? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	+2
5.	Does your work and lifestyle involve you in physical labor? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	+2
6.	Are you a Type-A person (lots of mental stress/ always in a hurry / very ambitious)? YES <input checked="" type="checkbox"/> NO <input checked="" type="checkbox"/>	+1
7.	Do you feel comfortable about sharing your emotions with others? (Do you freely express your feelings of love / affection / anger / sadness etc.?) YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	0
8.	Is your outlook on life is optimistic, positive? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	0
9.	How often does your meal include butter, ghee, fried foods, sweets and meat? Daily <input type="checkbox"/> Every once a while <input checked="" type="checkbox"/> Rarely <input type="checkbox"/>	+1

¹ This questionnaire uses a risk scale similar to that in the well-known 'Framingham Study' conducted in USA, but customized for the people of Indian origin. It can't be guaranteed that it will be 100% applicable to every person. The results of this questionnaire are also useful for identifying your own risk factors that you could reduce.

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10. Does your daily meal include plenty of fruit, green vegetables and salads?
YES NO 1
11. Was your birth-weight less than 2.5 kilograms (5.5 lb.)? YES NO 0
12. What is body mass index? (See page to find out how to measure it) 22 -2
13. What is waist/hip ratio? (See page to find out how to determine it) +1
14. Do you suffer from diabetes? YES NO 0
15. What's your systolic blood pressure (the upper number)? 130 +2
16. What's your total blood cholesterol level? 254 +8
17. What's the ratio of your total blood cholesterol / HDL? 1:2 -3
18. Did your physician notice left ventricular hypertrophy in your ECG? No 0

GRAND TOTAL OF YOUR SCORES ON QUESTIONS 1 TO 18 =³¹.....

Table 7.2.1: Points for the Age of Men and Women

	30	32	34	35	37	39	40	45	46	50	53
Man	- 2	0	+ 2	+ 2	+ 3	+ 4	+ 5	+ 7	+ 8	+ 10	+ 11
	55	58	60	65	70	74					
	+ 12	+ 13	+ 14	+ 16	+ 17	+ 19					

	30	32	35	38	40	42	45	48	50	55	60
Woman	- 12	- 9	- 5	- 2	0	+ 2	+ 4	+ 6	+ 8	+ 10	+ 12
	65	70	74								
	+ 14	+ 16	+ 19								

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Table 7.2.2: Points for Questions No. 2 through 18

Q. No.	Question /Answer → ↓	YES	NO	
2	Anyone from immediate family with heart disease before the age of 55	+ 5	0	
3	Smoking?	+ 4	0	
4	Exercise (minimum 30 minutes a day)	- 2	+ 2	
5	Lifestyle includes physical labor?	0	+ 2	
6	Type-A personality?	+ 2	0	
7	Share feelings with others?	0	+ 2	
8	Optimistic, positive outlook?	0	+ 2	
9	Meal includes fats, sweets, meat, etc.?	Daily	Some times	Rarely
		+ 3	+ 1	0
10	Eat plenty of fruit, greens, salads each day?	YES	NO	
		- 2	+ 2	
11	Birth-weight less than 2.5 kg (5.5 lb.)?	+ 2	0	
12	Body-mass index (BMI)	22	- 2	
		22 - 25	+ 1	
		25 - 30	+ 3	
		More than 30	+ 4	
13	Waist / Hip ratio	0.85	0	
		0.85 - 0.90	+ 1	
		0.90 - 0.99	+ 2	
		More than 1.00	+ 3	
14	Diabetes?	YES	NO	
		+ 6	0	
15	Systolic Blood Pressure	98 - 104	- 2	
		105 - 112	- 1	
		113 - 120	0	
		121 - 129	+ 1	
		130 - 139	+ 2	
		140 - 149	+ 3	
		150 - 160	+ 4	
		161 - 174	+ 5	
175 - 185	+ 6			

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Q. No.	Question /Answer → ↓	YES	NO	
16	Cholesterol (milligrams) 139 - 150 151 - 166 167 - 182 183 - 199 200 - 219 220 - 239 240 - 262 263 - 288 289 - 315 316 - 330	- 3 0 + 2 + 3 + 5 + 7 + 8 + 9 + 10 + 11		
17	Cholesterol / HDL Ratio 3 3 - 4 4 - 5 5 - 6 7	- 3 - 1 + 2 + 4 + 6		
18	Left Ventricle Hypertrophy in ECG?	YES + 9	NO 0	

Table 7.2.3: Your Risk of Hear Attack

Your Total Score	What is the Probability that You to Suffer from Heart Disease within the Next 10 Years?
Less than 5	very low probability
5 to 14	probable
15 to 24	high probability
25 or more	Very high probability

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7.3

Your Diet - How Healthy Is It?

		A	B	C
1.	How often do you eat meat and/or eggs?	Daily	Once or twice a week ✓	Never
2.	What kind of milk do you use?	High in cream	Low in cream ✓	Skimmed
3.	How often do you eat butter, ghee, cheese or fried food?	Daily	2 or 3 times a week ✓	Less than once a week
4.	How often do you eat sweets, ice cream or chocolate?	Daily	2 or 3 days a week ✓	Once a week or less
5.	The bread and rice - you use white or brown?	White	Both ✓	Brown
6.	How is your food normally prepared? (both at home and when you eat out)	fried with a lot of oil	fried with a small amount of oil ✓	without oil - baked or steamed
7.	How many spoons of sugar do you consume each day via tea or coffee?	6 or more spoons	2 to 5 spoons	less than 2 spoons ✓
8.	How many times do you eat fruit?	Once a week	2 or 3 times a week ✓	Daily
9.	How many times do you include green vegetables in your meals?	Once a week ✓	2 to 3 times a week	Daily
10.	How many times do you eat raw spinach/carrots/cucumbers/sprouts?	Once a week	2 to 3 times a week ✓	Daily ✓
11.	What does your breakfast usually consist of?	Toast-butter-eggs/ omelet/ sweets/fried food	biscuits/ steamed rice products (Idli, upama, alu-pohe)	Fruit, cereals ✓
12.	What do you spread over your bread? What do you normally spike your rice with?	Ghee	Oil	Nothing ✓
13.	What do you relish most with your meals?	Preserves, Papadam	Buttermilk	soup, salad, shredded veggies ✓
14.	Which food items do you love most?	sweets/ice cream / meat	Fried foods, spicy foods ✓	Fruit
15.	How many times do you eat sprouted lentils and steamed vegetables?	Once a week ✓	2 to 3 times a week	Daily
16.	How often do you consume cold drinks (sodas, flavored milk, etc.)?	Daily	2 to 3 times a week	Once a week ✓
	Points for each question	-3	0	+3

Tally your score and jot it down here

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If your score is

- 30 - 48 You have good eating habits. Keep your score above 40.
20 - 29 There are things in your diet that make you prone to risk. These could lead to health problems in future. Start making corrections now.
Less than 19 Your diet is a definite risk factor. Make changes immediately!



7.4

Main Ingredients of A Meal

No.	Ingredient	Calories per gram
1	Proteins	4
2	Carbohydrates-	
	• Sugars	4
	• Starch	4
	• Fiber (soluble and insoluble)	None
3	Fats	9
4	Minerals (Iron, Calcium, etc.)	None
5	Vitamins	None
6	Water	None

7.5

Fats and What You Need to Know about Them

1. Fats are made up of fatty acids. A human body needs only 14 grams of fats a day in order to meet the need for fatty acids.

An American as well as a well-to-do Indian consumes, on an average, 60 to 90 grams of fats each day. Thus 25% to 35% of their daily caloric intake consists of calories from fats. It leads to increase in body weight and cholesterol. A healthy person, (i.e. a person who has no heart disease and whose cholesterol count is less than 150 mg.) should limit his/her fat consumption in such a way that the calories derived from fats are less than 20% of the total daily caloric intake.

Those who wish to follow Dr. Ornish's method, either for the treatment of a heart disease or for reducing the cholesterol count, should ensure that no more than 10% of their total caloric intake is fat-derived. This translates into daily fat consumption of no more than 25 grams. Since some of the fatty acids naturally exist in other food stuffs, actual fats such

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as cooking oil need to be limited to 20 grams. 20 grams are equivalent to only 4 teaspoons of cooking oil.

2. Just as the amount of fat consumption is an important consideration, it is also important to know which types of fats should be used and which forms should be avoided –

#	Fat Type	Foods in which this type of fat naturally occurs
A	Saturated fats	Milk, butter, ghee, red meat, eggs and coconut oil. Saturated fats also occur naturally in small proportions in all other cooking oils.
B	Monounsaturated fats	Peanut oil, sesame seed (til) oil, mustard oil and fish.
C	Polyunsaturated fats <ul style="list-style-type: none"> • Omega 6 • Omega 3 	'Saffola' oil, sunflower seed oil and soybean oil. <ul style="list-style-type: none"> • These promote weight gain, reduce body's ability to fight infections and promote heart disease as well as growth of cancer cells. 'Saffola' oil has a high proportion of Omega 6. • Godo for the heart - occurs naturally in mustard oil, fish (though fish also contain saturated fats), lentils (without removing the seed coverings), beans, green vegetables and soybeans. <p>Limit the ratio of Omega 6 to Omega 3 to 5:1.</p>

3. Cooking Oils -

- All oils are 100% fats. So oil intake needs to be carefully controlled.
- Except for the coconut oil, all cooking oils and foods derived from vegetables primarily contain unsaturated fats. But all these oils also contain, to a lesser degree, saturated fats too. And vegetable oils do promote weight gain.
- During frying, the unsaturated fats in cooking oils change into trans-fatty acids, which are suspected of promoting heart diseases and cancer.

4. Sources of Fats and Amounts (%) of Fatty Acids in Those Sources

	Source of Fats	Saturated Fatty Acids (SFA) %	Polyunsaturated Fatty Acids (PUFA) %	Monounsaturated Fatty Acids (MUFA)%
1	Coconut oil	87.9	0.8	7.8
2	Corn oil	12.7	57.4	24.6
3	Cottonseed oil	25.9	47.8	22.9
4	Peanut oil	20.9	29.9	47.9
5	Mustard oil	10.7	32.6	56.0
6	Sunflower seed oil	9.1	66.2	25.1
7	Olive oil	14.2	8.2	71.5
8	Palm oil	47.9	9.0	37.9

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9	Saffola oil (karadai oil)	10.7	78.5	17.7
10	Sesame seed oil	13.4	44.5	41.5
11	Soybean oil	13.1	57.2	28.9
12	Butter	49.8	1.8	20.1

(Ref.: 'Nutritive Values of Indian Foods' by C. Gopalan, National Institute of Nutrition, Indian Council of Medical Research, Hyderabad, 1994)

It is recommended that the saturated fats in the diet should be eliminated and the amount of Omega-6 fats should be reduced. While keeping the consumption of total fats within the safe limits, the amounts of monounsaturated and Omega-3 fats should be increased; they are not conducive to heart disease.

By mixing in equal amounts the mustard oil, peanut oil and sunflower seed oil (all three of which are easily available in India), a proper balance between monounsaturated and polyunsaturated fatty acids (Omega 3 and Omega 6) is achieved. Such a mixture also contains the least amount of saturated fatty acids. Sesame seed oil can be substituted for the peanut oil; it has a lower amount of saturated fatty acids, which compensates for an equally lower amount of monounsaturated fatty acids. PUFA (polyunsaturated fatty acids) in mustard oil contain a high amount of Omega-3 fatty acids, which are good for the heart. On the other hand, advertisements for Saffola oil claim that it is good for the heart; but the PUFA in it contain high amounts of Omega-6 and low amounts of Omega-3 and monounsaturated fatty acids, which makes Saffola oil unsafe for the heart.

In order to increase the content of Omega-3 fatty acids in your diet, it is better to increase the amount of green vegetables, lentils with their seed coverings and beans rather than using oil.

5. Milk (The data in the table below pertains to the varieties of milk available in India)

	Type of Milk	Saturated fats (%)	Calories ² (per 100 milliliters)	Calories from the fats (out of total calories)
1	Buffalo milk	7.0	100	70 %
2	Cow milk	4.0	70	50%
3	Dairy milk	4.0	70	50
4	Toned milk	3.0	61	45%
5	Low Fat milk	2.0	52	35%
6	Double Toned milk	1.5	47	22%
7	Skimmed milk	0.0	35	0%

Butter = 80% fat, Ghee = 100% fat

² There is a difference between the definitions of a calorie. In physical sciences, (physics and chemistry) 1 calorie is that amount of heat which raises the temperature of water from 15.5 °C to 16.5 °C. In Life sciences (biology, biophysics, nutrition science, health sciences and medical science), however, 1 calorie represents 1000 units of what physics and chemistry regard as a calorie. When one thinks about calories in a given amount of a food product, or about the number of calories produced by 'burning' a given amount of body fat or the number of calories spent during exercise, this distinction between the two definitions of a calorie must be borne in mind.

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Fats in milk, yogurt, butter and ghee are harmful because they are saturated fats. They increase the cholesterol. Low fat milk is better than a full-fat milk. Skimmed milk is the kind of milk that has no cholesterol. Those who are already suffering from heart disease and those who wish to reduce the cholesterol should use skimmed milk even to lighten the tea or coffee. If they wish to consume yogurt and buttermilk, they should use yogurt or buttermilk made from the skimmed milk. Also they should limit the consumption of milk in any form to 300 milliliters per day. You can buy skimmed milk powder in a store and make skimmed milk from it at home by adding water.

6. Eggs and Meats

Eggs and most of the meats contain high levels of fat and those fats tend to be of the saturated variety. Eggs and meats are therefore harmful for the heart.

1. How much fat are alright to consume if you have heart disease?

According to the Ornish System, a patient of heart disease should limit the consumption of fats to 24 grams per day. These should consist of 8 grams each of monounsaturated, polyunsaturated and the saturated fatty acids.

This can be accomplished by the following measures -

- 20 grams of the three-oil mixture (mustard oil, peanut oil and sunflower seed oil) per day
- Use whole lentils and green vegetables
- Remember that 20 grams of the three-oil mixture and the fats already present in other food items in a daily meal provide the 8 grams of saturated fats and do not try to deliberately find a source of saturated fats.



7.6

How to Improve Your Diet and Reduce Your Weight

Shortcomings commonly found in the diet of well-to-do Indians are as follows -

1. Less emphasis on green vegetables, salads and fruit.
2. Use of white flour from which bran has been removed and/or polished rice.
3. Low amounts of fiber and antioxidants due to (1) and (2) above.
4. High amounts of saturated fats. Main sources of saturated fats in their diet are generally ghee, milk and yogurt, eggs and meat.
5. High consumption of sweets and fried foods. Fried foods not only cause excess body weight, but also lead to cancer because the process of frying generates trans-fatty acids which have been identified as carcinogens.
6. Low proportion of Omega-3 fatty acids.

I have found the following measures and guidelines very helpful in order to improve the diet and to reduce the weight -

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1. **Do not rely on the established tables of 'ideal weight'**. Those tables were constructed at a time when body mass index of 25 to 30 was considered safe. There are three yardsticks for determining a healthy weight for you -
 - Body mass index = [weight (in kg.) / (height in meters)²] ; BMI should be between 18 and 21.
 - Waist/Hip Ratio should be 0.85 or less.
 - You should maintain throughout your life the same weight you had at the age of 25.These three yardsticks should serve as a guideline for determining what body weight to aim for.
2. Eating more and exercising less than what your body needs causes an imbalance, which generates fatty tissue and increases weight. When you consciously change this imbalance, the weight decreases.
3. Reduction in food intake alone helps decrease the weight, but its effect is short-lived. For permanent decrease in weight it is important to tone the muscles, which burns the body fats very efficiently. You need to follow a regimen of regular exercise for that. Thus, in order to control your weight, you need to control how much and what you eat and how much you exercise.
4. Walking is an excellent form of exercise. You should walk 3 to 4 kilometers every day. In order to shed excess weight, additional walking will be helpful.
5. 1 kilogram of fat tissue in a human body is equivalent to 8000 calories. If you burn 300 calories a day by exercising, it will take a month to burn away $300 \times 30 = 9000$ calories; i.e. to reduce the weight by 1 kilogram (2.2 lb.). This assumes that you don't overeat at the same time.
6. To burn away the body fat:
 - Walk every day.
 - If you walk fast, you can burn more calories per minute. Don't walk at a leisurely pace. Walk briskly. Make your walk an 'aerobic' exercise.
 - Do your household chores that involve physical labor.
 - Work in the garden around your house or on a farm.
7. Food fats and sugar are the two components that build up the fat tissue in our body. Food fats represent 9 calories per gram. If these are not burned away via physical labor, nearly 97% of the fats in consumed food are turned into body fat. Sugar represents 4 calories per gram and contains no proteins, vitamins or fiber. Therefore calories from sugar are also referred to as 'empty calories'.
8. Since childhood we are offered sweet and fatty desserts as a reward for something or in order to celebrate a happy occasion, so our palate always looks forward to be treated to desserts. The liking for these sweet and fatty desserts is like a compulsive habit. It generates an intense yearning. One can't eat too much of just sugar or just a sweet substance; nor can one enjoy eating simply a fatty substance. But the combination of the two is irresistible and we

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are tempted to overeat such combinations. In addition, obese people are especially fond of desserts! This is a circle of evil.

9. Those suffering from heart disease should ensure that only 10% of their daily intake of calories originate in food fats in order to reduce the blood cholesterol. See section 7.5 for guidelines for how much of food fats can be consumed safely and the maximum limit on saturated fats.
10. Those who are free of heart disease or those whose cholesterol is not higher than 150 milligram don't need to be this cautious about the fat consumption. However, if they control the consumption of food fats, their weight and cholesterol will not increase. A safe guideline is to ensure that no more than 20% of recommended daily caloric intake should originate in food fats. This translates into a maximum of 40 grams of food fats per day.
11. Edible oils, butter, ghee and cheese undeniably contain fats. In addition, milk, milk products, desserts, chocolates, candies, ice cream, eggs, meat and fried foods and products made from peanuts (peanut butter, for instance) are also high in fats.
12. All the members of the household should agree upon how much edible oil to buy each month and the person responsible for grocery shopping should buy only that much of edible oil. The person responsible for cooking should use a mixture of peanut (or sesame seed) oil, sunflower seed oil and mustard oil. That person should also control the use of edible oils on a weekly basis, rather than on a monthly basis.
13. The limits specified for edible oils are not for young children. Since they are in the growth and development stage, their caloric intakes relative to their body weight tend to be higher compared to a similar ratio for the grown-ups. However it should be remembered that the eating habits formed in childhood stay with in our adult life; and therefore it is the responsibility of the adults in the family to not overindulge the children with sweet and fat desserts.
14. Do not prepare or buy fried foods or desserts more than once a week.
15. Most processed food, bakery products and fast foods have no fiber. avoid their use as far as possible.
16. Include sprouted lentils in a meal.
17. Start every meal with sprouted lentils, salad, carrots, cucumbers, etc. Serve the main entree only after these are eaten. That limits the consumption of the entree and you can 'diet' without going hungry.
18. Enzymes in our digestive system break down all food and convert it into sugar. If we limit our eating to just two complete meals a day, it generates a 'sugar flood' twice a day. If however we eat smaller portions 4 or 5 times a day the body will not experience big swings - periods of high and low amounts - of sugar. A human body was not designed for eating two platefuls of meals a day. Our ancestors roamed in the jungles all day and fed all day as and when they found anything edible. If we spread our recommended daily intake of

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food over four or five sessions it also helps reduce the blood cholesterol levels.

19. It goes without saying that increasing the number of eating sessions must not translate into overeating.
20. Do not eat any sweets between the meals, even if you can't change from 2 meals a day to 4 or 5 eating sessions per day. Blood sugar shoots up as soon as you consume a sweet and it rapidly decreases in about 2 hours, tempting you to eat some more sweets again.
21. Instead, snack on sprouted lentils, carrots, roasted garbanzo beans with their skin, pop corn (without butter), tomatoes, cucumbers and buttermilk made from skimmed milk between the two meals.
22. We often tend to eat as a relief from stress and anxiety. Even if we are not hungry, the mind is reminded to eat something. To distinguish real hunger from these false indications and psychological crutches is a part of reeducating oneself. Also, one needs to find the right ways to reduce the levels of stress and anxiety.
23. Do not remove the bran from flour, the reddish skin on grains of rice, skin on the lentils and do not peel potatoes. Do not use polished rice - polishing removes fiber from rice. Use brown bread (i.e. bread made from flour that has retained the bran).
24. When fruit are squeezed to extract the juice, the fiber is left behind. When you drink that juice, you obtain the simple sugar in the fruit and that creates a flood of sugar in your blood. It is far better to eat the fruit than to drink fruit juices.
25. Before a meal, eat 2 spoonfuls of fenugreek seeds either as sprouts or as a powder. It reduces the sugar flood and the cholesterol. Some people, however, may suffer from excess gas generation.
26. To reduce the use of oil in cooking, use teflon-coated utensils.
27. Regularly measure and record your weight, body mass index, waist/hip ratio, blood sugar and cholesterol.

◆◆◆

7.7

Aswad

(Refraining from the Temptations of Taste and Flavor - Thoughts of Mahatma Gandhi)

"*Aswad* means to refrain from '*swad*'. *Swad* means taste and flavor. We don't think whether a medicine is tasty and flavorful or not; we take it in regular doses because our body needs it. Think about food in the same manner... When we spice up the food even though it is not necessary for the body, when we cheat our mind into believing that these spices and additives are indeed necessary, it must be construed as a perversion."

If one thinks in this manner, one will observe that there are many unnecessary things in what we eat and drink. One will then find it natural to distance oneself from such unnecessary things and many temptations will be overcome. There are popular adages in

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Gujarathi (the language spoken by the natives of Gujarath) such as "*One clay pot demands thirteen things!*" or "*Stomach makes one labor*" or "*Stomach makes us play the band!*" and there is a lot of truth to those adages. This subject has been paid such a scant attention that it has become next to impossible to choose one's diet from the viewpoint of a spiritual resolution. In addition, parents, out of false ideas about love, indulge us with a variety of food fetishes, which are not good for our health and simply turn our tongues into uncontrolled beasts. As a result, I see the new generation growing up with unhealthy bodies and perverted tastes. We see the bitter fruit of this every day. We incur a lot of expenses; we chase medical doctors and, instead of gaining control over our body and senses, we spend a lifetime as a slave to our body and our taste..."

If you have chosen the path of '*Aswad*' out of conviction, then we must follow this path with a new vigor. It is not necessary to constantly entertain the thoughts about what to eat and what not to eat; but alertness and wakefulness is of vital importance. If one is awake and alert, it will be easy to understand when we eat something for the nutritional purposes and when we are merely satisfying the yearning for taste and flavor. Once this understanding begins to dawn, one should resolutely reduce the servitude to taste... To be truthful, under ideal conditions we shouldn't need fire for cooking or our need for fire should be minimum; our foods and drinks be chosen from amongst those which the great fire called the Sun cooks. And thinking on these lines, one finds that man is merely a fruit eater. But it is not necessary to delve too deep into this subject. I only wanted to talk about what *Aswad* is, what difficulties there are in it and how *Aswad* relates to the observance of the vows of *brahmacharya*. If and when convinced of the vows of *Aswad*, all should strive to be successful in observing these vows to the best of their abilities...."

- Mahatma Gandhi (in "Mangal Prabhat").



7.8 Fiber

In 1975, when I was studying at the Postgraduate institute in Chandigarh, the world-renowned surgeon Dr. Dennis Burkitt visited the institute. His fame had spread all over the world because of his research work in Africa where he had discovered a new form of cancer (Burkitt Lymphoma). At the beginning of his lecture, he showed us one slide, which made all the physicians first feel a little bit nauseated and then laugh. The slide showed the stools of two men, one black African and one White European. The stools of the black African seemed copious in amount and spread out on the ground because it was of soft consistency. In comparison, the stools of the white man appeared like pebbles - hard and dry.

Burkitt explained how these two forms of stools represented two different cultures. The diet of the African blacks (and the indigenous population of rural India) consists of plenty of grain, lentils, roots and vegetables; so their stools used to be copious, soft and wet. They used to defecate twice a day. The diet of the whites (or the modern urban population) became considerably different. So their stools became hard, low volume and dry. They could

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function even if they defecated only once in a couple of days. And since the stools are dry, they could clean themselves up with paper.

What changes in diet were brought about by the modern urban lifestyle?

The proportion of products made from white flour (no bran), sugar, fats, animal proteins and milk in the diet increased while the amount of fiber decreased. Enzymes in the stomach do not break down the fibers, so they are not absorbed in the blood. Also fibers absorb water. In the end, they get expelled in the form of stools. Since fibers absorb and retain water, they cause the stools to swell and remain soft. In addition, the cholesterol is trapped within the mesh of fibers and gets expelled along with the fibers in the stools. In the diet of modern man, the amount of fiber decreased and the stools became hard and dry; the toilet tissue became prevalent in bathrooms.

If the only question that accompanied the change in stools was whether to use water or paper for cleaning after a bowel movement, no discussion would have been necessary. However, Dr. Burkitt attributed a whole new group of diseases to the lack or shortage of fiber in diet. This group of diseases is similar to the Syndrome X. According to Dr. Burkitt, in cultures wherein the diet is low in fiber diet and stools are hard, the following diseases are prevalent to a high degree - heart disease, obesity, diabetes, stone in liver, hernia, appendicitis, piles, varicose veins and intestinal cancer.

In order to avoid these diseases brought about by the dietary etiquette of modern civilization, Dr. Burkitt advised us to increase the amount of fiber in the diet and to soften and increase the volume of stools.

Indian traditionalists worry a lot about constipation. When they describe at length the minute observations of stools, we physicians think of it as a neurosis. We laugh at their anxiety over the stools. But Dr. Burkitt presented a scientific basis for such seemingly exaggerated anxiety about the stools. At one point Vinoba has written, "One should observe one's own stools in the morning!" It is a mirror of our health.

(See Chapter 2, Pages, for more information on fiber).



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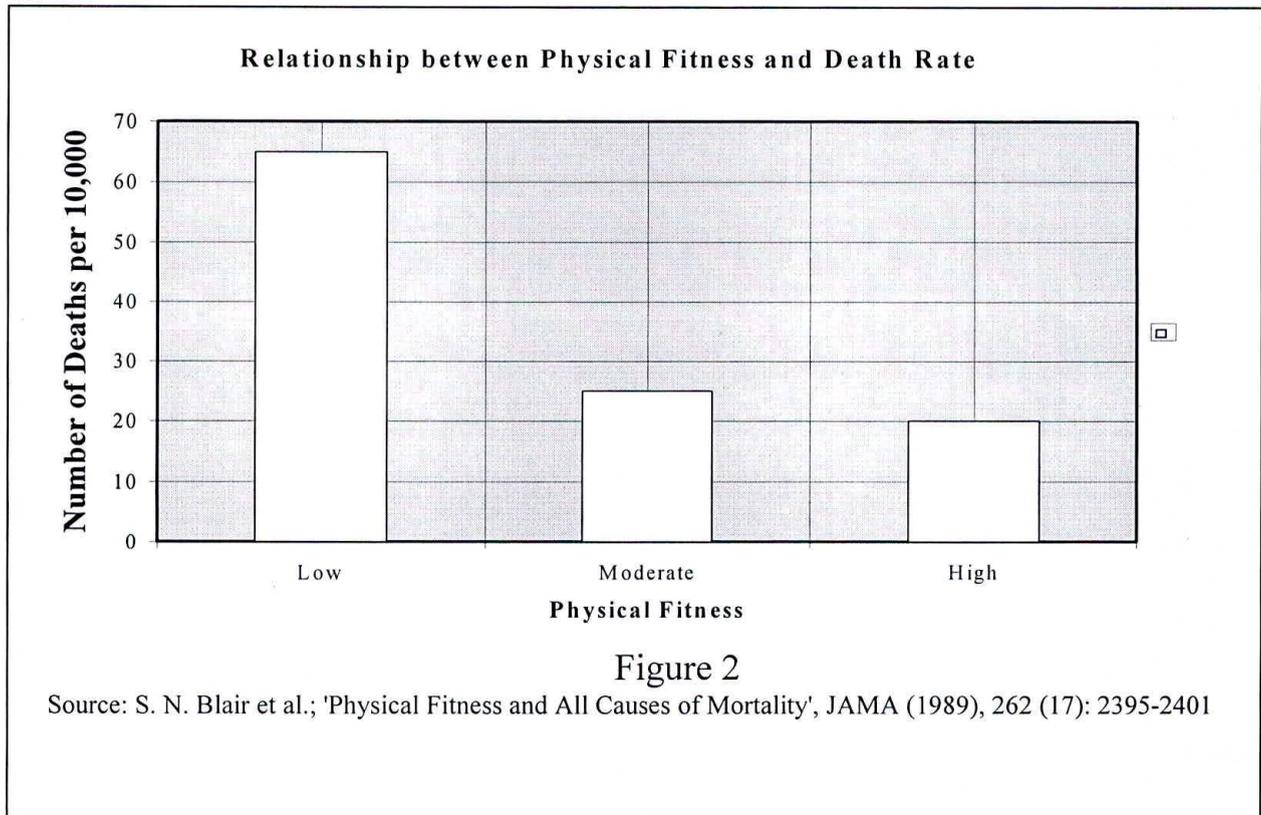


"A generation ago, most people needed rest after the day's hard work; now it is the opposite!"

7.9 Benefits of Exercise

1. Freedom from certain ailments and regulation of these ailments if already present.
 - Heart disease, high blood pressure, obesity.
 - Blood sugar decreases, beneficial HDL increases.
2. Reduces the risk of death.
3. Reduces stress and anxiety; makes the mood cheerful.
4. Exercise becomes a pleasurable activity..

Figure 2 shows the relationship between physical fitness and death rates. The first bar represents a group of people who did not exercise. The middle bar represents the group of people who exercised moderately and the last bar represents the people who exercised heavily. The height of each bar stands for the number of deaths per 10,000 people in each group. Two important conclusions can be drawn from this graph: (1) the death rate amongst those who exercised was nearly half that amongst those who did not exercise and (2) moderate exercise was just as effective as the hard exercise as far as reducing the death rate is concerned.



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7.10

How Active Are You?

1. Which of the following descriptions apply to your lifestyle and nature of your daily work?
 - A --- Sedentary (mostly a desk and chair job, hardly any physical labor)
 - B --- Quite active, involves a lot of walking around
 - C --- Constant walking or physical labor

2. On an average how much time do you spend on watching TV, reading newspaper or magazines?
 - A --- 3 or more hours
 - B --- 1 to 3 hours
 - C --- Less than 1 hour

3. Which of the following activities do you like more on your day off from work?
 - A --- Play cards, chess, scrabbles; watch movies or TV
 - B --- Go for a long walk, work in the garden
 - C --- Play badminton, tennis, soccer etc.

4. How often do you walk non-stop a distance of 3 km. or more?
 - A --- Never or rarely
 - B --- Once or twice a week
 - C --- Every day

5. How often do you walk up to the third or the fourth floor of a building?
 - A --- Never or rarely
 - B --- Sometimes
 - C --- Always

6. How often do you prefer to walk a distance of up to 1 km. (instead of using a car or a scooter)?
 - A --- Never or rarely
 - B --- Sometimes
 - C --- Always

7. How often do you actively participate in activities such as sports, swimming, dancing, jogging, e tc.?
 - A --- Never or rarely
 - B --- Once a week
 - C --- 2 to 3 times weeks or more often

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8. How much time you do spend every week doing household chores such as cleaning, sweeping, washing clothes (by hand), filling up various large containers with tap water and moving them from the water tap to their respective places, working in your garden patch, etc.?
 - A --- Less than 1 hour
 - B --- 1 to 3 hours
 - C --- More than 3 hours
9. How often do you engage yourself in exercise that is intense enough to make you sweat and /or make you slightly breathless?
 - A --- Once a month
 - B --- 1 or 2 times a week
 - C --- 3 to 6 times a week
10. If you had to make a dash to catch the bus or train or if you had to walk up to the fourth floor of a building, how long does it take you before you can breathe normally?
 - A --- 2 minutes or more
 - B --- Less than 2 minutes
 - C --- Don't get breathless at all.

Points - A = 0, B = 1, C = 2 ... Find your own score.

Your Score	
14 - 20	You are quite active. You should be physically fit. this active lie-style will help you stay free of heart disease.
7 - 13	You are active, but not enough to avoid heart disease. You need daily exercise.
6 or less	Your lifestyle is sedentary, you lack exercise. There is a high likelihood of your remaining physically unfit and contacting illnesses. Get involved in physical labor, sports or exercise; you will feel healthy and enthusiastic. Try and see for yourself.

7.11

How Fit are You Physically?

Heart rate (pulse) is a good indicator of physical fitness. Learn to identify the radial artery in the hand, two inches above the wrist line and to feel the pulse by pressing on this artery lightly with the middle finger and the ring finger of the other hand. (See Figure 3 below). Count the pulse for ten seconds. When multiplied by six, you get the pulse rate. This is the rate at which your heart beats.

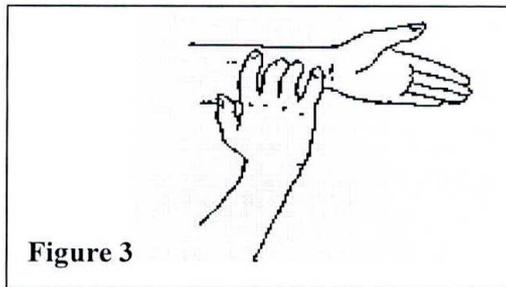


Figure 3

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Measuring Fitness - Method No. 1

Measure your pulse after resting for ten minutes. The slower the pulse, the more fit you are; but if it is slower than 50 or faster than 100 per minute, see your physician. See the table below to get an idea of how fit you are -

	Age (years)	Pulse Rate of a Physically Unfit Person	Pulse Rate of a Moderately Fit Person	Pulse Rate of a Person with Excellent Fitness
Men	20 - 29	86 and faster	60 - 85	Less than 60
	30 - 39	86 and faster	64 - 85	Less than 64
	40 - 49	90 and faster	66 - 89	Less than 66
	50 and over	90 and faster	68 - 89	Less than 68
Women	20 - 29	96 and faster	72 - 95	Less than 72
	30 - 39	98 and faster	72 - 97	Less than 72
	40 - 49	99 and faster	74 - 98	Less than 74
	50 and over	103 and faster	76 - 102	Less than 76

Measuring Fitness - Method No. 2

Another indicator of your fitness is the time it takes for your heart rate to return to normal after exercise. To test yourself, step on and off an 8 in. tall step every 2 seconds (i.e. 30 times a minute) for 3 minutes. Then rest for half a minute and count your pulse. (Those with a heart disease and those who feel chest pain and/or feel dizzy while stepping on and off should not take this test). See the table below to get an idea of how fit you are -

	Age (years)	Pulse Rate of a Physically Unfit Person	Pulse Rate of a Moderately Fit Person	Pulse Rate of a Person with Excellent Fitness
Men	20 - 29	faster than 101	76 - 101	75 or less
	30 - 39	faster than 103	80 - 103	79 or less
	40 - 49	faster than 105	82 - 105	81 or less
	50 and over	faster than 107	84 - 107	83 or less
Women	20 - 29	faster than 111	88 - 111	87 or less
	30 - 39	faster than 113	89 - 113	88 or less
	40 - 49	faster than 115	90 - 115	89 or less
	50 and over	faster than 117	92 - 117	91 or less

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7.12

Which Exercise Is Right for You?

Varieties of Exercise and Their Effects

Effects of exercise on your body can be grouped into 5 categories - fitness, stamina, muscle tone, flexibility and balance. Various types of exercise affect the body in various ways. The effects of selected exercises on body are tabulated below -

(* = little, ** = fair, *** = good, **** = very good, ***** = excellent)

EXERCISE	Fitness	Stamina	Muscle tone	Flexibility	Balance
Aerobic Exercise	****	****	***	***	****
Badminton	****	***	**	**	*****
Cricket (batting)	**	*	***	***	***
Bicycling					
Slow (8 km./hr)	***	***	***	***	****
Fast (19 km./hr)	****	*****	***	***	****
Dance	****	***	***	*****	*****
Soccer/Field Hockey	****	****	***	***	****
Jogging (8 km./hr)	****	***	***	*	**
Jogging (14.5 km./hr)	*****	****	***	*	**
Judo/karate	**	***	****	*****	***
Skipping Rope	****	****	****	**	**
Swimming (fast)	****	***	****	****	*****
Tennis	***	***	****	****	*****
Walking - brisk	***	***	****	**	**
Walking - Aerobic	****	****	****	***	***
Weight Lifting	*	****	*****	*	****
Yogic Exercises	*	***	**	*****	****

We are looking for a moderate fitness and a medium intensity exercise. To find the hardest exercise is not our goal. Looking at the above table with this in mind we find that walking, jogging, bicycling, dance, swimming, badminton and yogic exercises would be quite useful. Walking and yogic exercises stand out as two types of exercises that need no equipment and pose no hazards of accident and bodily harm. These two exercises offer all the desired effects in good measure. We could also choose dance in lieu of these two exercises. It also yields all these benefits.

The above table shows that the benefits of walking, jogging and bicycling are more or less similar. Personally, I prefer walking for the following reasons -

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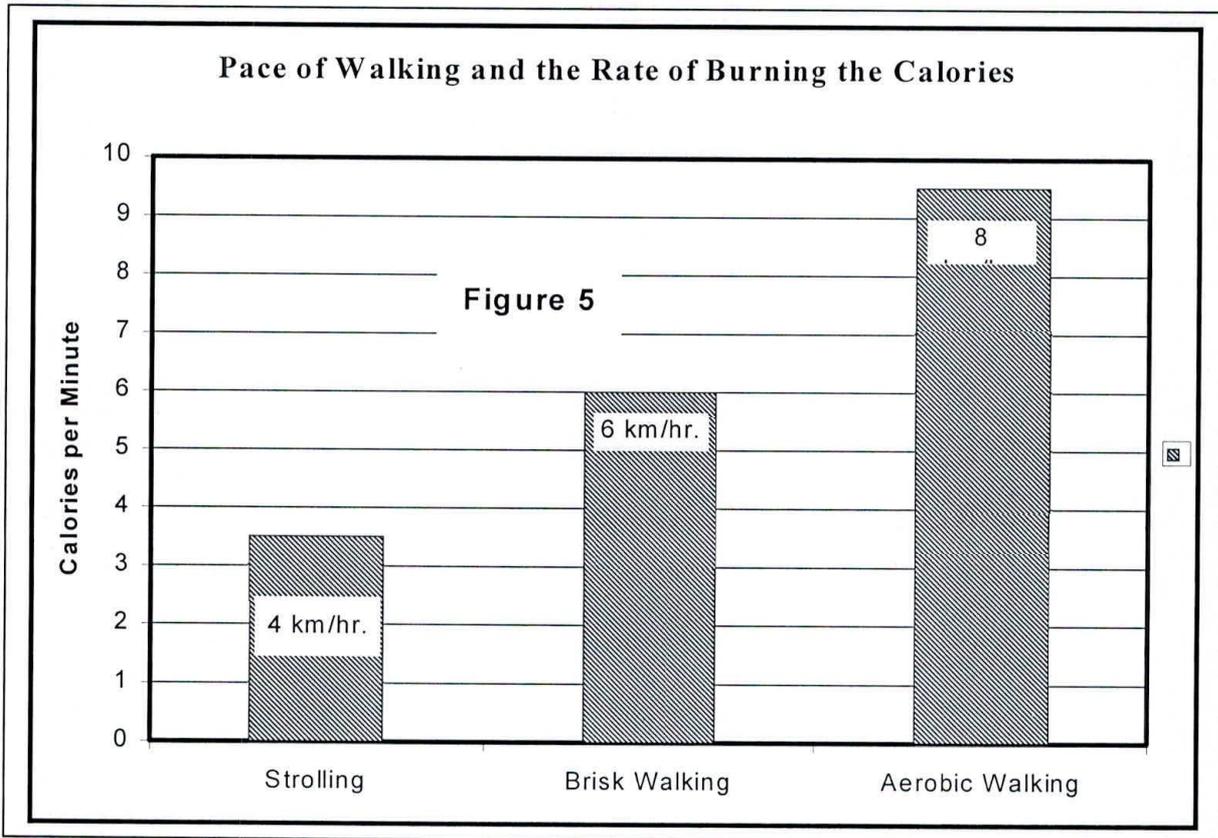
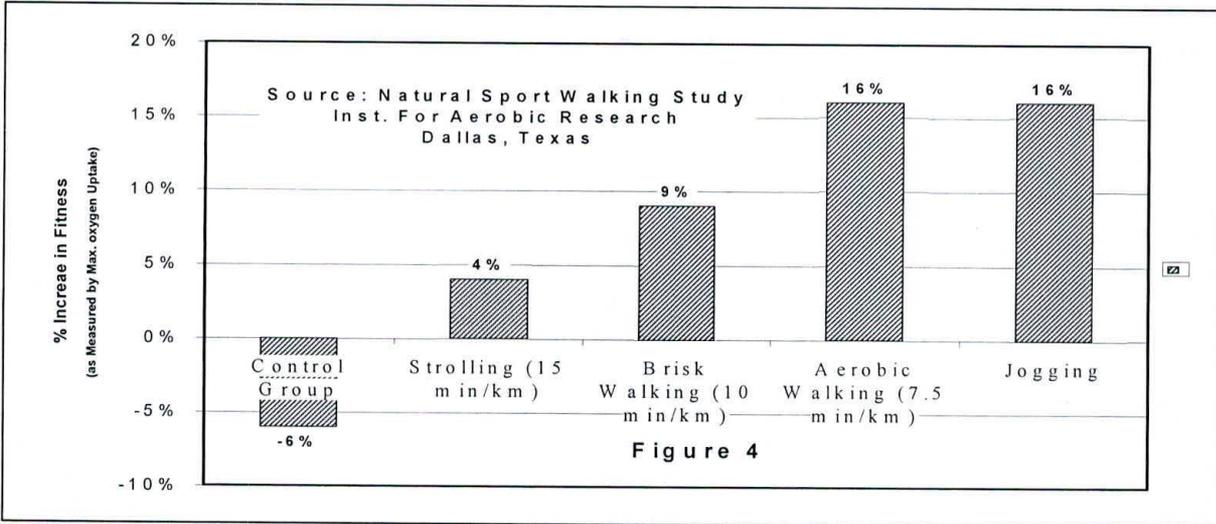


1. For the past 3 million years, i.e. during the evolutionary period in human history from Lucy up to the most recent past, man the biped has walked at work. He had to run only for a short time either during a hunt or when he had to run to save his life. At all other times, he walked for hours through the forests in search of food. In cattle-raising societies, man walked all day long herding and tending the animals. In agrarian societies man walked to get to his farm, to fetch water and to gather firewood. Even today in many villages of the world, people walk for hours. They have no other choice. Outside of sleeping, man has spent most of his time walking. Thus man is habituated to walking for the past 3 million years; walking is man's heritage! No other form of exercise can be construed as a 'heritage'. And that's why the construction of a human body is designed for walking. In comparison, driving a car or a scooter or sitting in front of the TV to watch a game of cricket are 'exercises' with only a few decades of legacy; the human body has not adapted to these. Maybe it will, after a few million years! But before that several generations will be sacrificed. Especially you and I! If we try to live in opposition to our biological destiny, premature death is guaranteed.
2. Sages of antiquity advised, "Walk on!" That advice is not only metaphoric, but also literal! Indeed we ought to walk! Death catches up with him who stays put in one place and just sits. If you don't wish to die (prematurely), then walk!
3. Walking needs no other equipment except shoes; a walker needs no companion.
4. At the speed of aerobic walking - 8 km. (5 miles) per hour - we can gain the same level of fitness that jogging would impart and we would burn calories at the same rate. Though hard to believe, it's a scientific truth. as you increase your pace, the category of walking changes -
 - 4 km. per hour = 1 km. in 15 minutes = Strolling
 - 6 km. per hour = 1 km. in 10 minutes = Brisk walking
 - 8 km. per hour = 1 km. in 7.5 minutes = Aerobic walkingAerobic walking is a high intensity exercise and it is equivalent to jogging. It also imparts the same level of fitness as jogging does (See Figure 4). However, walking faster than the pace of aerobic walking (8 km. per hour) is an unnatural form of exercise, called 'race walking' and it increases the oxygen demand tremendously.
The rate of burning calories depends upon the pace of walking as shown in Figure 5. If one walks briskly, one could burn 180 calories in 30 minutes. At the speed of aerobic walking, one would burn 300 calories in 30 minutes, i.e. same number of calories as if one were jogging. I am not recommending that everyone must walk at the pace of aerobic walking. All I want to convey is that this information helped me understand the scientific superiority of walking as an exercise.
5. Legs or feet do not get sprained, one does not fall down, one does not get injured or suffer a fracture while walking. I came across a very nice statement - "Only thing which running can give but walking can't is injury!"
6. One can enjoy the scenery while walking; one can think while walking and one can also pay attention to the movement of one's breath and keep up with that beat. And that's joy galore!

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7.13

How Much Exercise Is Right for You?

The Western experts recommend a 30-minute exercise every day or a 1-hour exercise three days every week. However, I think this is too mechanical a calculation: $30 \times 6 = 60 \times 3$. We would not advise anyone to sleep or to eat three times a week, because these are essential parts of our daily life. When exercise does not remain purely a necessity for physical fitness; but turns into so pleasant an experience that it becomes one of the daily activities in which one joyfully engages, exercising every day is the natural thing. If for some reason one skips a day, then the above equation can serve as a guideline to compensate for the missed activity by exercising a little longer the next few days.

You can set your own limit for the amount of exercise by counting the heart rate. The upper limit of the extent of exercise depends upon the capacity of your heart and is not same for all the people.

At birth, the maximum heart rate is 220; i.e. heart beats at the rate of 220 per minute at most. This maximum heart rate decreases at the rate of one beat per minute per year from the time of birth. Therefore,

Your present maximum heart rate = $220 - \text{your present age}$.

Let's say you are 50 years of age at this time. Then your maximum heart rate at present is $220 - 50 = 170$. Consider 170 as 100% of your heart's capacity. The useful effect of exercise occurs when your heart beats at 50% to 85% of its maximum capability. For a 50-year old person this number will lie between 85 per minute and 142 per minute. Once this simple formula is understood, one can set the limit of exercise appropriately.

When you begin the regimen of daily exercise, aim to maintain the heart rate at 50 to 60% of the maximum heart rate determined for your age. After 8 to 12 weeks of such a practice, you can increase the intensity of your exercise such that you can maintain the heart rate at 80 to 85% of the maximum. Do not try to hasten this process, do not overdo it. You don't want to hurt your body and you certainly do not want to get injured. Remember that exercise has to become a part of your lifestyle and you need to work slowly at it. When this simple thing is forgotten, people focus on achieving the ultimate goal of 85% of the maximum heart rate and painfully struggle to achieve it as soon as possible. That simply defeats the entire purpose - you do not want to turn exercise into a painful ambition. Make it natural, smooth and enjoyable. Since the 'training effect' of exercise is experienced when the heart rate can be maintained at more than 50% of the maximum heart rate, you don't have to rush to the 85% goal. Be a friend to your body. If you can't achieve 85%, you are not losing anything; 75% is still good and your body will benefit from it. Don't treat your body like a horse - don't whip it to make it run faster and faster for the sake of speed. Instead, coax your body gently; give your body time to adjust. Treat your body with genuine affection and show concern for its wellbeing.

If you are not adept at counting the heart rate, use a simpler method called the 'Borg Scale'. This scale starts at 6 and goes up to 20. The numerical values are assigned on the basis of your perception of the equivalence between exercise and strain from physical labor. When exercise is so light that it feels like you are simply resting, it has a value of 6. The level of

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exercise that feels like you have done a good deal of some light chores has a numerical value of 11. The 'training effect' begins to be felt at this level of exercise. You should try to maintain a level of exercise between 11 and 15.

BORG SCALE

Perceived Exertion (how strenuous a physical labor you feel you have performed?)

6

7 Extremely light

8

9 Very light

10

=====

11 Light

12

13 Somewhat strenuous **Desired Level of Exercise Is Between These Two Lines (11 - 13)**

14

15 Strenuous

=====

16

17 Very strenuous

18

19 Extremely strenuous

20

How Fast Do I Need to Walk?

Each one of us has to determine for himself or herself what answer to this question is right. If the intention of walking is to reduce weight, the faster the better. If the intention of walking is to make the body and the heart physically fit, the pace of walking should be sufficient to maintain the heart rate between 50% and 85% of the maximum possible heart rate. Figure 6 below shows that a walking pace equivalent to a moderate intensity exercise, i.e. 'brisk walking' is sufficient. If reaching the uppermost limit of exercise level (i.e. 85% of maximum possible heart rate) is important and it can't be reached by brisk walking, then one should resort to 'aerobic walking'. As a therapeutic measure or a preventive measure against heart disease, 85% of the maximum possible heart rate offers no additional benefit. Therefore "brisk walking is the best form of walking". (See page: 6 km/hour or 4 miles/hour = brisk walking).

My Revelatory Heart Disease

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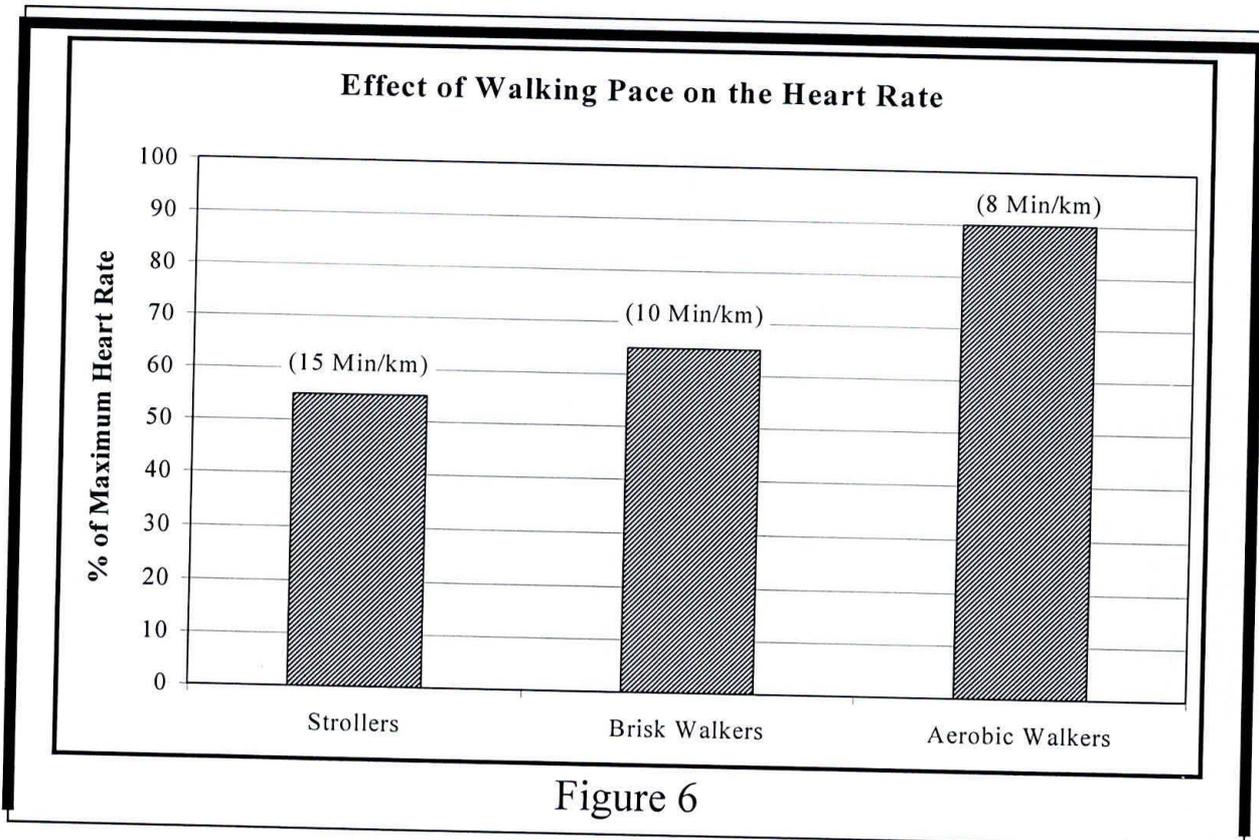


Figure 6

7.14 How To Walk

1. If you wish to walk for the purpose of physical fitness and therefore wish to maintain a certain intentional pace, **do use special walking shoes**. In the beginning, I thought that 'special shoes made for an exercise walk' was merely the new generation's indulgence and therefore stubbornly insisted on wearing the Indian style of slippers. But then I couldn't walk fast and when I tried to walk fast, I ended up with sprain. When I first experienced what it is like to walk wearing the 'special shoes made for an exercise walk', I slapped my face for having been so stubborn. (Even now *Rani* refuses to wear the walking shoes. Sometimes she walks barefoot! And then she complains about the feet getting sore and the ankle getting sprained). The walking shoes don't have to be very expensive and don't need to have a lot of frills. All that is necessary is that they should be comfortable for your feet. High heel shoes, well-cushioned running shoes and sports shoes are not only unnecessary, but also bad for an exercise walk.
 - Shop for walking shoes in the afternoon or evening. Your feet will be somewhat swollen at that time.
 - The front portion of walking shoes (where your toes fit in) needs to be a little bit flexible. Hold the shoe by the sole and try to bend the toe portion. When you walk,

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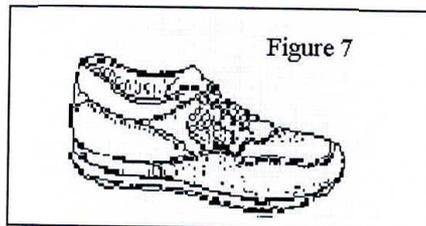
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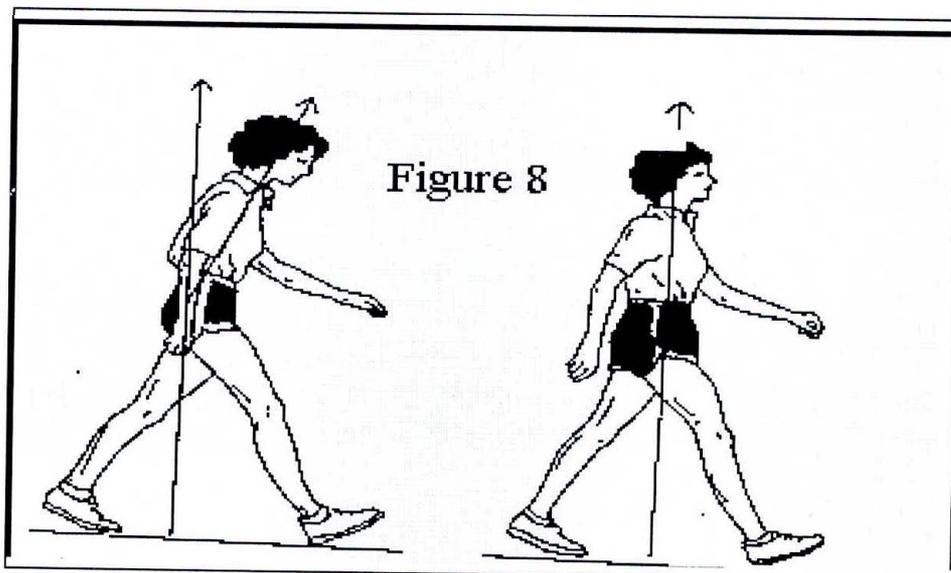


the heel lifts up first while the toes remain on the ground. At that moment, the shoe needs to be sufficiently flexible, not stiff like wood.

- The sole of a shoe needs to be firm, because when we walk, our heels are going to land on the ground first. Our body weight is going to be supported by the heel. The heel does not need cushioning. You need cushioning of the heels when you are running, so that the jolting impacts can be reduced. But that is not necessary when you are walking. For walking, the sole of your shoe ought to be firm, not softly cushioned.
- The sole of a walking shoe must not be tall. Running shoes, fashion shoes and women's high heel shoes fail miserably when it comes to exercise walking. Soles of walking shoes must not be more than half an inch high.
- When buying shoes, put on both the shoes - our feet are seldom exactly the same size; one foot is often slightly larger than the other. That means the shoes ought to provide comfort to both the feet. Briskly walk a few steps on a hard surface. (Not on the carpet! That will only deceive you)! This is the most important test. Your feet must not feel any discomfort when you walk briskly on a hard surface.



2. Study the various factors of exercise walking such as posture, planting of feet, swinging of arms etc. and practice them at home. When you begin exercise walking, ensure that you are doing everything methodically. Slowly these things become ingrained habits and occur without your conscious attention as you walk.
3. Figure 8 below shows the difference between a proper and improper posture while exercise walking. Ensure that your posture is proper for exercise walking.



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- The head should be held straight up; not leaning to one side, nor leaning forward. The chin should be parallel to the ground. For that, do not look at the ground. Look straight towards the horizon. To watch the road, just turn the eyes downward; don't bend you head down (see Figure 8).
 - Keep your shoulders straight, right under the ears. Don't lift your shoulders up while you walk; let them remain loose.
 - Keep the back straight and let the chest jut out front.
 - Keep the hips right under the shoulders.
 - You will see that not bending the head down when you walk is a challenge. When you bend the head down, the shoulders and the back also bend down and totally spoil the posture.
4. How long should your stride be when you walk? A tall person will naturally have a longer stride than a short person. However, that does not affect the pace of walking. Short people (especially women) walk faster and short people compensate for the short stride by a faster pace. If the thigh muscles (hamstrings) are stiff, it is hard to maintain a long stride. That's why stretching exercises before exercise walking are important.
5. While walking, the thighs and legs constantly move forward and backward through the hip joint like a pendulum. Let's suppose we are about to plant the right foot forward. (See Figure 9). At that time the leg should not be bent at the knee, it should be absolutely straight. Then, while bringing the left foot forward, the left leg has to be bent at the knee. (See Figure 10). Now the entire weight of the body is resting on the left foot. The right leg is straight like a pillar. The left leg now comes forward. It should land on the ground without being bent anywhere (see Figure 11). Now the right leg must be lifted off the ground and brought forward. It should be straight and not bent at the knee while landing on the ground. A leg should bend at the knee only when it is being lifted off the ground to move it from back to front. If a leg is bent at the knee while landing the foot on the ground, two things happen - you trot like a horse instead of walking and your body receives a jolt of lifting up and landing down with each step, like the clowning walk of Groucho Marx.

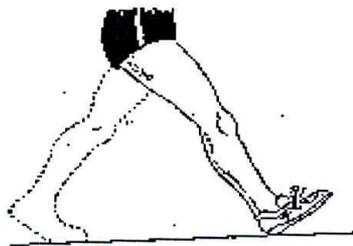


Figure 9

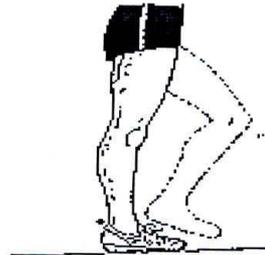


Figure 10

6. While landing the foot on the ground, let the heel touch the ground first. The toe and the sole of the foot should be off the ground while the heel is just touching the ground, so

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that the entire foot is making an angle with the plane of the ground. (See Figure 11). This is called the 'heel plant'. In order to accomplish a proper 'heel plant', the entire body and especially the back, the chest, the shoulder and the head remain straight. It is difficult to accomplish a proper heel plant with the head bent down.

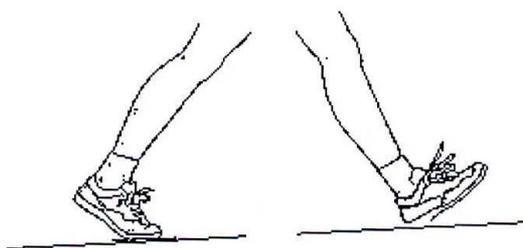


Figure 11

7. While landing the foot on the ground, the leg that is still in contact with the ground can be used profitably for increasing the pace of your walking. Let's suppose that the left foot is yet to land on the ground and we have begun to lift the right foot up; only the right heel is off the ground and the right toe is still in full contact with the ground (see Figure 11). At this instant, if you push down on the right toe as if to push the ground backward, it will propel the entire body forward, increase the pace and will also exercise the muscles of the calf. In order to generate the energy for walking from the muscles of the calf as well as from the hip and thighs, all you need to do is to remember to push the ground backward with the help of toe of the trailing leg.
8. Launch your exercise walk only after practicing the proper posture and heel planting techniques at home.
9. Before commencing the walk, do a warm up exercise for two to three minutes and then a few stretching exercises. The stretching exercises should be directed at stretching the muscles of the feet, calves, thighs and the waist. A yogic exercise called *Surya-namaskar* (a highly stylized sequence of postures beginning with standing upright to complete prostration to standing upright again) is ideally suited for this purpose and only three or four cycles of a Surya-namaskar are enough to take the body through all the necessary postures. It relaxes the body, increases the length of the stride, makes the joints more flexible, ensures a proper blood supply to the muscles and that in turn helps avoid fatigue and sprains from missteps.
10. Begin with strolling. The strolling pace is 4 km/hour. It makes the heart beat at 55 to 60% of the maximum heart rate. During the strolling phase, check your posture and walking technique often and make any needed amendments.
11. In the beginning phase, pay special attention to the regularity of walking. Make no excuses for not walking. Stay at the strolling pace and gradually increase the distance covered. Note the distance walked each day and increase it to 4 km. per day. Increase your pace after you have been regularly walking 4 km. each day at the strolling pace. Now try to attain the brisk walking pace (6 km. pr hour). First comes the regularity, then

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the distance and finally the speed. Do not reverse this sequence by focussing on speed first. For those who are just beginning to engage in exercise walking and for those who have a poor fitness level, Dean Ornish has suggested a timetable as follows –

Week No.	Duration of Each Walk	How Many Times a Day?	Desired Heart Rate	Borg Scale Value	How Many Days a Week
1	15 minutes	2	50% - 60%	10 - 12	6 - 7
2	20 minutes	2	50% - 60%	10 - 12	6 - 7
3 to 5	30 minutes	1	50% - 70%	10 - 13	6 - 7
6 to 8	40 - 50 minutes	1	60% - 75%	11 - 14	6 - 7
9 to 12	40 - 60 minutes	1	60% - 80%	11 - 15	6 - 7

12. Following the initial warm-up, stretching exercises, 5 minutes of strolling and 5 to 10 minutes of brisk walking, the body feels free of tightness in the joints and stiffness in the limbs. The heart rate will have increased up to the target zone. Take your pulse. You are going to continue walking at this pace for 20 more minutes. At the end of those 20 minutes, take your pulse once again and confirm the you indeed maintained the heart rate within the target zone.
13. Then slow down and walk at the strolling pace. This is called 'cooling down'. It has been observed that suddenly stopping after an intensive exercise can lead to arrhythmia (irregular beating of heart) in some people. That is why a cooling down period for slowly easing to a complete stop is recommended.
14. After you come to a complete stop, do the stretching exercise or Surya-namaskar again to nicely relax the muscles.
15. For the longevity, this moderate intensity exercise (i.e. brisk walking) is sufficient. What kind of exercise is good for an additional increase in physical fitness? I had observed that my heart rate would increase up to 70% to 72% of the maximum heart rate after a brisk walk. I wasn't able to able to raise it to 80%. So I began to run a short distance. But the sequence of walking and running and again walking and running wouldn't let my mind relax.
16. That's when I learned about aerobic walking. If, while walking briskly, you bend both the arms at the elbow to make a perfect right angle and move them back and forth rapidly as you walk, (Figures 12 and 13) it automatically speeds up your legs and you find yourself walking at the speed of 8 km. per hour. The heart rate climbs above 80%. This is called 'aerobic walking'. The intensity of exercise is as high as running. It uses up 10 calories per minute, so it is highly useful for weight reduction. Everyone does not need to engage in aerobic walking; nor is aerobic walking necessary for avoiding heart disease or to add a few years to the life. But those who need to reduce weight should consider aerobic walking. Generally, aerobic walking should be commenced after walking briskly for about 10 minutes. begin with no more than 5 minutes of aerobic walking. Then gradually increase the duration of aerobic walking to 20 minutes. Do not forget to slowly decrease the walking pace before coming to a complete stop. (As soon as you straighten the arms

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instead of bending them at the elbow, you will find yourself slowing down from the aerobic walking pace to the brisk walking pace).

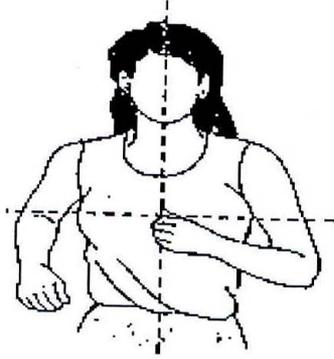


Figure 12

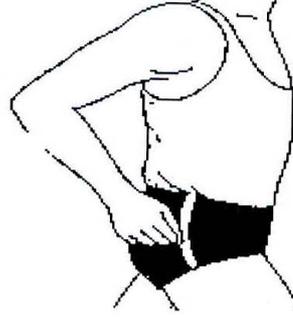


Figure 13

- After 5 minutes of brisk walking down, slow down to the strolling pace and cool down, stop walking, do the stretching exercises and finally rest.
17. Be mindful of your posture and walking technique and remember to correct yourself whenever you find yourself deviating from the proper posture and walking techniques.
 18. Keep a daily written record of how far you walked, how long it took you to walk that far and the heart rate you attained.
 19. Over and above these 18 suggestions, three important points to remember are:
 - **Those who have heart disease should set the limits of exercise only after undergoing a treadmill test and consulting a physician.**
 - **If at any time during walking you feel a pain in the chest or extreme exhaustion, stop and consult a physician.**
 - **LET WALKING BE A JOYFUL ACTIVITY, not a mere physical chore. Try to attain some kind of a rhythm in your walk; let your walking become a sort of dhyana!**



7.15

Mahatma Gandhi's Thoughts on Physical Labor

Everyone including me knows and experiences what happens to our body when there is no physical effort, no physical labor. Why not then do some productive work instead of mere fitness exercises such as walking, running and push-ups?

Vinoba has very nicely explained, "There's a word in Sanskrit for productive work - '*udyoga*'. It's a compound word formed by combining two words - *ut* and *yoga*. It means a high or noble yoga. *Udyoga* or productive work is the supreme yoga for us. If man had no hunger and

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if nature had not endowed man with a motivation to do productive work for satisfying the hunger, man would have destroyed himself."

Bread-labor was an important part of Gandhi's system of moral values. Gandhiji considered productive work a pursuit of spirituality and believed that whatever is needed for nourishing one's own body should be produced through one's own efforts. Therefore, everyone who lived in Gandhiji's monasteries had to till the land or to cook. Gandhiji even put India's national leaders such as Nehru and Patel to work in his monastery by asking them to cut vegetables.

"I became an ardent adherent of the philosophy that physical labor is essential to every man after reading one of Tolstoy's essays. But before I was fully convinced of it, I had read Ruskin's book 'Unto This Last' and had started following it. 'Physical labor' is an Indian word for 'bread labor'. It is a divine laws that everyone must perform some chores for the bread, everyone must put the body to work for bread. This law was propounded by a relatively unknown Russian writer Burnov; Tolstoy merely brought it to light and made it his own. I find the same statement in the third chapter of Bhagawad Geeta - Geeta accuses a man of stealing if he eats without performing yajña. It seems appropriate to take the word yajña to mean bread labor. In my opinion that is the only possible meaning. Regardless of whether my interpretation of yajña is right or wrong, it is the origin of my resolution. Reason also leads us to the same conclusion - one who does no bread labor has no right to eat. Bible also tells, "Earn your bread by the sweat of your brow". If a millionaire simply lay in bed and ate only when someone fed him, he will not be able to eat for a long time and he will lose all taste for food. He therefore exercises to light up the hunger and he must move his mouth in order to eat. So, if physical effort is necessary for both the prince and the pauper, why shouldn't everyone do bread labor? "

- Mahatma Gandhi in 'Mangal Prabhat'.

