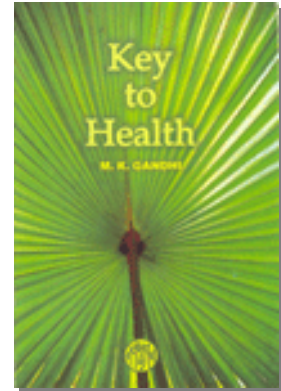


Key To Health

Written by: M. K. Gandhi

Translated by: Sushila Nayar

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PREFACE

For the benefit of the readers of the *Indian Opinion* (South Africa), I wrote a few articles under the heading *Guide to Health* in or about the year 1906. These were later published in book form. I found that it was known to the Indian public. But copies were not available in India. The late Swami Akhandanand asked for my permission to publish an Indian edition. The enterprise proved very popular. The book was translated into several Indian languages. An English translation also appeared. This reached the West, and was translated in several European languages. The result was that the book became the most popular of all my writings. I have never been able to understand the reason for this popularity. I had written those articles casually, and I did not attach much importance to them. But perhaps the reason for the popularity is to be sought in the fact that I have looked upon the problem of health from the orthodox methods adopted by doctors and *vaidyas*. Whether my presumption is correct or not, many friends have been pressing me to publish a new edition, putting forth my views to date. I have never been able to revise the original. I have never had the time for it. The present enforced rest offers me such an opportunity and I am taking advantage of it. I have not even got the original with me. The experience of so many years cannot but have left its mark upon my thought. But those who have read the original book will notice that there is no fundamental difference between my ideas of today and those of 1906. But my mind is responsive. Therefore, whatever change the reader may find will, I hope, be in the nature of a progress.

I am giving a new name: *Key to Health*. Anyone who observes the rules of health mentioned in this book will find that he has got in it a real key to unlock the gates leading him to health. He will not need to knock at the doors of doctors or *vaidyas* from day to day.

Aga Khan Palace,

Yeravda, 27-8-'42

M. K. Gandhi

PART I

01. THE HUMAN BODY

It is necessary to understand the meaning of the word health, before entering upon a description of the human body. In health, means body ease. He is a healthy man whose body is free from all disease; he carries on his normal activities without fatigue. Such a man should be able with ease to walk ten to twelve miles a day, and perform ordinary physical labour without getting tired. He can digest ordinary simple food. His mind and his senses are in a state of harmony and poise. This definition does not include prize fighters and such like. A man with extraordinary physical strength is not necessarily healthy. He has merely developed his musculature, possibly at the expense of something else.

It is necessary to have enough knowledge of the human body which is expected to attain the above standard of health.

God alone knows what kind of education was prevalent in ancient times. Research workers on the subject may be able to tell us something, but only something, about it. But all of us have some experience of modern education in this country. It has no relation with our everyday life. Thus, it leaves us almost utterly ignorant about our own body. Our knowledge of our own village and our fields shares a similar fate. We are taught on the other hand, much about things that have no bearing on our daily life. I do not mean to say that such knowledge is of no use. But everything has its own place. We must first know enough of our own body, our own house, our village and its surroundings, the crop that grows there and its history before going on to anything else. General knowledge broad-based on this primary knowledge, alone can enrich our life.

The human body is composed of what the ancient philosophers have described as the five elements. These are earth, water, vacancy, light and air.

All human activity is carried on by means of the mind aided by the ten senses. These are the five senses of action, i.e. hands, feet, mouth, anus and the genitals, and the five senses of perception, i.e. the nose, of taste through the tongue, of seeing through the eyes and of hearing through the ears. Thinking is

the function of the mind and some people have called the eleventh sense. In health all the senses and the mind act in perfect co-ordination.

The inner working of the human machine is wonderful. The human body is the universe in miniature. That which cannot be found in the body is not found in the universe. Hence the philosopher's formula, that the universe within reflects the universe without. It follows therefore that our knowledge of our body could be perfect we would know the universe. But even the very best of doctors and hakims and maids have not been able to acquire it. It will not presumptuous for a layman to aspire to it. No one has yet discovered an instrument which can give us any information about the human mind. Scientists have given attractive description of the activities going on within and without the body, but no one can say what sets the wheel going. Who can explain the why and wherefore of death or foretell its time? In short, after infinite reading and writing, after infinite experience, man has come to know how little he knows.

A happy working of the human machine depends upon the harmonious activity of the various component parts. If all these work in an orderly manner, the machine runs smoothly. If even one of the essential part is out of order, it comes to a stop. For instance, if the digestion is out of order, the whole body becomes slack. Therefore, he who takes indigestion and constipation lightly does not know the a-b-c of the rules of health. These two are the root cause of the innumerable ailments.

The question that demands our attention next is: what is the use of human body? Everything in the world can be used and abused. This applies to the body also. We abuse it when we use it for selfish purposes, for self-indulgence or in order to harm another. It is put to its right use if we exercise self-restraint and dedicate our self to the service of the whole world. The human soul is the part of the universal spirit of God. When all our activities is directed towards the realization of this link, the body becomes a temple worthy for the spirit to live in.

The body has been described as a mine of dirt. Looked at in its proper perspective, there is no exaggeration in this statement. If the body was nothing else but this, there could be no point in talking such pains to look after it. But if this so-called mine of dirt can be put to its proper use, it became our first duty to cleanse it and keep it in a fit condition. The mines of precious stones and gold also have the look of ordinary earth on the surface. The knowledge that there are gold and precious stones underneath, induces men to spend millions and engage scientific brains in order to get at what lies in those mines. Similarly, we cannot take too much pain over keeping in a fit condition the temple of the spirit-the human body.

Man came into the world in order to pay off the debt owed by him to it, that is to say, in order to serve God and His creation. Keeping this point of view in front of him, man acts as a guardian of his body. It becomes his duty to take such care of his body as to enable it to practice the idea of serving to the best of its ability.

02. AIR

No one can live without air as one can without water for a few days and without food much longer. Therefore, nature has surrounded us with air on all sides so that we can get it without any effort.

We take in air through our nose into our lungs. The lungs act as a sort of bellows. The atmospheric air which we breath in has a life-giving substance - a gas known as oxygen. The air that we breath out contains poisonous gases. These can kill us if they are not immediately allowed to spread out and get diluted by the atmospheric air. Hence the necessity of proper ventilation.

The air comes into close contacts with blood in the lungs and purifies it. Many people do not know the act of breathing. This defect prevents an adequate purification of their blood. Some people breath through their mouth instead of their nose. This is a bad habit. Nature has so designed the nose that it acts as a sort of filter for the ingoing air and also warms it. In mouth breathers the atmospheric air reaches the lungs without the preliminary filtration or warming. It follows therefore that those who do not know how to breathe should take breathing exercises. They are as easy to learn as are useful. I do not wish to go into a discussion of the various *asanas* or postures. I do not mean to say that these are not important or useful. But I do wish to emphasize that a well-regulated life outweighs the advantage of studying elaborate postures that ensure breathing through the nose and free chest expansion is enough for our purposes.

If we keep the mouth tightly close, the breathing would have to be carried out by the nose. Just as we wash our mouth every morning, the nose should be also be cleaned. Clean water, cold or lukewarm water is the best agent for this purpose. It should be taken in a cup in the palm of the hand and draw up through the nostrils. It is possible to draw the water up through one nostril, the other remains closed, and expel in through the other by opening it and closing the former. The process should be carried out gently so as to avoid discomfort.

In order to cleanse the back portion of the nose known as nasopharynx, water should be brought out by the mouth or even swallowed.

We must see that the air that we breath in is fresh. It is good to cultivate a habit of sleeping in the open under the star. The fear of catching a chill could be dismissed from the mind. Cold can be kept out by plenty of covering. This covering should not extend beyond the neck. If cold is felt on the head, it can be covered with separate piece of cloth. The opening of the respiratory passage - the nose - should never be covered up.

The day clothes should be changed for loose night clothes before retiring. As a matter of fact no clothes are necessary at night when one sleeps covered with a sheet. Tight-fitting clothes should be avoided even during day.

The atmospheric air around us is not always pure, neither it is the same in every country. The choice of the country does not always lie in our hands but the choice of a suitable house in a suitable locality does rest with us till some extent. The general rule should be to live in a locality which is not too congested and insist upon the house being well lighted and well-ventilated.

03. WATER

Next to air, water is the necessity of life. We cannot live without it for more than a few days, just as without air we cannot live for more than a few minutes. Therefore, as in the case of the air, nature has provided us with ample amount of water. Man cannot live on barren land where there is no vast tracts of desert land lie utterly uninhabited.

In order to keep healthy, everyone should take 5lbs. of water or other liquid food in 24 hours. Drinking water must be pure. In many places it is difficult to get pure water. There is always risk in drinking well water. The water of shallow wells, and even deep wells with stair- case leading down to the water level, should be considered absolutely unfit for drinking purposes. The difficulty is that the appearance and even the taste of water are no guide to its purity. Water which appears perfectly harmless to look at and to taste, can act as poison. The own custom of not drinking from an unknown well or from a stranger's house is worth copying.

In Bengal almost every house has a kachcha tank attached to it. As a rule the water of these is unfit for drinking purpose. River water is also frequently not fit for drinking, particularly where the river is used for navigation or where it passes by a big city and receives its drainage and sewage water.

In spite of what I have said, I know there are millions of people who had to drink what I have described as impure water. But that does not mean that their example is worth of being copied. Nature has provided us with sufficient reserves of vitality. But for that, man would have long ago disappeared from the face of the earth because of his own mistake and transgressions of the rules of health.

Here we are concerned merely with the role of water with regards of health. Whenever we are doubtful about the purity of water, it should be boiled before drinking. In practice it amounts to this that everyone should carry his drinking water with him. Many orthodox Hindus in India do not drink water whilst

traveling on account of religious prejudices. Surely, the enlightened can do for the sake of health. What the unenlightened do in the name of religion!

04. FOOD

Whilst it is true that man cannot live without air and water, the thing that nourishes the body is food. Hence the saying, food is life.

Food can be divided into three categories: vegetarian, flesh and mixed. Flesh food includes fowl and fish. Milk is an animal product and cannot be any means included in a strictly vegetarian diet. It serves the purpose of meat to a very large extent. In medical language it is classified as animal food. A layman does not consider milk to be a animal food. On the other hand eggs are regarded by the layman as a flesh food. In reality, they are not. Nowadays sterile eggs are also produced. The hen is not allowed to see the cock and yet it lays eggs. A sterile egg never evolves into a chick. Therefore, he who can take milk should have no objection to take sterile eggs.

Medical opinion is mostly in favor of a mixed diet, although there is a growing school, which is strongly of the opinion that anatomical and physiological evidence is in favor of man being a vegetarian. His teeth, his stomach, intestines etc., seem to improve that nature has meant to man to be a vegetarian.

Vegetarian diet besides grains, pulses, edible roots, tubers and leaves, includes fruits, both fresh and dry. Dry fruits include nuts like almonds, pistachio, walnut etc.

I have always been favour of pure vegetarian diet. But experience has taught me that in order to be perfectly fit, vegetarian diet must include milk and milk-products such as curd, butter, ghee, etc. This significant departure from my original idea. I excluded milk from my diet for six years. At that time, I felt none the worse for the denial. But in year 1917, as a result of my ignorance, I was laid down with severe dysentery. I was reduced to a skeleton, but I stubbornly refused to take any medicine and with equal stubbornness refused to take milk or buttermilk. But I could not build up my body and pick up sufficient strength to leave the bed. I had taken a vow of not taking milk. A

medical friend suggested that at the time of taking a vow, I could have in my mind only the milk of cow and buffalo; why would the vow prevent me from taking goat's milk? My wife supported him and I yielded. Really speaking, for one who has given up milk, though at the time of taking the vow only the cow and the buffalo were in mind, milk should be taboo. All animal milks have practically the same composition, though the proportion of the components varies in each case. So I may be said to have kept merely the letter, not the spirit, of the vow. But that as it may, goat's milk was produced immediately and I drank it. It seemed to bring me new life. I picked up rapidly and was soon able to leave the bed. On account of this and several similar experiences, I have been forced to admit the necessity of adding milk to the strict vegetarian diet. But I am convinced that in the vast vegetable kingdom there must be some kind, which, while supplying those necessary substances which we derive from milk and meat, is free from their drawbacks, ethical and other.

In my opinion there are definite drawbacks in taking milk or meat. In order to get meat we have to kill. And we are certainly not entitled to any other milk except the mother's milk in our infancy. Over and above the moral drawback, there are others, purely from the point of view of health. Both milk and meat bring with them the defects of the animal from which they are derived. Domesticated cattle are hardly ever perfectly healthy. Just like man, cattle suffer from innumerable diseases. Several of these are overlooked even when the cattle are subjected to periodical medical examinations. Besides, medical examination of all the cattle in India seem to be an impossible feat, at any rate for the present. I am conducting a dairy at the Sevagram Ashram. I can easily get help from medical friends. Yet I cannot say with certainty that all the cattle in the Sevagram Dairy are healthy. On a contrary, a cow that had been considered to be healthy by everybody was found to be suffering from tuberculosis. Before this diagnosis was made, the milk of that cow had been used regularly in the Ashram. The Ashram also takes milk from the farmers in the neighborhood. Their cattle had not been medically examined. It is difficult to determine whether a particular specimen of milk is safe for consumption or not. We have to rest content with as much safety as boiling of the milk can

assure us of. If the Ashram cannot boast of fool-proof medical examination of its cattle, and be certain of the safety of its dairy products, the situation elsewhere is not likely to be much better. What applies to the milch cattle applies to a much greater extent to the animals slaughtered for meat. As a general rule, man just depends upon luck to escape from such risks. He does not seem to worry much about his health. He considers himself to be quite safe in his medical fortress in the shape of doctors, vaidas and hakims. His main worry and concern is how to get wealth and position in society. This worry overshadows all the rest. Therefore, so long as some selfless scientist does not, as a result of patient research work, discover a vegetable substitute for milk and meat, man will do on taking meat and milk.

Now let us consider mixed diet. Man requires food which supply tissue building substances to provide for the growth and daily wear and tear of the body. It should also contain something which can supply energy, fat, certain salts and roughage to help the excretion of waste matter. Tissue building substances are known as proteins. They are obtained from milk, meat, eggs, pulses and nuts. The protein contained in milk and meat, in other words, the animal protein being more digestible and assimilable, are much valuable than vegetable proteins. Milk is superior to meat. The medicos tell us that in cases when meat cannot be digested, milk is digested quite easily. For vegetarians milk being the only source of animal proteins, is a very important article of diet. The proteins in raw eggs are considered to be the most easily digestible of all proteins.

But everybody cannot afford to drink milk. And milk is not available in all places. I would like to mention here a very important fact with regards to milk. Contrary to the popular belief, skimmed milk is a very valuable article of diet. There are times when it proves even more useful than whole milk. The chief function of milk is to supply animal proteins for tissue building and tissue repair. Skimming while it partially removes the fats, does not affect the proteins at all. Moreover, the available skimming instrument cannot remove all the fats from milk. Neither there is any likelihood of such an instrument being constructed.

The body requires other things besides milk, whole or skimmed. I give the second place to cereals-wheat, rice, jowar, bajra etc. These are used as the staple diet. Different cereals are used to staple in different provinces in India. In many places, more than one kind of cereals are eaten at the same time, for instance, small quantities of wheat, bajra and rice are often served together. This mixture is not necessary for the nourishment of the body. It makes it difficult to regulate the quantity of food intake, and puts an extra strain upon digestion. As all these varieties supply starch mainly, it is better to take one only, at a time. Wheat may well be described a king among the cereals. If we glance at the world map, we find that wheat occupies the first place. From the point of view of health, if we can get wheat, rice and other cereals become unnecessary. If wheat is not available and jowar, etc. cannot be taken on account of dislike or difficulty in digesting them, rice has to be resorted to.

The cereals should be properly cleansed, ground on a grinding stone, and the resulting flour used as it is. Sieving of the flour should be avoided. It is likely to remove the bhushi or the pericarp which is a rich source of salt and vitamins, both of which are most valuable from the point of view of nutrition. The pericarp also supplies roughage, which helps the action of the bowels. Rice grain being very delicate, nature has provided it with an outer covering or epicure. This is not edible. In order to remove this inedible portion, rice has to be pounded. Pounding should be just sufficient to remove the epicarp or the outer skin of the rice grain. But machine pounding not only removes the outer skin, but also polishes the rice by removing its pericarp. The explanation of the popularity of polished rice lies in the fact that polishing helps preservation. The pericarp is very sweet and unless it is removed, rice is easily attracted by certain organisms. Polished rice and wheat without its pericarp, supply us with almost pure starch. Important constituents of the cereals are lost with the removal of their pericarp. The pericarp of the rice is sold as rice polishings. This and the pericarp of wheat can be cooked and eaten by themselves. The can be also made into chapattis or cakes. It is possible that rice chapattis may be more easily digestible than whole rice and in this form a lesser quantity may result in full satisfaction.

We are in the habit of dipping each morsel of chapati in vegetable or dal gravy before eating. The result is that most people swallow their food without proper mastication. Mastication is an important step in the process of digestion, especially that of starch. Digestion of starch begins on its coming into contact with saliva in the mouth. Mastication ensures a thorough mixing of food with saliva. Therefore, starchy food should be eaten in a relatively dry form, which results in a greater flow of saliva and also necessitates their thorough mastication.

After the starch supplying cereals come the protein supplying pulses-beans, lentils etc.

Almost everybody seems to think that pulses are essential constituent of diet. Even meat eaters should have pulses. It is easy to understand that those who have to do hard manual work and who cannot afford to drink milk, cannot do without pulses. But I can say without any hesitation whatsoever that those who follow sedentary occupations as for instance, clerks, business men, doctors and those who are not too poor to buy milk, do not require pulses. Pulses are generally considered to be difficult to digest and are eaten in a much smaller quantity than cereals. Out of variety of pulses, peas, gram and haricot beans are considered to be the most and mung (green grams) and masoor (lentils) the least difficult to digest.

Vegetables and fruits should come third on our list. One would expect them to be cheap and easily available in India. But it is not so. They are generally considered to be delicacies meant for the city people. In the villages fresh vegetable are a rarity, and in most places fruits are also not available. This shortage of greens and fruits is a slur on the administration of India. The villagers can grow plenty of green vegetables if they wish to. The question of fruits cannot be solved so easily. The land legislature is bad from the villager's standpoint. But I am transgressing.

Among fresh vegetables, a fare amount of leafy vegetables must be taken every day. I do not include potatoes, sweet potatoes, saran etc, which supply starch mainly, among vegetables. They should be put down in same category as starch

supplying cereals. A fair helping of ordinary fresh vegetables is advisable. Certain varieties such as cucumber, tomatoes, mustard and cress and other tender leaves need not be cooked. They should be washed properly and eaten in raw in small quantities.

As for fruits, our daily diet should include available fruits of the season, e.g. mangoes, grapes etc. should all be used in their season. The best time for taking fruits is in early morning. A breakfast of fruits and milk should give full satisfaction. Those who take an early lunch may have a breakfast of fruits only. Banana is a good fruit. But as it is very rich in starch, it takes the place of bread. Milk and banana make a perfect meal.

A certain amount of fat is also necessary. This can be had in the form of ghee or oil. If ghee can be had, oil becomes unnecessary. It is difficult to digest and is not so nourishing as pure ghee. An ounce and half of ghee per head per day, should be considered ample to supply the needs of the body. Whole milk is also a source of ghee. Those who cannot afford it should take enough oil to supply the need for fat. Among oils, sweet oil, coconut oil, and ground nut oil should be given preference. Oil must be fresh. If available, it is better to use hand-pressed oil. Oil and ghee sold in the bazaar are generally quiet useless. It is a matter of great sorrow and shame. But so long as honesty has not become an integral part of business morals, whether through legislation or through education, the individual will have to procure the pure article with patience and diligence. One should never be satisfied to take what one can get, irrespective of its quality. It is far better to do with ghee oil altogether than to eat rancid oil and adulterated ghee. As in the case of fats, a certain amount of sugar is also necessary. Although sweet fruits supply plenty of sugar, there is no harm in taking one to one and half ounces of sugar, brown or white in a day. If one cannot get sweet fruits sugar may become a necessity. But the undue prominence given to sweet things towards nowadays is wrong. City folk eat too much of sweet things. Milk puddings, milk sweets and sweets of other kinds are consumed in large quantities. They are all unnecessary and are harmful except when taken in very small quantity. It may be said without any fear of

exaggeration that the partake of sweet meals and other delicacies, in a country where the millions do not get an ordinary full meal, is equivalent to robbery.

What applies to sweets, applies with equal force to ghee and oil. There is no need to eat food fried in ghee or oil. To use ghee in making puris and laddus is thoughtless extravagancy. Those who are not used to such food cannot eat these things at all. Those who do eat them I have often seen fall ill. Taste is acquired, not born with us. All the delicacies of the world cannot equal the relish, that hunger gives to food. A hungry man will eat a dry piece of bread with the greatest relish, whereas one who is not hungry will refuse the best of sweetmeats.

Now let us consider how often and how much should one eat. Food should be taken as a matter of duty even as a medicine to sustain the body, never for the satisfaction of the palate. Thus, pleasurable feeling comes from satisfaction of real hunger. Therefore, we can say that relish is dependent upon hunger and not outside it. Because of our wrong habits and artificial way of living, very few people know what their system requires. Our parents who bring us into this world do not, as a rule, cultivate self-control. Their habits and their way of living influence the children to a certain extent. The mother's food during pregnancy is bound to affect the child. After that during childhood, the mother pampers the child with all sorts of tasty foods. She gives the child a little bit out of whatever she herself may be eating and the child's digestive system gets a wrong training from its infancy. Habits once formed are difficult to shed. There are very few who succeed in getting rid of them. But when the realization comes to man that he is his own bodyguard, and his body has been dedicated to service, he desires to learn law of keeping his body in a fit condition and tries hard to follow them.

We have now reached a point when we can lay down the amount of various foods required by a man of sedentary habits, which most men and women who read this pages, are:

Cow's milk	2 lbs.
Cereals	
(wheat, rice, bajra in all)	6 oz.
Vegetable leafy	3 oz.
Vegetable others	5 oz.
Vegetables raw	1 oz.
Ghee	1 1/2 oz.
or Butter	2 oz.
Gur White Sugar	1 1/2 oz.

Fresh fruits according to one's taste and purse. In any case it is good to take two sour limes a day. The juice should be squeezed and taken with vegetables or in water, cold or hot. All these weights are of raw stuff. I have not put down the amount of salt. It should be added afterwards according to taste.

Now, how often should one eat? Many people take two meals a day. The general rule is to take three meals: breakfast early in the morning and before going out to work, dinner at midday and supper in the evening or late. There is no necessity to have more than three meals. In cities some people keep on nibbling from time to time. This habit is harmful. The digestive apparatus requires rest.

05. CONDIMENTS

I have not said anything about condiments in the last chapter. Common salt may be rightly counted as the king among condiments. Many people cannot eat their food without it. The body requires certain salts and common salt is one of them. These salts occur naturally in the various foodstuffs but when food is cooked in an unscientific way, e.g., throwing away water in which rice, potatoes, other vegetables have been boiled, the supply becomes inadequate. The deficiency then has to be made up by a separate addition of salt. As common salt is one of the most essential salts for the body, I have said in the last chapter that it might be supplemented in small quantities.

But several condiments are not required by the body as a general rule, e.g., chilies fresh or dry, pepper, turmeric, coriander, caraway, mustard, methi, asafetida, etc. These are taken just for the satisfaction of the palate. My opinion, based on my personal experience of fifty years, is that not one of them is needed to keep perfectly healthy. Those whose digestion has become very feeble might take these things as medicine for a certain length of time, if considered necessary. But one should make it a point to avoid their use for the satisfaction of the palate. All condiments, even salt, destroy the natural flavor of the foodstuff much more than after the addition of salt or other condiments. That is why I have said that salt should be taken when necessary as an adjunct. As for chilies, they burn the mouth and irritate the stomach. Those who are not in a habit of taking chilies cannot bear them in the beginning. I have seen several cases of sore mouth caused by the taking of chilies. I know of one case who was very fond of chilies, and an excessive use resulted in his premature death. The Negro in south Africa will not touch condiments. He cannot bear the color of turmeric in his food. In the same way, Englishmen also do not readily take to our condiments.

06. TEA, COFFEE AND COCOA

None of these is required by the body. The use of tea is said to have originated in China. It has a special use in that country. As a rule one cannot rely on the purity of drinking water in China and therefore it must be boiled before use to ensure safety. Some clever Chinaman discovered a grass called tea which when added to boiled water in a very small quantity gave it a golden color. The color did not appear unless the water was really boiled. Thus the grass became an infallible test for seeing when a given quantity of water was boiled. The way, the test is used, is to put the tea leaves in a strainer. If the water was boiled it will assume a golden color. Another quality of tea leaves is said to be that they impart a delicate flavor to the water.

Tea prepared as above is harmless. But the tea that is generally prepared and taken has not only nothing to recommend it, it is actually harmful. The leaves contain tannin which is harmful to the body. Tannin is generally used in the tanneries to harden leather. When taken internally it produces a similar effect upon the mucous lining of the stomach and intestine. This impairs digestion and cause dyspepsia. It is said that in England innumerable women suffer from various ailments on account of their habit of drinking tea which contains tannin. Habitual tea drinkers begin to feel restless if they do not get their cup at the usual time. In my opinion, the usefulness of tea, if any, consists in the fact that it supplies a warm sweet drink which contains some milk. The same purpose may well be served by taking boiled hot water mixed with a little milk and sugar.

What I have said about tea applies more or less to coffee also. There is a popular saying about coffee in Hindustani which say, "Coffee allays cough and relieves flatulence, but it impairs physical and sexual vigor and making of blood watery, so that there are three disadvantages against its two advantages." I do not know how far the saying is justified.

I hold similar opinion with regard to cocoa. Those whose digestion works normally, do not require the help of tea, coffee or cocoa. A healthy man can

get all the satisfaction that he needs out of ordinary food. I have freely partaken of all the three. I used to suffer from one aliment or another while I was using them. By giving them up I have lost nothing, and have benefited a good deal. I can get the same satisfaction from a clear vegetable soup that I used to derive from tea etc. Hot water, honey and lemon make a healthy nourishing drink, which can well substitute tea or coffee.

07. INTOXICANTS

The intoxicants used in India might be taken as the following: alcohol, bhang, ganja, tobacco and opium. Alcohol or liquor include the country made liquor and arak, besides the large quantity of liquor imported from foreign countries. All these should be strictly prohibited. Alcohol makes a man forget himself and while its effects last, he becomes utterly incapable of doing anything useful. Those who take a drinking, ruin themselves and ruin their people. They lose all sense of decency and propriety.

There is a school who favour limited and regulated consumption of alcohol and believe it to be useful. I have not found any weight in their argument. Even if we accept their view for a moment, we have still to face the fact that innumerable human beings cannot be kept under discipline. Therefore it becomes our duty to prohibit alcoholic drinks even if it were only for the sake of this vast majority.

Parsis have strongly supported the use of tadi. They say that although tadi is an intoxicant it is also a food and even helps to digest other foodstuffs. I have carefully examined this argument and have read a fair account of literature pertaining to this subject. But I have been a witness of the terrible straits to which tadi reduces the poor and therefore I have come to the conclusion that it can have no place in man's food.

The advantages, attributed to tadi, are all available from other foodstuffs. Tadi is made out of khanjur juice. Fresh khanjur juice is not an intoxicant. It is known as nira in Hindustani and many people have been cured of their constipation as a result of drinking nira. I have taken it myself though it did not act as a laxative with me. I found that it had the same food value as sugarcane juice. If one drinks a glass of nira in the morning instead of drinking tea, etc., he should not need anything for breakfast. As in the case of sugarcane juice, palm juice can be boiled to make jaggery. Khanjuri is a variety of palm tree. Several varieties of palm grow spontaneously in our country. All of them yield drinkable juice. As nira gets fermented very quickly, it has to be used up

immediately and therefore on the spot. Since this condition is difficult to fulfill except to a limited extent, in practice, the best use of nira is to convert it into palm jaggery. Palm jaggery can well replace sugar-cane jaggery. In fact some people prefer it to the latter. One advantage of palm jaggery over sugar-cane jaggery is that it is less sweet and therefore one can eat more of it. The All Indian Village Association has done a great deal to popularize palm jaggery, but much remains to be done. If the palms that are used for making tadi are used for making jaggery, India will never lack sugar and the poor will be able to get good jaggery for very little money. Palm jaggery can be converted into molasses and refined sugar. But the jaggery is much more useful than refined sugar. The salts present in the jaggery are lost in the process of refining. Just as refined wheat flour and polished rice lose some of their nutritive value because of the loss of the pericarp, refined sugar also loses some of the nutritive value of the jaggery. One may generalize that all foodstuffs are richer if taken in their natural state as far as possible.

Taking of tadi I naturally began to talk of nira and from that I went on to the topic of jaggery. But let us return to liquor for the moment.

None of the public workers perhaps have the same bitter experience of the evils of the drinking as I have had. In South Africa, most of the Indians going there as indentured labourers were addicted to drinking. The law there did not in my time permit Indians to take liquor to their houses except under a medical certificate. They could go to the drinking booths and drink as much as they liked. Even the women had fallen victims to this evil habit. I have seen them in the most pathetic condition. One who has seen those scenes near the public bars will never support drinking.

African Negroes were not given to drinking originally. Liquor may be said to have simply ruined them. Large numbers of Negro labourers are seen to waste all their earnings in drinking so that their lives become devoid of any grace.

And what about Englishmen? I have seen respectable Englishmen falling in the gutter under the effect of alcohol. There is no exaggeration in this statement. During the war many Englishmen had to leave the Transvaal. Some of them

were taken in my home. One of them was an engineer and a good man in every way, when not under the effects of alcohol. He was a theosophist. Unfortunately, he was addicted to drink and lost all control over himself when he was drunk. He tried hard to give up the habit, but as far as I know he never succeeded.

On my return from South Africa to India I had a similar painful experience of the evils of drink. Several Princes have been and are being ruined by liquor. What applies to them applies more or less to many a rich youth. The condition of labour as a result of taking alcohol is also pitiable. That, as a result of such bitter experience, I have become a staunch opponent of alcohol, will not surprise the readers.

In a nut shell, alcohol one physically, morally, intellectually and economically.

08. OPIUM

The criticism leveled against alcohol applies equally to opium, although the two are very different in their action. Under the effect of alcohol a person becomes a rowdy, whereas opium the addict dull and lazy. He becomes even drowsy and incapable of doing anything useful. The evil effect of alcohol strikes the eyes every day, but those of opium are not so glaring. Anyone wishing to see its devastating effect should go to Assam or Orissa. Thousands have fallen victim of this intoxicant, in those provinces. They give one the impression on living on the verge of death.

But China is said to have suffered the most from the evils of opium. The Chinese possess a better physique than the Indians. But Chinese addicted to opium look miserable and more dead than alive. An opium addict will stoop to anything in order to procure his dose of opium.

Several years ago, what is known as Opium War took place between China and Great Britain. China did not wish to buy opium from India. But the English wanted to impose it on China. India was also to blame in that several Indians had taken opium contacts in India. The trade paid well and the treasury received crore of rupees as opium revenue. This was obviously an immoral trade and yet it went on flourishing. Finally, as a result of a mighty agitation in England, it was stopped. A thing of this type, which simply ruin people, should not be tolerated for a single minute.

After having had my say on opium as an intoxicant, I must admit that its place in Material Medic is incontestable. It is impossible to do without this drug medical agents. But that can be no reason for using it as a intoxicant. Opium is a well-known poison and its use as an intoxicant should be strictly prohibited.

09. TOBACCO

Tobacco have simply worked havoc among mankind. Once caught in its tangle, it is rare to find anyone get out again. The use of tobacco is prevalent all over the world in one form or another. Tolstoy has called it the worst of all intoxicants. This verdict of that great man should command our attention and respect. He had freely indulged in the use of tobacco and alcohol in his early days and was familiar with the harmful effects of both. I must admit, however, that in spite of this, I cannot talk about the evils of tobacco with the same authority knowledge as in the case of opium and alcohol. But I can certainly say that I am not aware of a single advantage occurring from the use of tobacco. Smoking is an expensive habit. I know of an Englishman who used to spend five pounds, i.e., seventy-five rupees on tobacco every month. His monthly earning was twenty-five pounds, so that he smoked away one fifth of his monthly income.

Tobacco smokers become callous and careless of others' feeling. Non-smokers generally cannot bear the smell of tobacco smoke, but one often comes across people in railway train and tramways who just go on smoking, heedless of feeling of their neighbors. Smoking causes salivation and most smokers have no hesitation in spitting anywhere.

Tobacco smokers' mouth emits a foul smell. Probably tobacco kills the finer feelings and perhaps it is to this end that men take to smoking. There is no doubt that tobacco is an intoxicant and while under its effects one forgets one's worries and misfortunes. One of Tolstoy's character had to do a ghastly deed. Tolstoy's makes him drink liquor at first. The man was to murder someone. In spite of the effects of liquor, he hesitated to do so. Lost in thought he lights a cigar and begin to smoke. As he watches the smoke curling up he exclaimed, "what a coward I am! When it my duty to commit this murder, why should I hesitate to do so? Get up, go ahead, and do your job." Thus his wavering mind finally decided to commit it. I know, this argument is not very convincing. All smokers are not bad men. I know that millions of smokers seem

to live ordinary straightforward lives. All the same the thoughtful should ponder above quotation. What Tolstoy perhaps means is that smoker keep on committing minor crimes which generally pass unnoticed.

In India people use tobacco for smoking, snuffing and also for chewing. Some believe that snuff produces a benefit effect, and they use it under the advise of vaidas and hakims. I think that it is not necessary. A healthy man should never have such requirements.

As for chewing tobacco, it is the dirtiest of all the three ways in which tobacco is used. I have always maintained that its uselessness is a mere figment of the imagination. I have found no reasons to change my opinion. There is a popular saying in Gujarati which says, all the three are equally guilty: the smoker fills his house with smoke, the chewer dirties every corner and the snuffer his clothes.

Tobacco sheers, if they are sensible, keep a spittoon at hand. But the vast majority spit on the floor, in the corners and on the wall unabashed. The smoker fills his house with smoke and runs the rash of it catching fire, and he takes snuff soils his clothes. If there are any who keep handkerchief and thus save their clothes from soiling, they are exception that prove the general rule. Lovers of health, if they are slaves to any of these evil habit, will resolutely get out of the slavery. Several people are addicted to one, two or all the three of these habits.

They do not appear loathsome to them. But if we think over it calmly, there is nothing becoming about blowing of smoke or keeping the mouth stuffed with tobacco and pan practically the whole day long or opening a snuffbox and taking snuff every now and then. All the three are most dirty habits.

10. BRAHMACHARYA

Brahmacharya literally means that mode of life which lead to the realization of God. That realization is impossible without practicing self-restraint. Self-restraint means restraint of all the senses. But ordinarily brahmacharya is understood to mean control of sexual organs and prevention of seminal discharge through complete control over the sexual instinct and the sexual organs. This becomes natural for the man who exercises self-restraint all round. It is only when observance of brahmacharya becomes natural to one that he or she derives the greatest benefit from it. Such a person should be free from anger and kindhearted passion. The so called brahmacharis, that one generally comes across, behaves as if their one occupation in life was the display of bad temper.

One notices that these people disregard the ordinary rules of brahmacharya and merely aim at and expect to prevent seminal discharges. They fail to achieve their object. Some of them become almost insane while others betray a sickly appearance. They are unable to prevent the discharge and if they succeed in restraining themselves from sexual intercourse, they think that they have attained all that was needed. Now mere abstention from sexual intercourse cannot be termed brahmacharya. So long as the desire for intercourse is there, one cannot be said to have attained brahmacharya. Only he who has burnt away sexual desire in it's entirety may be said to have attained control over his sexual organs. The absence of seminal discharges is a straightforward result of brahmacharya, but is not all. There is something very striking about a full-fledged brahmachari. His speech, his thought, and his action, all bespeak possession of vital force.

Such a brahmachari do not flee from the company of women. He may not hanker after it nor may he avoid it even when it means rendering of necessary survive. For him the distinction between men and women almost disappears. No one should distort my words and use them as an argument in favor of licentiousness. What I mean to say is that, a man whose sexual desire has been

burnt up ceases to make a distinction between men and women. It must be so. His conception of beauty alters. He will not look at the external form. He or she whose character is beautiful will be beautiful in his eyes. Therefore, the sight of women called beautiful will not ruffle or excite him. Even his sexual organs will begin to look different. In other words, such a man has so controlled his sexual instinct that he never gets erections. He does not become impotent for lack of the necessary secretions of sexual glands. But these secretions in his case are sublimated into a vital force pervading his whole being. It is said that an important man is not free from sexual desire. Some of my correspondents belonging to this group tell me that they desire erection but they fail to get it and yet have seminal discharges. Such men have either become impotent or are on the way to become so for loss of the necessary secretions. This is a pitiable state. But the cultivated impotency of the man, whose sexual desire has been burnt up and whose sexual secretion are being converted into vital force, is wholly different. It is to be desired by everybody. It is true that such a brahmachari is rare to find.

I took the vow of brahmacharya in 1906. In other words, my efforts to become a perfect brahmachari started 36 years ago. I cannot say I have attained the full brahmacharya of my definition, but in my opinion I have made substantial progress towards it. If God wills it, I might attain even perfection in this life. Anyway, there is no relaxation of efforts nor is there any despondence in me. I do not consider 36 years too long a period for effort. The richer the prize, the richer the effort must be. Meanwhile, my ideas regarding the necessity for brahmacharya have become stronger. Some of my experiments have not reached a stage when they might be placed before the public with advantage. I hope to do so some day if they succeed to my satisfaction. Success might make the attainment of brahmacharya comparatively easier.

But the brahmacharya on which I wish to lay emphasis in this chapter is limited to the conservation of sexual secretions. The glorious fruit of perfect brahmacharya is not to be had from the observance of this limited

brahmacharya. But no one can reach perfect brahmacharya without reaching the limited variety.

And maintenance of perfect health should be considered almost an utter impossibility without the brahmacharya leading to the conservation of the sexual secretions. To countenance wastage of a secretion which has the power of creating another human being is, to say the least, an indication of gross ignorance. A firm grasp of the fact that semen is meant to be used only for procreation and not for self-indulgence, leaves no room whatsoever for indulging in animal passion. Assimilation of the knowledge that the vital fluid is never meant for waste should restrain men and women from becoming crazy over sexual intercourse. Marriage will then come to have a different significance and the way it is treated at present will appear disgusting. Marriage ought to signify a union of heart between two partners. A married couple is worthy of being considered dard brahmacharis if they never think of sexual intercourse except for the purposes of procreation. Such an intercourse is not possible unless both parties desire it. It will never be restored to in order to satisfy passion without the desire for a child. After intercourse which has been performed as a matter of duty, the desire to repeat the process should never arise.

What I am saying may not be taken as copy book wisdom. The reader should know that I am writing this after a long personal experience. I know that what I am writing is contrary to the common practice. But in order to make progress we have often to go beyond the limits of common experience. Great discoveries have been possible only as a result of challenging the common experience or commonly held beliefs. The invention of the simple match stick was challenged to the common experience and the discovery of electricity confounded all preconceived notions.

What is true of physical things is equally true of things spiritual. In the early days there was no such thing as marriage. Men and women, as in the case of animals, mated promiscuously. Self-restraint was unknown. Some advanced men went beyond the rut of common practice and discovered the law of self-

restraint. It is our duty to investigate the hidden possibilities of the law of self-restraint. Therefore, when I say it the duty of every man and woman to take the marital relations to the state indicated by me it is not to be dismissed as utterly impracticable. If human life is molded as it ought to be, conservation of vital fluid can become a natural thing for everyone.

The sexual glands are all the time secreting the semen. This secretion should be utilized for enhancing one's mental, physical and spiritual energy. He, who would learn to utilize it thus, will find that he requires very little food to keep his body in a fit condition. And yet he will be as capable as any of undertaking physical labour. Mental exertion will not tire him easily nor will he show the ordinary signs of old age. Just as a ripe fruit or an old leaves falls off naturally, so will such a brahmachari when his times comes pass away with all his faculties intact. Although with the passage of time the effects of the natural wear and tear must be manifest in his body, his intellects instead of showing signs of decay should show progressive clarity. If all this is correct, the real key to health lies in the conservancy of vital energy.

I gave here the rules for the conservation of vital force I know them.

1. Sexual desire has its root in one's thought. Therefore, complete control over through is necessary. The way to achieve it is this. Never let your mind remain ideal. Keep it filled with good and useful ideas. In other words keep thinking of whatever duty you have on hand. There need be no worry about it, but think out how can you become an expert in your department and then put your thoughts into action. There should be no waste of thoughts. Japa (repetition of God's name) is a great support when ideal thoughts haunt you. Contemplate God in the form you have pictured Him unless you know Him as formless. While japa is going on, no other thoughts should be allowed to enter one's mind. This is the ideal state. But if one cannot reach it and all sorts of uninvited thoughts invade one's mind, one should not become disheartened. Namajapa should be continued faithfully and in the confidence that ultimate victory is bound to follow.

2. As with our thoughts, so with our reading and talking. These should be healthy and clean. Erotic literature should be avoided. Idle, incidence talk leads to indecent action. It is obvious that one who do not wish to feed his animal passions will avoid occupations which tend to include them.

3. Like the mind, the body must also be kept well and usefully occupied, so that the fatigue of the day may lead to refreshing dreamless sleep. As far as possible, work should be in open. Those who for some reason or the other, cannot undertake physical labour, should make it a point to take regular exercise. In my opinion, a brisk walk in the open is the best form of exercise. During the walk the mouth should be closed and breathing should be done through the nose. Sitting or walking, the body must be held erect. To sit or stand otherwise is a size of laziness and laziness is the enemy of self-restraint. Yogic exercises-*asanas*-are also useful. This much I can say from my personal experience that one who keeps his hands and feet, eyes and ears, healthily occupied does not have much difficulty in controlling the animal appetite. Everyone can test this for himself.

4. A Sanskrit text say that a man becomes what he eats. A glutton who exercises no restraint in eating is a slave to his animal passions. One who has not been able to control his palate, will never be able to control the other senses. If this is true, it is clear that one should take just enough food for the requirements of the body and no more. The diet should be healthy and well-balanced. The body was never meant to be treated as a refuse bin holding the foods that the palate demands. Food is meant to sustain the body. His body has been given to man as a means of self-realization. Self-realization means realization of God. A person who has made this realization the object of his or her life, will never become a slave to the animal passion.

5. Man should look upon every woman as his mother, sister or daughter. No one ever entertains impure thoughts with regard to his mother, sister or daughter. Similarly, women should look upon every man as her father, brother or son.

I have given more hints than these in my other writing, but they are all contained in the five given above. Anyone who observes them should find it

easy to overcome what has been called the greatest of all passions. A person, who has real desire for brahmacharya, will not give up the effort because he or she regards the observance of these rules as impossible or at least within the reaches of one in a million. The effort is a joy in itself. To put it in another way, the joy of possessing perfect health is not to be compared with any other, and perfect health is unattainable by slaves. Slavery of one's animality is perhaps the worst of all.

A few words about contraceptives will not be out of place here. The practice of preventing progeny, by means of artificial methods, is not a new thing. In the past such methods were practiced secretly and they were crude. Modern society have given them respectable place and made improvements. They have been given a philanthropic grab. The advocates of contraceptives say that sexual desire is a natural instinct-some call it a blessing. They therefore say that it is not suppress the desire even if it were possible. Birth control by means of self-restraint is, in their opinion, difficult to practice. If a substitute for self-restraint is not prescribed, the health of innumerable is bound to suffer through frequent pregnancies. They add that if births are not regulated, over population will ensue; individual families will be pauperized and their children will be ill fed, ill clothed and ill educated. Therefore, they argue, it is the duty of scientists to devise harmless and effective methods of birth control. This argument has failed to convince me. The use of contraceptives is likely to produce evils of which we have no conception. But the worse danger is that the use of contraceptives bids fair to kill the desire for self-restraint. In my opinion it is too heavy a price to pay for any possible immediate gain. But this is not the place to argue my point. Those who would like to pursue this subject further should procure the booklet called Self-Restraint v. Self Indulgence read the digest what I have said therein and then do as their heads and heart may dedicate. Those who have not the desire or the leisure to read booklet will, if they follow my advice, avoid contraceptive as poison. They should try their best to exercise self-restraint. They should take up such activities as would keep their bodies and minds fully occupied and give a suitable outlet to their energy. It is necessary to have some healthy recreation when one is tired by

physical labour. There should not be a single moment of idleness for the devil to creep in. In this way, true conjugal love will be established and directed into healthy channels. Both the partners will make a progressive rise in their moral height. The joy of true renunciation, once they come to know it, will prevent them from turning to animal enjoyment. Self-deception is the greatest stabling block. Instead of controlling the mind, the fountain of all animals desire, men and women involve themselves in the vain endeavor to avoid the physical act. If there is a determination to control the thought and the action, victory is sure to follow. Man must understand that woman is his companion and helpmate in life and not the means of satisfying his carnal desire. There must be a clear perception that the purpose of human creation was wholly different from that of the satisfaction of the animal wants.

PART II
NATURAL THERAPEUTICS

01. EARTH

These chapters are written in order to introduce the reader to this most important branch of therapeutics and tell him how I have made use of these methods in my own life. The subject has been touched upon in the foregoing chapters. It will be dealt here. The science of natural therapeutics is based on a use, in the treatment of disease, of the same five elements which constitute the human body. To refresh the reader's memory, these are earth, water, ether, sunlight and air. It is my effort to point out how they can be utilized for health purposes.

Up till the year 1901, although I did not rush to doctors whenever I happened to get ill, I did use their remedies to a certain extent. I used to take fruit salt for constipation. The late Dr. Pranjivan Mehta who had come to Natal introduced me to certain drugs to remove general lassitude. This led me to read literature on the uses of drugs. Add to this a little put in at a cottage hospital in Natal. This enabled me to carry on for some time, but none of the drugs did me to carry on for some time, but none of the drugs did me any good in the end. Headaches and loss of a sense of general wellbeing persisted. I was very dissatisfied with this state of things and what little faith I had in medicines began to fade.

All through this interval my experiments in dietetics were continued. I had great faith in nature cure methods, but there was nobody to help me with practical guidance in their use. With the help of whatever knowledge I could gather by reading little of nature cure literature, I tried to treat myself by diet regulation. My habit of going out for long walks also stood me in good stead, and thanks to that habit I did not have actually to take to bed. While I was thus managing to keep going somehow, Mr. Polak handed me just's book, called Return to nature. He did not follow just's instructions himself, except that he tried to regulate his diet more or less according to Just's teaching. But knowing me as he did, he thought I would like the book. Just lays great emphasis on the use of earth. I felt that I ought to give it a trial. For constipation, Just advises

cold mud poultice on the lower abdomen throughout the night. The result was most satisfactory. I had a natural well-formed motion the next morning and from that day onwards I have hardly ever touched fruit salt. Occasionally, I feel the need of a purgative and take less than a dessert spoonful of castor oil early in the morning. The mud poultice should be 3 inches broad, 6 inches long and 1 inch thick. Just claim that mud can cure man bitten by a poisonous snake. He would pack wet earth all round the body. I mention this for what it is worth. I would like to put down here what I have tested and proved applied to the head, relieves headache may be due to several causes, but whatever the cause, as a general rule, an application of mud poultice relieves it for the time being.

Mud poultices cure ordinary boils. I have applied mud to discharging abscesses as well. For these cases I prepare the poultice by packing the mud in a clean piece of cloth dipped in potassium permanganate lotion. In the majority of cases this treatment results in complete cure. I do not remember a single case in which it has failed me. Mud application immediately relieves the pain of a wasp sting. I have used it in many cases of scorpion bite though with much less success. Scorpions have become a nuisance in Sevagram. We have tried all the known treatments for scorpion bite, but none has proved infallible. I can say this that the results of mud application are not inferior to those of any other form of treatment.

In high fever, an application of mud poultice on the head and abdomen is very useful. Although it does not always bring down the temperature, it does invariably soothe the patient and make him feel better, so that the patients themselves ask for these applications. I have used it in several cases of typhoid fever. The fever no doubt runs its own course but mud applications seem to relieve restlessness and abate the suffering. We have had about ten cases of typhoid fever. I have not used any drugs in the treatment of these cases. I have made use of other nature cure methods besides mud poultices, but about those in their own place.

In Sevagram we have made free use of hot mud poultices as substitute for antiphlogistine. A little oil and salt is added to the mud and it is heated sufficiently long to ensure sterilization.

I have not told the reader what kind of earth should be used for mud poultices. In the beginning I used to procure sweet smelling clean red earth. It emits a delicate smell when it is mixed with water. But this kind of earth is not easy to obtain. In a city like Bombay it is a problem to get any kind of earth. It is safe to use soft alluvial clay, which is neither gritty nor sticky. One should never use of earth taken from manured soil. Earth should be dried, pounded, and passed through a fine sieve. If there is any doubt as to its cleanliness, it should be well heated and thus sterilized. Mud used as a poultice on a clean surface need not be thrown away after use. It can be used again and again after drying it in the sun or on fire and pounding and sieving it. I am not aware that mud poultice made out of the same earth again and again as described above, is any the less efficacious. I have myself use it in this way and did not find it any the less efficacious for repeated use. Some friends who regularly used mud poultices tell me that mud from Jumna's banks is particularly good for this purpose.

Eating Earth

Just writes that clean earth may be eaten in order to overcome constipation. Five to ten grams is the maximum dose. The rationale is said to be this. Earth is not disgusting. It acts as roughage and must pass out. The peristalsis thus stimulated pushes out of the faecal matter as well. I have not tried myself. Therefore those who wish to do so, should try it on their own responsibility. I am inclined to think that a trial or two is not likely to harm anyone.

02. WATER

Hydrotherapy is a well-known and ancient form of therapy. Many books have been written on the subject, but in my opinion the form of hydrotherapy suggested by Kuhne is simple and effective. Kuhne's book on nature cure is very popular in India. Andhra has the greatest number of Kuhne's followers. He has written a good deal about diet as well, but here I wish to confine myself to his experiments in hydrotherapy.

Hip bath and sitz bath are the most important of Kuhne's contribution to hydrotherapy. He has devised a special tub for use though one can do without it. Any tub thirty to thirty six inches long according to the patient's height generally serves the purpose. Experience will indicate the proper size. The tub should be filled with fresh cold water so that it does not overflow when the patient sits in it. In summer the water may be iced, if it is not cold enough, to give a gentle shock to the patient. Generally, water kept in earthen jars overnight answers the purpose. Water can also be cooled by putting a piece of cloth on the surface of the water and then fanning it vigorously. The tub should be kept against the bathroom wall and a plank put in the tub to serve as back rest. The patient should sit in the tub keeping his feet outside. Portions of the body outside the water should be kept well covered so that the patient does not feel cold. After the patient is comfortably seated in the tub, gentle friction should be taken for five to thirty minutes. When it is over, the body should be rubbed dry and the patient put to bed.

Hip bath brings down the temperature in high fever and given in the manner described above it never does any harm, and may do much good. It relieves constipation and improves digestion. The patient feels fresh and active after it. In cases of constipation, Kuhne advises a brisk walk for half an hour immediately after the bath. It should never be given on a full stomach.

I have tried hip baths on a fairly large scale. They have proved efficacious in more than 75 cases out of 100. In case of hyperpyrexia, if the patient's condition permits of his being seated in the tub, the temperature immediately

invariably falls at least by two to three degrees and, the onset of delirium is averted.

The rationale of the hip bath according to Kuhne is this. Whatever the apparent cause of fever, the real cause in every case is one and the same, i.e. accumulation of waste matter in the intestines. The heat generated by the putrefaction of this waste matter is manifested in the form of fever and several other ailments. Hip bath brings down this internal fever so that fever and other ailments which are the external manifestations there of subside automatically. How far this reasoning is correct, I cannot say. It is for experts to do so. Although the medical profession have taken up some things from nature cure methods, on the whole they have given cold shoulder to naturopathy. In my opinion both the parties are to be blamed for this state of affairs. The medical professions have got into the habit of confining themselves to whatever is included in their own curriculum. They present an attitude of indifference, if not that of contempt, for anything that lies outside their groove. On the other hand, the nature curists nurse a feeling of grievance against the medicos and, in spite of their very limited scientific knowledge they make tall claims. They take the spirit of organization. Each one is self-satisfied and works by himself instead of all pooling their recourses for the advancement of their system. No one tries to work out in a scientific spirit all the implications and possibilities of the system. No one tries to cultivate humility, (if it is possible to cultivate humility).

I have not said all this in order to belittle the work of the naturopaths. As a lay co-worker I wish them to see things in their true colour so that they may make improvements wherever possible. It is my conviction that so long as some dynamic personality, from among the naturopaths themselves, does not come forward with the zeal of missionary, things will continue as they are. Orthodox medicine has its own science, medical unions and teaching institutions. It has too a certain measure of success. The medical profession should not be expected to put faith, all of a sudden, in things which are yet to be fully tested and scientifically proved.

In the meantime the public should know that the specialty of nature cure methods lies in the fact that being natural, they can be safely practiced by laymen. If a man, suffering from headache, wets a piece of cloth in cold water and wraps it round his head, it can do no harm. The addition of earth to cold water enhances the utility of the cold pack.

Now about the size or friction bath. The organ of reproduction is one of the most sensitive parts of the body. There is something illusive about the sensitiveness of the glans penis and the foreskin. Anyone, I know not how to describe it. Kuhne has made use of this knowledge for therapeutic purposes. He advises application of gentle friction to the outer end of the external sexual organ by means of a soft wet piece of cloth, while cold water is being poured. In the case of colour. The sheet used for these patients, should afterwards be sterilized by soaking it in boiling water leaving it in it till it cools down sufficiently and then washed with soap and water.

In cases where circulation has become sluggish, the leg muscles feel sore and there is a peculiar ache and feeling of discomfort in the legs, an ice massage does a lot of good. This treatment is more effective in summer months. Massaging a weak patient with ice in winter might prove a risky affair.

Now a few words about the therapeutics of hot water. An intelligent use of hot water gives relief in many cases. Application of iodine is a very popular remedy for all injuries and the like. Application of hot water will prove equally effective in most of these cases. Tincture of iodine is applied on swollen and bruised areas. Hot water fomentations are likely to give equal relief, if not more. Again, iodine drops are used in cases of earache. Irrigation of the ear with warm water is likely to relieve the pain in most of these cases. The use of iodine is attended with certain risks. The patient may have allergy towards the drug. Iodine mistaken for something else and taken internally might prove disastrous. But there is no risk whatsoever in using hot water. Boiling water is as good a disinfectant as tincture of iodine. I do not mean to belittle the usefulness of iodine is one of the few drugs which I regard most useful and necessary, but it is an expensive thing. The poor cannot afford to buy it and

moreover its use cannot be safely entrusted to everybody. But water is available everywhere. We may not despise its therapeutic value because it is obtained so easily. Knowledge of common household remedies often proves a godsend in many crisis.

In cases of scorpion bite where all remedies have failed, immersion of the part in hot water has been found to relieve the pain to a certain extent.

A shivering fit or a rigor can be made to subside by putting buckets of hot boiling water all round the patient who is well wrapped up or by saturating the atmosphere of the room with steam by some other device. A rubber hot water bag is a most useful thing, but it is not to be found in every household. A glass bottle with a well fitting cork, filled with hot water and wrapped in a piece of cloth, serves the same purpose. Care should be taken to choose bottles that will not crack on hot water being poured into them.

Steam is a more valuable therapeutic agent. It can be used to make the patient sweat. Steam baths are most useful in cases of rheumatism and other joint-pains. The easiest as well as the oldest method of taking steam bath is this. Spread a blanket or two on a sparsely but tightly woven cot and put one or two covered vessels full with boiling water under it. Make the patient lie flat on the cot and cover him up in such a way that ends of the covering blankets touch the ground and thus prevent the steam from escaping and the outside air from getting in. After arranging everything as above, the lid from the vessels containing boiling water is removed and steam soon gets on to the patient lying between the blankets. It may be necessary to change the water once or twice. Usually in India people keep an angithi under the pots to keep the water boiling. This ensures continuous discharge of steam, but is attended with risk of accidents. A single spark might set fire to the blankets or to the cot and endanger the patient's life. Therefore, it is advisable to use the method described by me even though it might seem slow and tedious.

Some people add neem leaves or other herbs to the water used for generating steam. I do not know if such an addition increases the efficiency of steam. I do

not know if such an addition increases the efficiency of steam. The object is to induce sweat and that is attained by mere steam.

In cases of cold feet and legs, the patient should be made to sit with his feet and legs immersed up to the knees in as hot water as he can bear. A little mustard powder can be added to the water. The foot bath should not last for more than fifteen minutes. This treatment improves the local circulation and gives immediate relief.

In cases of common cold and sore throat a steam kettle which is very much like an ordinary tea kettle with a long nozzle can be used for applying steam to the nose or throat. A rubber tube of required length can be attached to any ordinary kettle for this purposes.

03. AKASH (ETHER ?)

Akash is difficult word to translate as are indeed all the other four elements so called. For pani is not mere water in the original, nor Vayu wind, or prithvi earth, or teja light. Akash is either least of all. Perhaps the nearest equivalent is emptiness taken in its literal sense. And it is horribly in expressive of the original. All the five in the original are as living as life. If however we take either as the nearest equivalent for akash, we must say that we know very little about ether itself and akash much less. Our knowledge of its therapeutic uses is still more limited. Akash might be taken for the empty space surrounding the earth and the atmosphere round it. On a clear day, on looking up, one sees a beautiful mauve blue canopy which is known as the akash or sky. So far as we are concerned, this sky or the ether is limitless. We are surrounded by it on every side, and there is no nook or corner without it. Generally we imagine that the sky is something resting upon the high it is the blue canopy above us. But the sky is as much above is as below and all around us. We move round and round with the earth. Therefore the akash is round and everybody is within it. It is an envelope whose outermost surface is measureless. The lower strata of the akash for a number of miles are filled with air. But for this man would become suffocated in spite of the emptiness. True, we cannot see the air, but we can feel it when in motion. Sky out air say from an empty bottle and create a vacuum, but who can pump out the vacuum itself? That is akash.

This akash we have to make use of to maintain or to regain health. Air being most essential to sustain life, nature has made it omnipresent. But the omnipresence of air is only relative. It is not limitless in reality. Scientists tell that after a certain number of miles above the earth there is no air. It is said that earthy creatures cannot exist outside this atmosphere. This statement may or may not be true. All that we are concerned with here is that akash extends beyond the atmosphere. Some day the scientists might prove that what we call ether is also something which fills the empty space akash. Then we will have to discover a new name for the empty space that holds neither air nor the

ether. Be that a sit may, the mystery of this empty space all around us is most intriguing. We cannot solve it unless we can solve the mystery of God himself. This much might be said that the more we utilize this great element akash the healthier we will be. The first lesson to be learnt is this that we should not put any partitions between ourselves and the sky the infinite which is very near and yet very far away. If our bodies could be in contact with the sky without the intervention of houses, roofs and even clothes, we are likely to enjoy the maximum amount of health. This is not possible for everyone. But all can and should accept the validity of the statement and adapt life accordingly. To the extent that we are able to approach the state in practice, we will enjoy contentment and peace of mind. This train of thought taken to the extreme leads us to a condition when even the body becomes an obstacle separating man from the infinite. To understand this truth is to become indifferent to the dissolution of the body. For to lose oneself in the infinite is to find oneself. The body thud ceases to be a vehicle for self-indulgence. Man will make use of his body for the attempt he will discover that he is part of and one with all the life that surrounds him. This must mean service of mankind and through it finding God.

To return from the high flight, this train of thought will make the thinker keep his surrounding as open as possible. He will not fill the house with unnecessary furniture and will use the minimum of clothes that are necessary. Many households are so packed with all sorts of unnecessary decorations and furniture which one can very well do without; that a simple living man will feel suffocated in those surroundings. They are nothing but means of harbouring dust, bacteria and insects. Here in the house where I am under detention, I feel quite lost. The heavy furniture, chairs, tables, sofas, bedsteads, innumerable looking-glasses, all get on my nerves. The expensive carpets on the floors collect large amount of dust and act as a breeding place for insect life. One day the carpet in one of the rooms was taken out for dusting. It was not one man's work. Six men spent the afternoon in doing the job. They must have removed at least ten pounds of dust. When the carpet was put back in its place it had a new feel about it. These carpets cannot be taken out and dusted everyday.

Such treatment will wear out the carpets and greatly increase the expenditure of labour. But this is by way. What I mean to say is this that my desire to be in tune with the infinite has saved me from many complications in life. It led not merely to simplicity of house hold and dress but all round simplicity in the mode of my life. In a nutshell, and in the language of the subject under discussion, I have gone on creating more and more contact with akash. With the increase in the contact went improvement in health. I had more contentment and peace of mind and the desire for belongings almost disappeared. He who will establish contact with the infinite possesses nothing and yet possesses everything. In the ultimate analysis, man owns that of which he can make legitimate use and which he can assimilate. If everybody followed this rule, there would be room enough for all and there would be neither want nor overcrowding.

It follows that one should make it a point to sleep in the open. Sufficient covering should be used to protect oneself against the inclemencies of the weather against cold and dew. In rainy season an umbrella like a roof without walls should be used for keeping the rain out. For the rest, the starlit blue canopy should form the roof so that whenever one opens one's eyes, he or she can feast them on the ever changing beautiful panorama of the heavens. He will never tire of the scene and it will not dazzle or hurt his eyes. On the contrary, it will have a soothing effect on him. To watch the different starry constellations floating in their majesty is a treat for the eyes. One who establishes contact with the stars as living witnesses to all his thoughts will never allow any evil or impurity to enter his mind and will enjoy peaceful, refreshing sleep.

Let us descent from the akash above within and immediately about us. Thus the skin has millions of pores. If we fill up the empty space within these pores, we simply die. Any clogging in the pores therefore must interfere with the even flow of health. Similarly we must not fill up the digestive tract with unnecessary foodstuffs. We should eat only as much as we need and no more. Often one overeats or eats indigestible things without being aware of it. An

occasional fast, say once a week or once a unable to fast for the whole day, one should miss one is more meals during the day. Nature abhors a vacuum is only partially true. Nature constantly demands a vacuum. The vast space surrounding us is the standing testimony of the truth.

04. SUN

As in the case of the other elements, which have been already dealt with, man cannot do without sunlight. The sun is the source of light and heat. If there was no sun, there would be neither light nor warmth. Unfortunately we do not make full use of sunlight and consequently we are unable to enjoy perfect health. Sunbath is as useful as ordinary water bath though the two cannot replace one another. In cases of debility and slow circulation, exposure of the uncovered body to the morning sun acts as an all-round general tonic and accelerates the metabolism. The morning sun has the largest amount of ultra-violet rays which are a most effective component of the sun's rays. If the patient feels cold, he should lie in the sun covered up and gradually expose more and more of his body as he gets use to it. One can also take the sunbath pacing up and down in the sun without any clothes on, in a private enclosure or in other place away from public gaze. If such a place is not within easy reach, one can just cover up the private parts by trying up a piece of cloth or a langoti and expose the rest of his body to the sun.

I know and many persons who have been benefited by sunbaths. It is a well known treatment for tuberculosis. Sunbaths or heliotherapy is no longer confined to the sphere of naturopathy. Orthodox medicine has taken it up from naturopathy and developed in further. In cold countries, special glass buildings have been constructed under medical supervision, so that the glass lets in the sun's rays and at the same time protects patients against the cold.

Sun treatment often results in the cure of intractable ulcers. To produce sweating I have made patients lie in the sun at about 11 a.m., i.e a little before midday. The experiment has been successful and the patients are soon bathed in sweat. In these cases the head should be protected from the sun by means of a cold mud poultice. Banana or any other leaves can keeping the head cool and well protected. The head should never be exposed to strong sunlight.

05. AIR

This fifth element is as important as the four already discussed in the foregoing pages. The human body which is composed of the five elements cannot do without any one of them. Therefore no one should be afraid of air. Generally, whenever our people go, they make devices to keep out the sun and the air and thus jeopardize their health. If one cultivates the habit of living in the open in the midst of plenty of fresh air, right from childhood, the body will become hardened and he or she will never suffer from cold in the head and the like ailments. I have said enough about the importance of fresh air in an earlier chapter. There is no occasion, therefore, to repeat here what has already been said.