BELL BOOKS

THE NATURAL WAY OF HEALING

Dr J M Jussawala

"Kill the germs and cure the disease" is the watchword of modern medical science. But if you go germ-hunting for every disease you have or are in danger of getting, there is no end to inoculations, vaccination, etc., all of which poison the system. This wildgoose chase goes on while sickness and degeneracy continue.

Natural health, which has the ability to resist disease, is entirely different from artificial health. Dr Jussawalla, one of the leading nature cure experts in India, shows how this method can make a dramatic change in your life. By strict adherence to hygiene, sanitation, health foods, fresh air, sunshine, and exercise, you can live a healthier and happier life.

DR J. M. JUSSAWALLA is also the author of *Prevention is Better than Cure, Living the Vegetarian Way, Natural Dietetics, and Healing from Within.*

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Preface

"The practice of medicine is an art, not a trade; a calling not a business; a calling in which your heart will be exercised equally with your mind. Often the best part of your work has nothing to do with the patents and powders, but with the exercise of an influence of the strong upon the weak, of the righteous upon the wicked, of the wise upon the foolish. To you as the trusted family counseller, the father will come with his anxieties, the mother with her hidden griefs, the daughter with her trials and the son with his follies."

SIR WILLIAM OSLER

There is an enormous amout of writing on medicine and new books on the subject are written every year. But only that writing which has originality of thought, keenness of observation, and breadth of vision will live for all time.

One such work of great value from the point of view of the healing art in general, and of nature cure in particular, is that of Hippocrates, frequently called the father of medicine. Equally valuable are the works of Hanneman, the founder of homeopathy, Schussler, the founder of biochemistry, and Charaka, the founder of the ayurvedic system of medicine. These works live forever.

Various systems of medicine are practised in India—allopathy, homeopathy, ayurveda, unani, and nature cure. I believe that co-operation is needed between practitioners of these different systems. We should lay aside bigotry and narrowness, so that we can help one another to help suffering humanity. A closed mind and healing do not go together.

A physician has rightly said: "There is so much good in all systems of the healing art, it would be a crime to

belittle or ignore any of them, but there is so much bad in the best of them that it is not proper for one who uses a single method to fight all other methods." If all physicians understood this, not only would they do justice to the healing art, but they would also succeed nobly in their profession, considered the noblest of all.

Nature cure, which is complementary to other methods of healing, is an independent healing science. It is also a way of life. Unfortunately, in the minds of some doctors and many members of the public, nature cure does not stand for any definite school or scientific system of medicine. It is also an unfortunate fact that many who don't have he necessary training or legal qualifications claim to be practising nature cure.

I consider the time has come when nature cure should be standardized in India in order to give its rightful place among the sciences of healing. Only then can this valuable system and its accredited practitioners secure the legal recognition and the confidence of the public which they deserve.

This publication is primarily designed to be a sequel to my book *Healing from Within*, a treatise on the philosophy and theory of nature cure, but has been planned so that it can be read and understood independently. Those who want further background reading are referred to my earlier volumes, *Prevention is Better than Cure, Living the Vegetarian Way*, and *Natural Dietetics*. My thanks are due to Professor Nissim Ezekiel and my son Adil for editing the book.

Plato said: "This is the great error of our day in the treatment of the human body that physicians separate the soul from the body." The book is dedicated to my patients from whom I have studied, learnt, and understood mankind better by trying to solve their problems, physical, mental, emotional, and who have, in accordance with the principles and philosophy of nature cure, helped me to treat the body as a whole.

DR J. M. JUSSAWALA

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"If any man can convince one and bring home to me that I do not think or act aright, gladly will I change; for I search after truth, by which man never yet was harmed. But he is harmed who abideth on still in his deception and ignorance."

MARCUS AURELIUS ANTOMINUS

CHAPTER 1

Health and Nature Cure

Progress brings benefits. It also brings perils. Let's see what's gone wrong with the art of healing. We always seem to be talking of disease. Medical journals and medical literature abound in material on disease. It is rare on the other hand, to find any constructive writing on preserving or improving health. In spite of advances in the world of healing, disease and sickness are on the increase. Why ? Because the approach to health and disease is all along based on combative methods which include vaccination, inoculation, poisonous drugs, and mass medication not only for the ill but for those who are perfectly healthy.

Unfortunately, the almost total neglect of the laws of health and the universal use of drugs, sera, vaccines, etc., to cure disease produce a will-o-the-wisp state of affairs. No sooner is one disease considered cured than a new one is born from it. This is fully recognized by the medical profession itself. To quote the *British Medical Journals* : "As soon as we get an effective bactericidal agent, up crops the resistent strain, as soon as we immunize infants we get a susceptible adult population, as soon as we find the cause of a group disease and their specific treatment a new organism appears, e. g., the new virus still awaiting a viricide." It is high time we

realized that by chasing germs with drugs and bactericides we are not necessarily on the road to health.

"Kill the germs and cure the disease" is the watchword of modern medical science. If you go germ-hunting for every disease that you have got or are going to get, there will be no end to inoculations, vaccinations, sera, etc., poisoning the system in the belief that we are really immunizing the body "scientifically." Besides, new drugs are manufactured almost every few months, then discarded as offering nothing better than the old. This wildgoose chase goes on while sickness and degeneration continue.

It would not be out of place here to quote a scientist of distinction, W. Mitchell Stevans. He wrote:

> Up-to-date orthodox medical researches have been working either in cul-de-sacs or in circles constantly receding further from the centre. They have been obsessed with microbes or viruses and have been responsible for the idea that disease may be conquered by injecting man's long-suffering body in sera, vaccines, toxins or chemicals. Their work has a pernicious effect upon medical education so that the student is encouraged to lean upon laboratory findings and to disregard experience and observation; their work has encouraged specialization just as if the human body were divisable into a large number of more or less water-tight compartments and furthermore, the manufacturing chemists are innundating medical man and the general public with all kinds of preparations founded upon what they call 'medical science.'

Natural health, which has the ability to resist disease, is entirely different from artificial health. Natural health

is something which can only be achieved by strict adherance to hygiene, sanitation, health foods, fresh air, sunshine, exercise. In other words, the laws of health pertaining to body and mind.

The person who is not well naturally wishes to become well again as rapidly as possible. This instinctive desire leads people to use any treatment or remedy that promises to bring about speedy relief. Unfortunately, people use such expedients without considering that they may do permanent harm to the body or the mind. If a patients recovers, the remedy, however drastic it may have been, receives the credit; if a patient dies, the treatment is hardly ever blamed. This is because there is now a widespread, "scientifically" based belief among doctors that disease can only be overcome eventually through the use of the most powerfully destructive agents.

So instead of obeying nature's demand, we endeavour to suppress the symptoms by means of deadly drugs (even though in tolerated amounts). We work against the integrity of the body, for though symptoms may be subdued, the toxic overload of these drugs still needs to be reduced. This necessarily continues to operate against the interest of the body. When the symptoms are suppressed and the toxic overload remains, we have to deal with a critical toxic situation. The body is now faced with a double task to carry out in the near or distant future (depending on the circumstances)—the elimination of the symptom or dealing with it in some other way, perhaps more dangerous to continued life, as the toxic overload and the poisonous drugs may lead to chronic and degenerative disease, which at times becomes beyond repair. Hence the remedy becomes worse than the disease. Besides, the widespread and indiscriminate use of antibiotics leads to the development

of resistant strains of organism, and it is very likely that they may then transfer this resistance to other bacteria. Once the human body's natural defences are destroyed or weakened, patients are prone to even minor infections popularly known as "doctor-induced ailments" which can be very dangerous.

Thus the chief factor which leads to the spread of disease and causes ill-health is the drastic treatment of human bodies right from infancy in an attempt to cure and relieve disabilities. The second important factor is faulty nutritional habits from the moment of or before conception to the onset of disease and after. The third and most important factor is our so-called civilized life, based on ignorance and neglect of nature's simple laws of health, hygiene and sanitation, nutrition, and elimination. These are the three principal causes of disease and illness. Error grows so deeply rooted in our minds that our general habits appear to be wise and an individual's departure from them foolish and faddish.

The efficiency of any art of healing is to be judged not by suppressive measures considered as cures but by estimating the vast amount of suffering that has been relieved, the large number of operations avoided, the number of lives that have turned to actual living instead of merely existing, and the immense number of children who have been brought up in health instead of semi-health and disease. The great fact to be realized is that within the body itself lies the power to safeguard health and promote that natural resistence which is the surest preventive against disease. Any attempt to interfere with that prerogative, no matter how well intentioned, is only going to produce disharmony, and instead of better health there will be a proneness in one form or another to chronic or degenerative disease.

The more supposedly civilized people become, the more prone are they to violate natural laws, because civilization as it develops tends to make life increasingly artificial. In no realm is this more evident than in the treatment of disease.

If wrong habits of eating and living constitute the fundamental causes of ill-health as the philosophy of nature cure upholds, all the drugging, serumizing, and vaccinating one cares to employ will not improve one's health. It needs no scientific or academic training to enable one to recognize that the best way to cure disease is to remove the fundamental causes that produce it, and after studying the symptoms, to treat the body as a whole by going back to the root cause of the trouble.

The wonderful healing power of nature, therefore, should be considered and studied by doctors and patients before applying a remedy—except in cases of emergency or crisis. Any remedy that is suspected of causing serious complications should be guarded against.

In the past, quite a few eminent physicians have mentioned that the science of healing has gone astray. This needs to be emphasized more than ever today. Present-day diagnosis and treatment are more dependant on laboratory techniques and instruments of precision. Today, a specialist or consultant is highly qualified with laboratory techniques at his finger-tips, and is an expert in handling instruments for diagnostic purposes. However, he pays less attention to the clinical side of a case.

An average doctor or medical student leaving college is well-versed in analysis and diagnosis and has memorized thousands of names of diseases and symptoms. He begins his education with the catalogues of the big manufacturers of drugs, every disease and its analysis alphabetically arranged. Nowadays the system is to

prescribe patent medicines with hardly a specific prescription for a specific illness. The art of healing is being overshadowed by the science of medicine. There is a distinct division between basic science and clinical medicine which has led to a deterioration of the physician-patient relationship.

In fact, the progress of scientific medicine is felt by many to have far outstripped the personal care of the patient for whom it is meant. A recourse to instruments and tests is justifiable only after all clinical sources of information and examination have been fully exploited. According to one doctor, "We are in danger of losing our clinical heritage from pinning too much faith in figures thrown up by medicine."

Thus modern medicine is getting further away from the bedrock of clinical medicine. Our present system of medicine may be said to make people conscious of disease, not health, which can only be maintained by balanced diet, regular exercise, and outdoor games. Instead, people are encouraged to lead lives of indolence and luxury. There is always a drug to help them survive.

We have often heard of a patient who was at the doctor's for a check-up, and received a clean bill of health. There was nothing to worry about—cadiogram within normal limits, clinical, pathological, radiological findings all normal. Yet, two days later he is dead ! Why and how ?

We often hear of people who have never been sick in their lives suddenly dying. As there were no premonitory symptoms, sudden death is generally attributed to enbolism, thrombosis, or coronory. "Earth covers up the doctor's mistake," it is said. Yet, autopsies would show that the trouble which brought their end had been gaining ground for years.

It is well to remember that there are many conditions hidden deep down in the forces of the body which laboratory and other fine tests are unable to reveal. Diagnosis of a disease is important but what is more important is a diagnosis of the whole body, physical, mental, emotional, and spiritual. A disease is not an entity outside the body, something that attacks the system and so needs to be repulsed. It is a manifestation of a general symptomatic disturbance. The treatment which will succeed and have a lasting effect is one which affects the body as a whole. Bearing this in mind, the approach to health and disease should be positive and constructive. We need to revolutionize the modern methods of healing.

HEALTH VERSUS WEALTH

The greatest problem before the world today is how to save the human race from extinction through degeneracy. Ordinarily, that man is considered healthy who eats, drinks, lives an active life, and does not resort to a doctor. But it is not enough just to be free from any definite, diagnosable disease or to stay out of the sick bed. Health is a positive state of well-being meaning that every organ of the body is functioning normally and is in perfect functional balance with every other organ. Functional balance, therefore, is health, and functional imbalance is disease.

Modern society has been preoccupied with material values, and has neglected fundamental human values which are both material and spiritual. Not only has it failed to bring us happiness but it has shown itself incapable of preventing our deterioration. We must remember that from some points of view the quality of life is more important than life itself.

Do we realize how much health means to every one of us? Do we appreciate the fact that good health is the very bedrock of achievement? Busy as we are with the production and distribution of wealth, we seem to have forgotten that wealth cannot be enjoyed without good health. If we realized the value of health as fully as the value of wealth, we would not and could not continue to live as we do. There is not only a steadily increasing deterioration in the quality of the food we eat but also in the quality of man. Why? Because man today is judged or respected not for his quality but for his wealth. He adopts all possible means, fair or foul, to gain wealth. We are living in the kingdom of Mammon where wealth is considered more important than human life. We squander our health in pleasure, excitement, self-indulgence, and dissipation. That is why we find the diseases of wealth rampant today—heart ailments, cancer, obesity, gout, diabetes.

Most of us do not even know what real health means. We go through our lives in a condition that is neither real health nor active sickness. Rather than accept the truth that disease is the result of wrong living and wrong thinking, we willingly allow ourselves to be fooled with the theories that ill-health is due mainly to the stress and worry of life, to germs, to heredity, change of weather, and pressure of work.

We do not want to face the facts and realities of life. We do not want anyone to shatter our illusion that we are not really healthy but morbid, that we are not so overworked as overfed. We hate to believe that we do not need to have more and richer food to keep up our strength, that we need less but plain, wholesome food to keep our bloodstream pure and healthy. If a healer points out that the rational way to health lies along the

path of self-denial, self-control, and self-discipline, he only succeeds in making himself unpopular and, in the eyes of others, is either a quack or "unscientific."

I do not think I am wrong in stating that no medical school offers a course on health. In medical colleges, students are taught about all sorts of diseases, but it is rare to find any extensive emphasis on health. Sound health is an inestimable blessing and the only way to maintain it is through care of the body. There are laws of hygiene and health which govern our whole being. In the vast universe, man alone is the breaker of laws, and the violator of rules. He disregards the laws of health, leads a life of dissipation, and then wonders why he suffers from disease and disharmony. He ignores the rules of hygiene and right living, knowingly or unknowingly, and then complains when he gets an incurable malady.

Dr Pyle rightly said that "persons who treat their bodies as they please and transgress rules of personal hygiene of which they should have a definite understanding, are physical sinners and they are not only committing a crime against themselves, but against their dependants and future generations." That is why it has been claimed by a great observer of the human condition, that there will come a time when unnecessary sickness will be made a crime, because it places a penalty on others who are not in any way to blame. As a general rule, man just relies on luck to escape from the risk of infectious disease or from diseased animals slaughtered for meat. He does not seem to worry much about his health. He considers himself quite safe in his medical fortress of doctors, *vaids*, and *hakims*. His main worry, which overshadows every other, is how to win wealth and status in society.

Thousands of chemists pour out drugs, pills, medicines, antibiotics, sleeping pills, and aspirins by the ton. For

the first time in the history of the world every human being is now subjected to contact with dangerous chemicals from the moment of conception until death. All this has come about because of the sudden rise and prodigious growth of an industry for the production of man-made synthetic chemicals with insecticidal properties. A drastic change has come about in the nature of the most serious public health problems.

As if this is not enough, young men and women are increasingly taking hard and soft drugs like heroine and marijuana, and hallucinogens like L.S.D.

Health is not something that can be purchased in a bottle from a drug store, but is a condition built from within by our own vital processes. Health is in reality the physical effect of harmony in all phases of our existence, in body, mind, and spirit. It is the result of living in accordance with the natural laws that operate in the mind, emotions, and body of man. To build and maintain the maximum of health, it is necessary to see that our habits are correct and the laws of life are observed. They may be summarized as proper supply of fresh air and sunlight; regulated diet; regular exercise or *asanans* and deep breathing; rest, relaxation, repose and sleep; strict cleanliness, internal and external; and the right attitudes of mind.

By this we do not mean that we should become fanatics on the subject of health or conscious of health all the time. A sane routine, consisting of the items listed above leaves us free for other things of great importance. We should make right and healthful living a means to an end and not an end in itself. Whatever our ambitions, regardless of the nature of our future plans, the indispensable means of achieving them is health. Buoyant, dynamic health is worth untold treasures. Upon this

one can build all kinds of wealth—financial, mental, moral, and spiritual.

Health is man's normal condition and his birthright. It is disease that is an abnormality, a predictable result of wrong patterns of living, including various combinations of wrong diet, wrong emotions, wrong thoughts, wrong daily hygiene, drastic drug treatment, and artificial habits. We must realize that most of our troubles are self-created and controllable only through self-management and self-discipline. Instruction in the art of living should always begin in early life, when the principles can be grasped more easily than in adulthood when we have already formed rather fixed habits and follow certain patterns of living detrimental to our health.

We see our friends and relatives disappearing one by one into a hospital to emerge minus a gall bladder or an appendix, or going through a hysterectomy in fear of cancer. We notice that they take pills and medicine to enable them to digest their food and excrete it, that they have to support their feet with steel arches, their backs and abdomens with surgical belts and rupture pads, and their necks with collars. They live on vitamin supplements and pain killers.

In the homes of the wealthy and refined the doctor is called for every passing ailment. It is, therefore, not surprising that these victims, in spite of employing armies of physicians, surgeons, and others to keep them in health, are permanently ailing and seem never to enjoy good health, generally making their lives and the lives of their near dear and ones miserable.

In my opinion, the sick should be taxed, and the family doctor should be paid or given his fee only so long as the patient stays well. He should have fixed fees for keeping the patient healthy. Of course, if this happens in our

present set-up, many doctors will find themselves unemployed. A return to the natural laws and principles of health is our only salvation.

A TOPSYTURVY WORLD

It was Mark Twain who said, "This is a fool's civilization, so do not try to excuse it in any way. Only posterity will be able to judge it properly." Why wait for posterity to judge it when we can judge the age ourselves? Its new ideology is "new morality," "new freedom," and "new security."

The new morality is no morality at all. It is generally unlicensed sex and open adultery. The new freedom is nothing but a step towards destruction. It is disrespect for law and order, and for the rights of others. It is a type of individualism that is destructive of "freedom under law" which is the only kind of liberty that can prevail. When the new freedom is found to be lawlessness it is recognized for what it really is—anarchy. The new security is equally dangerous but in a different way. It always places the load of responsibility on the other fellow! It destroys individual initiative, and leads to the false demand that "the world owes me a living."

We are living in an age of rapid change, and much of that change consists of overlooking the basic principles of life. The so-called modern philosophy appears to allow for more independence and pleasure and less responsibility. In our present surge of progress we find the world moving in two directions. In many fields, chiefly science, we are really moving forward. But at the same time we have rapidly regressed by discarding many of the basic ideas which made our society, nation, and the world great.

What else do we expect in our confused race for pleasure and wealth? We must look to the harvest which is here already. "As you sow so shall you reap." Philosophies which break down morals, encourage lawlessness, and plant the seeds of irresponsibility can only destroy us.

Health, in this "modern, scientific, civilized world" is a paradox when we come to realize the unnatural conditions imposed on us by modern living. Our artificial civilization encourages evils that destroy sound principles. Custom and fashion are at war with nature, the principles they enjoin and the indulgence they foster steadily decrease both physical and mental strength. They force an intolerable burden on the race.

Today we are concerned with a different kind of hazard that lurks in our environment, a hazard we ourselves have introduced as our modern way of life evolved. We breathe poison in the air, eat poison in food, drink poison in water and there is poison in the earth and on it. Insectides, herbicides, rodenticides—where do they all lead to? They may prove to be suicide for man. When asked if we should put florides in our water, iodine in our salts, chalk in our bread, experts and authorities say yes. The specialists advise us that such poisons or non-foods are now recommended in optimum amounts, that in such amounts any of these and many more which are routinely added are non-toxic, therefore, safe. These then become foods.

Someone has said that civilization means syphilization. As civilization advances, the use of cosmetics increases. Today both men and women use comestics and the incidence of skin disease is the same in both. The products which cause sensitization include hair dyes, hair tonics, hair lotions, lipsticks, nail polish, freckle creams, shaving lotions, etc.

Just as adulteration of food for commercial purposes has a damaging effect on health, the use of comestics without proper scientific control harms the body. This also applies to beauty parlours and to slimming and massage centres which are springing up like mushrooms. They are considered to be rather lucrative business. As a matter of fact, any art or science which is practised by unqualified persons for merely commerical purposes is not only detrimental to that art or science but is like playing with fire. A little knowledge is a dangerous thing.

Unfortunately much that is considered scientific is entirely unscientific. One man's meat is a million men's poison. There are ways and ways of making money, but why mislead people and ruin their health in the name of science. The increase of civilized ailments is indeed alarming. In order to make a successful change in this field, the problem of poison and pollution has to be decisively tackled. Apart from air, water, and food which is largerly contaminated by chemicals and radio-active matter, the abuses of alcohol, tobacco, and wrong nutrition must be attacked. Million are spent on research in combating and conquering disease but no money is spent in finding ways to maintain health and prevent sickness. It is high time now for physicians, health experts, nutritionist, hygientists, and physicists to intervene. Above all, mass health education, genuine government control, and public co-operation in this most vital matter is very necessary.

As we look around the world today we are appalled at what we see, for in this phase of evolution man really is the great destroyer. We destroy the soil with chemicals, we destroy the water with fluorine and chlorine. We destroy every form of life, in fact, we are intensely cruel to the animal kingdom. One could go on with one's list of man

humiliations and misery. Man is at the root of these because he makes money out of them. It is not the world which should change; it is we who need to change.

Practically any food the housewife brings is a risk to the health of her family. Vegetable oil is adulterated with argemone, coconut oil with lubricating oil, butter with animal fat, paper with horse dung, blotting paper is found in cheese and ice-creams, washing soda in dirty sugar, rice, and flour. Tea is mixed with the husk of gram, coffee with chicory, chillies, honey, aerated water and tomato juice with offensive colouring. Tinned food and fruit juices often cause metal poisoning because the tins contain antimony, cadium, lead, and arsenic. The list is never-ending. Where are we drifting in the name of science ? It is not science but sheer commercialization. We are sinking instead of soaring.

CHAPTER 2

Auto-Intoxication

Toxemia means poison in the blood. It may be poisoning from within or self-poisoning, which is at times called auto-intoxemia or auto-intoxication. Auto-intoxication refers to that endless chain of conditions produced by the poisoning of the system or any part of it through germs or chemical substances contained in or derived from the body.

Auto-intoxication may emanate from any organ, any tissue, any part. Life, as a chemical process, is present in every molecule of the body, so the production of poisonous substances as a result of imperfect or abnormal biochemism occurs anywhere in the body.

Through the researches of Bouchard, Kellog, and other investigators, especially most nature cure physicians, the subject of auto-intoxication has been established as second to none in the etiology of constitutional diseases. These include gout, diabetes, arterisoclerosis, senility, indigestion, sluggish liver, backaches, headaches, heartburn, cardaic trouble, sexual weakness, hermorhoids, obesity, gallstones, colitis, boils, pimples and other skin disorders, neurasthenia, gastritis, glandular disturbances, mental depression, and even insanity. It should be clearly understood thet there is no subject in clinical

medicine from which an element of auto-intoxication, particularly as a productive cause for symptoms of all sorts, can be eliminated. It may be safely said that auto-intoxication is the underlying cause of practically every disease which the body is heir to.

Clinically, it is the intestinal form of auto-intoxication that is of greatest interest. Intestinal toxemia, or to use a more up-to-date term, intestinal sub-infection, is probably the biggest subject in medicine today because of the ill-effects and diseases it engenders. It takes into its range every organ and tissue of the human body. A great many toxic conditions have their origin in the intestinal tract, particularly in the colon.

We have not hesitated to sacrifice teeth, tonsils, gall bladder, and appendics, only to discover to our dismay that all too often the patient presents an unchanged clinical picture following these sacrifices. While it is true that teeth, tonsils, gall bladder, etc. are frequently the seat of infection and should receive attention, yet in many instances the primary focal area, the colon, is overlooked. It can be stated without hesitation that the largest number of human ailments are due directly or indirectly to faulty elimination or a failure of elimination, and that the colon, the largest organ of elimination in the body, scarcely receives adequate attention.

Excessive putrefaction of the intestines, if continued for any length of time, is liable to produce a variety of fairly well-defined symptoms—headache, vertigo, anorexia, and nausea. It can also produce a general feeling of fatigue, that everlasting tired feeling, tired going to bed, tired getting up, loss of appetite, insomnia, melancholia, mental depression, loss of weight, unavoidable sweating (especially about the head), periodic attacks of indigestion or ptomaine poisoning, rheumatism, and skin eruptions

commonly caused by allergies due to absorption in the blood. Disintegrating poisons of hemolytic toxins from the intestinal tract are responsible for this, leading to a breakdown of health.

The whole trend of modern civilization is in the direction of devitalizing the intestinal canal and making it a source of disease and the cause of premature senility and death. This statement cannot be over-emphasized in view of the fact that it pertains to the vast majority of human beings who are at the beck and call of our so-called civilization. The life of the over-busy man, of the nervous woman, of the consumer of large quantities of food and drink, conventional life with its silly foibles and follies, all these have maintained auto-intoxication as largely responsible for ill-health. The results of this are, in many instances, obscure and hard to diagnose and are sometimes wrongly classified under neurosis and psychosis.

Our sanatoria and mental hospitals are full of cases that could be cured if obscure forms of poisoning from the intestinal canal were better understood. The vital and driving force in the mechanism of the human body has often been compared to a fire boiler, for just as the ashes and clinker of the latter have to be removed to keep the fire burning brightly, so does the human body require to be continually cleaned of its waste products. For this purpose it is provided with four eliminatory organs—the kidneys, the skin, the bowels, and the lungs. Thoroughly maintained in a good working condition, they are the *sine qua non* in the functioning of the human apparatus. It then functions steadily and effectively, preventing or minimizing auto-intoxication.

The widespread, I may say universal, prevalence of auto-intoxication, especially in the intestinal form, furnishes the best scientific argument for the many physical

therapeutic methods used by the science of nature cure in the prophylaxis and treatment of disease. In most acute and in all chronic diseases, the application of one or the other or all of these methods is unavoidable if the physician really desires to cure his patients according to the best knowledge of pathogenesis. No treatment of disease is complete without the application of such measures as will ensure the elimination of surplus toxins from the body. In fact, this procedure is so essential it should take precedence over all other curative measures. The following are some methods in the treatment of auto-intoxication.

(i) Fasting. Rightly understood and employed, there is no better method of speedy recovery of health than fasting. Fasting is merely a period of digestive or physiological rest during which the body is enabled to devote all its energies to eliminating the accumulation of waste poisonous matter from the system.

(ii) Elimination. Khune, the famous nature curist, rightly said, "Health is cleanliness." By that he meant cleanliness not only of the house, street, and one's clothes, but above all within the human body. It is the great panacea for all disease. The colon of the average member of civilized communities is in a desperately depraved and dangerous condition. Nearly all diseases of the heart, arteries, and kidneys are the result of the absorption of poisons from the intestinal span due to retention, constipation, and incomplete evacuation.

Even though a person's bowels move daily, he may still be constipated, and more than 95 per cent people suffer from auto-intoxication caused by delayed stool conditions. Mechanically, if the drainage is poor, absorption of toxins into the portal circulation is responsible for much of the pathology in the right quadrant. The efficient treatment

of colon stasis, as it is called, has always been a difficult problem. The only possible way of clearing and disinfecting the colon is to actually get into it. Colonic therapy rightly applied by one thoroughly familiar with the anatomy and physiology of the large bowel may produce surprisingly beneficial results.

One of the most important therapeutic agents in the treatment of disease by way of elimination and cleansing is colonic lavage (bowel wash). It is administered for the purpose of cleansing out the large intestines. In this way, the absorption of toxins is prevented and the nerve supply of the abdominal organs stimulated through the solar plexus, which is not infrequently in a semi-paralytic condition because of pressure from a distended transverse colon.

I suppose it would not be out of place to mention our experience of irrigating the colon. After using a gallon or two of water, the odour of the returns would suggest the opening of a cesspool or even worse, the odour of carrion or rotten fish. No diagnostic laboratory is needed to count the bacteria or to determine the nature of their virulence. Your eyes and nose are enough to convince you of the reason for your headache, neurotic symptoms, and the everlasting tired feeling, and several other conditions previously mentioned. The importance of colonic irrigation becomes clear if one thinks of a blood stream full of toxic material carrying blood to nourish the brain, heart, lung, and kidneys, especially if any of these organs is already crippled by disease or injury.

(iii) Sweat Baths. This is a valuable means of eliminating toxins from the system. The effect of heat, especially moist heat, upon the sebaceous or oil glands of the skin is to soften any plugs of accumulated secretions and extraneous matter and aid in their expulsion. At the same time this heat dilates the surface vessels of

the skin to their utmost extent. This not only promotes the removal of waste, but relieves internal congestion, a condition present in every individual whose skin fails to function properly and who does not sweat at least occasionally. The skin is the most important gland of our body and sweating is one of its most important functions.

(iv) Massage. This is considered a passive form of exercise, and softens and relaxes those parts of the body which have grown hardened and congested. It forces out of the tissues the stagnant and impure blood and brings in new arterial combustion and perfect elimination.

(v) Osteopathic and Chiropractic Treatment. This branch of work is indispensable in nature cure for the attainment of quick and complete results. Abnormal pressure or impingement of a nerve, or a blood vessel out of alignment or a misplaced vertebra or a contraction of connective tissue interferes with and may completely arrest the natural flow and exchange of blood and of nerve impulses between the different parts of the body, just as pressure on a garden hose or a kink in it interferes with or stops the flow of water from the hydrant. Osteopathic or chiropractic treatment relaxes the contracted tissues, replaces the dislocated bones, liberates and stimulates the flow of blood and nerve impulses, and by doing so removes the mechanical cause of the disease.

(vi) Hydrotherapy (water treatment). This is recognized by all schools of medicine today as one of the greatest and most beneficial methods of healing in existence. Water cure, when properly combined with a pure food diet, comes nearer to being a cure-all than any other therapeutic agent. Water is used by naturopathic physicians in many ways, both internally and externally. It is used in the form of packs, compresses, plain and medicated baths, steam baths, percussion or jet baths,

needle baths, sitz baths, and tub and mineral baths (spas).

(vii) Electrotherapy. In order to intensify the effects of his remedies, the nature cure physician takes the aid of another great natural force—electricity, which enables him to obtain quick results. Some of the ways it is used are in the form of radiant heat baths, infra red rays, colour rays, short wave diathermy, ultra-sound therapy, ultra violet rays, high frequency currents, and electronoets.

(viii) Psychology. Nature cure stands for a new understanding of this most important science. The tendency has been to use the science of psychology merely as a means of correcting bodily ailments and mental errors. This is good and necessary, but more is needed. Psychology should be employed more as an integrating factor, rather than an analytical factor. Most disorders can be traced to a failure in the individual to experience the joy of living. This failure is a common one, and endless time is spent, both by practitioner and patient, to combat its results by contrary means. As naturopathy attempts to deal with the causes rather than with the symptoms in man's physical structure, it approaches his mental and emotional structures in the same way.

(ix) Open Air and Sun Bath. Nature cure regards air and sun baths as very important healing factors. Man is an air-and-light animal, but for ages he has carefully secluded himself from the life-giving forces of air and light under layers of dense clothing, gloves, parasoles, and heavy shoes. In many instances, his clothing is so heavy and dense that it does not allow elimination of the porous exhalations of the skin, which is denied ventilation. The body is constantly bathed in and reabsorbs its own poisonous excretions. This is just as detrimental to health as sleeping in closed, unventilated rooms. Under such conditions the skin becomes weak and

anaemic and loses its power of reaction and elimination. As a consequence, the heavily-clad individual catches cold with every passing breeze.

(x) Exercise. This is the natural prophylactic to auto-intoxication. It would not be out of place here to say that the average adult today is soft and flabby. He overeats and under-exercises. This is particularly true of business and professional people and all those with sedentary occupations, from the clerk in the office to the director in the bank.

Of all animals man alone sits down on a cushioned chair and allows himself to deteriorate through lack of exercise. A few minutes of systematic exercise would undoubtedly benefit the lungs by keeping its millions of air cells in active use. It aids digestion and stimulates the body's vital combustion. In fact it has very far-reaching effects, influencing every organ and function of the body. Even the brain responds to it.

(xi) Diet. Last but not least. The average dietary is too rich in foods which clog without nourishing, which fill without feeding, and which lead to a retention of waste matter in the body. This waste matter gradually pollutes the whole system and gives rise to a multitude of symptoms. Wrong eating and drinking, therefore, are the most prolific of all the causes of disease. A regulation of our diet in harmony with nature's laws and principles are of prime importance in the treatment of acute and chronic diseases. This is such an important subject that it needs more space than I have here, and I shall take it up again in a later chapter.

Here I have merely tried to show how auto-intoxication is at the root of almost all our ailments and how these ailments need to be treated by removing the causes of auto-intoxication. It is a condition no doctor should lose sight of in his clinical diagnosis.

CHAPTER 3

Constipation

He who would cure constipation must address his remedies not to the expulsive power of the bowels but to the secreting power of the arteries. From the point of view of health, two of the most important things in life are taking the right type of food for the maintenence of the body and proper elimination of the waste products of the used material. This means that the two things that cause most diseases in our so-called civilized world are wrong food habits and poor elimination.

Constipation is insufficient action of the bowels in the passage of the contents of the intestine, causing hard, dry faeces due to the absorption of water, independent of organic disease, within or outside the bowels. Constipation or costiveness is a very common condition in which the bowels do not move often enough, or are not completely emptied when they move. The number of motions required for health varies from person to person. The majority of people have a motion a day, some have two a day, and others have one every other day. There are also cases where bowel movements do not take place for over a week without any apparent ill effects.

It is a good habit for the bowels to move regularly according to the number of meals per day. This would

normally occur shortly after each meal, since the taking of a new meal into the system is inclined to start peristalsis. In such cases the remnants of the meals taken twenty-four hours earlier should be completely evacuated shortly after the corresponding meal of the next day. Such cases no doubt represent the maximum condition of intestinal action and internal cleanliness and applies to persons in normal health.

The happy via medium between the two extremes, viz., no bowel movement for over a week and bowel movements after every meal is one clear bowel movement a day. This is generally considered normal. As said before, the number of motions varies from person to person as it pertains to the constitution of the individual as well as the pathological condition of the alimentary tract. There are cases of colitis, intestinal atony, sprue, general debility where even one bowel movement a day is too much as it leads to prostration, exhaustion, and even collapse.

On the other hand those who suffer from what we call constipation phobia (or fear of constipation), feel that there must be something radically wrong with them when they find that they do not achieve the unrealistic standards they have set up for their bowel actions.

From the physiological point of view the digestive organs of the human body are the most important. As soon as food is swallowed it enters the stomach where it remains for about three hours undergoing partial digestion. The stomach expels its contents into the small intestine, where digestion is completed later. The nutritive products of the food are absorbed in liquid form by the cells lining the intestine into the small veins of the gut, and these enter the bloodstream.

About five hours after a meal, the contents of the small bowel pass into the large intestine (the colon). While the small intestine is about twenty-two feet long, coiled upon itself and very active, the large intestine can contain more, though only five feet long. It is very true that 95 per cent of all diseases are due directly to constipation. A study of the colon and its operation will show why it plays so important a role in the maintenance of health.

The walls of the colon are elastic, they function mechanically, and bands of muscles surround this tube. Contraction of these muscles (peristalsis) press the waste onward and outward. If the muscles become flabby and weak the waste is not completely expelled and turns into cake and becomes dry and hard adhering to the intestinal walls. Under the natural heat of the body it decays, bacteria breed, and poisons are absorbed into the blood, leading to auto-intoxication. This toxic condition may manifest itself in one of many forms described in the previous chapter.

We must always remember that a normal stool is a formed mass, soft and yielding, with 75 per cent moisture. When there is a delay in emptying the bowel, the fluid is absorbed, with the result that a hard, dry stool is passed. The trouble is this may not always be seen as constipation.

The rate of the intestinal passage, measured by the time that elapses between the eating of food and the final elimination of the residue of the food from the body, is observed by the simple and harmless procedure of swallowing a capsule of powdered charcoal or carmine, a harmless red pigment, after a meal and noting the length of the time before the first discoloration appears in the faeces. Constipation induces anorexia and stasis of

the intestines which result in the release of several toxins in the system. This effects health and vitality and lowers the natural resistance, exposing the body to various types of infections.

It is well known that the contents of the colon are very toxic. Foul gases and poisonous compounds are generated therein during long continued constipation bringing about looseness of the coecal valve. The contents of the colon may even back up into the small intestine, where absorbtion is rapid. Hence the headache, nausea, migraine, dizziness, and loss of appetite that accompany constipation. Many other more serious disorders and diseases follow constipation as a result of the poison stored in the body. These poisons give rise to many degenerative diseases such as rheumatism, arthritis, neuritis, and other disorders.

The statement has often been made that many people remain constipated all their lives and yet live a so-called healthy and happy life. They may live in spite of constipation but never because of it. Others believe that the importance of constipation as a factor of disturbing health or aggravating disease has been greatly exaggerated. Perhaps with the exception of a very few cases, the condition produces a marked lowering of physical and mental efficiency, resulting in certain definite disease conditions. Dr Arbutnot Lane of London says : "Chronic intestinal stasis, which I believe to be the prime factor in the production of very many diseased conditions, is of enormous importance and we cannot spend too much time or thought in unravelling the many problems which it presents."

Constipation is not a manifestly evident disease like heart trouble or tuberculosis. Nor does it keep the effected person from attending to his usual activities. The

effects are not abruptly evident in these cases and, except for an occasional toxic headache, periodic lack of appetite, intermittent period of tiredness etc., which are accepted by the sufferer as commonplace and to be expected in the normal course of events, the effected person normally believes he enjoys good health. With the passing of time the symptoms described above become more frequent during the cumulative effects of these conditions.

Causes of Constipation

The cause of constipation without complications are myriad. Among the miscellaneous causes of chronic constipation are wrong food and too bland a diet without roughage; refined and rich food lacking in vitamins and minerals; insufficient intake of water; faulty, irregular habit of defecation; procrastination of evacuation or avoiding calls of nature; weakness of abdominal muscles due to sedentary habits or lack of exercise, repeated deliveries, general debility, senility, and frequent use of purgatives or laxatives; indiscriminate and over-use of enemas; insufficient food intake and chronic starvation; hard water; meat in large quantities; imperfect mastication or overeating which prevents the liver from acting, cooking for taste rather than nourishment; irregular habits of eating and drinking and lack of physical activity; and emotional stress and strain.

Constipation is also caused by other complications and organic diseases such as tumours or growths; inflamed piles and prolapse of the rectum; anal spasm, fissure, or fistula; viscroptsis; instussuseption (a telescoping of one part of the intestine into another); sluggish liver, hepatitis, and inactivity of liver; aftermath of diarrhoea, dysentery or illness, or drug colitis; spastic or flaccid condition of the intestine; anaemias of various sorts; changes in

digestive chemistry such as hypochloridia, or hyperacidity; diseases of the rectum and colon; cancer or other malignancies; sacculation; wrong combination of foods; poor teeth, improper chewing, and deficient mastication; uterine diseases, and retroverted uterus; diabetes; certain drugs used for treating other ailments, especially opium and its derivatives which inhibit intestinal secretion; tight condition of the rectal sphincters; abnormal condition of the lower spine; prolapse of the bowels or floor of the pelvis; and enlarged prostrate gland.

Symptoms that are popularly considered as indicating constipation are infrequency, irregularly, or difficulty of elimination due to either scantiness, dryness, or large, hard impactions. But there are numerous other symptoms such as furring of the tongue and offensive breath, while the complexion becomes sallow and muddy; loss of appetite; headache, dizziness, depression, and nausea; pigmented skin, urticaria, and boils; diarrhoea alternating with constipation; varicose veins; sciatica or pain in the lumber region; edema of the leg; langour or depression; and distention and gas dyspepsia. The origin of many nervous maladies lies in more or less chronic constipation, though the sufferer may be unaware of the fact. The treatment of constipation will depend upon the cause.

Acute constipation may be a temporary condition co-existent with and due to some acute abnormal condition of the body, to the use of drugs which inhibit the natural secretions, or to a sudden change in food or routine when travelling or during a long journey. Most chronic cases of constipation come on gradually and last for a considerable time.

The treatment of chronic constipation without complications or where there is no disease causing it consists of

following a rigid plan of action directed towards re-educating the bowels and giving up all artifical aids. Like every other abnormality, constipation must be attacked from all sides and its causes removed. Regular habits, the time of bowel movement, right diet, sufficient exercise, and a high standard of general health with good muscular tone are essential.

Constipation is a habit that is started among enlightened people early in life. As constipation is a habit, the overcoming of it must become a habit. Regularity in this matter is of utmost importance. The system can be trained in this particular habit to be as regular as clock-work, but the impulse must be headed when it makes a demand. If the impulse for expulsion is neglected or suppressed systematically, the body soon loses its rhythm, the impulse disappears, and the process must be started all over again by systematic education. Children should be trained from the earliest days to respond to the call of nature as soon as it occurs. It is also important to train the bowels so that the call comes at the same time every day.

When one is suffering from chronic constipation there is nearly always a subnormal functioning of the stomach and of many parts of the alimentary canal. The muscular tissues of the bowels have lost their tone, strength, and power to resist the influence of the overwork continually forced upon them. So with long continued constipation there is often dilation, an enlargement or ptosis, or sagging of some or all the organs that make up the alimentary tract.

The next important weapon in our battle against constipation is correct diet. A common custom among civilized people is to use refined foods, those from which the essential elements of nutrition have been removed.

These devitalized foods take a heavy toll on general health, especially of the muscular tone of the bowels, for it is necessary to have natural foods in order to have natural action.

Roughage such as is found in the bran of wheat, coarse vegetables and fruits is indispensable. It is nature's remedy. The nearer we approach a simple, natural diet, the less we shall be bothered by sluggishness of the bowels and its accompanying evils.

Figs, prunes, raisins, apricots, spinach and, other greens, whole-grain cereal products, wholemeal bread, tomatoes, honey, molasses, and all fruits have a laxative effect. Regular drinking of water is beneficial not only for constipation but also for cleansing the system, diluting the blood, and washing out poisons.

The sufferer from constipation usually seeks relief by using cathartics and purgative medicines. Although they give temporary relief they cannot cure constipation, and in the end they are most harmful. Purgative drugs stimulate the nerves and mucous membranes of the bowels and so exite peristalsis and evacuation. But if the use of such drugs is continued, the nerves and mucous membranes become dulled and lose their power. Larger doses are then taken, and finally, greatly increased doses, so that still greater injury results. The continued use of drugs gravely aggravates the condition they are supposed to overcome, and renders a permanent cure by rational methods doubly difficult. Drugs are, in fact, among the most frequent causes of habitual constipation.

Purgatives owe their action to the harsh chemical irritation which they set up in the bowels. The bowel muscles strain and flex in a violent effort to get rid of the irritant substances, the surrounding tissues are drained of moisture, and the bowel contents forcibly evacuated in a

liquid form. The exertion and strain which strong purgatives induce are comparable to the whipping of a tired horse. Accordingly, a period of inactivity in the bowel results due to strain and the weakening of the muscles. This leads to a greater dependence on purges! The whole cycle of purging has to be repeated over and over again, leading to pernicious degeneration of intestinal musculature. Such treatment, if presisted in, brings about a catarrhal condition of the intestine and often colitis.

There are two commonly used evacuants—liquid paraffin and castor oil. Liquid paraffin has the disadvantage that it coats the whole digestive tract, so there is interference with absorption of constituents leading to deficiency and avitaminoses. Being a mineral oil of the oil group product, continuous use of it may lead to malignancy. Besides, taking paraffin regularly and in fair quantities causes seepage as it passes out of the end of the bowels and soaks clothes. It is definitely not recommended for habitual use.

Castor oil is the better of the two and should not be entirely discarded on the plea that some untoward incidents may have happened in using it indiscriminately, especially in cases of inflamed or pathological intestinal tracts. Discretion is the better part of valour. It is a trend in the medical field to introduce or discard drugs without sufficient thought. Castor oil is not only used for bowel evacuation but also has therapeutic and curative values.

Good muscular tone is an important point in the treatment of constipation. Fresh air, particularly in the form of outdoor games, walking, and exercise play an important role in strengthening and activating the muscles, and this prevents constipation.

Generally, our bowel walls are in such a flaccid or relaxed condition that the mere provision of bulk for expulsion will not be sufficient, and so measures must be taken to build the muscular strength of the bowel walls. These measures involve daily exercises that strengthen the abdominal wall, cold sitz baths to tone the pelvic organs, and the daily practice of what may be termed colonic muscle persuasion, i.e., to visit the toilet at a particular time to train the bowels to move, whether the desire to evacuate is present or not. Care should be taken, of course, to avoid strain, but a few minutes should be spent daily in the toilet and at a fixed time.

Deeply kneading the abdomen with a rotary movement following the direction of the colon (clockwise) is helpful. Begin the kneading low down on the right side of the abdomen (caecum and ascending colon), work up to the lower border of the ribs (hepatic flexure), continue to the left side (transverse colon and splenic flexure) and then go downward to the lower left side of the abdomen (descending colon, Sigmoid). Repeat a number of times. Manual or mechanical vibratory massage has a restoring and stimulating effect in many cases.

Fasting is important. It is a direct and decided change from heavy eating to complete abstention from food. Fasting gives rest to the organs of digestion so that the depurating organs can function better. It is an overhauling process through which the packed contents of the bowels are driven out, toxins eliminated, and the bloodstream purified. A few days fast followed by fruit juices and a reform diet is not only helpful in curing constipation but is one of the best methods of treating chronic diseases. However, it should be done under proper guidance and conducted by an experienced naturopathic physician.

Cold sitz baths are often of great benefit because of their invigorating influence, especially when followed by a brisk walk. It may be necessary for those whose vitality is somewhat low to use hot sitz baths at first; or hot and cold sitz baths can be used alternately two or three times.

For an abdominal compress two or three thickness of cotton cloth from which cold water has been wrung should be applied to the abdomen and held in place by a piece of woolen flannel. A cold abdominal pack before going to bed and allowed to remain all night or until dry, will frequently be valuable in treating constipation. It will improve the circulation and add to the general vigour of the internal organs.

Sinusidal electrical modality to the abdomen has a remarkably direct effect in the case of simple loss of tone of the colon. Rectal dilation by means of solid dilators is excellent in cases of constipation due to a tight sphincter.

Drinking hot water with sour lime juice and half a teaspoon of salt is excellent for constipation. The water should be just hot enough to allow fairly rapid drinking. Half a cup of grape juice sweetened with a teaspoon of honey and mixed with half a cup of boiling water taken immediately after a meal will bring good results.

The drinking of warm liquids or of fruit juices upon rising in the morning seems to stimulate peristaltic action in some people. A more specific remedy is copiously drinking water which has been kept overnight in a brass vessel, or to keep twenty or thirty black raisins overnight in a glass of water, and after adding the juice and a pulp of lemon to it, to drink if first thing in the morning. Linseed is extremely useful in difficult cases of constipation. A teaspoon of linseed swallowed with

water before each meal provides both bulk and lubrication.

In the class of remedies that give varying reactions are the special cellulose products like bran, agar-agar, psyllum seeds and intestinal oils, and isabgool.

We may repeat here that all dry fruits, figs, prunes, raisins, apricots, and plums are laxatives. Also fresh fruits, especially grapes, figs, papayas, bananas, mangoes, grapefruit, and oranges. When desired, fruits may be eaten between meals. All green and leafy vegetables, especially spinach and french beans, tomatoes, whole-grain cereals, bran, honey, and molasses, also have a laxative effect. Those foods which constipate are all products made of white flour—bread, cakes, pastries, biscuits, cheese, fleshy foods, preserves, white sugar, and hard-boiled eggs.

Spastic constipation is best treated by the use of non-irritating, rather fine foods, together with considerable fats or oils. Oil used internally as a lubricant should be taken an hour and a half or two hours after meals. In spastic constipation, the oil should not be taken immediately after food in order to avoid interfering with digestion. Olive oil, agar-agar, isabgool, and psyllium, by virtue of the mucillage they engender and their ability to carry moisture throughout the intestinal canal are very helpful in spastic constipation.

It has to be remembered that a diet that may give quite satisfactory action for one man may prove highly constipating to another. As we know, the increase of bulk in the diet and the use of more cellulose is the most natural remedy for constipation. In colitis, sprue, and ulcers, a diet with a greater amount of roughage will make matters worse, This may occur either by causing a diarrhoeal condition or looseness of the bowels with the

passing of pieces of mucous membrane, and instead of a remedy becomes a danger and causes serious trouble.

Unfortunately, owing to the nature of modern life and its tensions, immediate results may not be expected in all the forms of treatment recommended above but with patience and perseverance one is bound to get results. We should keep in mind that a healthy colon is a self-regulating organ and will function normally unless there is something radically wrong, where constipation is due to other complications.

A person who has been constipated for many years cannot expect to be cured or relieved overnight, and some cases, if they are far gone, might never be completely cured. One rational treatment for immediate relief to be used when the bowels are very constipated is the enema. To render the body less toxic quickly, it is of great value to empty the bowel daily by this quite harmless method until, with the measures prescribed, a natural movement occurs.

The enema should only be used to clean the bowels until they begin to function normally on their own. The enema is generally used right up to the end of the first week of treatment, and every other night thereafter, as required. The enema or the "internal bath" as it is sometimes called, helps the cleansing of the colon, the principal sewer of the body. This particular method cannot be improved upon. Of course we should not depend entirely on the internal cleansing of the body, but should exercise and regulate our diet so that the alimentary canal will perform its duties without artificial aids.

Prevention of Constipation

The average person today, especially the sedentary worker, eats too much food. Because of the extravagant

amounts of food habitually eaten, in all kinds of unwise combinations, the patient is merely given medicines to overcome the immediate symptoms of his complaint. These patch him up for a time only to leave him with more complicated symptoms. A most important factor in preventing constipation is the taking of laxative foods and avoiding constipating foods such as those already described. The intake of an adequate amount of fluid between meals is also necessary. Those who need more fat in their diet should take more butter, ghee, cream, and oil.

Food shoud be properly chewed, hurried, untimely meals should be avoided, and the calls of nature should be attended to promptly. Daily exercise and walking are very important for everyone who does not obtain sufficient muscular exertion in the course of his day's work. This will improve the muscular tone and stimulate the liver.

Regular bowel habits should be formed. For this, an effort must be made at a fixed time to evacuate the bowels without straining, whether the impulse to do so is present or not. As far as possible, drinking water with meals should be avoided as it dilutes gastric juices essential to good digestion.

The desire for excessive drinking should always be regarded as a sign of disturbance or a symptom of disease. Eating hot and spicy foods can lead to excess sweating, which in turn makes the body demand excessive fluids. Just as overeating is bad for health so is overdrinking. Excessive amounts of water should be taken only in cases of urinary disorders like the retention of urine, calculus, and urinary infections. We should only drink water when we really want to. Very little water will be found to be necessary on a diet of raw foods and vegetables, as all natural foods contain a large amount of water.

CHAPTER 4

Slip Disc

Many have "slipped" over discs when in fact their obscure muscular pains are often due to spasms of the muscle fibres. Before the function of the intravertebral disc was fully known, the medical practitioner, who was as ignorant about "slip disc" as he was about poliomyelitis, treated slip disc cases as lumbago, sciatica, and backache. On the other hand, osteopaths, chiropractors, and bonesetters practised manipulations and mechanical adjustments many years earlier to treat such cases of "out of aligment" or a "misplaced vertebra" now known as "slip disc." Their success was often much greater than that of general practioners who used to treat their patients with anti-rheumatic and pain killers, losing precious time in the process. Now that they are aware of the disc problem, they send their patients to appropriate specialists, neuro or orthopedic surgeons.

Admittedly, the prolapse intervertibral disc is often responsible for sciatica and other complications, and if not treated in time can lead to paralysis. But what happens is that patients are turned into invalids by being made to rest for weeks on end and not being allowed to move without belts and supports, when instead they should be treated through manipulations, mechanical

adjustments, traction, treatment by ultra-sound therapy, and short wave or long wave diathermy. No belts and supports are required, only a straight, comfortable, and hard mattress. In most cases, this would save a lot of time and money. It would prevent psychological trauma and surgical interference.

Moving about with collars and belts, and fixing head and back rests in cars for support have become a fashion. It shows the degeneration of modern, civilized human beings who are incapable of standing up to any physical strain. Compare him to a labourer who carries heavy loads on his back and head and hardly shows any signs of cervical spondylosis or slip disc. We attribute today's epidemic of cervical spondyloses, disc lesion, slip disc, lumbago, and backache to weak muscles caused by our mode of living, faulty nutrition, tension, and emotional strain. In this age of mechanization, people are over-rested, overfed, over-stimulated, underdeveloped, and under-disciplined. Hence, when we treat cases of disc lesion, we should also consider the mode of living, lack of exercise, and faulty nutrition which cause toxic conditions, acidity, and weak and flabby muscles.

Regulated exercise, especially yoga under expert guidance, together with osteopathic or chiropractic treatment and traction are the first line of defence for such sufferers. A word of caution. Because of unused, stiff, flabby, and weak muscles, exercises should be done gradually, systematically, and scientifically to avoid further complications if the disc is involved. Besides, spinal adjustments have to be made with care, especially in the case of those who have been taking cortisone preparations (steriods) in large doses or for long periods of time as this tends to make the bones brittle and the chances of fracture are quite high. For advanced cases

of disc lesion, an orthopedic belt may be temporarily necessary in order to keep the injured portion straight and to prevent any sideways movement. But collars should never become permanent.

Backaches can be due to several factors such as weak muscles, wrong posture, sedentary life, flat feet, unbalanced body, rheumatic diathesis, fibrositis, arthritis prolapse of the uterus, pregnancy, hysterectomy, menstrual disorders, leucorrhoea, bone involvements like disc lesion, decalcification and degeneration, prolapse of the intervertebral disc, Pott's spine, Schaumann's disease, tubercular spine, tumour, and after spinal anesthesia. Backache can also be due to amoebic infestation, abdominal distension, viscroptosis, floating kidney, venal trouble, constipation, peptic ulcer, diabetes, sexual excess, mental tension, emotional strain, and above all, trauma.

The primary cause of a disc lesion is generally a history of trauma which a patient is not able to trace, as he is misled by the first few attacks of either a stiff neck or stiff back or some such pain in the arms or legs, which are often cured with hot-water bags or external application or infra-red rays. Suspected cases of disc lesion must be examined by X-ray. This examination may not always reveal a disc lesion, but it is very important to exclude any other pathological processes like fracture, arthritis, and T.B. A myolography may also be indicated but should be done only if a neuro-surgeon considers surgical intervention necessary.

CHAPTER 5

Poliomyelitis

Our first defence against the invasion of poliomyelitis, commonly known as infantile paralysis or polio, is knowledge—knowledge in order to safeguard ourselves, our families, and suffering humanity against the perils of one of the great crippling diseases. Poliomyelitis is aptly named, for *polio* means gray, *myelos* means spinal cord or marrow, and *itis* means inflammation of the gray matter of the central nervous system, a well-known characteristic of this disease. Its full name is acute anterior poliomyelitis, since it is the anterior (front) horn of the gray matter of the spinal cord that is primarily affected by the germ.

Infantile paralysis, however, is the term most frequently used, which, in a sense, is unfortunate, as people jump to the conclusion that the disease attacks only the young. This is not so, for individuals of all ages may get infected, although it is true that the majority of polio patients are children.

As the disease is caused by a virus of which there are many types or strains, it is believed that repeated exposure to small amounts of various strains of the polio virus—not enough to cause a recognizable form of the disease—produces an immunity to it. It is possible that more

children than adults are susceptible to an acute form of the disease because they have not had time to build a sufficient resistance to it. So it may be said that the disease most often attacks children between the ages of two and fifteen, though people of all ages contact polio.

We have said that infantile paralysis is caused by a special type of infective agent called a virus. A virus is a disease-agent much smaller than a germ, and cannot be seen even under the most powerful microscope. Unlike a germ, it grows only in living cells, and most rapidly in the nerve cells of human beings and monkeys. The virus of infantile paralysis is one of the smallest known, and grows in very few kinds of animals besides man. All races seem to be susceptible to it. In spite of difficulties, the virus has been isolated and to some extent identified. It attacks only the neurons, or nerve cells, feeding on these cells and injures them so that they become inactive and useless, and sometimes they die.

Earlier opinion held that the virus got into the body solely through the nasal passage and the olfactory nerve (the nerve of smell). It is believed that the virus can enter in at least two ways—through the mouth and intestinal tract or through the upper respiratory tract. The virus has affinity to and travels along the nervous system. If a person has had his tonsils or adenoids removed severals weeks or months before exposure to the virus, that region may still have sensitive tissues with perhaps exposed nerve endings. It is such unprotected nerve endings that the virus seeks. Once in the nervous system it can speed its way to the centre of its activity which is somewhere within the medulla of the spinal cord. That is why it is recommended that when children need to have tonsils or adenoids removed, the operation should be performed when polio is not prevalent.

Till very recently, general practitioners were not familiar with the symptoms of polio just as they were not familiar with the slip disc. Slip disc cases were formerly diagnosed as rheumatism, lumbago, or sciatica and treated accordingly. So also polio was formerly diagnosed wrongly. If the patient complained of not being able to walk after a short illness or fever it was taken as a sign of weakness or the aftermath of a particular illness. Having no knowledge of polio, the physician could hardly be expected to deal with it.

Polio is not a new disease or a new discovery. Like cancer, it has remained one of the most elusive problems of modern medicine. Though valuable information has now been accumulated after the most difficult research, yet certain essential knowledge is still lacking. It is clear that in order to control polio, a great deal of methodical, painstaking research will be necessary. So for the most hopeful development in the fight against infantile paralysis is the knowledge of how to care for its victims, of minimizing its crippling effects, and rehabilitating those already disabled.

The American president, Fraklin D. Roosevelt, a victim of polio, got it right when he said, "Those who today are fortunate in being in full possession of their muscular powers naturally do not understand what is meant to a human being paralyzed by this disease to have powerlessness lifted, even to a small degree. It means the difference between a human being hopelessly dependant on others—and an individual."

A method of treatment does not always restore the power of motion but good care and prompt treatment does help. Many polio patients have recovered completely. However, protracted and continous treatment is essential for the optimum recovery of those who have

been left with residual after-effects. If much damage leads to permanent paralysis, surgery has to be resorted to and paralyzed limbs or a paralyzed back has to be fitted with braces for support. It may be said that over and above everything, the morale of the patient has to be maintained. Polio victims can do an incredible number of things for themselves, and lead happy, useful lives.

Polio is unpredictable because the general symptoms of the disease vary widely from the most severe and even the fatal to those so mild that diagnosis is difficult. The severe form of the disease with its typical paralysis is not likely to be overlooked or mistaken for any other illness. But in the less severe forms there is a chance of confusion, and in the mildest form of the infection a diagnosis can be seldom, if ever, made.

The early signs of polio—symptoms like headache, sore throat, slight fever, diarrhoea or constipation are very like those of many other illness. There may be stiffness in the neck, or soreness in the arms, legs, and back. These may be symptoms of something else or of nothing important, but at the same time they cannot be neglected or overlooked as there have been cases where children have been treated for trivial symptoms like slight fever, a head-cold, a sore throat, only to reveal later that they have poor muscle co-ordination and are already down with polio.

Terror or trembling of the hands and other parts of the body, and pain and stiffness in the neck and back, irritability, apprehension, and vomiting are major and alarming symptoms. Any one or even all these symptoms may be absent or present at one time or another. However vague and varied the symptoms may be, they assume great significance, especially during an epedemic.

Polio is a generalized infection in which the tissues of the nervous system are involved and suffer more specifically than any of the other tissues in the body. The extent of the paralysis or palsy that attacks the various muscular tissues of the body depends upon the section of the spinal cord which the germ invades. In rare instances, the trunk and the facial muscles are involved, but usually the arms and legs suffer as the germ finds a better environment in that section of the spinal cord which governs the nerve and muscular functions of both the upper and lower extremeties. This particular form of paralysis claims the largest number of victims.

Types of Poliomyelitis

Probably the most common type of polio is the form least identified by the general public. It is known as "abortive polio" and is difficut to diagnose, since the symptoms are often overlooked. These symptoms may consist merely of headache, fever, vomiting, sore throat, or an upset stomach, and there is no evidence of paralysis. It is probably this form that helps to bring immunity to a vast number of persons.

If, on the other hand, the virus on reaching the central nervous system carries on pronounced activity, it will bring on the identifiable symptoms of polio. First of all, there may be merely a stiffness of the neck and back, but no paralysis. This type is know as non-paralytic poliomyelitis, and the nerve cells involved are not permanently disabled. It is known that of those children with recognized and definite polio, at least half get entirely well without any permanent paralysis.

Then there is paralytic poliomyelitis. Here, large numbers of the nerve cells are rendered useless, and the muscles which they enervate are unable to cause movement.

A person may become paralyzed in the arms, legs, or other parts of the body. The disease may also affect the muscles of respiration that cause the breathing action of the lungs. Unless this type of case is placed in an apparatus called the respirator or iron lung which mechanically expands the lungs, the person may not be able to breathe easily and may die.

At times the virus may settle in the region of the medulla, or "bulb," the thickened collection of nervous tissue at the upper end of the spinal cord. It is in this bulb that many of the vital nerve centres of the body are lodged. When the infection localizes in this region, it is known as bulbar polio. The virus lodging there may affect the nerves controlling the muscles of the throat, making it impossible to swallow or to speak clearly. That is why even the slightest difficulty in swallowing or speaking is a symptom to be watched carefully when polio infections are prevalent. Lodging in the medulla, the virus may affect the patient's breathing apparatus. For this type of polio, even the iron lung is of little use. Bulbar polio is very serious, though fortunately it is rarer than spinal polio, i.e., when the infection localizes in the lower regions of the spinal cord.

Both types of polio, spinal and bulbar, are aspects of the same illness, the only difference being the location of the virus and the extent of damage done to the nerve cells which control the various muscle activities.

Sources of Infection

At present there is no way of preventing polio and it is extremely difficult, if not impossible, to protect children from being exposed to infection. Though the paralytic type of polio does not run through a family, like measles, which is also a virus disease, it has been found that where

one person in a family has polio it is possible for other members to have the virus within their systems and still, to outward appearances, not have the disease.

Probably the greatest source of infection is the large number of human carriers. These may be recognized as abortive cases or carriers who are apparently healthy. Abortive cases may be only slightly ill for a few days with a fever and an upset stomach, yet the virus may be active within them. There is no practical way of discovering who harbors the virus and for how long. That is why we are advised during an epedemic to keep children from meeting new groups of people, any one of whom might be a carrier. Let us state again that the polio virus may be harbored in a person's body without causing him any disturbance whatever.

Human waste matter, like stool, may contain the virus and may be a source of infection. Water polluted by sewage may be a source of infection. Swimming should be discouraged during the monsoon and during epedemics of the disease. Flies are supposed to be carriers of polio and typhoid. However, it has never been proved that human beings have contracted the disease through flies.

It is also believed that fatigue may cause increased susceptibility to the severer forms of polio. If a person is over-exercised and is in a state of extreme fatigue, his body may be less likely to check the spread of the attacking agent or disease. Therefore, when polio is endemic, it is perhaps best to avoid too much exercise to avoid becoming over-tired. Remember, a rested body is good protection against disease. Likewise, cleanliness is important. Failure to practise good health habits such as washing the hands thoroughly before eating or before handling food may result in transmission of the infection.

It may be said here that the sources of infection are many, but any method of allowing infected material to be carried from the source of disease (i.e., the bodily discharges of a sick patient or a healthy carrier) to the nose or throat or intestinal tract of some parts may cause new cases of polio. Polio is more prevalent during the summer and autumn than at other times, but occasionally small outbreaks of the disease do occur during the winter. Though polio epidemics seem more common in temperate regions, it is contracted in every part of the world.

Incubation Period

The time between the entrance of the virus into the body and the development of the first symptoms is the incubation period. In polio this seems to be relatively short. In some outbreaks it has been as four or five days, in others as long as ten days or two weeks. Undoubtedly, the longer periods occasionally reported have been the result of faulty observation. One or more undiscovered or abortive cases might have occured between the first paralyzed patient and the next observed case.

Treatment

There is no known drug to cure polio. The use of serums or vaccines is apparently of doubtful effectiveness. There is no magical or secret method of treatment and we have to depend on external means. Orthodox medicine usually favours splints and plaster casts to reduce severe crippling, but it has been found that more beneficial results can be obtained through external treatment, as advocated by the pioneers of nature cure. This treatment consists of hot packs, massage, manipulation, passive and

active movements, underwater treatment, and the use of electricity. Such measures have been found very beneficial in minimizing paralysis and other developments associated with polio. On the other hand, fixed immobilization of the weakened muscles, as enjoined by orthodox medicine, leads to muscle atrophy.

Although polio is not primarily a disease of the muscles, secondary changes occur in them as a result of disease. Deformities or weakened muscles can be prevented by not overstretching or fatiguing them, and by maintaining their circulation and re-educating them through external measures. Children have a better chance of recovery if treatment is begun promptly.

As soon as the diagnosis is made, the patient should be treated with hot packs. This is an important part of the cure. Pieces of woolen cloth from which very hot water has been wrung out, applied at frequent intervals to the affected parts of the body relieve the pain and hardness. Just when the pains lessen, or as soon as the patient can bear it, a gentle systematic massage followed by a gentle passive movement of the weakened or paralyzed limbs should be started. This serves the double purpose of preventing the muscles from wasting away, and keeps them in the best possible condition. The strong muscles are apt to pull the weak ones out of position. Later, the active movements start, i.e., the patient moves his limbs.

There is usually a difference of opinion between the practitioners of nature cure and orthodox methods of treating polio. As a rule, the former believe in external treatment in the early stage of the illness to prevent unnecessary deformities, whereas most medical specialists believe in giving rest to the affected parts, first by plaster casts, splints, etc., and later by resorting to physical therapy.

Heat is now almost universally applied for the relief of pain and the hyper-irritability of muscles. Woolen packs cut to fit the affected parts of the body are put into boiling water, wrung out almost dry, and placed on the arms, legs, chest, or whichever part of the body is painful. This method and the use of physical therapy early in the illness, as soon as the soreness of the muscles permits, are rational ways of treating polio through nature cure. We may repeat again that hot packs are used for the relief of pain and muscle spasm during the acute stage. Packs must be made of pure wool and the excess water must be wrung or squeezed out thoroughly. Passive motion should be started as soon as pain and general conditions permit, especially as regards the respiratory muscles. Respiration cases should be aided by respirators until the test of vital capacity by a spinometer shows that all muscles are functioning adequately.

After the acute symptoms have subsided and the patient has become afebrile, he is kept in bed on a hard mattress for a variable period, depending on the extent of paralysis and the muscles involved. During this period, treatment consists of active voluntary exercise of the involved muscles with massage, manipulation, osteopathy, and chiropractic measures.

As soon as the muscle soreness and spasm have been relieved, the affected muscles have to be "re-educated." In the hands of the skilled worker much can be done to restore the full use of muscles. It must be emphasized that not all patients recover completely. Some will have permanent paralysis, but if proper care with the best of physical therapy has been given from the very first days of illness, the arms, legs, and muscles of the body, even in severe cases, will be in such shape that an orthopedic surgeon can do much to overcome the effects of the

disease. Muscle tendons can be transplanted so that parts of healthy ones will take the place of those which are no longer able to carry on their original work. Joints can be treated so that an otherwise useless leg is made to bear weight and the capacity to walk can be restored.

Surgery may not be enough. Braces may be necessary to help carry the weight of the body and permanently support paralyzed legs and back. For some patients, braces may be a life-long requirement, for others they may be needed only temporarily until the weakened muscles have the opportunity to regain their strength, or until healthy muscles can be made to take over the functions of those destroyed by the disease.

It is to be emphasized that there is no specific treatment for polio. All that is done today must be looked upon as prevention of unnecessary complications or restoration to maximum use of impaired or damaged nerves or muscles. This is all that can be hoped for in any treatment at any stage of the disease. The skilful use of surgery late in the disease does just this—it prevents further troubles and minimizes those already present. Good physical therapy used early also prevents needless deformities, training nerves and muscles to carry on with maximum efficiency. Emphasis should be laid on good external treatment and on early care of the patient in the course of the disease.

The treatment of acute infection, rest in bed, physical therapy and surgery may take many months. Improvement may take place only over a period of years. Maximum improvement occurs when expert care is administered from the very beginning. Not for one moment should the patient neglect this supervision and care.

The patient and his family must realize that in certain cases, in spite of all that is done, the patient remains

crippled. Then comes the task of improving the physical state by readjusting the mental state. Weakened muscles in the arm or leg need not mean defeat. They need not even offer a serious handicap. Success and a happy and useful life are as possible for a polio victim as for anyone else. Improper attitudes on the part of the patient or the patient's too solicitous family may lead to maladjustments of personality that are even greater handicaps than physical crippling. The skilled physician does much to guide the members of the family concerned in the perplexing problems of mental health.

Let us repeat that no method of treatment can guarantee the return of proper or normal physical movement, but good treatment helps. Paralysis results from damage to nerve cells in the spinal cord or other parts of the central nervous system. In some cases, very few cells are damaged so that there is no paralysis, or it is temporary. About half the cases of paralysis recover spontaneously, and many others are helped by proper treatment. If so much damage has been done that paralysis is permanent, a surgeon can often transplant muscles so that parts of healthy ones can do the work of those injured. Braces can sometimes be fitted to support a paralyzed back or legs.

Prevention

Since there is no specific means of warding off the disease, such as medical science has provided for typhoid and many other communicable illnesses, prevention, for the present, depends on avoiding exposure to the virus. This is exceedingly difficult if not impossible in most cases. During an epidemic, many carriers and persons with mild, undiagnosable forms of polio infection unintentionally and unknowingly spread the virus.

There is practically no way to detect these carriers. All that can be done is to prevent unnecessary contact with new groups of people. Since this disease is spread by infected persons, the less the number of contacts the less the chance of being infected. Even rigid confinement of a child to his home, however, will not always prevent disease from being carried to him. Nothing should be eaten that could have been soiled by the discharge from the bodies of others. Screening the house against flies is an important preventive measure as they can carry the virus from known or undetected carriers.

During recent years, many scientists and physicians have reported the increased incidence of polio, especially in its more severe forms, following tonsils or adenoid operations. It is believed that not only may one's resistance to the disease be lowered by such surgery, but also that the exposure of tiny nerve endings to the operated area may provide easy access for the virus to enter the central nervous system. As far as possible, parents should avoid the removal of tonsils or adenoids prior to and during the polio epidemic season.

Hard and fast rules regarding attendance at schools cannot be formulated. In a city the child actually makes fewer new and intimate contacts in school than out of school. In cities, children are drawn from a relatively small area. In the villages the reverse may at times be true, for here the children frequently travel long distances, and to them the school may add new hazards and new exposures.

Swimming may cause infection during an epidemic. Swimming itself is not harmful, but if the water is contaminated by sewage and human pollution it is definitely dangerous. Also, if the child is exposed to new crowds, then swimming may be a menace even though the water

itself is safe. Little is gained if, during an epidemic, the authorities close the schools and swimming places, while parents allow their children to mingle with crowds of people in the streets, in shops, and in other common meeting places.

The Prognosis

In many instances, the virus, shortly after it enters the body, finds its way to the principal nerve centres. Once there, it settles and concentrates on the inner gray cells of the medulla or the spinal cord, or both. Here it feeds and grows, living on the material within the nerve cells. These cells may be destroyed and no longer retain control over the muscles. Paralysis, or inability to move the muscles which these nerves control, becomes apparent, and the result is more or less permanent crippling. There can be no real cure for this. If the nerve cells attacked by the virus are not destroyed and retain some of their activity, they may eventually recover. In such instances, where virtually injured nerves recover, the muscles controlled by such nerves become irritated causing a "spasm." Frequently there is acute pain with the spasm.

Many polio patients recover in a short period, depending on the type of the disease. Some require protracted and continous treatment. Continuity of care is essential for optimum recovery of those who have been left with residual after effects. In conclusion, we must repeat that knowledge of the nature of polio and of its early external treatment and care of the patient is the best possible weapon of defence against its devastating effects. We need an organization like one in the U.S.A., The National Foundation of Infantile Paralysis, which has steadily performed its task of leading, directing, and unifying the fight against polio.

Polio can best be cared for in hospital, as patients can be treated more consistently with a full complement of medical services. Besides, patients with intercoastal muscles or diaphragms may need respiratory care either to preserve life or to allow much needed rest. There should be a teaching and study centre attached to the hospital so that there may be constant improvement in methods of treating the disease.

What do we find in India? Misapprehensions have influenced not only our general hospitals, but even those, however few in number, devoted exclusively to the care of this disease. They often refuse admittance to acute polio cases. The fear of infecting other patients leads them to close their doors to these helpless unfortunates, and with such conditions, a polio epidemic can be a catastrophy. Fear of the unknown distorts our judgement and results in irrational acts. Knowledge is power, so let science triumph over ignorance and fear in conquering polio which claims so many victims.

Measures during an Epidemic

(i) In an epidemic, though the chances of contracting the disease in relation to the total population are small, the appearance of any of the following symptoms—headache, nausea, cold, upset stomach, soreness or stiffness of muscles, or unexplained fever should put one on guard and the risk of contracting the disease should be minimized.

(ii) Try and keep away from crowds and places of public attendance.

(iii) If possible, avoid travelling in buses and trains.

(iv) Avoid swimming, especially in water that may be polluted. Better not stay out in the cold, to avoid a chill.

(v) Pay strict attention to personal hygiene.

(vi) Garbage should not be left uncovered.

(vii) Keep flies and other insects away from food.

(viii) Avoid extreme fatigue and over-tiring. A rested body is good protection against disease.

(ix) If possible, avoid tonsils and adenoid operations during epidemics.

There is as yet no way of telling in advance who among a patient's daily contacts may be a carrier of the virus. It may be said here that during an epidemic those who do not suffer from paralysis but who have colds, upset stomachs, headache, and fever are in danger of contracting the disease.

Summary

(i) Poliomyelitis, polio, and infantile paralysis are one and the same disease.

(ii) It attacks persons of all ages, but usually children.

(iii) It is caused by a virus.

(iv) It is not primarily a disease of the muscles, but rather of the spinal cord and the central nervous system.

(v) The disease is communicable. It spreads most commonly through human contact, through the excreta of cases, contaminated food and milk, or sewage and flies.

(vi) It is a disease most prevalent during summer and the monsoon.

(vii) Personal cleanliness and the habit of washing the hands before eating are always important.

(viii) Hot packs are used almost always to relieve the pain and sensitivity of muscles, and external treatment given at the early stages of illness helps to prevent unnecessary crippling.

(ix) No medicine has any effect in infantile paralysis. We have to depend on external treatment.

(x) Most people develop a natural immunity to polio, probably because the polio virus is so widespread that everyone has been exposed to it. That is why so few grown persons have it.

(xi) As polio has no effect on the mind, the morale of the patient should be kept up and he should continue his normal activities. People suffering from polio have been unbelievably active, and have led useful lives.

(xii) Above all strict cleanliness and proper elimination should be observed to maintain good health.

CHAPTER 6

Obesity

"The battle of the bulge" is like a cold war—it goes on and on all over the world. People get more and more figure conscious but not, unfortunately, to that extent health conscious. Obesity or corpulence is a condition of the body characterized by over-accumulated fat under the skin and around certain internal organs. In all healthy people a greater or lesser amount of fat is present in these parts and serves important physiological ends, besides contributing to the configuration of the body. Even a considerable measure of corpulence, however inconvenient, is not inconsistent with a high degree of health. It is only when in excess that it can be regarded as a morbid state.

For some persons, and particularly among certain races, a degree of corpulence is natural. The degree of obesity in a person is dependant on his collection of fatty globules or cells. As long as the accumulated fat remains stored up as adipose tissue, it does no harm, however inconvenient it may be. But when it begins to enter into the cellular elements of the body, especially of the muscles, it becomes a source of danger.

Corpulence can be traced to several causes—glandular, herditary, or post-operative. Sometimes a person puts on weight after hysterectomy or menopause. It may also

arise after childbirth, due to overeating on the part of the mother or because she leads an inactive or sedentary life. Other causes are the water-logged condition of the body, and the intake of drugs which produce fatty changes in the tissues, especially arsenic, mercury, cortisone, and insuline. Alcohol taken in large quantities also tends to form fat, partly because many alcoholic drinks contain much sugar and partly because a portion of the body heat is derived from the alcohol and a corresponding amount of the starchy and sugary food is spared and converted into fat.

Symptoms

One cannot expect to enjoy and maintain good health in a state of excessive obesity. It leads to sluggishness, heaviness in breathing, and lethargy, keeping us from physical activity and causing serious malfunctioning of the various organs. When such a stage is reached, obesity is considered a disease. It is said that your waist line is your life line. This is very true, as excessive fat taxes the vital organs. Overweight is responsible for cardiac trouble, palpitation, diabetes, gout, hypertension, artisclerosis, high cholestrol (a somewhat debatable condition), disc lesion, and even premature death.

Treatment

The two most common causes of overweight are a luxurious, inactive, and sedentary life accompanied by excessive sleep, rich food, or overeating. So the most important thing to consider when treating obesity—barring glandular obesity, which is rare—is the intake of food and the output of energy. The only rational way of dealing with the question of obesity, when it occurs without complications, is a suitably planned course of dietetic

treatment in conjunction with suitable exercises and other measures for promoting and increasing elimination and burning up of fat.

The greatest foe of feminine loveliness and beauty is excess fat. At present there is a great "slimming" craze among the more ardent female followers of fashion who happen to be burdened with a little extra flesh, and a variety of drastic methods of reducing have become fashionable. Most methods are freakish and dubious ones. Not only do many slimming centres have no scientific knowledge of dietetics, they also prescribe certain diets which are highly dangerous to the health of those misguided enough to try them.

It is generally recognized that no two persons are exactly alike, scientifically speaking, nor do they react alike, and a diet that agrees with one may disagree with another. There are various reasons for the difference in their reactions. First, we have to take into consideration not only the physical make-up of the persons concerned but also their mental make-up, their emotions, moods, environment, the race to which they belong, their idiosyncracies, the type of food they are used to, and their pathological condition. Some people are apt to overeat not necessarily because they are hungry but because they are unhappy, emotionally upset, lonely, or frustrated.

Many seem to think that of all diseases obesity is the easiest to treat. It may be said here that it is not so easy as one imagines. Various complications arise with overweight, like anemia, low or high blood pressure, menstrual disorders, digestive disturbances, sluggish liver, waterlogged condition, flat feet, hernia, constipation, internal disorders, sexual disorders, infertility or barrenness, cardiac deficiency, diabetes, disc lesion, allergy, and uneven distribution of fat.

Besides, obesity leads to morbid cravings. There is usually a desire to eat and drink too much and the wrong kind of things. It is a well known fact that fat people are easy-going and genial. They will not walk when they can ride. They hunt for pills to reduce without effort, and try to squeeze the fat out of their body by wearing contraptions. In fact, they clutch at any straw no matter how absurd or unreliable it may be.

Also, temperament plays an important part in the development of obesity, for we know that people with a phlegmatic nature quickly put on flesh, while if there is a tendency to become fat even worry will make some people fatter. Worry due to frustration, disappointment, or other causes leads to overeating as it gives one mental satisfaction which is an outlet for one's feelings—psychologically considered, a rebound. The most difficult problem is that of regimentation, i.e. controlling diet and drink, and resorting to regular exercises and walks. A lot of determination and will-power is needed to follow the prescribed routine.

All this shows that one needs to cross quite a few hurdles to reduce. A vicious circle develops, as it takes courage to break old habits. Apart from this, human nature has to be taken into consideration when treating obesity. After all, the spirit is willing but the flesh is weak. A doctor has very rightly said: "Obesity, though grotesque, is not a joke, it is a disease. Corpulence is not a comedy, it is a tragedy." Before beginning treatment, thorough physical check-ups by a doctor are necessary. There may be some abnormality which, if unnoticed, may cause great danger to health and life.

There are no short cuts to reducing weight. The only rational method is systematic dieting without bringing

about any deficiency in the system or starvation of the tissues, coupled with burning up of fatty deposits by means of moderate exercise, games, walking, and other means of toning the skin and muscles. To these may be added regulated baths and scientific massage, the latter a passive form of exercise.

Only in the case of glandular obesity should endocrine therapy medication be resorted to, otherwise reducing drugs, strong medications, and injections, though offering quick results, are detrimental to health. Health cannot be maintained in a state of excessive obesity. The rational treatment for reducing should be such that not only is there systematic reduction in weight but one should feel more energetic, lighter, and healthier.

CHAPTER 7

The Story of Cancer

The one disease which has offered the broadest and greatest challenge to man is cancer. It is like the crab—once it has got its claw into you it is very difficult to dislodge. Cancer is a world problem; no race, white, black, brown or yellow, is spared. The universality of the allopathic system, the invention of wonder drugs, and the rapid strides in the field of surgery are the principle factors that have made the treatment of disease easier. Also, the facilities of modern hospitals for indoor and emergency cases have greatly reduced the rate of mortality. Despite these resources there are some refractory diseases which need more research and study before they can be successfully tackled. Of these, cancer is considered the most intractable.

Cancer is on the increase, and its devastating death toll is mounting despite the fact that collossal sums are spent annually in the hope of finding the cause and cure of cancer. While cancer has been increasing at an enormous rate and while the reasons for its continous increase have prevailed for a very long time, our research workers have so far accomplished very little.

The medical world ventures into research methods which are questionable, fatalistic, even destructive in

terms of the individual suffering victims who are physically and mentally affected by the devasting disease. To wait till the disease has progressed to a recognizable form, and until it has developed a definite pathology, is to sacrifice needless time, money, and opportunity, and this manner of treatment is never more than symptomatic. It is merely locking the stable after the horse has bolted—a rather feeble gesture, not in any sense constructive.

Any disease at an advanced stage is difficult to cure. At the same time there is no reason to expect much from the present conventional methods of suppressive treatment which act only on the cancer and try to cure it by rays, radium, operations, drugs, etc., as if the cancer were the cause, and the effect of a cause.

It is true that so far very little has been discovered that fully explains the origin and the formation of foreign cells, generally called cancerous growths. It may be said here that as the cell is the basic unit of life the whole body is composed of cells or the product of cells. When cancer appears in an organism it means the biological behaviour of some of the cells which make up that organism has changed.

It is suggested that cancer arises as a result of mutation in a cell, and on this assumption some specialists believe that cell therapy can be of much help in the treatment and cure of cancer. They believe that cancer is an "immuno-biological problem" and that it does not usually attack a healthy body if the entire system is functioning correctly. They maintain that a cell which is a mutation —and that's what cancer is—will be rejected and eliminated by the body.

The disease manifests itself through many different symptoms, in many different organs of the body, and at many different stages and has several causes. We are,

however, aware of many predisposing causes that lead to cancerous growth. Occupational, environmental, and heriditary influences all play a very important role in the origin of cancer. The causes of cancer can be classified as mechanical irritation or injury, chemical irritation, and mental or psychological disturbances.

To mechanical causes belong trauma, injury, or a blow to any part of the body, ill-fitting dentures, pessaries, a knock, all of these lead at times to cancerous formations. Long-standing ulcers in the mouth or the duodenum, chronic mucous colitis, heavy drugging leading to drug colitis, continuous purgation, all these irritate the mucous membrane of the digestive tract and cause malignancy of the stomach, the duodenum, and the alimentary tract.

Other sources of cancer are warts, moles, lumps, and keloids; continuous meddling with them and pinching them causes an irritation in the particular spot. Besides, the continuous chewing of tobacco, *paan* and betel nut, heavy smoking, and consuming very hot drinks cause cancer of the oral cavity. Excessive sunbathing can induce cancer of the skin. Heating the body by means of a *kangri*, an earthen vessel containing lighted coal tied round the abdomen by Kashmiris in winter, is responsible for skin cancer of the abdominal wall. In short, continuous irritation of any particular spot can give rise to cancer.

The most destructive kinds of chemical irritation are due to poisonous drugs, the flesh of diseased animals, rich or adulterated food, chemicalized products, atomic radiation, frequent X-rays, and the use of radium and other destructive active substances which cause leukemia.

One of the most important factors in the treatment of cancer is that of the internal chemical changes created by the patient as a result of emotional activity. The chemical substances formed can aid in the creation of

health or the formation of disease. There are many glandular imbalances which, if not corrected, increase emotional stress, resulting in diseases of a more chronic nature.

A cancer or a tumour is a malignant growth which can be brought about by the glandular imbalances caused by negative emotions, or by mental stress which creates a poison within the cells. This in turn promotes the growth of other similar poison. Highly emotional disturbances lead to acidity and toxemia, and cause a change in the blood chemistry and the glandular system. These can cause cancer. Cancer restricted to any particular organs or tissues is usually induced, as we have seen, by a great variety of chemical, biological, and physical agents. Local causes are of great importance in determining the patterns of cancer throughout the world.

Cancer of the respiratory tract is usually due to atmospheric pollution, which irritates the tract. Air pollution is a possible source of carcinogenic substances; cancer of the lips and mouth is usually found in pipe smokers and betel nut chewers. Cancer of the penis, cervix, and uterus is generally due to lack of hygiene.

Known carcinogenic agents—agents which cause cancer —are used in insecticides, pesticides, food dyes, and several drugs used for medicinal or pesticidal purpose. Food can be chemically contaminated at its source, especially through the use of toxic pesticides and herbicides during its cultivation. All of them are not equally potent carcinogenic agents, but one should not take them lightly and encourage the use of such agents, particularly when their carcinogenic properties have been proved.

The problem of the possible relationship between tobacco-smoking and the incidence of lung cancer is one of the most topical issues in cancer research today, but

discovering the relationship will of itself solve nothing. Tobacco-deprived man may be disposed to seek other "tranquillizers" potentially equally harmful. It appears that pure pipe smokers incur less risk than cigar smokers, and they in turn less than cigarette smokers. However, trying to discover if the incidence of cancer varies according to whether people use matches or lighters to light their cigarettes is still to avoid the main issue raised by smoking. From the scientific point of view, if we can at all say that certain kinds of smoking are less harmful than others, then the *hooka*, in which smoke passes through a hollow wooden tube and a vessel which contains water, is the least harmful as the destructive effect of tobacco is considerably decreased.

Today we are concerned with a different kind of environmental hazard, which we have introduced in the name of science and civilization—poison in the air we breathe, water contamination and pollution, rich and adulterated commercialized foods, insecticides, pesticides, sprays on vegetables and fruits, eating the flesh of dead and diseased animals which leads to highly toxic and disease-inducing conditions, lack of exercise, artificial living, and mental strain. As if this is not enough, we have vaccination, immunization, right from birth or even before, as in antitetanus injections to pregnant mothers. Today, almost as soon as a child is born it is bombarded with vaccines—smallpox, polio, diptheria, whooping cough, B.C.G., and now measles and influenza. In time to come perhaps endless other vaccines will be introduced for preventing disease.

It is impossible to inject serum derived from diseased animals into the human blood without seriously and permanently impairing the vital energy of the various cells which compose the body, for it reduces their power

to resist disease. Dr Allexis Carrol wrote, "Medicine is far from having decreased human suffering, as much as it endeavours to make us believe. The suppression of fever, diptheria, smallpox, typhoid etc., are paid for by long suffering and the lingering deaths caused by chronic infection, and especially by cancer, diabetes and heart diseases."

It is a fact that the flesh of dead animals, when eaten, not only undergoes the most offensive form of decomposition, and gives rise not only to highly toxic conditions, but also promotes the retention of these toxins within the colon and so favours their absorbtion. Every third sample of food lifted by the health authorities is adulterated. Not only that. Most of the colours which are used to brighten the adulterated or substandard food can cause cancer.

The yellow *jalebi* which makes your mouth water whenever you pass a sweet-meat shop contains metanil yellow, a coal-tar dye which produces cancer. The bright green canned peas you relish so much in your *alu-mater* or *mater-panneer* contain blue VRS, a carcinogen. As for *papad* the poor Man's desert in India, the tempting pink variety has Rhodamine-B, one of the deadliest carcinogens known. Such colours are added even to pulses to make them look brighter. The glowing yellow *haldi* (turmeric) powder which lends colour to your curry has lead-chromate, causes anaemia, paralysis and in young women, abortion.

All these facts are data collected by the Union Government's Health Directorate. According to the latest figures, 75 percent of the non-alcoholic beverages examined by the health authorities in Assam are adulterated; it is 62 per cent in Madras and in Andhara Pradesh; 46 per cent in West Bengal, and 46 per cent in M. P. The percentage

of adulterated samples of butter, ghee and ice-cream in different states is between 12 per cent and 50 per cent and of spices and condiments upto 46 per cent. The corresponding percentage of adulteration in cereal products fluctuates between five and hundred.

In the case of fruit products, the percentages are: Bengal 100 per cent, Assam 3.6 per cent, Orissa and Rajasthan 50 percent, to take only four states. Even in such innocent looking items as tea, coffee, cocoa, and chicory the percentage of adulteration is as high as 3.3 per cent in Orissa and 23 percent in Assam.

Mustard oil deserves special mention. It is a major cooking medium and all sorts of oils are used to adulterate it, even mobil oil and diesel oil. The most common adulterating ingredient for mustard oil is argemone, popularly known as *bhabhanada* in U. P. and *shialkantha* in Bengal. It was supposed to cause epidemic, dropsy, and glaucoma, but recent research have proved that it causes cancer also. Often, another harmful chemical compound, alkyi isothicynate, is added to mustard oil to give it pungency.

The continuous dumping of oil and other forms of pollution, including radioactive wastes, in streams, rivers, and oceans, have a detrimental effect on fish and on the human beings which consume them.

Heredity also plays an important role in cancer. One of its frequent causes is an inherited encumbrance. This must be taken seriously, because such an encumberance can be recognized long before any symptoms or manifestations of cancer appear. Some authorities believe that cancer is not hereditary but can only be acquired. Whatever the truth may be, at least certain people are predisposed to cancer if they do not inherit it.

We should not overlook the fact that cancer is largely accepted as a disease of *civilization*. Hence, modern

civilized life and everything connected with it should be taken into consideration. It has been ascertained by experts that cancer is rarely found among primitive races.

Concerning the food and diet of civilized people, the trend towards deprives over-refinement food of its most essential constituents. Instead of taking food in its natural form which contain vitamins and organic minerals, artificial, dead, and soft foods are eaten. The tissues are thus deprived of potassium and other mineral salts, resulting in debility and low resistance. That is why we call cancer the disease of civilization. It is a fact that cancer and heart diseases are found more among the wealthier classes, just as leprosy is found among the poor.

Honest investigators in the medical field discovered that cancer is a *constitutional disease* and the growth a local expression, hence it should be treated constitutionally. Thus, cancer is not a local disease but is the local manifestation of a constitutional or blood disease. Localized growths like lip cancer, cancer of the uterus, or breast cancer are secondary, contributing or inciting causes, which facilitate the symptoms indicated in the appearance of a cancerous growth.

Though the function of an organ is a special act, yet the conditions for its continuance are coincidentally transferred from parts quite beyond that of its exercise from the whole organism. The body is not a collection but a totality. It is not a mere aggregate of cells, it is an organism, i.e. an interacting and interdeperdent whole. Hence in treating disease the body should be treated as a whole.

The incidence of most cancer is due primarily to the cumulative effect of various carcinogenesis. One should, therefore, be familiar with the facts regarding the insidious

role of various cancer causing irritants like coal tar, tabacco tar, and pine-oil tar, incomplete burning of coal, manufactured gases, crude oil, tar oil, and other combustibles. Not only persons who smoke but those who inhale tobacco smoke over prolonged periods because of environmental reasons show an excessive liability to lung cancer. Smokers, thus not only give cancer to themselves but also to others.

Hence, cancer is caused not by a single irritant, but the sum total of many irritants. To rid humanity of cancer means first of all *preventing* cancer. Only a few cases of cancer are curable, as the majority of them are sooner or later fatal. Success in curing cancer depends totally on the vitality of the individual and also on how much harm has been done to the body due to X-ray, radiation, chemicals, and medicines.

When in search for a cure of cancer, delay is dangerous, but that is not all. We should not neglect the fact that there are innumerable substances commonly used in our environment which, by entering our bodies through our bloodstream and skin, cause cancer sooner or later. These need our utmost attention. Every aspect, environment, food, adulteration, cultural customs, surroundings, occupation, inheritence, pollution, air, water, soil, and several other factors mentioned above, should be investigated to locate the primary causes of cancer.

The operating knife, various rays, and wonder drugs providing temporary relief are no answer. No doubt cancer is one of the greatest scourges of our present civilization. Men and women succumb equally to it. The male stomach and the female pelvis are most vulnerable. The prevention of cancer is far safer and wiser than curing or controlling it after the formation of a cancer lesion. Millions are spent on cancer research every year. If

only a quarter of this sum were utilized on preventing cancer, concentrating on biologically rational living, and preventing the adulteration of foods, air pollution, etc., half the battle would be won.

Cancer does not usually attack a healthy body whereas a toxic body is fertile field for the disease. A cell that is fully nourished and protected is a healthy cell and a congregation of such cells means a healthy body. Such a body is immune from all diseases, including cancer. Since cancer today is generally incurable, we must prevent its occurrence, and we cannot prevent it without tackling its probable causes. But the medical profession is interested primarily in improving the technique of curing patients and thus prolonging life.

In the *British Medical Journal* we find a very thought-provoking statement.

> Some gravely damaged patients who without expert help would have died right away die a few years later. In the intervals, as a general rule, the killing disease has been kept at bay but not cured. The years intervening between rescue and eventual death are spent in continuous dependence, not fully well, and often with serious psychiatric symptoms.

It is a horrible way to die, with the excruciating pain frequently becoming so unbearable that the victim, sensing and welcoming the inevitable end, often begs for "mercy killing." It is very rightly said, "we try to cure conditions when they have reached a last stage but show no great enthusiasm in trying to prevent them."

To rid humanity of cancer means first of all preventing cancer. Operations, rays, medication, etc., may be helpful in removing the symptoms, but they do not mean

removing the soil upon which cancer has developed. All the probable causes mentioned above and perhaps many more which are not yet known should be investigated, together with the change in our modes of living.

From the nature cure viewpoint, cancer, in the final analysis, is a disease which springs from a missue of the "great healing law," or biological law, as it is normally called, and is a result of a missue of man's internal natural forces which have built up a latent disease depot in the body, a foundation for the growth of the great scourge.

It is a vicious accumulation of unfavourable physiological factors, some primary, some secondary, and some remote which are all contributing factors. There is no single cancer-producing cause in and by itself, not even a single predisposing cause. It is, as we have seen, a combination of factors which bring about a cancerous condition within the physical organism. So, for a cure emphasis should not be laid on this or that factor but on a combination of correctives.

The conquest of cancer demands more than reliance on the operating knife and on rays of various kinds. It involves radical reform in our ways of living. The human soil depends on the nature of food consumed, and we know that sound health is the ability to resist disease. We repeat here that cancer does not grow on healthy soil. There is at present no specific treatment for cancer, but it is believed that results could be expected not only in the medical field but also from outside the profession. Any individual should be free to obtain the services of a licensed practitioner of any school of healing. There can be no monopoly of brains.

The story of cancer today is an endless one as there is still a lot to be learnt and studied. The sooner this is

done the better for suffering humanity. Statistics reveal that about five lakhs die of cancer in India every year. This includes the record of the highest incidence of oral cancer in the world. The following are the vulnerable spots for cancer infection commonly noticed by cancer specialists in India: Gujarat—base of the tongue; Maharashtra—cheek or front of the tongue in the male, and genital organs in the female; and the breast in Parsi women.

CHAPTER 8

Alcoholism

It should be driven home at the outset that no man or woman can begin drinking moderately with the certainty that he or she will not eventually become an alcoholic. Probably most alcoholics believe that their habit is quite harmless, that they drink in moderation although just what constitutes moderation is an undecided factor. Some may hold this belief honestly, but others are simply rationalizing an addiction. They do something which deep down in their hearts they know is wrong, and proceed to give overwhelming reasons why their conduct is perfectly right and proper. This "pot and kettle" argument throws no light on the whole situation. The best course is to know from the start that this habit is harmful and that one will benefit by renouncing it.

The problem of drinking is not isolated but is inextricably associated with numerous aspects of modern life. Custom and tradition still lead people to have drinks on various occasions, either at parties, or in business and friendly meetings, or as a toast on some auspicious occasion. Many take to drink after the day's work is over, for relaxation and diversion. They also force their wives to drink with them to keep them company. Many husbands later complain that their wives are unable

to keep within the limits, and that they take to heavy drinking.

Being bored by the day's work or the family surroundings, frustration in love or marriage, perplexity in domestic or business matters, makes people turn to alcohol "to pull themselves up." Emphasis should be laid on the fact that habitual drinking may be due to psychiatric causes such as frustration, maladjustment, inferiority complex, anxiety and boredom, emotional or mental upsets, business worries, insecurity, nervous tension etc.

But many have similar troubles and they do not use alcohol as an excuse. Some start drinking or continue taking alcohol under, so to say, doctor's orders. Others are advised alcohol for insomnia in middle or old age or under stress. This is ridiculous. Once they get into the habit of taking alcohol or sleeping pills, the effect of the dose wears out and it has to be increased. It is said that "sleeping pills are like marriages, after a while they don't work." Why unnecessary blame the innocent victim of alcohol and barbiturates for committing suicide. Often, death is accidental, due to the combined effect of heavy drinking followed by overdose of sleeping pills taken under emotional stress.

Alcohol leads to a dilation of the blood vessels, resulting in a flushing of the skin and a sensation of warmth. This is usually accompanied by a slight fall in blood pressure and an increase in the pulse rate. Large doses depress the heart action and cause an increase in blood pressure.

Alcohol produces definite changes in the liver, leading ultimately to cirrhosis. There are cases in which comparatively moderate drinking for a few years has been followed by cirrhosis of the liver. On the other hand, livers of persons who have been steady drinkers for many

years show only a moderate grade of cirrhosis. A few years before cirrhosis develops, heavy drinking may present symptoms of an enlarged and tender liver, with a swelling of the spleen.

It has long been known that the use of alcohol definitely lowers resistance to disease, especially pneumonia.

The most outstanding effect of alcohol on the body is depression of the central nervous system. Nervous control and motor co ordination are definitely reduced by alcohol. Grim evidence of this is the number of automobile accidents which occur when car drivers have been drinking. Even a moderate quantity of alcohol interferes with attention, concentration, memory, judgment, and reason. The speed of performance slows down and errors increase.

Alcohol is linked with juvenile delinquency and with social disease. It also contributes to the breaking of homes.

There seems to be a widespread impression that alcohol has a stimulating effect on the sexual function. The only explanation for this is that the higher centres of the nervous system are depressed. Because judgement, will power, and self-control are definitely inhibited, sexual desires are under less restraint. Actually, however, with the ingestion of large quantities of alcohol, the spinal cord is depressed and the sexual powers are impaired. Among chronic alcoholics, derangement of the reproductive organs is more or less evident. This may result in sterility or in atrophy of the testicles, and sexuality may be very much impaired or even destroyed.

Alcohol is usually classified as a nervous system depressant, but this concept is diametrically opposed to the popular idea that alcohol is a stimulant. The apparent stimulation of the individual who is under its influence

is well known. He comes out in a "fighting mood", wanting to fight with everyone he meets, or he may come out in a "laughing mood." He becomes talkative and boisterous, laughs loudly at minor jokes (even the ordinary things of life seem funny), or he may get into a "crying mood" when everything in the world seems wrong. Alcohol may lead a man to an attack of "amnesia," when he cannot remember anything he did while under its influence.

All these characteristics are but indications of the early action of alcohol on the brain and the nervous centres which involve reason, judgment, will-power, self-control, and mental balance. When these inhibitions, which characterize the highest development, are renewed, the emotions are given free rein. It is not surprising that there is a connection between strong drink and venereal disease. Alcohol is a destroyer of personality, a highway of physical and mental degeneracy. It can even lead to the downfall of a nation.

Alcoholism is not only a problem of the individual, but is unequivocally a consequence of our social structure and the attitude of society toward drinking. It cannot be emphasized too strongly that alcoholism is a disease, and that the victims are not criminals to be hauled in court, but invalids needing care. When a man carelessly throws a lighted cigarette into a pile of dry leaves and starts a forest fire he cannot escape responsibility by asserting he did not intend to do any harm.

It may be said here without the least hesitation that many people of both sexes drink too much and get away with it by saying that they are not alcoholicsb ut "heavy social drinkers." One of the main arguments is that so and so was taking whisky every day ofh is adult life and died at a ripe old age. To attempt to prove that regular

intake of alcohol is harmless by citing an incident or two is preposterous. Administering a remedy to a single patient and drawing general conclusions from his response would likewise bring ridicule on the investigators. There is abundant evidence that alcohol produces harmful effects against which the example of a case or two is of no value.

Alcoholism is one of the greatest health hazards today and it is not being systematically attacked. To stop a person from taking alcohol is considered an infringement on his personal liberty. By the time treatment for excessive drinking is started, the "social drinker" is already an alcoholic, and it is generally too late to do anything about it. No other disease costs the victim, his family, and the public so much suffering as alcoholism.

The medical profession's attitude to alcoholism is at times beyond one's comprehension. After all these years they have now awakened to the dangers of smoking, but their attitude with regard to liquor (as formerly towards smoking) is still controversial. The pioneers of nature cure have been constantly hammering at the dangers of tobacco and liquor, but the medicos can never accept any theory until they themselves proclaim it a scientific one.

There is usually a great deal of disagreement among physicians regarding the use of alcohol. Even now some doctors prescribe liquor for insomnia and mental tension, and recommend it for relaxation, and in middle or old age. In dealing with the cure and prevention of disease, the most scientific approach from the standpoint of public health is education and prevention, not prohibition.

CHAPTER 9

The Fountain of Youth

There is a vast difference between what we call growing old gracefully and ageing. Paracelsus, the famous philosopher, and a great physician, has said something which is very true: "All things have a certain time during which they exist on the earth. If a man's time is over, he will have to die. But many die before time is over, not by a visitation of Providence, but because they are ignorant of the laws controlling nature." Death will be with us always, but ageing, which is another word for dying slowly or undergoing a living death, can be prevented. It is a process in which the cells die faster than they can be replaced by new cells. The growth process of a child replaces cells faster than they die, but when the child stops growing there is a balance of cell replacement. For several years the body cells rebuild as raipidly as they die. As time takes its toll, the replacement processes begin to slow down, and cells die more rapidly than they are replaced. When this happens, the body begins to show signs of ageing.

Every living thing is a battleground for the forces of life and death, between anabolism (building up) and catabolism (tearing down), for we are dying as we live, our tissues are always disintegrating and developing acid

waste products, but simultaneously they are being rebuilt about as fast as they break down. If we supply neutralizing material (through rational eating habits) or provide a supplement in the form of an alkaline neutralizing factor, then the cell can be regenerated whatever a person's age.

The secret of natural health and longevity, and the deterring of senile changes lie in following the laws of nature. To get the maximum results, it is necessary to see that every habit is correct, and every law of life observed as far as it is possible to do so. These are, briefly, fresh air and sunshine; deep breathing, regular exercise, and corrective posture; rest, relaxation, recreation and sleep; proper food and regulated diet; right mental attitudes; and strict cleanliness and proper elimination.

It should be remembered that a toxic body is a fertile field for diseases, thus two important factors of health should be kept in mind. Firstly, the diet should be balanced so that it contains a minimum of starch and protein (contrary to the medical view) and a maximum of mineral-bearing foods to keep the bloodstream clean. Secondly, there should be a steady elimination of dead and worn out cellular tissues which, if allowed to remain in the system, impede its functions and circulation. The only way to do this is by muscular activity, either in the form of walks or systematic exercises, or by yoga *asanas* and *pranayam*.

We all automatically poison ourselves in various ways, especially through food, drinks, narcotics, waste of energy, and lack of exercise, leading to toxemic and acidic conditions in the blood which produce the senile change we call old age. Every movement of our body leaves an acid residue. These acid residues are fatigue toxins and

auto-intoxication, physical errors of living, dissipation or sustained worry and fear leading to morbid emotional moods and negative beliefs, uncongenial environment, and, nowadays, the resorting to poisonous and habit forming drugs just to keep ourselves going.

Youth can also be prolonged artificially. Extracts of the sexual glands of certain animals, when injected into ageing human bodies, have brought about a marked abatement of the symptoms of senility, with a corresponding improvement in all functional activities—which seems to be nothing less than rejuvenation.

There is also a treatment for old age called cellular therapy, in which healthy animal cells which correspond to unhealthy ones in the body of the patient are injected into him for the purpose of rejuvenation. Endocrine therapy consists of supplying hormones to activate the glands. As there is something of a system of cooperation between the several glands, one gland can help out another. Thus the thyroid and the sexual glands act much the same way, preventing the pre-senile deposits of fat and postponing the appearance of old age.

Whatever may be the results of the above scientific methods for rejuvenation, we are concerned here with natural health, not that brought about by artificial means. We must learn to live in tune with nature, drawing on our growing knowledge of dietetics and hygiene to grow old gracefully.

Fasting, if well conducted, followed by a rational diet consisting of two-thirds alkaline and one-third acid base equilibrium, together with internal cleanliness and proper exercise is one of the best methods of rejuvenation and regeneration. Premature senility and early death are due to toxic blood, which if purged becomes the fountain of youth. The real secret of natural health, vitality, physical

efficiency, youthfulness, and long life is well balanced body chemistry. In other words, both youth and age depend on the vital force within us, the true indicator of our health, physical, mental, and spiritual.

SEX AND HEALTH

Two instincts, that of hunger and of sex, hold human beings in their iron grip. These two instincts worry and often torment all living beings. Sex is a natural instinct like hunger, and no social or moral code is able to curb this instinct. Besides, sexual fulfilment is not just a matter of genital gymnastics, nor should it be considered merely as an organic mechanism of life. Though it varies from person to person, it is one of the most powerful drives in all living beings, much more so in highly developed ones.

In treating diseases the problem of sex should not be overlooked, since millions of homes are broken up and millions of lives darkened by sexual maladjustments, sexual inadequacy, sexual incompatibility, sexual dissatisfaction, and sexual frustration. The physician must take great care not to neglect this factor as it is one of the most important causes of emotional illness, leading to various physical and mental illnesses.

It is bitterly disappointing that this vital and all absorbing subject of sexual inadequacy, which has shattered many happy homes, is so often ignored, and instead of proper understanding and education, sexual debility and impotency are thought of as having purely psychological causes.

On the contrary, psychic problems are manifestations of sexual maladjustments and sexual maladies in 95 per cent of cases. It is said that if you can't communicate in

greater enlightenment and improvements in medical science and hygiene. Modern medicine has succeeded in prolonging life but has not been able to ensure that old age sets in graciously. We grow old prematurely because we depart from the simple, economic ways of nature which make small demands upon life's mechanisms, especially those involving highly essential viscera—the liver, kidneys, and the heart.

It is very common to find that people die suddenly in spite of thorough physical check-ups and with a clean bill of health from their doctors. This is not at all surprising. The diagnosis of a physical illness may be far from correct if a doctor concentrates only on the physical aspects of a patient, neglecting the mental, emotional, and spiritual factors which comprise the body.

Besides, we rely far too much on laboratory tests and instruments. Autopsy reports show a frightening difference between actual and supposed causes of death. There are critical differences many a time in test results from two different laboratories. It should be recognized that healing is an art as well as a science but not an exact science. Methods of testing vary, theories change and are modified. Some are definitely progressive, but at the same time, old methods are arbitrarily discarded as unreliable and misleading.

We rely too much on instruments instead of on the diagnostic acumen of a competent physician. For instance, electrocardiography gives us a clue about the working of the heart. Top cardiologists will tell us that an electrocardiogram taken in the morning was found normal and by the evening the patient was reported dead from a heart attack!

We wonder what the cause of his death could be, and why the electrocardiogram did not give a clue. But the

man was a non-smoker, a teetotaller, a vegetarian, people say. Yes, true, but have we ever thought of his life style, perhaps his reckless habit of constantly chewing *paan*, tobacco, or *kimam*? Have we considered his food and drug habits, the number of cups of tea or coffee he had during the day, his sex life—marital or extramarital which only he knows about, his business, the domestic tensions in his life? Many people are considered perfectly well clinically, but this is very misleading, as generally the early or so-called minor symptoms of disease often pass unnoticed in a clinical examination. We must also take into fact the individual's habits which tend toward health or disease.

It is not work that kills men, it is worry or wrong living. Work is worship. Work is healthy. It is fear, worry, and tension which secretes acid. It has been well said, "It is not the revolutions that destroy the machinery but the friction."

Looking at the habits of people who reach exceptional old age, one finds that they do everything in moderation. The great majority of us have the wrong habits in eating, drinking, and sleeping. This, along with heavy drugging and the inefficient working of the depurating organs like the skin, bowels, kidney, and lungs produce auto-intoxication or toxemic conditions. In such cases a serious retention of acid-products takes place, due obviously to their over-production and under-elimination. The purpose of the study of nutrition and particularly of vitamins and minerals is to learn to employ this self-healing and self-renewing power so that a more youthful body and a greater store of vital energy may be ours. But we must be willing to pay the price of the self-discipline required to live sensibly.

The causes of premature old age, therefore, are improper diet, lack of exercise, chronic constipation leadin

need to be neutralized by alkaline foods to keep the blood pure, thus avoiding the loss of youthfulness and health. The healthy complexion of the face, the elastic disposition of the skin, bright eyes, all depend on the normal compound of the blood. We are built according to our nutriments.

It is not only a good disposition and positive thinking that characterizes youth but also pure blood. The increased demands of modern living and the enhanced rush and tension of present working and living conditions are to be blamed, to some extent, for premature decay. Gluttony, extremes in drinking and smoking, excess of animal food and poor waste habits take up too much of the alkaline synthesis of the blood, leading to acidosis and toxemia which is the great enemy of youthfulness and health.

What we call old age has less to do with years than with certain physical changes within the body. As a result of these organic changes, the body functions at an increasing disadvantage. Thus we may exhibit signs of senility while yet young in years, and others at an advanced age may exhibit very few of the signs of this state. The mind may still be alert and capable of utilizing to advantage the experience and knowledge gained during the past half century or more, but muscle vigour, sound nerves, tissue flexibility, and the level of organic functions and nutritional capacity decline.

The excessive use of table-salt causes premature old age as the arteries harden. The beginning of precipitation and the hardening of the arteries are the early signs of old age, irrespective of one's age. Hence the familiar phrase, "A man is as old as his arteries." If in middle age there is a tendency to increase in weight, this is certain evidence that the food intake is more than

the organism can utilize, and this taxes the vital organs. It is well for those advancing in age to understand that there is less danger from under-nutrition than from overeating.

Basically, the sole difference between youth and old age is a chemical difference. It is the cell on which our life-span is based. If we could combine other health measures with good eating habits and keep the anabolic process going, then the cells, which reproduce themselves when we are young, should and will reproduce themselves when we are older. This can happen if we supply them with the proper materials in the right proportion for body-building.

Instead, in almost all cases, the catabolic process is enhanced because of our artificial civilized life, rich food, heavy drinking and smoking, tension, strain, mental and emotional upsets, heavy drugging, or factors beyond our control like adulterated, devitalized, demineralized foods, water contamination, the poisonous air we breathe, congestion, lack of hygiene and sanitation, and continuous conflict in life. Life becomes shorter, or even if prolonged, it is not healthy in the true sense of the term.

We can't say to what extent an individual can prolong his life, but let him select and balance his diet so that it will supply all the elements of nourishment the body needs in the right proportion taking into consideration his age, occupation, environment, and the season of the year. Unhealthy food and drinks should be avoided, and plenty of fresh air, sunshine, rest, and mental relaxation is recommended. Positive thinking is essential, and one should be moderate in everything to live a long and healthy life.

We may have reduced mortality and lengthened the average life span. But we have gained ill-health too! Our proneness to disease is on the increase in spite of our

bed, you can't communicate in marriage. Sexual inadequacy on the part of one partner or both is the major cause of divorces in the West. It is difficult to judge if this is so in India because of the want of any adequate statistics, considering, as one writer very ingeniously puts it, "The surface calm, tension underneath—Indian marriages." Sex is the best medicine for relieving emotion, as sex is a form of liberation. Dr William H. Masters, noted marriage counsellor, regards sexual fulfilment as the cornerstone of a happy married life. Not only that, but a satisfactory sex life is important for overall happiness in life.

About 75 per cent to 80 per cent of cases being treated for physical disorders can be traced back to frustration or some emotional or mental factor of which the patient is not aware in the manifestations induced by it. One doctor rightly puts it as the "E. I. I. or emotionally induced illness factor." Just as frequent or excessive sexual indulgence may involve physical and psychological strain, in the same way suppression, maladjustments, and physical or mental incompatibility of the couple may lead to grave disorders resulting in cardiac pains, menstrual disorders, growth of hair,g landular disorder, collites, ulcers, frigidity, headache, migraine, and various pains in the body. Psychosomatic factors lead to obesity, asthma, hysteria, convulsion, insomnia, neurosis, mental depression, emaciation, alcoholism, heavy smoking, and even insanity and suicide. Menopause should be taken to mark a change of sex life.

Sigmund Freud, who explained many of the hidden aspects of sex, propounded the view that a disturbed attitude to sex and psychiatric disorders of different kinds are interrelated. The *Kama Sutra*, the ancient Hindu classic, is now unanimously acclaimed as one of the world's

greatest expositions of the art of love and sex. Havelock Ellis, Ven de Velde and many genitologists in the West have emphasized the importance of sex knowledge in married life. *The Kinsey Report* and Dr Master's and Dr Virginia E. Johnson's detailed study, *Human Sexual Response* and *Human Sexual Inadequacy* prove the importance of sex education, behaviour, and adjustments not only for a happy married life but much more so from the point of view of health—physical, mental, emotional, and spiritual.

WHAT IS DEATH?

Death, like birth, happens to all of us but it has been said that death itself is a birth. It can be defined as the state of transition from this world to the next, the state in which we leave the physical body. The dying body is a body which has usually (except in the case of accident) reached the end of its endurance; it can go on no more. Its mechanism gradually fails, its metabolic processes no longer have the ability to renew the failing organism. Eventually the heart stops, the breathing stops.

Clinically and legally a person is supposed to be dead when his body shows no sign of a pulse or a heart beat. However, one does not die instantly. After the heart has ceased to beat and the lungs have ceased to work, the brain has to die. The brain cannot live long without oxygen, but even the brain does not die instantly; it takes some time. That is why Russian scientists who have commented on heart or organ transplantations are concerned with the state of the donor, who is presumed or proved dead, and not of the recipient.

Here the Soviet approach appears to be both humane and scientific. Under Soviet law, human organs can be used only from persons whose death has been proved by

which conforms to its theory and philosophy. In short, naturopathy is not only a complete system of healing which uses natural agencies, but is a way of life.

WHAT IS NATURE CURE?

For the benefit of the uninitiated let us look at three aspects of nature cure as a method of healing. First, as an historical movement using nature's forces of air, light, sun, water, and food. Secondly, as a philosophy of natural living, incorporating healing and the consequent joy of life. Thirdly, as a practical science and art of restoring health with the aid of qualified naturopathic practitioners. Nature cure, therefore, must be studied as a therapeutic agent, as a mode of living and as a religion.

There is a depth and breadth in the nature cure movement which is not thoroughly understood by the layman and even by the casual practitioner. Nature cure is a comprehensive term applied to all methods of treating disease which aim at cooperating with the natural forces and defensive mechanism of the body. It is a distinct system of healing based upon its own philosophy of life, health, and disease. It may be defined as an art, a science, a philosophy, and a practice following definite physical, chemical, biological, mental, and spiritual laws for the restoration of health and the correction of bodily disorders without the use of poisonous drugs.

Nature cure is a complete revolution in the art and science of living. It is not only a therapy, it is a way of life in tune with the vital, life-giving forces or elements comprising the human entity on the physical, mental, and spiritual planes. It is this supreme natural force or power acting in and through every atom, molecule, and cell in the human body which is the true healer, the *vis medicatrix*

natural which always endeavours to heal, repair, and restore the perfect type. All that the physician can do is to remove obstructions and to establish normal conditions within and around the patient so that the "healer within" can do the work effectively.

The human body is a self-operating and, therefore, a self-repairing mechanism which will maintain itself in good health during its existence and restore itself to normal health, provided of course the shock induced by injurious agencies is not too great. It is the sick who, consciously or unconsciously, have brought violence upon themselves by improper use of the agencies of nature. Violation of nature's laws in eating, drinking, breathing, working, resting, thinking, as well as in moral, social, and sexual conduct results in certain primary and secondary manifestations of disease. Acute disease is a condition in which there is a violent reaction against the injurious agencies. Suppression of nature's efforts in acute disease results in chronic disease.

It should be made plain (and clearly understood) that in disease there is a primary and secondary cause. The first recognizes the individual's environment and his use of it. The second is the accumulation of foreign matter in the system caused by one or more primary factors.

The various forms of naturopathic treatment have been classified under a triplicity of science—the psychological, mechanical, and material—according to their nature: (*i*) man's emotional, mental, or psychic nature; (*ii*) the anatomy and physiology of the body, its parts, or any of its functions: and (*iii*) the chemical substances which compose the cells and tissues of the body.

For treatment, the naturopathic physician employs such methods and means of cure as (*i*) psychotherapy, constructive suggestion, and correction of wrong habits;

(*v*) Brain death as a criterion for diagnosing life's end is very important in case of doubt. If the electroencephelogram remains truly iso-electric (i.e. electrically neutral or flat) for a number of hours, there is no hope of revival and death soon follows.

The Howard Committee suggest that if there is a doubt the tests should be repeated twenty-four hours later, especially the EEG.

CHAPTER X

Nature Cure—Its History and Methods

Naturopathy is a scientific system of healing by a naturopathic physician, diagnosing through methods generally adopted in modern medical practice, and in addition to these methods using other important means like osteopathy and chiropractic spinal diagnosis. It also takes the help of Iridiagnosis, a method of determining bodily conditions by examining the iris of the eye.

A naturopathic physician treats and administers for any human disease or trauma, pain, deformity, or physical, chemical and mental condition through the use of air, water, light, heat, earth, fasting, hydrotherapy and mineral baths, electrotherapy, chromotherapy—corrective and orthopaedic gymnastics, scientific massage and manipulations, osteopathy, chiropractic, vibrotherapy, psychotherapy, and artificial dilation and other stimulation of the sympathetic nervous system through the orifices. Above all it leans on dietetics, which includes the use of foods and monodiets, and also natural medicine such as herbs, biochemical tissue-building products and cell-salts found in the normal body, excluding the use of poisonous drugs.

Modern naturopathy includes every physiological method and agency which has proved worthy through the centuries and accepts any new discovery or development

EEG, i.e., electroencephelograph, and an ECG, i.e., electrocardiogram. This is very correct as there have been absolutely authenticated cases where a man has been beheaded, and when the severed head was held up for public inspection the lips continued to move. Owing to lack of oxygen the air supply going past the vocal cords diminishes till the brain is no longer capable of functioning, and the rest of the body dies slowly. It is said that various organs continue dying for a day or so, and at the end of three days the body is just a lump of decomposing protoplasm.

Raja Yoga and spiritual science generally enlightens us by claiming that the physical body has an astral body, the two being connected by means of a cord known as the silver cord." In sleep or in a trance, the astral body leaves the physical body and travels at times into the astral plane. The same thing happens when a Raja yogi is buried alive. As the yogi is in a trance his astral body leaves the physical body which is alive though clinically he would be declared dead.

As long as the cord attaches the physical body to the astral body, the body is alive, but the moment it snaps the physical body dies. Occultism claims that there is a kind of diaphanous cord attached to the pineal gland (the third eye) and that this is the connection with the spiritual entity which is the real man in his astral form. At death this cord is severed.

Some occultists believe that the solar plexus is the place where the spirit is connected with the body. Others are of the opinion that the silver cord streams out of the body, usually from the navel. It is believed that different people may have different outlets for the silver cord, depending upon the development of the *atma*. Whether this is so or not, the occult idea is that when the cord

thins, withers, and parts from the so-called body, death occurs. Only then has the real person flown off to another life, to another stage of evolution. Once the astral body has left it does not matter at all what happens to its fleshy envelope. It should be disposed of in any hygienic way.

A person who has died, it is believed, has three clear days in which to sever and dissociate completely from the physical body. In our religious teachings we are told that the astral body, the soul or *atma*, leaves the physical body on the fourth day, which is called "charam" or the day of resurrection, when the soul reaches the spirit world. It is obvious that whatever method or cure one follows, death cannot be avoided, though one can, through sensible living, prolong life. It is as natural to die as it is natural to be born. It is premature deaths that are tragic.

As we are concerned only with physical death, we should be able to determine whether a patient is truly dead or not. Clinically and legally a person is dead when there is no pulse or heart beat. There are several tests to determine whether these are absent.

(*i*) Clinically, a person is dead when no breath condenses on a mirror held before the lips.

(*ii*) The reflexes should be absent. Tendons tapped with a small reflex hammer should not elicit the reflective muscular response seen in a living person. The pupils of the eyes should be dilated and unresponsive to bright light.

(*iii*) The patient should be totally unaware, unresponsive, so that even the most intensely painful stimuli evoke no response, not even a groan, withdrawl of a limb, or quickening of respiration.

(*iv*) The patient should be observed for at least an hour to make certain that there are no muscular movements or spontaneous breathing.

(*ii*) mechano-therapy, articular and spinal manipulation, exercise, corrective and orthopedic gymnastics, physical therapy, etc.; and (*iii*) biochemical, nutritional control, dietetics, etc. The principle tools which nature cure uses in maintaining and restoring health are fasting, diet, rest, exercise, sunlight, and fresh air.

Hydrotherapy, electrotherapy, massage, corrective, gynmastics, and manipulation are natural modes of treatment. These means of treatment are included under the general term physiotherapy. They have been developed to accelerate natural healing. Physiotherapy should not be regarded as a separate and distinct therapy like nature cure but rather as one to be used in conjunction with proper medical and surgical care.

There are at present two approaches to the science of nature cure. The first takes into consideration only the five elements of nature cure, that is, sunlight, air, fire, water, and earth (food) on which the whole science is based in practice. This is how nature cure was practiced by its pioneers. Its adherants think that any aid taken beyond this is not strictly nature cure.

The other, which might be described as the eclectic group, which besides making use of the five elements, includes the use of other therapeutic methods that conform in every respect to the philosophy of nature cure. This group considers that methods which are constructive, not repressive, and which have no harmful after-effects come rightly within the sphere of naturopathy. This second group of nature cure scientists does not regard naturopathy as a rigid system in the dogmatic sense. Naturopathy is primarily and fundamentally "drugless" and "bloodless," yet, in its broader aspects it does admit the use of both natural medicines and surgery when their use is constructive and in conformity with the basic

principles of the philosophy of nature cure. The individual modalities and technique employed in nature cure vary with the degree of intelligence, training, and clinical experience of its practitioner.

The history of nature cure is as old as the origin of man. All living beings, including animals, know and practise nature cure by instinct. A sick dog will fast by natural instinct. Cats know the importance of a sunbath. The aboriginal races had very few diseases compared to the many found in civilized nations because they lived more naturally than civilized man.

It may not generally be known that the philosophy of natural healing is a part of Indian lore. Nature cure, very much as we know it today, was practised in ancient India, where philosophers, yogis, holy men, and other ascetics and their disciples followed many of its methods for the purification of the body, mind, and soul, to help them through long hours of meditation. Among the common religious customs in India are fastings on certain days of the week, subsisting only on water for some time, and on fruits on selected days of the month.

Healing means not only the removal of disease and its symptoms, but instruction and education so that the individual is raised to a higher level of living, thereby avoiding illness and disease. Knowledge of nature cure not only helps to prevent and cure diseases but it teaches how to live well and enjoy sound health. From the beginning the leaders of the nature cure movement have been teachers as well as physicians.

HISTORY OF NATURE CURE

Ever since man became conscious of pain and discomfort, instinctively or otherwise, he has learned to use and apply

the natural forces of the universe for his comfort, benefit, and well being. The first cry of pain through the primitive jungle was the first call for the physician.

Fundamentally, the basis of all life, that of man or beast, is wholly dependent for its very existence on the five elements of nature—sunlight, air, fire (heat), water, and earth (food). History has disclosed that for thousands of years people have used, in some form or other, the natural forces of the universe for the preservation of life and the restoration of health.

Nature cure is one of the gifts of our ancient Indian civilization to the world. Long before Aristotle, Hippocrates, and Plato were born, the Indian yogis and sages were proponents of nature cure. The long hours of meditation practised by our learned and holy men called for great will-power and self-control. Fasting, dieting, *asanas*, exercises, and various types of baths helped to discipline an individual. These were the pioneering attempts at nature cure.

It was Hippocrates, the renowned physician erroneously called the "father of medicine" and still respected by the scientific world of today, who emphasized that man being the product of nature is definitely governed by natural laws. His life, health, and being are influenced and affected by them in one way or other. With the advancement of science there was some diversification in the art of healing. Some physicians who recognized the simple essentials for health and resistance, and used them with a belief in the *vis medicat nature* (the healing power of nature) continued to follow the theory laid down by Hippocrates and his colleagues, and by earlier practitioners.

On the other hand, physicians relied upon chemists and bateriologists, and placed their faith in vaccines,

sera, animal extracts, and so-called scientific remedies, and in all the elaborate armoury of the bacteriological and chemical laboratories. These produce results which, ludicrous in the light of recorded statistics, are at present the basis of modern medical science. Hence the fundamental divergence between medical and nature cure methods of treatment.

Nature cure was born with mankind. It took different forms of expression at different periods of its evolution, according to the protagonists as well as the environment and conditions then existing. Further, unlike other schools of cure, particularly the allopathic, the therapeutics of nature cure developed with synthetic instead of analytical viewpoints.

Medical science started administering drugs orally and parentally for treating illness of all kinds. Naturopathy continued teaching mankind how to help and encourage nature in healing all kinds of illness by purely natural means without administering poisonous drugs. Hence the emphasis of allopathy was on curing the effect, and that of naturopathy on curing the cause. Allopathic physicians devoted themselves to the study of disease rather than to the study of health.

Hence medical science treats diseases symptomically rather than basically, that is to say, the average medical practitioner seeks to remove the symptoms (discernible effects) of disease rather than its basic cause within the system. The nature cure practitioner, on the other hand, while being guided by symptoms, aims at the removal of the fundamental causes of disease, which he claims are basically the same in all diseases, irrespective of the form it may take in any given case.

For example, the medical procedure for constipation is merely the forced relief of the bowels by the

administration of purgatives which do nothing to remove the fundamental cause or causes of bowel sluggishness, but actually intensify it. The nature cure treatment for constipation is directed towards the removal of the basic cause of the condition, i. e. wrong diet, weak abdominal and colonic muscles, lack of exercise, irregular habits, emotional or mental stress, etc. This ensures the proper working of the bowels without any artifical aid.

If we continued through the whole list of diseases common to man, in every disease the medical treatment would be found to be directed towards the eradication of the superficial aspects (or symptoms) of the disease, whereas the nature cure treatment aims at the removal of the fundamental causative factors. It, of course, takes into consideration the special symptoms of the disease.

That is why Professor Rennonard in his "Letter Philosophique et Historeue Sur Medicine" has written: "The physicians long left the path of simple and true observation which Hippocrates showed them, believing that they had formed another guide in their physiological and pathological theories." Evidently, the practitioners failed to see the wisdom of Hippocrates' teaching.

This does not reflect in any way on the diverse methods of treatment. At no time did Hippocrates or his contemporaries teach that one particular method or system of healing was sufficient to maintain or restore the health of man. There are two principal methods of treating disease—one is combative, the other preventive. In the allopathic schools and in its colleges and research institutes, the trend is more or less combative. Their usual procedure is to subdue and suppress disease and its symptoms by means of drugs, surgical operations, inoculations, vaccinations, etc. This method fights disease with disease, poisons with poisons, germs with germs.

The naturopathic physician, on the other hand, works more along preventive lines, by teaching hygienic living, by natural methods of treatment, and by the elimination of the causes of ill-health and disease in the patient. Naturopathy is not to be thought of as a mechanical and manipulative therapy or as akin to physiotherapy. It includes all systems of healing, that is, the employment of any method, mechanical, organic or inorganic, in assisting the body to return to the state of normality. To be more specific, the naturopathic physician employs physiological, psychological, and mechanical sciences that rebuild, purify, and normalize the vital forces of the body. Modern naturopathic medicine includes every method and agency which has proved worthy through the centuries and accepts any new discovery which conforms to the theory and philosophy of nature cure.

METHODS OF NATURE CURE

Various methods of nature cure have been tried, and have proved successful in preventing diseases. Some of these are given below for practitioners of other methods of healing, and may be used in conjunction with other methods or independently as the case may be.

Fasting

Of the various measures employed in the course of natural treatment by far the most important preventive and curative measure is fasting. Fasting is not starving. It is both the popular as well the medical view that starvation begins almost immediately after the discontinuance of meals. Organic destruction is supposed to set in at once. This is not in any sense true, for the effect of fasting is at first constructive. Actual regeneration of the blood, as

well as the repair and the regeneration of the various tissues of the body takes place, conclusively proving that fasting, if properly conducted, is not injurious but distinctly beneficial.

Because much misunderstanding exists in regard to fasting, it must be pointed out that it is merely a digestive and physiological rest, during which the body devotes all its energies to eliminating accumulations of waste and poisonous matter from the system. The effect of fasting in enhanced by a preliminary cleansing of the bowels which is usually done by an enema or bowel wash.

However simple the principle of fasting may appear, it should never be conducted without proper supervision. Not only should the fasting be done scientifically, but the breaking of the fast together with the preliminary diet to follow, should be guided by one who has a thorough knowledge of the subject. It may otherwise result in permanent damage to the alimentary tract or even the whole system. The age of the patient, the nature of the complaint, its duration, etc., are all factors which have to be considered before a fast is undertaken.

A fast may be continued on water only, or else the patient is given juices, usually orange juice, at two hourly intervals during the day. If the patient is unable to take orange juice, vegetable juices are given instead. These vegetables or fruit juices are in no sense food, and serve not only to cleanse the alimentary canal (digestive tract), but to supply the system with some of the invaluable mineral salts often lacking in the patient's body. For the first day or two there may be appetite, but once the system becomes adapted to the new condition, i.e., the condition of fasting, the appetite disappears altogether and does not return until the fast has gone on sufficiently long for the tongue to clear. When the tongue has cleared,

especially when fasting is undertaken to eliminate fever, the appetite begins to return. In such cases, it is time to cease fasting and begin eating again.

In a fast of one to three days, the appetite may not return when the fast is broken. But as soon as food begins to be eaten, a really sound and healthy appetite makes itself felt. This is because while elimination is going on, the body has no desire for food, indeed, food is repugnant to it. As soon as food is taken again and the assimilative process set in operation, the body shows its readiness to welcome food in no uncertain manner.

When a fast is being broken, great care must be taken not to overeat. Overeating after fasting is the greatest danger to be avoided, and here again skilled advice and attention are indispensable. Much depends upon how long the fast has been carried on. Generally, a sweet fruit (such as grapes) or milk are the food to be chosen. In fact, after a prolonged fast, the "milk cure" as it is called, is of inestimable value in building the system anew in almost every type of disease.

Gradually, and only gradually, can the patient return to a full, normal diet after completing a fast of some duration. Taking a properly balanced diet, all the benefits of the fast are maintained and the system develops a high level of efficiency and strength. But if wrong and indiscriminate feeding is resorted to after a fast, virtually the whole value of the fast will be lost.

Proper Food and Regulated Diet

Food is eaten so that it may be digested, absorbed, assimilated, and finally transformed into energy. Heat, motion, activity, and work leading to health are but the manifestations of that energy in a kinetic form, energy which was contained in the food in a potential form. The

main purpose of wholesome food is to provide the factors necessary for the growth and repair of the body as well as those elements with which the body generates energy and heat. The two purposes serve one great end, the maintenance of the vital force within us at the highest level of perfection. We should, therefore, select and eat food not merely to exist but also that we may live well and enjoy good health.

Our food is largely spoilt long before it is gathered. Plants and trees often suffer from either deficiency or excess of certain elements in the soil. These conditions naturally result in poor crops and lowered stability of plant protoplasm, making it susceptible to rapid degeneration and to attack by fungi and insects. The soil must, thus, contain all the essential elements for the growth and propagation of plant life, in an assimilable form and in the right proportion in order to bring forth wholesome and durable products. These, in turn, are necessary for the normal development of animal and man. We can never expect to build healthy, strong, and enduring bodies from food grown on impoverished or wrongly fertilized soil.

Apart from growing mineral-starved food, we find that much of it is totally altered in composition. Millers have learned to deprive our grain of the surrounding skin, the bran, which is extremely rich in health-giving elements, mineral substances, and vitamins. Many people live largely on denatured, artifical food. In ever-increasing numbers, people subsist on tinned foods. In order to make these artifical foods more attractive to consumers they are dyed in chemicals, with chemical flavours added to them. These devitalized and demineralized foods lower the vitality and sap the health of the people, thereby making them fall prey to various diseases and epidemics. However, it is not our intention to discourage storage and

preservation of food by simple and effective methods in which the quality and vitamin contents are preserved. In fact, such foods become a necessity when it is difficult to find fresh foods.

The three main constituents of food are carbohydrates, fats and oils, and proteins. Besides these, mineral salts, water, and vitamins are the essentials of a balanced diet. The proportion of these constituents and factors is one of the main problems of dietetics. Carbohydrates, which include sugars, are the heat and energy giving foods. Proteins supply materials for building up new cells and repairing old ones. Fats and oils are also heat giving foods, but have functions different from carbohydrates. Water helps digestion and elimination of waste products. Minerals maintain proper balance in blood and in all the tissues, while vitamins supply vitality and maintain health.

Practical Dietetic

It will be seen that sound dietetics is essential for overcoming disease, either in conjunction with, or in place of fasting. The individual under natural treatment must be prepared to live in accordance with the dictates of sound, sensible dietetics if he wishes to maintain his health at the proper level of efficiency. The necessity for practical understanding of this vitally important subject must be manifested to every reader (irrespective of whether he wishes to overcome disease or prevent its appearance in the system). The following summary of the natural dietetics treatment will be of help to anyone who has his health and future welfare at heart.

All-Fruit Diet

The necessity for a proper supply of the essential mineral salts in our daily food cannot overlooked. Fresh

fruits contain these essential elements in the greatest abundance. That their cleansing and body-purifying properties are neglected by the medical profession in the treatment of disease is one of the tragedies of our age.

The victim of disease is always lacking in these mineral elements essential to health and vitality. When he comes under natural treatment, an exclusive fresh fruit diet is often prescribed with a view to cleaning his system of toxic matter and supplying to it some of the essential minerals it badly needs. When first taken into the system fruits are acid in reaction, and this fact has confused many people as regards their health-giving value. The weak fruit acids are in fact quickly broken down in the system, and valuable alkaline mineral salts are left behind in the tissues. It is this residue of organic alkaline mineral matter, left behind in the tissues after its oxidation, that gives fruit its greatest value as a curative and body-cleansing agent. Patients who for some reason cannot eat fruits are given raw and steamed vegetables instead, which serve exactly the same purpose in the curative process.

Fruit and Milk Diet

Milk is the one food which is complete in itself as it contains all the the elements the body needs for full sustenance and for cleansing purposes. As such it is highly prized in natural treatment. When a patient has been on a fast or on the all-fruit diet, the next step is often to place him on the fruit and milk diet. This carries on the curative process. At the same time the body is provided with vitality and with nerve and muscle-building elements (these latter coming from milk). Thus the fruit and milk diet is a kind of half-way house between the direct cleansing action of the fast and the all-fruit

diet, a restricted diet and a full diet designed to build the patient's system after the cure.

Full Milk Diet

After a protracted fast what is called the "full milk diet" is prescribed. For this the patient is fed on milk only, in gradually increasing quantities, until he sometimes drinks as much as six seers a day. The full milk diet should only be carried out under expert guidance. The results are often little short of amazing. The fast followed by the full milk diet is very effective. Solely by means of these two natural therapeutic and dietectic agents, diseases as diverse as pernicious anaemia, diabetes, arthritis, Bright's disease, and neurasthenia have been cured.

Balanced Diet

A well-balanced diet should include a sufficient amount of raw vegetables and fruits for organic minerals and vitamins, together with other elements in the right proportions.

(*i*) *Carbohydrates*. About 14 ozs. of starches and dextrines (found in cereals) are necessary in the daily diet for both vegetarians and non-vegetarians. Cereals may be selected from the following foods—rice, rye, oats, corn, ragi, wheat, and their substitute from vegetables (roots and tuber) like potatoes, sweet potatoes, pumpkim, and fruits like bananas.

(*ii*) *Sugars*. About 2 ozs. per day is necessary for vegetarian and non-vegetarians. It may be in the form of *gur*, honey, maplesugar, white sugar, brown sugar, glucose, or its substitues in melons, beet, and in fruits like grapes, dates, raisins, and bananas.

(*iii*) *Hydrocarbons* (Fats and Oils). About 2 ozs. per day is necessary for vegetarians in the form of *ghee*, butter, cream, cheese, rut, and vegetable oils.

(*iv*) *Proteins.* For vegetarians, at least 10 ozs. per day of milk, 3 ozs. of pulses and *dals*, plus 1 oz. of nuts like groundnuts, soyabeans, pistachios, walnuts, almond, etc. are necessary. For non-vegetarians, 3 ozs. of meat or fish plus 10 ozs. of milk plus one egg, and 3 ozs. of pulses or *dals* (optional) per day is advised.

(*v*) *Organic Minerals and Vitamins.* For vegetarians and non-vegetarians, per day, 4 ozs. of green leafy vegetables, 3 ozs. of root tubers and other vegetables, 3 ozs. of raw vegetables, and 3 ozs. of fruits are necessary.

Hydrotherapy

Hydrotherapy is a branch of "nature cure" which treats disease by the application of water in various forms and temperatures. The latest researches and investigations have revealed the wonderful palliative and curative virtues of water. The medical profession has become so wedded to drugs that it spurns the use of water—either internally or externally—in anything like the proper proportion which its undoubted therapeutic qualities demand. But naturopath makes full use of the cleaning and healing qualities of hot and cold water.

For cleaning the bowels during fasting, or during the early part of natural treatment in cases where bowel action is sluggish, the warm water enema is invaluable. The enema is not intended to be used continuously by patients undergoing natural treatment, but only in the beginning of the treatment, that is, until the bowels have been set to function properly. The enema is the only form of water treatment that is applied internally by the naturopath.

As an external healing and cleansing agent, water is used in a variety of ways.

The hot bath, cold both, warm bath, the hot Epsom salts bath, and the sitz bath (either hot or cold), are forms

of water treatment used in conjuction with other modes of natural treatment. Their use depends on the nature of the complaint and the condition of the patient.

For instance, the morning cold sitz is one of the finest of tonic agencies. It is possible to employ it in revitalizing a depleted system, though some people find it too rigorous. The physician has to use his discretion in each case. The hot Epsom salts bath is a very fine cleansing agent, but people with weak hearts are not likely to get the best results from its use, because it is enervating in its immediate effects. Here again discretion in treatment is necessary.

One of the greatest uses of water in natural treatment is that of wet packs. Cold packs are made by wringing out some linen or similar material in cold water, wrapping it round the area or part of the body to be dealt with, and covering it with warm flannel. The cold application, covered as it is by warm material, has the effect of drawing out the inflammation, pain, and swelling in a manner little short of miraculous. This is particularly so in the case of wet packs used in abating fevers.

Properties of Water

Water possesses four remarkable properties, all of which render it most valuable for healing purposes. (*i*) It is a great solvent in absorbing, communicating, or releasing heat. (*ii*) It has great solvent properties, being the one universal solvent. (*iii*) It is available in three forms—liquid, solid, and gaseous. (*iv*) It is adaptable to the form of its container. A number of people believe that the only use of water employed externally is for cleanliness, just as many believe that the only use of water internally is to quench thirst.

No other therapeutic agent possesses so many admirable qualities as water. It is the most flexible medium for producing the thermic and mechanical effect desired, and can be applied either to a limited area or to the whole surface of the body. No other substance is capable of absorbing so much heat as water, for which reason it is taken as the standard of specific heat. It also releases heat with great readiness. It can, therefore, be used either for abstracting heat from the body or communicating heat to it.

Being a universal solvent, its use internally in the form of enema, colonic lavage, or water drinking aids greatly in the elimination of uric acid, salts, excess sugar, and many other blood and food chemicals that are waste products (auto-intoxication) which readily accumulate in the body under certain abnormal conditions causing more or less pronounced damage.

Physiological Effects of Water

The physiological effects of water are due to those qualities which enable it to be used (*i*) as a nutrient entering the composition of every structure and serving a useful purpose in nearly every function, especially as a vehicle for conveying food material to the tissues and removing wastes; (*ii*) as a means of abstracting heat from the body by contact and by evaporation; (*iii*) as a means of communicating heat to the body; and (*iv*) as a means of producing certain mechanical or percussant effects.

It must be remembered that in addition to the reflex effect produced, there is also a mechanical effect which is commonly the reverse of the reflex one. The real effect is the sum of these two and depends upon their relative intensity. The effects of the application of water may be simply divided into two classes, reflex and mechanical. The mechanical effect is necessarily the reverse of the

reflex. When the blood vessels of the skin are made to contract as the result of the application of an irritant of any sort there is an inrush of blood into the interior of the body. This causes mechanical distension of the internal parts, which follows more or less quickly. The primary universal constriction of the small vessel takes place according to the intensity of the irritation and the extent of the application.

Some Fundamental Principles of Hydrotherapy

(*i*) *Cold Water*. This has the effect of improving the tone of muscles and blood vessels, because the reaction after its application increases tension. Warm water results in relaxation, dilation, and reducing of tone. Each produces a hypermia, an increase of blood in an area. Cold water produces this effect through reaction and is tonic in nature, while warmth does it through relaxation, and is not a tonic.

Cold water applications have so many effects that it is well to understand them. The primary effect of cold water application on the skin is to contract the small blood vessels in the skin and produce pallor and coldness. But as soon as the application is withdrawn, the contracted blood vessels expand and the effusion of the part, with an increased amount of blood, brings redness to dispel the pallor or blueness. Hence, depending upon the vitality of the patient, the secondary effect of a cold application is that of a return to the previous condition, or greater activity.

If one's vitality is low, a cold application for even a short time may cause fairly prolonged depression. There may be a return to subnormal activity in the part to which the application was made, or even in the entire body in case of a general application. In such cases, there may be no reactive increased functioning. This return

to the normal, and especially the rebound to increased activity, is the explanation of the tonic effect of cold water upon those of good, resistant vitality.

By the use of cold water upon the surface of the body, we have the apparent paradox of deriving a stimulating or tonic effect from that which primarily depresses the activity of the skin and subsequent tissues. This clearly shows that it is not the effect of the cold that one seeks to produce in most cases but the after-effect, induced by the sensation of cold.

(*ii*) *Hot Water*. One of the chief values of the application of hot water to the skin is that it prepares the body for the application of cold water. The reactive power is largerly increased if this preliminary heating has taken place, and in the case of fatigue, rheumatism, neuralgia, or anaemic and enfeebled persons, this preliminary heating of the skin is of the greatest importance.

Hot baths are in many respects just the opposite in their influence, and relax the tissues of the body. Hot water is always very soothing and is invariably effective for relieving pain. It may also be used to excite or depress the nervous system. Baths of high temperature should not be too long or they will produce excessive excitement or stimulation, sometimes causing nervousness, headache, dizziness, nausea, etc. If the heat is long continued, exhaustion may appear.

A one-and-a-half-hour neutral bath, that is, of water slightly below the temperature of the body, produces such complete isolation of the nerve centres that it acts as a delightful sedative.

(*iii*) *Aternate Hot and Cold Applications*. One of the most stimulating of all applications is the alternate hot and cold bath, especially by means of a shower or jet. This effectively stimulates appetite and overcomes local

(*ii*) *Alternate Hot and Cold Applications*. Alternate hot and cold bath, especially with a shower or jet, effectively stimulates appetite and overcomes local congestions and enaemias without causing any disturbance to the heat balance of the body. Apart from the thermal effect (as explained above) the mechanical effect, that is, of the pressure, should be taken into consideration since this enhances the effect of a water application.

That the mucous membranes can endure water ten or fifteen degrees hotter than the skin can is evident by the fact that many people drink liquids hot enough to scald the skin. The water of an enema or rectal irrigation may be comfortably borne in the rectum while its contact with the skin upon the passage will be extremely painful. In the steam or vapour bath a temperature up to 120°F is generally employed and in Turkish or hot-air baths, from 140°F to 180°F.

The sweat box, either in the form of steam, radiant heat, or hot air; is one of the most covenient means of inducing perspiration. It is on this account liable to abuse. The chief therapeutic value of the bath is elimination. Hence it is often employed in rheumatism, gout, urticaria, toxemia, diabetes, and obesity.

(*iii*) *The Compress*. This is simply the application of water at any temperature by means of a cloth, sponge, or other suitable medium. The ordinary, old-fashioned poultice is a compress, but inconvenient and messy for ordinary purposes. A linen cloth folded two to four times renders the best service. If the compress is to be greatly prolonged, a rubber bag filled with water at the proper temperature may be placed over the compress to maintain the desired temperature.

(*iv*) *Fomentation*. This is the application of a hot compress, usually a thick folded flannel cloth, applied a number

of times at a high temperature. Dip the fomentation cloth into boiling water, holding both ends. When it is thoroughly soaked in the boiling water, twist both ends so that the cloth is wrung out thoroughly and place it on the part to be fomented. When very hot water is used, the cloth must be wrung quite dry, otherwise there will be danger of causing blisters on the patient's skin. Another precaution which should be observed is to place a dry cloth next to the skin. In concluding the treatment, cold application should always be made for a short time.

(*v*) *The Sitz Bath*. The sitz is one of the oldest and most serviceable of hydratic procedures. It has to be taken in a sitting position, with the feet placed in a separate and smaller tub containing warm water. The temperature of the sitz bath may be cold, cool, or hot. The temperature of the cold sitz bath should be 55°F to 65°F, and the duration one to fifteen minutes. A short, cold sitz bath produces tonic effects. It is most frequently employed for disorders of the pelvic viscera. The prolonged cool sitz bath affords excellent results in chronic menorrhagea. In many cases in which the cold sitz bath is contraindicated, a sitz bath at 85°F, cooled to 75°F is beneficial for fifteen to twenty minutes.

The temperature of the hot sitz bath is 106°F to 120°F and its duration three to four minutes. It is well to begin with a temperature of 100°F rapidly adding hot water until the maximum temperature is reached. The feet should be kept in hot water. The hot sitz bath is a most powerful analgesic measure. For the best effects, it should be followed by a cold application for a short time.

(*vi*) *The Wet Sheet Pack*. This extremely useful and widely applicable hydratic procedure is accredited to Priesnitz who is considered by naturopaths to be the father of hydrotherapy. The patient is covered with the

wet sheet pack and blankets are tucked well around him to avoid exposure. The cold wet pack effectively reduces temperature. It is more convenient and less disturbing than the cold bath, especially when applied to patients with high temperature.

The wet sheet pack is used not only for febrile conditions but also for sweating, depending upon the length of the application. Sweating may be increased and prolonged by making the patient drink water freely.

It is one of the most useful of hydrotherapeutic procedures. It has very powerful effects, is convenient and easily applicable, and can be modified to suit different pathological conditions.

Psychotherapy

Nature cure stands for a new understanding of this important science. The tendency has been to use psychology merely as a means of correcting bodily ailments and mental errors. This is good and necessary, but more is needed. Psychology should be employed more as an integrating rather than as an analytical factor. Most psychological disorders can be traced to a failure in the individual to experience the joy of living. This is of course general in most people and endless time is spent both by practitioners and patients to combat the result of this failure. Naturopathy attempts to deal with causes rather than with symptoms in all spheres of life—physical, mental, and emotional.

The right mental attitude is of great importance. Agreeable thoughts and pleasant emotions induce bodily conditions which favour health and efficiency. On the other hand, physical and mental fear, anger, and worry induce morbid states and generate poisons which create disease. In fact we would be remiss in our duty if we

failed to recognize the fact that the state of mind effects the health of the body and its longevity. The body can be ruined through mental stresses if they are sufficiently severe to interfere with normal functions.

We may not be able to prevent mental fears voluntarily, but with proper understanding and by following the laws of health, the body can be kept healthy and strong, and in that way help to control fears. Worry is akin to fear. It is in fact a sort of chronic fear. To anticipate failure is to invite it by suggestion. Worry, like other depressing emotions, while sometimes caused by the physical state, reacts upon the body in a most pernicious way forming a vicious circle. Worry kills a hundred people to every one killed by work.

Worry is also a morbid physical state as real as indigestion, rheumatism, or any other bodily disease. A sick mind often makes physical health impossible. Many physical ills like paralysis, chronic indigestion, nausea, constipation, or general debility of mind and body called neurasthenia have been cured through the mind when all efforts directed purely to the physical condition have failed. Health lies deeper than blood and muscle. To obtain and preserve health there must be a resolute will as well as perseverance and discrimination. Hence the importance of right mental attitudes and positive thinking.

One need not go so far as to say that all illness is an idea, and that if the idea is corrected the supposed illness will disappear. One must, however, recognize the fact that the mind does react for good or ill on the body, and that the body reacts on the mind in exactly the same way. When the body imposes on the mind sensations that are not pleasant (such as suggestions of illness) the mind becomes depressed. Mental depression partially inhibits normal functions, for all functions depend on normal brain

or nerve stimulus to act fully. So, as the body depresses the mind so the mind depresses the body, the one making the other worse, resulting in actual illness or functional failure.

Recent studies in auto-suggestion have shown that it is the most effective healing agent if properly applied. A great deal of its healing force is lost to the patient if not properly used. The reason why auto-suggestion and psycho-therapeutic agents of a similar nature have not achieved the success expected and claimed for them in certain quarters is that the physical side of the case has been entirely neglected during treatment and all attention focussed on the mental. In nature cure both the physical and the mental receive their due share of attention with the best results for the patient.

Electrotherapy

Electro-therapy is a branch of nature cure which uses electricity as a curative agent. It includes galvanic, feradic, short wave diathermy, ultra sound, electrical light baths, infra-red rays, ultra-voilet rays, etc. In order to intensify the effect of some remedies in nature cure the aid of electricity is taken so that quicker results are obtained.

Massage

Massage is a passive form of exercise which softens and relaxes hardened and congested parts. It forces out of the tissues stagnant and impure blood, bringing a fresh supply laden with oxygen and nourishment, thus ensuring rapid combustion and thorough elimination. Electrotherapy and massage are also used by doctors under the name physiotherapy. These methods, therefore, need not be dealt with in detail here.

Barring trauma (injury) and surroundings uncongenial to human life, the primary cause of all diseases is violation

of health laws in thinking, breathing, eating, drinking, and resting, as well as immoral social and sexual conduct which results in primary and secondary manifestations of disease. It is very necessary, therefore, to understand and follow the laws of health in order to prevent sickness and disease.

Fresh Air and Sunshine

Fresh air and sunshine are as necessary for good health as food and water. Oxygen inhaled, the air we breathe is necessary for every function of the body. When taking an air bath we expose the entire body to air, bathing it in air, so to speak. Airbaths give the skin a chance to breathe if its pores are not completely clogged with dust. They keep the pores active and promote the elimination of waste matter. More than this, they have a most soothing, and at the same time invigorating effect upon the nervous system, particularly when the air is cool or cold. The direct contact of the air with the innumerable nerves and organs located in the skin has a most refreshing influence. For this reason it is recommended that those suffering from nervous disorders or having nervous tendencies regularly practise air-bathing.

Man is an animal needing light and air, but for ages he has carefully smothered himself in layers of dense clothing denying himself the life-giving influence of air and light. In many instances the clothing is so heavy that it does not allow elimination of the exhalations of the skin. The body is constantly bathed in its own poisonous excretions, which may be reabsorbed into the system. This is just as detrimental to health as sleeping in a closed, unventilated bedroom. In such conditions, the skin becomes weak and anaemic and loses its power of reaction and elimination. As a consequence, the eavihly-clad individual catches cold

with every passing breeze. Everyone should try to take an air bath for at least half an hour each day. The colder the air the more invigorating it is, for cold air has something of the effect of cold water.

Whenever possible, it is advisable to make an air bath a sunbath as well. This may or may not include the time spent on exercise, though it is particularly important that part of one's exercise be taken with the minimum of clothes because of the increased perspiration induced by exercise. Free movement is possible, and also enjoyable, when one is unhampered by clothes.

The Sun

The sun is the greatest aid to health. From the dawn of history the sun has been especially utilized as an aid to the restoration of health and as a means of maintaining and increasing it. It is the greatest source of energy and vitality. Without the beneficial influence of sunlight there can be no animal or vegetable life on this planet. It is only natural, therefore, that sun baths have a profound influence upon the body. There can be no challenging the statement that sunlight is a fundamental biological need ranking with oxygen, water, and food in importance.

The contact of sunlight with the skin produces effects identical with those caused by certain food constituents on the system, thus actually taking the place of food. It is found that food, when exposed to the action of light, acquires nutritive properties which it did not possess before. A little exposure to direct sunlight every day will help turn the lime and phosphorous of the food into straight, sturdy legs, strong arms, and sound teeth. If we were more in direct contact with the sun's rays we would not be so dependant upon vitamins. The fact that we are

not in direct contact with sunlight is responsible for much of our ill-health today.

In a country like India where sunshine is available for the greater part of the year, heliotherapy would go a long way in solving the ever-perplexing problems of providing medical relief to the country's teeming, poverty-striken millions. Sunbaths strengthen the entire body, improve the appetite, and aid digestion. In fact, mild sunburn increases immunity to disease, as sunlight is a great anti-septic not only for the environment but also for the blood and skin.

Living, working, and sleeping indoors all the time and becoming victims of vicious habits that are the results of unnatural living, have caused a strong and hardy race to degenerate.

As fresh air and sunlight are absolutely indispensable for health, every effort should be made to get as much of them as possible for the maintenance of health and the prevention of disease. It goes without saying that sun baths in health or disease must be taken without clothing if the best results are to be obtained. Of course the demands of modesty must be satisfied by wearing only very light and scanty clothing to cover no more of the body than is absolutely necessary.

A word of caution, however, is required against carrying sunbathing too far because of the sun's powerful chemical effect on the body. The rays of the sun are actually destructive if sunbathing is overdone, especially in the case of very fair or lightskinned persons. While they need a certain amount of sunlight like everybody else, they should not expose themselves for too long a time to the strong sun, at least not until they have become sufficiently tanned to do so. These rays are stimulating to a certain degree but beyond that point one should be careful.

It is advisable to have the head covered during a sunbath when the rays are intense. When there is any special weakness or sensitiveness in the eyes, they should be protected by dark or yellow glasses. Always start with short exposures and mild rays, generally increasing the duration and intensity as the skin and body get used to the general irradiation. Exposures beyond the health-giving point (which naturally will vary with different individuals) are apt to produce sunburn, headache, depression, and prostration. When the sun is intense, the actinic and heat rays are too powerful and are liable to produce depression. In children and adults whose skin is delicate or sun-starved, much care must be taken to avoid over-exposure and drought.

As a general rule one should avoid sunbaths, or modify either the after-treatment or the manner in which they are taken, if depression instead of exhilaration occurs. If there remains any erythema (redness of the skin) from the previous sunbath, it is better to postpone the next treatment until it has disappeared. If the skin is scaling or peeling from previous sunbaths one should either wait until the desquamation is completed, or remove the dead scales by friction with a hand towel or soft brush, for these scales absorb ultra-rays and prevent them from reaching the live skin where they are needed.

As to the duration of the sunbath, much depends upon the season, the atmospheric conditions, the health of the individual, the place, and the time. Generally, in summer when sunlight is quite intense at midday, it is much safer to take a sunbath before 9 a.m. and after 4 p.m. The duration may also be shortened because of the heat, whereas in winter it may be taken later and also for a longer period. Usually, after a sunbath, it is best to cool down the body with a quick shower, a sponge, or swim.

Children and young people should have plenty of sun during the growing period to develop sturdy bones and strong teeth, and to increase resistance against disease. If every mother and every child were to take a sunbath regularly and properly as explained, there would be a race of healthy beings sufficiently sturdy to resist all disease.

Deep Breathing, Exercise, and Correct Posture

We can live without food for many weeks, without water for several days, but not without air for even a few minutes. Breath is life. Life is absolutely dependant on the act of breathing. Taking a deep breath is like blowing on smouldering fire. By taking a full breath we inhale a large quantity of oxygen, and by retaining it a while, we stir and purify the air which always remains in the lungs. On exhaling, we expel the carbon dioxide and other poisonous gases.

The quality of the blood depends largely upon its proper oxygenation in the lungs. If it is under-oxygenated it becomes poor in quality and is laden with all sorts of impurities. The system then suffers from lack of nourishment, becoming poisoned by the waste products not eliminated in the blood. As the entire body, every organ and every part, is dependant upon the blood for nourishment, impure blood must have a serious effect upon the entire system. Not only does physical health depend very materially on correct breathing, but mental power, happiness, self-control, clear-sightedness, moral and even spiritual growth may be enhanced by the correct form of breathing known as *pranayam*.

The proper method of breathing is to take the breath in through the nostrils, as the organs of respiration have their only protective apparatus there, a filter or dust-catcher in the nostrils which contains numerous tiny hairs

adjusted for this purpose. Also, the long narrow winding nostrils are filled with a warm mucous membrane which, coming in contact with the inhaled air, warms it, so that it can do no damage to the delicate organs which reach from the throat to the lungs. When the breath is inhaled through the mouth, there is nothing from the mouth to the lungs to strain the air or catch the dust and other foreign matter in the air, and the entire respiratory system is unprotected. Moreover, such incorrect breathing admits cold air into the organs thereby injuring them. The man who breathes through the mouth at night always awakens with a clogged feeling in the mouth and dryness in the throat. We should never neglect correct breathing while walking, exercising, sitting, or resting.

Exercise

A world-renowned physical teacher, Eugene Sandow, has very rightly said, "Life is movement, stagnation is death." Besides, everyone knows that a machine not used becomes rusty and useless. Exercise is as much a vital necessity for maintaining health as air, water, and food.

In daily work the individual often develops some parts of his body to the neglect of others. If the brain alone is exercised, the body suffers and vice versa. Manual labour is often "one-sided," the postures adopted bringing into play some parts of the body more than others, and the range of movement is frequently very limited. The result is inharmonious development. The exercises employed in a system of physical training, if they ensure, as they should, the harmonious development of the whole body, will at the same time correct the faults engendered by lopsided work. These exercises put the body in a better

condition to perform any other work that may be required of it.

Systematic physical culture brings into play, by uniform exercise, every part of the organism. In a perfectly natural manner it stimulates the appetite, promotes elimination, and increases the vital activity of every cell and organ. It evokes physical and mental vigour, strengthens will-power and self-control, and makes for coordination of the mind and body, leading to a harmonious development of the whole system. A proper development of the physique should be ensured during childhood and early youth, otherwise theopp ortunity is in a great measure lost forever and a comparatively puny and delicate body and a lifetime of suffering and unfulfilled desires are almost inevitable.

Several systems of exercise have been developed during the past two centuries. The most important systems with which we are familiar are the Swedish system and Yoga *asanas*. The latter system has been practised from time immemorial. It does not make much difference what system one practises, provided the exercises are performed systematically, regularly, and under proper guidance.

Posture

The maintenance of a correct bodily attitude or posture is scarcely less important than the development of muscles by exercise. Correct posture and exercise go hand in hand. A weak body falls into a faulty attitude, whereas a strong body assumes a fine physical bearing characteristic of health and vigour.

There are various causes of faulty posture and consequent deformity of the body. Bones mature fully between the ages of 20 and 25. During the years of development the soft bones may easily bend out of shape by a wrong

sleeping position or by improper clothing. This flexibility of the framework of the body in early life indicates the importance of training for symmetrical development. Lack of a well-balanced diet is responsible for muscular fatigue leading to faulty posture. Mental depression and a gloomy outlook on life are usually reflected in a slouching appearance. Feet trouble plays a major part in bad posture.

Most civilized men and women, young and old, may be deformed because of neglect, a tendency to slouch, and lack of the right concept of physical beauty as related to physical bearing. Badly constructed chairs and soft beds deform and cripple our bodies. and are among the major evils with which civilization has afflicted the human race.

There is no doubt that a great deal of spinal curvature in childhood, from round shoulders to flat chest, is directly the result of incorrect sitting postures in schools. It is just as harmful to sit all humped over as it is to stand in that position. The nervous system cannot be maintained at its best unless the spine is held reasonably erect.

Apart from the poor appearance of a faulty posture, the detrimental effect of a stoop on the system cannot be overlooked. This may cause a variety of aches and pains in different parts of the body. The alimentary viscera sags and hampers digestion, the lungs are compressed, and there is not sufficient oxygenation of the bloodstream. All this results in low vitality and decreasing resistance to diseases and epidemics.

To maintain correct posture all the time, constant attention to the matter is needed. Apart from corrective measures, the best way to improve posture is to follow the ordinary rules of health. Adequate meals, regular exercise, walks and games, sufficient rest and sleep, in short,

anything which improves the tone of the muscles is called for. The use of properly constructed chairs not only prevents a flat chest and round shoulders but is helpful in preventing other deformitics. School seats and desks, theatre seats, house and office chairs, and automobile seats should be constructed from the point of view of encouraging good posture.

It must be remembered that correct posture in sitting, standing, and walking must be assiduously cultivated for keeping well and preventing illness. The essential thing is to keep the chest high while the hips are held back. This draws in the abdominal muscles and lifts the liver and stomach into place. The spine should be erect, keeping the head in the right position, the chin inwards, downwards and backwards. Check your standing position against a wall. Head, shoulders, buttocks, and calves should touch it. From this position step forward straight and maintain an erect posture all the time.

Rest, Recreation, Relaxation, and Sleep

One cannot be constantly active. Nature has provided for alternate activity and rest. Repair of the system is accomplished during rest and relaxation. One cannot really rest unless activity creates a demand for rest. The muscles are not built up during exercise. It is only when they are at rest, or during muscular relaxation, that the building process takes place.

Everyone should learn how to relax physically and mentally, because in relaxation the muscles work more efficiently, and secondly, fatigue is completely relieved in a very short time as the venous blood circulation is promoted throughout the body. The best method is to practise the "dead pose" which in Yoga is called *shavasana*. When we lie down to rest in a waking condition our muscles

remain slightly contracted. Even this slight contraction is overcome in *shavasana*.

Sleep, like air, water, and food, is universally recognized as an essential of life, but very few people understand, and still fewer appreciate, the importance of sound, healthy, regular, timely, and refreshing sleep. The amount of sleep required for health is in proportion to the physical and mental strength of the individual, though the average man requires eight hours. The man who thinks of gaining time by depriving himself of sleep is making a great mistake.

There is no hard and fast rule in this matter, but it may be said that in rest, relaxation, and sleep, common sense must dictate the application of the principles involved. The amount of sleep varies with the nature of work, age, sex, environment, and temperature of each individual. Let moderation be the key note in relation to rest, play, work, studies, exercise, or anything else.

Sanitation and Hygiene

Proper care of food and the manner and environment in which it is produced is of great importance in the preservation of health. Every effort should be made by local authoritiesto prevent diseases among animal. The meat of diseased animals can be very harmful.

Vegetables should not be contaminated by any substance harmful to health. If foods are intended for use in an uncooked state, they should not be fertilized by human or animal wastes or watered by house drains.

Strict cleanliness is necessary in handling foods. It is dangerous to purchase foods that are kept in insanitary conditions or exposed to flies, dust, or other contamination. This applies especially to milk, milk products, sweetmeats, cut fruits, etc. There seems to be an amazing neglect in the care of food in the market place as well as in the

house. Every effort should be made to keep flies and other insects away from food.

The inspection of food in all its forms and stages is an important duty of the Health Department. Strict measures should be taken to eliminate adulteration, contamination, poor quality in eatables, and food which is found unfit for human consumption. These measures are very necessary to prevent infectious diseases and for the preservation of health.

During feasts, scrupulous cleanliness should be observed. The persons who do the cooking and serving should not only have clean hands but they should wear clean clothes and above all, have clean habits. Cooks and servants often pass on the infection of the digestive tract to the inmates of the house because of their unhygienic habits, especially the habit of not washing hands properly after using the toilet. There should be a law that only clean persons, free from infectious diseases, be allowed to cook and serve food. It is a common sight, especially at feasts, to see perspiring men cooking and serving food unmindful of the drops of perspiration falling into the dishes and vessels. Contamination during cooking and serving through utensils, plates, etc., has also to be reckoned with.

Personal Hygiene

Personal hygiene is a term used to denote personal care of the body. The well-being of an individual is really the totality of the care of all the different organs individually and collectively, plus the necessary precautions and observance of general hygiene.

Many people think that in order to live rightly, much hardship must be endured. The reverse is the case with those whose tastes and habits have not been perverted, and the capacity for work and pleasure that results is indeed a gain.

The bath, for instance, is not merely a cleansing agent, but a definite aid in keeping well, increasing the power of the body and building resistance to disease. Personal hygiene does not mean merely the washing of the outside skin or wearing clean clothes, etc., though these are essential factors in preventing disease. The teeth, hair, nose, eyes, hands, and feet should all receive our care if we are to be really healthy.

Moral Code

We should have knowledge of sex and of the effects of alcohol and smoking on health. Sex is the basis of life. It is life's greatest and most dominating force. Hence it is essential that some form of sex education should be imparted to men and women to help them avoid pitfalls and the consequent misery.

CHAPTER 11

Living the Nature Cure Way

Nature cure is a way of life as religion, theosophy, philosophy, vegetarianism, or a particular cult is a way of living. It is not a scheme for returning to savagery or barbarism, neither is it a collection of fads and fancies. To the average man, nature cure is only a combination of massage and vegetarianism, and to him a naturopath usually means a physiotherapist.

Nature cure, apart from being a way of life, is a distinct system of healing based upon its own philosophy of health and disease. It does not limit itself to curing aches and pains. It is a complete revolution in the art and science of living, as it is a realization and application of all that is good in natural science, philosophy, and religion.

A naturopathic physician is a teacher of health. The agents he uses are the agents of life. He directs his patients to live rationally and prevent disease by natural living. The nature cure way of life involves educating the individual in self-control, right habits of living, prevention of disease by following the laws of nature, and improving constitutional health by using nature to effect cures and create defences against disease. All the methods of a naturopath are natural methods using fresh air, water, sun, exercise, and fasting.

Man is a complex of body, mind, and spirit, and this being so the naturopath's approach is one which deals not only with bodily disturbances but with the psychic stresses that usually precede these. The principle of nature cure emphasizes that instead of merely treating the symptoms and diseased structure the body be treated as a whole. Secondly, it adopts such methods and remedies as do not hinder the body's efforts to cure or survive, except in a crisis or emergency. It has often been found that people die of their remedies and not of their diseases!

Discussing some experiments performed by medical men, Dr Woods Hutchinson once said:

> Results followed which are well under way to revolutionize the practice of medicine. First, the discovery that the healthy human organism possessed inherent powers of defense against disease and that many of what we put down as symptoms of disease and even as parts of the disease process such as fever, vomitting, diarrhoea, shivering, fits and some forms of convulsions are parts of nature's efforts to get rid of the poison.
>
> Our proper function is to intelligently assist nature in her efforts, instead of thwarting her at every turn and suppressing every symptoms as quickly as we can find a club to beat it down with.

Science today is finding in its researches confirmation of the truths discovered by nature cure many decades ago.

"Man himself is responsible for disease," said Hippocrates. Most people take it for granted that disease comes from external conditions for which they are not responsible, and so naturally, to get cured, they look first to drug stores and patent medicine sellers. Medical science has no frontiers, but every practised therapy—whether allopathy,

homoeopathy, ayurveda, unani, or nature cure—has its limitations and so has every individual practitioner.

Compulsory medicine like compulsory religion is abnoxious, and is an outrage against the intelligence of citizenship. If one who is qualified to treat his own body or the bodies of those who depend upon him cannot have the right to do so, in accordance with the dictates of his conscience and intelligence, then indeed we are encouraging a kind of persecution that has few parallels in history. We should take heed of what the great spiritual teacher Swami Vivekananda has said, "Knowledge is nothing but finding unity in the midst of diversity."

As the physician has to deal with the whole man—the body, mind, and spirit—so the relationship between the doctor and his patient should be a unique one. Unless trust and confidence between the two is complete, treatment may be so seriously handicapped that it is better not to begin it. The science of man is the most difficult of all sciences. Nature cure proclaims that the healthy life is a ceaseless unfolding of the soul together with the development of external powers.

The truth, the whole truth, and nothing but the truth of nature cure should be taught to parents and children right from the start. Let it be said that naturopathic physicians should be openminded, combining in their practice all that is good from the different systems of healing, providing always that it does not violate the basic principles of nature cure. If they follow the high principles of non-violence upon which their system is based their success will be unique.

CONCLUSION

Engineers are prone to talk of the efficiency of modern machines. But no machine has ever been constructed

that is as efficient as man himself. Where can be found a pump as perfect as the human heart? If the boss treats it right it stays on the job for more than 600,000 hours making 4,320 strokes and pumping fifteen gallons an hour. We have no telegraphic mechanism equal to our nervous system, no radio so efficient as the voice and the ear, no camera as perfect as the human eye, no ventilating plant as wonderful as the nose, lungs, and skin, and no electrical switchboard can compare with the spinal cord. Isn't such marvellous mechanism worthy of the highest respect and the best care?

Yes, the only remedy is *preventive medicine*. How much better it is to study and realize the conditions of sound health than to contract maladies and then seek to cure them which often proves itself to be extremely difficult and in many cases an impossible task. It is far more expensive to be sick than to keep well. The treatment and so-called cure of disease is one of the most expensive undertakings in the civilized world. It is bankrupting families, cities, states, and national governments.

The human brain has accomplished marvellous inventions, but we are shamefully ignorant about the most important question of maintaining our health. As a rule people will not listen to advise on a wholesome way of living until they are compelled to. The average person has to suffer before he starts to think about his health and welfare.

We should regard the preservation of health as a sacred duty. Being careless, indifferent, or ignorant about living, eating habits, and becoming ill, results in our becoming a burden to others and losing precious moments of our life. Our earning power and efficiency are badly affected by the heavy expenses of hospitalization, nurses, doctors, and medicine. It is a peculiar weakness of human nature that

prevention receives little attention. Hospitals, sanitoriums, and asylums are flooded with the sick, but there are few institutions which show people how to prevent disease.

It is the duty and privilege of every intelligent person to acquire sufficient knowledge of health in order to lead a happy, healthy, and successful life. There is nothing which is so closely connected with us as our bodies. That is why it is surprising to find that there is nothing, perhaps, of which our ignorance is so profound and our indifference so complete.

There is evidence of a growing tendency in the day-to-day life of the individual today, to deviate from normal and natural ways of life and to lean more on drugs and tonics for the maintenance of health. These trends are undesirable and unnatural. If the desired results can be achieved by the practice of a regimen based on naturopathic principles, a substantial contribution towards the welfare of humanity will have been made. Sun, fresh air, water, and simple wholesome food are commodities within the reach of everyone. Yet the most is not always made of these bountiful gifts of nature. A correct way of life, in relation to these factors, can make a great deal of difference in the matter of the preservation and promotion of health.

Nature cure has a very important place in any programme for the improvement of the health of the nation. It does have a relation to public health. By propagation of the knowledge and practice of the methods of nature cure, the incidence of illness can be reduced, the duration and difficulties of convalescence cut short, restoration of health after illness expedited, and thus the growing pressure on hospitals and their curative facilities decreased.

Nature cure, (or to use the alternative term, "nature care") methods should and can have a very important

place in any public health programme. It should not be forgotten that a healthy people are one of the best assets a country can have in its drive towards prosperity. The nature cure system is a great weapon in the battle for health. Sensible, rational living with mental poise and balance has been the base upon which the edifice of nature cure has been built. The truth of the matter is that normally cases that are handled by nature cure physicians are those which have been through the "medical mill" and come out of it as damaged goods or so-called "incurables" or "medical rejects."

It is sad to note that there is so much antagonism among practitioners of different "parties" and that they should devote their energies to attacking one another who are doing so much for the sick and ailing in their own systematic and rational way. Calling one another "quacks" does not befit men of this profession. They use the word to identify every mode of healing that does not belong to their system, no matter how important it is to our health and happiness.

We can understand that, as a rule, the physician practises according to the doctrine prevailing in the particular school of thought in which he was trained. Besides, it is difficult for him to deviate from the usual line of thought and become active in some entirely different method of healing. But to insist on one form of therapy and rejecting all other methods as unscientific is to display ignorance of the practice of medicine. Naturopathy is a basic philosophy and practice of the cause and cure of disease. It operates only in accord with natural law, but while it exists as a distinct system of healing, its complimentary mission is to work in harmony with other systems so far as possible, and this endeavour should also be recognized and pursued.

In the ultimate analysis, there is no cure that is not finally achieved through natural processes, notwithstanding the actual process of health which is accomplished by nature whatever the treatment administered, what we call *vis medicatrise naturea*, the healing power of nature.

Lord Dawson, once physician to the royal family of England said, "What the patients want is regimen and re-education in methods of living and treatment; it may be diet, physio-therapy and relaxation under controlled observation. Such treatment or education of the man and his tissues takes several weeks. We need a new type of institution distinct from hospital provision."

The institution of nature cure supplies such a need.

PIONEERS AND STALWARTS OF NATURE CURE

The following are the nature cure pioneers and proponents who will always be remembered for their contribution to the cause and advancement of the science of nature cure:

(*i*) *Dhanvantari*. He was the father of all medical sciences—allopathy, homoeopaty, ayurveda, unani, and nature cure. Although there are various systems of medicine, the goal of all these medical systems is to give relief to suffering humanity. Dhanvantari is the primogenitor of medical science.

(*ii*) *Heroditus and Democritus*. These were the two famous Greek physicians of antiquity who recommended systematic exercises and diet.

(*iii*) *Hippocrates*. Rightly or wrongly called the Father of Medicine, he believed in the natural form of treatment. His teaching was *nature sanat, midicus curat*—it is nature that heals disease, and the physician assists in the healing process.

(*iv*) *Paracelsus.* A naturopath and renowned German alchemist, his motto was *natura magestra,* nature is the teacher of science.

(*v*) *Vincent Priesnitz.* He was the pioneer of the hydropathic (water cure) treatment.

(*vi*) *Johann Schrothi.* He combined water cure with his special dietary system.

(*vii*) *Arnold Rikli.* He founded the system of treating diseases with airbaths and sunbaths.

(*viii*) *Kneipp.* He was a Roman Catholic priest who combined water-cure and pure herbal remedies.

(*ix*) *Kuhne.* The first naturopathic practitioner to publish a scientific treatise on nature cure. His famous book *The New Science of Healing* has been translated into almost all the languages of the world. Kuhne's method, especially the sitz bath has become a household word in India.

(*x*) *Bechamp, Pierre Jacques Antoine, M.D., D.S. (1857-1875).* Bechamp discovered the process of fermentation. Discoverer of the smallest forms of life, which he called microzyma (minute ferment bodies). The microzyma theory of disease refutes the commonly accepted germ theory of disease. It is the foundation upon which naturopathy rests. It proves the unity of disease as expounded by Louis Kuhne and the unity of basic treatments propounded by Adolph Just.

(*xi*) *F. E. Bilz.* He was a strong advocate of the natural method of healing, and the author of the naturopathic encyclopedia, *The Natural Method of Healing.*

(*xii*) *Dr H. Lahmann.* Another staunch advocate of naturopathy.

(*xiii*) *Adolph Just.* His work *Return to Nature* has been translated into most of the European languages.

(*xiv*) *Edwin D. Babbit*. Was a great pioneer of chromotherapy and heliotherapy. *The Principles of Light and Colour* is his greatest work.

Apart from these, Trall, Dr Kellogg, Dr Henry Lindlahr, Dr Benedict Lust, and others in the West and, I may add, Mahatma Gandhi and others in India, have made their names immortal in the science of nature cure.

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