HERALD OF HEALTH

History of the Doctor
(Photo feature)

Coronary Heart Disease

Stephie D'Souza
Fastest Woman Runner of India

JANUARY 1962

HISTORY OF THE DOCTOR

In the ancient world the doctor and the priest were one

THERE ARE about 14 lakhs of doctors in the world today. But still there is an increasing dearth of doctors (one for 200,000 people in some countries). Since most of them have located in cities, large numbers of people never see a medical man—except fakes and witch-doctors.

Sin and disease arrived on the earth at the same time. In ancient times evil from without, such as wounds, was treated with tribal remedies of herbs and other plants. But evil from within—physical and psychic illness—was attributed to the baleful influence of external forces and the duty of combating it was conferred on the witch-doctor who knew the powers that control destiny. As civilization flourished the magician yielded to the priest who was charged with routing the devil that caused the disease, or of invoking the god that had afflicted man with a burden of evil to punish him.

(Continued on pages 6-9.)

1. SUMERIAN AND ASSYRIAN PRIESTS flogged their patients until the devil that was responsible for the diseases was routed out of the nearly dying victim. The code of Hammurabi of Babylon marked the beginnings of organized medicine. It provided for the amputation of the hands of the inept surgeon.

2. HIPPOCRATES OF GREECE drew his first clinical conclusions from direct observations. Aesculapius and daughter Hygeia foretold the encounter of curative and preventive medicine. The oath of Hippocrates still constitutes the deontological code of all doctors in the world.

(Photos and material by the courtesy of World Health Organization, South-east Asian Regional Office and Dr. J. de Moerloose, Publications Division, WHO.)

The Oriental Watchman and Herald of

HEALTH

53rd YEAR OF PUBLICATION

A Magazine for Home and Happiness

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OUR COVER

The Punjab float during Republic day celebrations, New Delhi.

Photo: M. L. Mehta

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The Editor Says

"LIVE AND HELP LIVE"

WHAT ABOUT adopting this motto as a New Year's resolution if you haven't made one yet? You generally hear it stated more passively —"Live and let live"—parading a sort of conciliatory tolerance. But that's not sufficient. It doesn't go far enough. It would be about as satisfying to the world's heart hunger as crumbs to a dog from its master's table. Furthermore it smacks of a patronizing attitude that puts a tail-between-the-legs twist to a man's personality. The "help live" philosophy doesn't do that. It has a built-in gracious touch that enables the recipient to retain his self-respect.

Few, if any, live to full capacity. In saying that, we do not have the linear or chronological dimension of life in mind, not just now, at least. Others are dealing with that, and we wish them well. To their credit it should be noted that the period of life expectancy is lengthening. The average life span in some countries has actually doubled in the last forty years.

But living to the full is not merely a matter of having happy birthdays. What about the 364 days in between? No less an authority than Aldous Huxley reckons that most people function at only about 15 per cent of capacity. That's a lamentably low efficiency rating. Analysing how this might be stepped up, he takes a look at possible biochemical means, such as he says the Russians are experimenting with. He reports that they are working to produce "pharmacological substances that normalize higher nervous activity and heighten human capacity to work." Maybe, he cautiously suggests, man will be able in a few years to "lift himself by his own biochemical bootstraps."

Many serious-minded citizens will share his misgivings, however, regarding the ethics and feasibility of such a method. It might backfire. It could lead to disastrous results in the hands of an unscrupulous dictator. In any case, it is beyond the range of possibility for most of us. So even if it were safe, it offers no immediate solution to our problem. Come January 1, 1962, what can Mr. Average Man do to help himself and others to live more abundantly?

Well, if you get your radar turning, you might pick up some distress signals right at home to begin work on. Your husband, for instance, might be like a man we read about recently. He needed help which his wife could have given if she had read his signals aright. He was an airplane pilot, a job that requires high level performance and clear thinking. But he crashed one day, killing all but one on board. The ensuing investigation revealed that nothing had been wrong with the plane, nor with the signals. But a check into the pilot's home life revealed that he had been overburdened with mental and emotional problems. He went down under the load.

Children need a lift more often than we realize, the kind that parents can give better than anyone else. They need someone to help them develop confidence and

(Please turn to p. 9.)

GREAT NAMES IN MEDICAL HISTORY

Dr. Daw Yin May of Burma

Mrs. R. Shrewsbury

THE FIGURE of Dr. Daw Yin May is a familiar one to medical students in Rangoon, Burma, and has been for the past two decades. Highly esteemed by the most eminent people in the medical profession, she is at heart a very natural woman, approachable by many and loved by all.

Born a few decades ago at Prome, she was promptly named Ma Yin May by her mother Daw Hla Aye and her father U Kyaw, who was then the deputy Commissioner. She schooled at an early age at St. John's Convent. Her intelligence, coupled with the Good Shepherd nuns' discipline, care, and training, crowned her final school year with outstanding success. She attained second place in all Burma with distinction in English and Mathematics in the European High School Final Examinations. Two years later she finished her Intermediate Science examinations with a first division pass from University College, Rangoon. She then went to India and joined the Calcutta Medical College. Being an industrious and intelligent student, she passed her examinations steadily and in her fourth year of the M.B.B.S. course she was awarded a gold medal for excellence in pathology. The following year she secured her M.B.B.S. degree, being the first Burmese lady to do so. Since then she has had many honours bestowed on her.

The Government gave her a state scholarship for post-graduate medical studies in London at the Royal Free Hospital. While there she gathered a double degree of L.R.C.P. and M.R.C.P., both within a year. Her thirst for knowledge drove her on to Edinburgh, where during the next few years she gained further recognition at the Royal Infirmary, being endowed with the double qualification of F.R.C.S. and M.R.C.P. (Edin.). Such intellectual achievements have marked her as a unique woman among Burmese medical students. Later she toured the medical centres of the European world. She went to Vienna, Dublin and several other places. Returning home, she entered service the same year as House Surgeon in Rangoon Dufferin Hospital. In due course she was promoted to Assistant Medical Superintendent I, then to A.M.S. II.

In 1936 she was happily married to Professor Min Sein. A bonny boy was born to them in 1937, and three years later a little girl.

In the spring of 1937 an appealing offer came to her from another continent to continue her post-graduate work in England. The following year found her as an Honorary Obstetrician and Gynæcologist in Rama Krishna Mission Hospital, Rangoon, where she remained until 1942. During that period she also served for some time as Director of Ladies Health Visitors Training School. The Second World War put an end to that appointment. During the Japanese occupation she worked for the country as a superintendent

(Please turn to p. 10.)

Dr. Daw Yin May,
F.R.C.P.E., F.R.C.S.E.

HISTORY OF THE DOCTOR

(Continued from p. 2)

Little by little the practician emerged at the side of the priest-doctor—the surgeon capable of performing difficult operations, cataracts for example. The beginnings of organized medicine are seen in Babylon where the first known medical code, that of Hammurabi, provides for the amputation of the hands of the inept surgeon. Greece is dominated by the figure of Hippocrates, whose oath still constitutes the deontological code of all doctors in the world.

The torch of medicine, dropped by the hands of Athens and Rome, fallen from high estate, passed from the Arabs to the peoples of Europe. The texts of Hippocrates and Galen continued to inspire the doctor from the birth of Christianity to the flowering of the industrial era.

3. MOSES, the codifier of laws for the Jewish people, still claims the all-time lead in the sciences of sanitation and hygiene. He evolved laws for the prevention of epidemics and disease.

4. THE ROMAN DOCTOR inherited his science from Greece. Galen, born at Pergamus, influenced "European" medicine until the Renaissance. Public health was carefully nurtured in Rome with the development of baths, sewers, aqueducts.

5. THE ARABS who were able to preserve and translate the ancient manuscripts were led by Avicenna and Rhazes. For several centuries medical studies were based on their works. Here a doctor cauterizes with a red hot iron.

6. THE MIDDLE AGES were characterized by scholasticism. Here a professor gives an anatomy lesson for a text inspired by Galen, while below a barber dissects without bothering about what is being said above him.

The doctor discovers one by one the secrets of the human body

However, progress was marked by the achievement of a better understanding of anatomy and the physiology of the human body, and by the arrival of surgery, viewed with suspicion for a long time. With the Arabs, who were devoted to chemistry, the knowledge of therapeutic drugs was greatly expanded. The interdiction that prevented them from studying anatomy retarded the progress that might have been possible through the organization of hospitals where they trained their future doctors. In the Europe of the Middle Ages the monks, trustees of the learning of the Ancients, in their turn dispensed medical knowledge in the schools that they founded around monastery hospitals such as Monte Cassino and St. Gallen.

7. THE FIRST HOSPITALS were conducted by nuns and monks. Several patients shared the same bed. The condition of the blood, saliva and urine were part of the medical examination. Plague treatment: bleeding and purges.

8. PARACELSUS OF BASLE was a violent, exalted reformer. A partisan of clinical medicine, he revolted against the dogmatism of his time; burned the works of the Ancients.

9. VESALIUS IN ITALY revolutionized the study of anatomy, ending the teaching of Galen and practising direct observation by dissection. He was treated as a madman. A pupil of Titian illustrated his work on anatomy.

10. THE RENAISSANCE helped in spreading syphilis, which Europeans at war mutually accused each other of originating. Here it is called Naples sickness by the French. Treatment: mercury, sweating.

First great medical school was created at Salerno and by virtue of its influence Padua, Pisa and Bologna in Italy and Montpellier and Paris in France were born. The Italian universities produced such milestones as the work of Harvey, circulation of the blood, and of Vesalius, in anatomy.

In the course of the last hundred years medicine has made enormous strides. Among the most illustrious of its benefactors, Morton should be mentioned for anæsthesiology—Pasteur for bacteriology—Lister for antisepsis—Koch for tuberculosis—Claude Bernard for physiology—Laveran and Ross for malaria—Gowland Hopkins for the vitamins—Mellanby for the deficiency diseases—Roentgen and Marie Curie for radiation medicine—Fleming for penicillin. Now highly evolved and powerful weapons are at the service of medicine today—such as a cobalt bomb for the treatment of cancer (shown opposite page) et cetera.

Coming in a future issue: The Birth of a Doctor
(Portrait of a future doctor in his years of preparation in an Indian Medical School)

11. JENNER discovered the principle of vaccination against smallpox in 1796. Although 150 years have elapsed this lethal disease today continues to rage in many parts of the world, a manifest anachronism.

ıe doctor becomes
ıman of science

2. THE CHARLATANS laughed at by Moliere, used cure-ills that had not changed since Galen: purges, clysters, bleeding, cupping. A king of France was purged 2,000 times, bled 8 times. He lived to be 77.

THE EDITOR SAYS

(Continued from p. 4.)

proper self-esteem. Fortunate are children who have a mother like Mrs. Pakshi. Her seven-year old girl was eager to be helpful, like most children are. Her mother was having a tea party. Fitting in where best she could, she picked a bouquet of flowers for the occasion, beautiful yellow ones—dandelions! What would you have done or said? Well, Mrs. Pakshi understood little girls and knew how to protect and enlarge their creative instincts. "What lovely flowers!" she exclaimed, praising her daughter's efforts and thoughtfulness. Arranging them in a beautiful vase, she gave them a place of honour on the piano for all the guests to see. That mother helped her child to live.

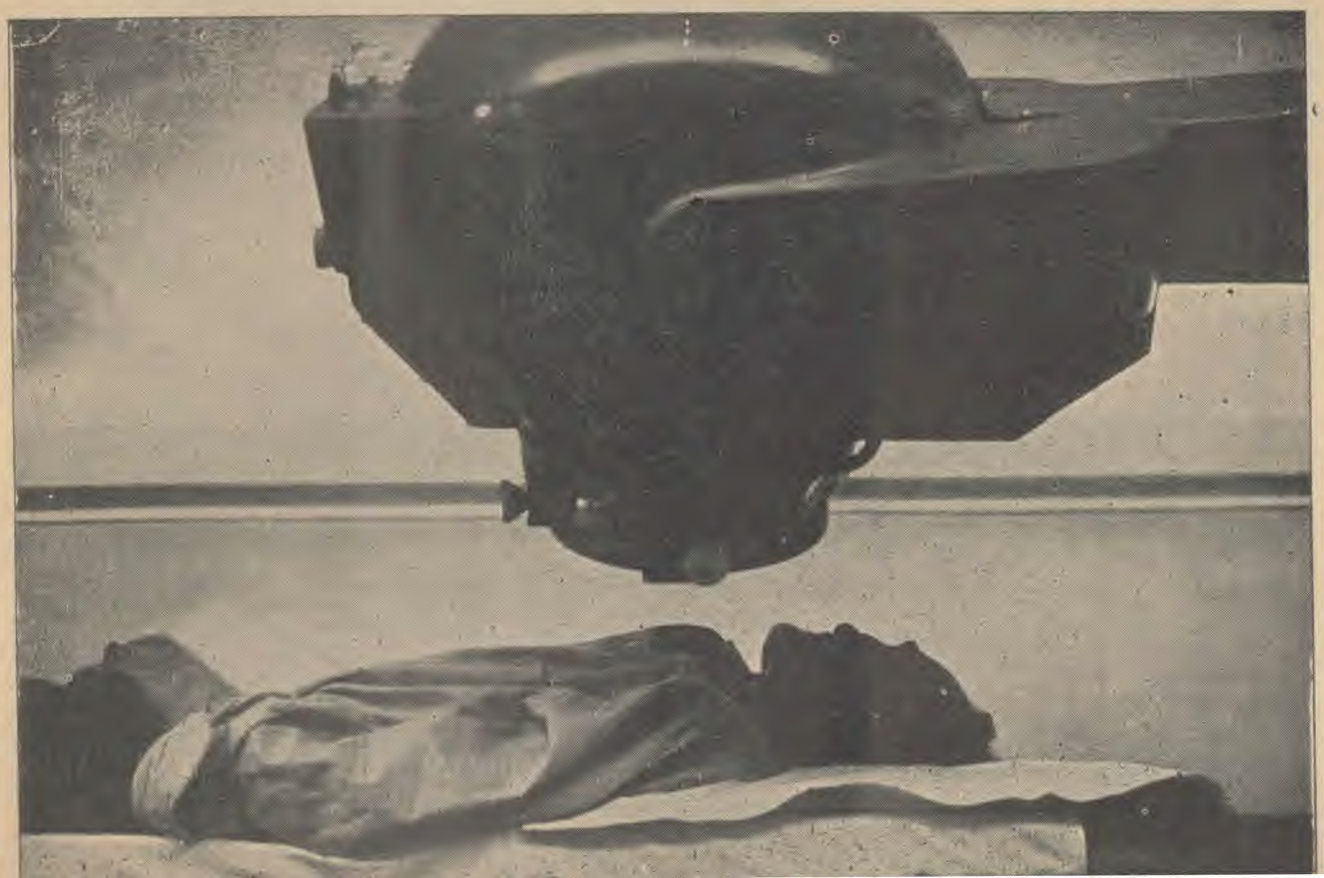
You don't have to be a psychiatrist to help people live. The main thing you need is an understanding heart. How would you go about dissuading a man from jumping off a high bridge to his death? A very unlikely assignment for me, you might say. Well, don't be too sure. That's a blown-up picture of the distressful situation many around us find themselves in. When a chaplain, a psychiatrist and a dozen other such people failed to help just such a case recently, it was one of his fellow mechanics who worked in the same shop with him who was able to talk him out of his morbid intention. He was equipped to help his brother in need. He was able to restore confidence and faith and to rekindle hope where it had nearly died out.

But the people we are thinking about just now are not on the verge of jumping into the river with their burdens. They are manfully bearing up under life's strain. But they could do with a little help which any of us can give, if we will. A word of encouragement instead of censure. Recognition rightly due. Some made-to-order attention. An anniversary date remembered. A message of congratulation upon some success achieved. "I saw your name on the honour roll," written to a boy in school will put a lot of wind in his sails.

In line with such a programme of "help live" is a resolve made by a certain young medical doctor. He was asked why he became a doctor. His reply: "I saw a heavenly light. I dedicated myself to bring that light to the faces of burdened men and women." That's something we all can do to make living easier and more purposeful for both ourselves and others. We don't have to be medically trained either. We just need to exercise common courtesy and understanding along with a fair measure of restraint against the selfish impulses of our baser nature. By so doing we shall bring joy to many hearts and will make a lasting contribution to the noble objective of helping others to live.

T.R.T.

The arsenal of a modern doctor



Whistle and Hoe

RUTH NERLUND

"Whistle and hoe, sing as you go!
Shorten the rows by the songs that you know."

SOMETHING to think about, isn't it? But it is so easy to let discouragement creep in when one's row in life seems hard to tread. It may contain furrows of discontent, but keep hoeing, and then cultivate it with contentment. The sod may have been hardened by bitter experiences which have come to you, but sow the seed of loving-kindness and water it with the dew of service for others.

Do not let discouragement creep into your row. It is said that discouragement is the devil's best tool. Perhaps you have heard the illustration given of the devil going out of business and ready to offer all his tools for sale to the highest bidder. Oh, there were all manner of tools—hatred, envy, jealousy, malice, deceit, and many other implements which would do harm. And then he had one that was priced much higher than the others. It was discouragement. And when he was asked why it was priced so high, he said: "It is more useful to me than any other tool. I can pry open and get into a man's conscience with that when I could never get near him with any others; and once inside, I can use him with my discouragement in any way that suits me best. It is much worn, because I use it with nearly everybody, for few people yet know that it belongs to me and that I use it to achieve my ends." And it is said that "the price placed on discouragement was so high that the devil owns it still."

Don't let that tool get into your row. Just.—

"Whistle and hoe, sing as you go!
Shorten the rows by the songs that you know."

DR. DAW YIN MAY

(Continued from p. 5.)

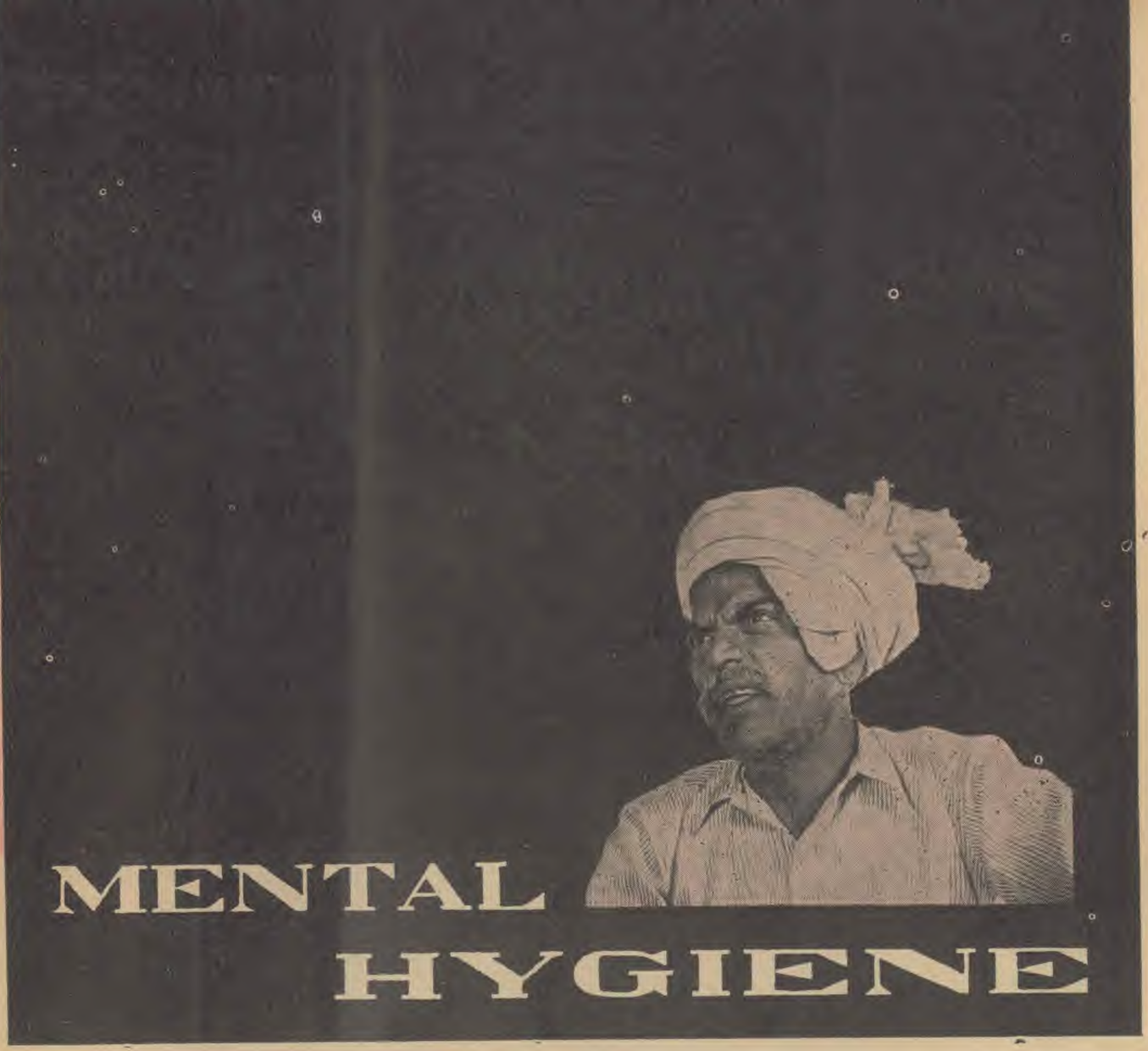
of the Maternity Hospital and also as lecturer in Obstetrics and Gynæcology in the Medical School.

The return of the British to Burma saw her instated as an Officer Commanding Women and Children's Hospital with the rank of Lieutenant Colonel A.B.R.I. (Med.), the first woman of her country ever promoted to this rank. On the 4th of January, 1948, when Burma became a free nation, the most esteemed Burmese title "Thiri Pyanchi" was bestowed upon her.

The independence of Burma brought about the resignation of the Medical Superintendent of the Rangoon Dufferin Hospital. Then Dr. Daw Yin May was invited to accept that appointment. She still holds that office. In addition, she is Professor of Obstetrics and Gynæcology in the Medical College. In June, 1955, she spent two months in England on a holiday. Combining duty with pleasure, she took advantage of the opportunity to bring herself abreast with modern developments in obstetrics and radium treatment in gynæcology, a cherished privilege after seven long years of ceaseless labour for suffering humanity.

At home Dr. Daw Yin May is a woman, one hundred per cent. Her great pride is her house. She has as fine tastes in household linen and furniture as any gifted woman. She takes great care in selecting the colour schemes around the house, blending the light Paris green of the walls, with the mauve or maroon cushions and curtains. Gardening is one of her favourite pastimes and orchids are her speciality.

Her great aim in life is to develop good and efficient lady doctors for her country. Her own life of devoted service should serve as a model to inspire her students to follow in her footsteps.



MENTAL HYGIENE

AN INTRODUCTION

(First in a series)

DR. (MRS.) ROSHEN S. MASTER
F.C.P.S., M.B., D.P.M.

Hon. Psychiatrist,
Remand Homes,
Poona.

JUST AS physical health goes hand in hand with the well-being and normal functioning of the body, so mental health goes hand in hand with the happiness and normal functioning of the mind. Mental health can be defined as the full and free expression of all our native instincts and acquired propensities, in harmony with one another, for the normal functioning of a well adjusted personality as a whole.

To maintain physical health it is not enough to know only the curative side of medicine; one must also be acquainted with its preventive side, so that the disease can be combated and kept in check. This science of public health and preventive medicine has now reached such high standards, that it has become possible for most countries to eradicate many communicable diseases and prolong the expectancy of life. Unfortunately, however, we cannot say the same about mental health and hygiene; for though mental hygiene bears the same relationship to psychiatry as preventive medicine and public health to medicine, the science is still very much in its infancy, nor has it reached the doorstep of the common man, like preventive medicine. With our present day tempo of life, and our mental hospitals getting full to bursting capacity with mentally deranged

patients, it is of the greatest urgency that we give more than passing thought to mental health, and it is our duty to educate the future parents of our day in the principles of mental hygiene to enable them to bring up mentally healthy children with well-adjusted personalities.

Mental hygiene is a positive science, which seeks to establish a condition of healthy mindedness, by applying the principles of healthy living and happiness from early childhood. It aims at maintaining mental health not only by prevention but also by the early abolition of mental symptoms, while preserving at the same time the individuality of the personality. As already mentioned while defining mental health, a perfect co-ordination and full expression of the native instincts and acquired propensities is necessary. If there is disharmony between them conflicts arise in the mind of the patient, resulting in agitation, anxiety states, and other psychoneurotic symptoms. If any of the instincts or propensities are suppressed in early childhood by domineering parents, the personality becomes inefficient and weak-willed, losing its individuality. If the instincts or propensities are entirely suppressed, they emerge in later life as abnormal behaviour and psychoneurotic or psychotic symptoms. It is essential, therefore, that mental hygiene should start within the precincts of family life, and its principles should be applied from the eldest to the youngest. The child should be given an opportunity of developing and maintaining a healthy attitude of life, so that he grows up to be a happy, well-adjusted personality, useful to his society and State. This in turn will eradicate many psychoneurotic symptoms and behaviour disorders, for the acid test of mental health is not the individual's brilliance, efficiency, or social success, but his adaptability to life, and a well-adjusted and balanced personality.

A few historical facts, which led to the establishment of the mental health and hygiene movement will not be out of place here.

The twentieth century will go down in history as a century of many "firsts". One of these will be the first tests leading to the scientific discovery of the child. Another will be the first steps toward starting the mental health and hygiene movement.

Till the turn of this century no one bothered about why a child behaved badly, could not learn, or after having started out as a brilliant child fell into disreputable ways. If the child did not behave properly he was punished till he conformed to what the adults thought was "correct" social behaviour. If the child did not learn, the teachers punished him, and when that failed left him to rot at the bottom of the class irrespective of his intelligence quotient and mental age. If a brilliant child felt bored and ran away from school or home to do what he wanted to do and thus give full expression to his energy, he was dubbed "bad", put into a reformatory school and forgotten about.

At the beginning of this century, free primary education was made compulsory in France. It was observed that State funds were being wasted on attempting to teach children who were unable to learn due to their mental backwardness, which led to the discovery of psychometry by Binet in 1905, and to the classification of school-going children according to their intelligence quotient and mental age. Thus the children could be given the teaching best suited to their capacity. Today the science of psychometry has reached such high standards that even the mentally defective child, when detected early enough by these tests, can be given a little hope in life and taught a new routine, things within his capacity, under the loving touch and sympathetic guidance of trained personnel.

On May 6, 1956, the world celebrated the birth centenary of Sigmund Freud. Everyone knows him either as the great scientist who evolved the theory of psychoanalysis and discovered the unconscious mind; or as an eccentric scientist who diagnosed every symptom of neurosis on the basis of sex. Very few people, however, realize the fact that Freud was the first man to discover that the roots of various behaviour problems and neurotic symptoms were laid in very early childhood. He propounded the theory, that the source of all emotional problems could be traced to personal difficulties and emotional traumata experienced in early childhood. Thus we can say that he started the ball rolling for the mental health and hygiene movement. At first he was ridiculed. How can a doctor who has never treated a child patient talk about the difficulties and emotional traumata of childhood? But in due course his theories were accepted by Meyer and other pupils who came to work with him. Since his time child psychology has taken great strides, thanks to the indefatigable work of many scientists in America and England. This advance in child psychiatry, coupled with the fact that the public is getting more and more "prevention conscious," laid a good field for the mental health and hygiene movement.

The honour for laying the foundation of the mental hygiene movement for the advancement of mental health goes to an American scientist, Clifford Beers. After a brilliant scholastic career, due to some unfortunate incident in his life, Beers suffered from a temporary mental imbalance, and was admitted to a mental hospital. When he came out, he worked for, and succeeded in founding this movement.

Further development in child psychiatry and the mental health campaign led to the establishment

Devidas Kasbekar

What varied environs or forces brought about a healthy mental outlook to this grand old gentleman, and a warped personality with filthy habits to a boy who is but just budding into life?

S. L. Pikle

of juvenile courts, child guidance clinics and special institutions for teaching the mentally defective. The juvenile courts dealt with the treatment and after-care of delinquents, the child guidance clinics took care of the behaviour problems and emotional troubles of children not only by treatment but also by improving the parent-child and the teacher-child relationships. The institutions for the mentally defective were manned by specially trained personnel who looked after the needs of the mentally deficient.

All these advances took place mostly during the first three decades of this century. Almost all countries now maintain well-run child guidance clinics, juvenile courts, and institutions for teaching mentally deficient children.

Concurrently, Freud and later workers in the field of psychiatry, started delving into the causes of various mental disorders of adults. They proved conclusively, that all the symptoms of psychoneurosis and many symptoms of psychosis, were later manifestations of early mental and emotional traumata, and were "escape mechanisms" put up by the subconscious mind to dodge the ego and the super-ego structures. Later workers went so far as to point out that many conditions labelled as medical disorders, were merely the physical manifestations of mental imbalance. This gradually evolved into a comparatively new branch of psychiatry, viz. "psychosomatic medicine." Since World War II, this science is becoming increasingly popular, and now rather than "fix" the symptoms of neurotics by giving them an intensive, elaborate and impersonal medical or surgical line of treatment without any effective cure, the root cause of the trouble is probed into, and eradicated with the help of adequate psychotherapy. Once the patient learns to face his problems and understands his difficulties, he responds with friendliness, develops emotionally and intellectually into a healthier and more efficient person, his physical symptoms abate automatically and he is able to adjust himself to his environment with ease.

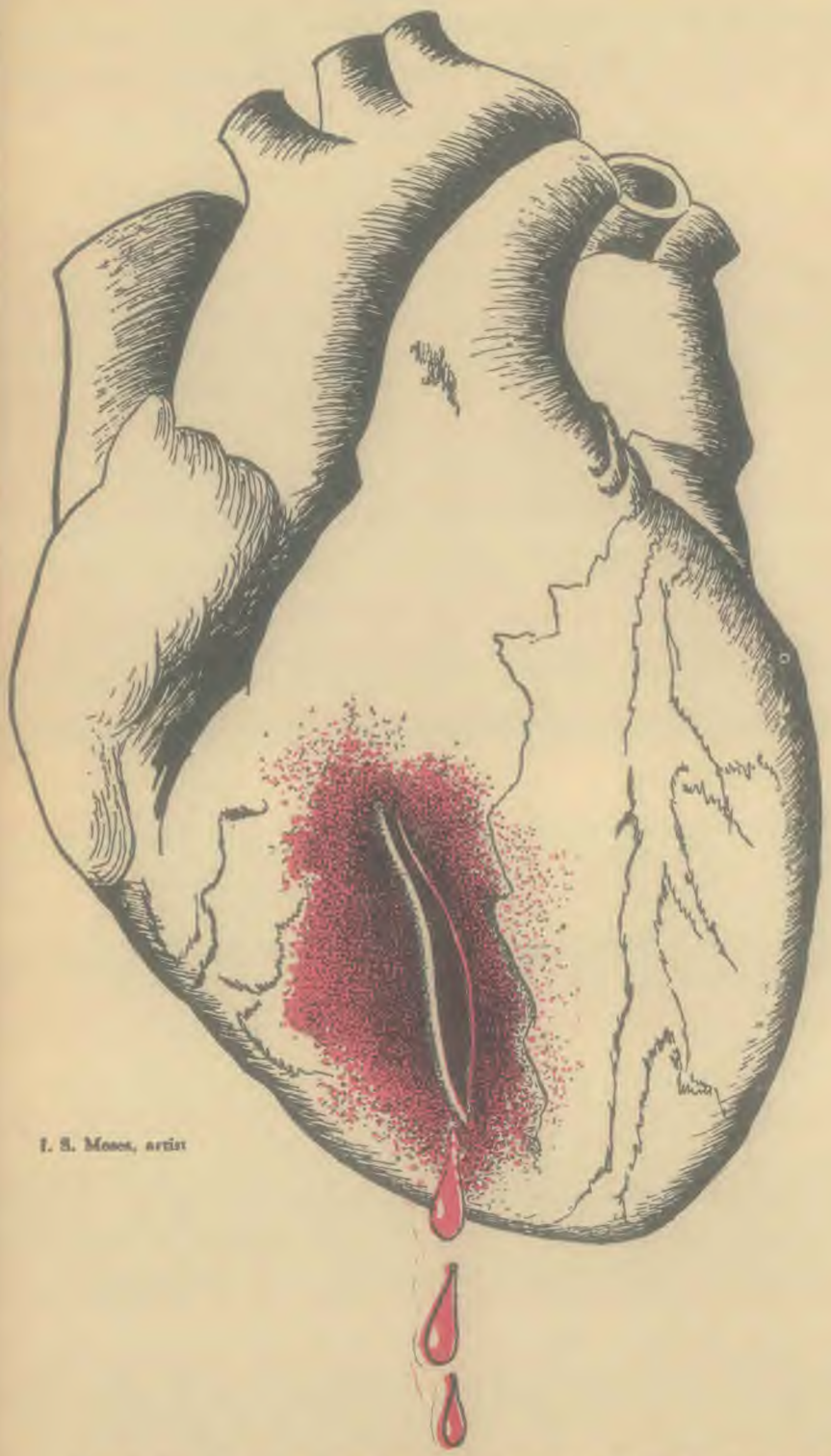
In concluding this introductory article, I hope I have conveyed to my readers with sufficient emphasis the importance of mental health and hygiene to the general populace of any country. As the training in mental hygiene starts from the day an infant is born, in my next article I shall deal with mental hygiene during infancy and childhood.

—Reprinted by courtesy: Medical Digest, Vol. 24, No. 11, Nov. 1956, pp. 885-887.

HAROLD J. HOXIE, M.D.

CORONARY HEART DISEASE

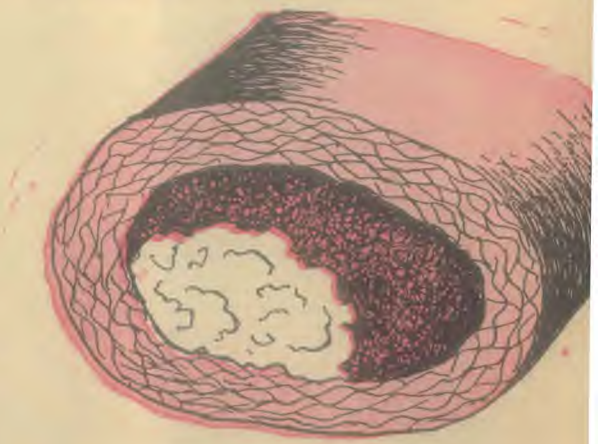
Heart artery with fatty deposit and roughened lining



I. S. Moses, artist

Heart showing coronary thrombosis effect. Darker area reveals location of heat-muscle-death section.

Blood clot formed over fatty deposit in the heart blocks artery completely.



Gopal Das is a successful businessman, wiser than he was a year ago. He built up his timber-supply business by giving his customers a better price and more service than his competitors gave. He was not a person to depend on others to do his work for him. He was as competitive and ambitious at 54 as he had been at 30. He had been reared in the country, and liked good food—rich milk on his cereal and two fried eggs for breakfast. He did little physical work in connection with his business and for years was about 30 pounds overweight.

One evening last January a pressure feeling began in Gopal's chest. Thinking it was the result of something he had eaten, he took an aspirin and some soda mints. The distress subsided a little, and he retired but could not sleep. By 4:00 A.M. he agreed to let his wife call the doctor. When the doctor arrived a half-hour later, he found Gopal pale, cold, and sweating.

Recognizing that Mr. Das was having a coronary heart attack, the doctor gave him an injection of morphine to relieve his pain and called an ambulance to take him to the hospital. There he was given oxygen, and because his blood pressure was low he was given a medicine to raise it in order to improve the blood supply to his heart muscle. His pulse was irregular, so he was given quinidine to prevent his heart from racing dangerously. He was given an anticoagulant to prevent further clotting of blood in his coronary arteries or in the lining of the heart chambers. He had to have three more injections of morphine before the pain stopped, shortly before noon.

That morning an electrocardiogram was taken. It was suggestive of an obstruction of a coronary artery, with resulting infarction, or death, of a portion of the heart muscle. Another electrocardiogram taken the next day revealed changes that confirmed this diagnosis. But by this time Gopal was feeling fine and could see no reason for remaining in bed.

The doctor explained the importance of complete rest. In an acute coronary attack a portion of the heart muscle is so deprived of its necessary blood supply that it dies. This dead muscle shortly becomes soft; if the softening involves the entire thickness of the heart wall, the wall may tear. This is a catastrophe that results in sudden death, as the blood that leaks through the opening is trapped within the pericardial sac around the heart and compresses the heart so much that it cannot fill with blood. This complication is more likely to occur if the person is active and the blood pressure remains high. This danger is about over after two weeks, when young scar tissue begins to knit the weakened muscle. This condition accounts for about 10 per cent of deaths that occur in the first three weeks.

Another reason for bed rest is that a part of the wall of the heart is not doing any pumping of blood. In addition, the affected region is bulging while the active part of the heart is contracting, so that the efficiency of the heart is greatly reduced. This may result in heart failure, first evidenced by congestion in the lungs, breathlessness, and coughing. If heart failure persists, the legs and hips become swollen from accumulation of excess water.

The risk of heart failure is largely dependent on the size of the infarct, or dead muscle, and upon the condition of the heart before the attack. The risk is greatest in the first four to six weeks, but may persist for a long time. It may take many months for the uninjured heart muscle to grow thicker and take on the work of the part that was replaced by scar tissue.

During the period shortly after a coronary attack the muscle close to the zone of tissue death is irritable. It may set up a rapid, poorly organized activity that prevents the heart from contracting efficiently. This is called ventricular fibrillation, and is probably the most common cause of sudden death in coronary heart disease. This complication can often be prevented by watching for signs of irritability of the heart muscle in the form of premature contractions, and by giving procaine amide or quinidine.

Another disturbance of heart rhythm many prove serious if it is transient, and fatal if it persists more than a few minutes. This is cardiac standstill; the heart simply stops beating. Epinephrine or ephedrine is often effective in controlling this complication. Quickly opening the chest and massaging the heart by hand has saved some who otherwise certainly would have died.

A certain amount of shock, noted by cold, clammy perspiration, weakness, faintness, nausea, pallor, and a fall in blood pressure, occurs in more than half the victims of infarction of the heart. Many recover spontaneously, but a few continue to have a weak, thready pulse. Most patients with persistent shock die. A few can be saved by prompt treatment. The most effective treatment developed is the use of medicines to constrict the blood-vessels. One of these medicines is Levophed, which must be given into a vein by a doctor and its effect watched carefully.

Another important type of complication that formerly caused almost a third of deaths from coronary attack is abnormal blood clotting. Clots often form on the inner lining of the heart chamber where it is involved with infarction, or muscle death. Pieces of the clots may break off and be carried by the blood to any part of the body, where they may obstruct the arteries to that part. They are most likely to cause trouble if they go to the brain, the legs, the kidneys, or the intestines, where they may cause

(Continued on p. 32)

A SPLENDID ACHIEVEMENT OF VELLORE SURGEONS

OPEN-

N. Gopinath, M.S., M.S. (Thor.), T.D.D., F.A.C.S.

THE PAST decade has brought forth an impressive display of clinical achievements in the field of cardiac surgery. As recently as 1948 there were only three inborn heart lesions then amenable to surgical treatment: patent ductus arteriosus, Coarctation of aorta, and Tetralogy of Fallot. The interior of the heart represented an important barrier to progress, the last anatomic factor of the many that have confronted the surgeon through the decades. Few could have foreseen that in thirteen years to follow, many of the congenital and acquired lesions of the heart and the great vessels would be successfully tackled.

The surgeon today with the development of the open heart operation can precisely see what has to be done within the interior of the heart and then proceed to carry out the necessary reparative measures in a dry field, unhurriedly. To this end, he can disengage the heart from functioning even up to ninety minutes or two hours with the additional advantage of stopping the breathing heart. Such a spectacular advance has brought the opportunity of a fuller and richer life to many who are at present cardiac cripples. In the world as a whole, at the present birth rate, two thousand infants arrive every twenty-four hours with inborn defects of the heart. Most of these infants are potential candidates for corrective surgery. The number of people requiring relief from acquired heart disease is admittedly less accurate. In the not too distant future, even the damage caused by the coronary disease, that is breakdown of the heart's own circulation, may be relieved by surgery. Lest there be complacency, one need only to reflect upon the inescapable fact that more children with defects in the heart are born each day, than are being corrected in a year with the present facilities. It is therefore right to predict that practice of heart surgery, especially open heart surgery, will not be confined to a few medical centres but will continue to grow of necessity at an impressive rate.

The key to this open heart surgery is the development of a heart-lung machine. This essentially consists of taking over the function of the heart, thus relieving it of its work temporarily. The investigators concluded early in their efforts, that the machine has to assume also the function of the lungs. The latter would mean an excellent substitute for gaseous exchange of oxygen and carbon dioxide. It withdraws the carbon dioxide laden venous blood and returns to the body oxygenated arterial blood, supplying the heart itself with arterial blood during the period of disengagement. A heart-lung machine would need only two connections to the patient's circulating system: one to the chamber of the venous pump through the superior and inferior vena cava to take away blood; secondly, to the aorta or its branches returning arterial blood. At this stage one can have an idea of the prerequisites of a heart-lung machine. It should supply properly prepared arterial blood to the body in about the same quantity as patient's requirements are. During this procedure, the patient's functional integrity must be maintained. Risk of the procedure must be low. There should be no dangerous effects produced. Lastly, the technique must be practicable. Adequate protection has to be given to the brain as it cannot tolerate anoxemia.

Research experience in dogs have shown that several existing types of pumps are satisfactory. But the main task was a device to take over the function of the lungs. In the lungs gaseous exchange takes place across the membrane of myriad microscopic air-sacs that bring air into close proximity of blood. Surface area of the lung is about six hundred square feet for an average build man. One of the

HEART SURGERY

Courtesy of All India Radio, Madras Office, Christian Medical College & Hospital, VELLORE. S. India. Released through the Public Relations

most difficult tasks was to expose the blood over such a large area outside the body, without damaging the delicate blood cells. This was accomplished in many ways. Gibbon of Philadelphia, one of the earliest pioneers, used a system whereby the blood films over stainless steel screens during oxygenation. The second one is where blood is picked up from a shallow trough and filmed on rotating discs in an atmosphere of oxygen. The third type permits exchange of gases across surface provided by oxygen bubbles rising with blood in a vertical tube. Lastly there is the diffusion type whereby blood passes between semi-permeable membranes through which oxygen diffuses.

At the same time, Bigelow of Toronto University showed that hypothermia or lowering of body's temperature would permit circulation to be temporarily interrupted for a short period, when surgery of heart could be done. This field has recently been extensively investigated. Great stimulus was given by the work of Mr. Drew of London. He cooled the body to a temperature of as low as 15° C with pumps and a cooling system, when all the vital functions of the body could be stopped for as long a period as one hour. Hypothermia has held the fascination of physiologists as condition is produced in the body which ordinarily is not compatible with maintenance of life. The spontaneous respiration ceases at 28° C and the brain stops functioning at 19°C. Lastly the heart stops beating at one or two degrees less, i.e., about 17-18°C. Virtually all the vital functions of life stop working. Then the conventional definition of life and death do not apply any more.

A combination of hypothermia and the heart-lung machine complement each other physiologically and a new phenomenon has resulted which at first appeared a technical convenience.

Let us see what the surgeons have done with such devices to aid them. Holes in the partition of the two pumping chambers of the heart can be closed. Widening of narrowed pathways and valves through which blood flows and a combination of these present in what is termed 'blue babies' can be corrected with relatively low mortality. Some boons of time and direct visions have made it possible to develop solution for many acquired defects resulting from disease and that too most commonly from rheumatic heart disease. Narrowed mitral and aortic valves can be widened. More difficult has been the leaking valves, which have spurred many a surgeon to search for complete replacement of these valves in the interior of the heart by artificial ones. To check the perfect functioning of artificial valves one may need to have either beating or still heart. The day is not far off when a complete replacement of the heart is possible.

All this work could not be done if cardiologists and radiologists have not diagnosed correctly the condition before operation. Special radiological aids are necessary, like cine angio-cardiography. Perfect team work is very essential so that the operation could be a success. A good biochemical laboratory is needed to keep control on the various blood alterations that take place. The importance of a blood-bank in taking care of the large amounts of blood necessary to such an operation has to be impressed. Side by side, experimental laboratories are necessary to develop and to keep pace with the progress.

"This new field has brought relief to many suffering from the lesions of the heart. There is no doubt that this field would grow. However, in Medicine there are no ultimate solutions to problems. Only ways of doing things better; and for the future the horizon remains unlimited."

DON'T BLAME OTHERS for YOUR ILLNESS

CLIFFORD R. ANDERSON, M. D.

DON'T TEAR DOWN YOUR DOCTOR FOR YOUR SINS

G. C. Thomas

YOU MAY BE YOUR OWN WORST ENEMY

The poor woman was deeply worried. For several days she had not been able to eat any food. Her face was drawn and twitching, and her lips were trembling as she said:

"If only the other doctor hadn't given me those pills! I am sure they were the cause of all my troubles. I was perfectly well before I took that medicine, doctor. And now look at me, I'm a physical wreck."

"How long has it been since you took those pills?"

"About four months."

"Did you go back and see your doctor again?"

"Yes, I went back the very next week. But after that I decided not to go any more. I thought I would try some pills that the woman next door had been using. They seemed to do her a lot of good. So I felt sure they would help me."

"And did they help you?"

"No, they just made me feel worse."

"What did you do then?"

"Well, I tried some other pills that someone else recommended."

"And they didn't help you either?"

"No, I felt worse and worse."

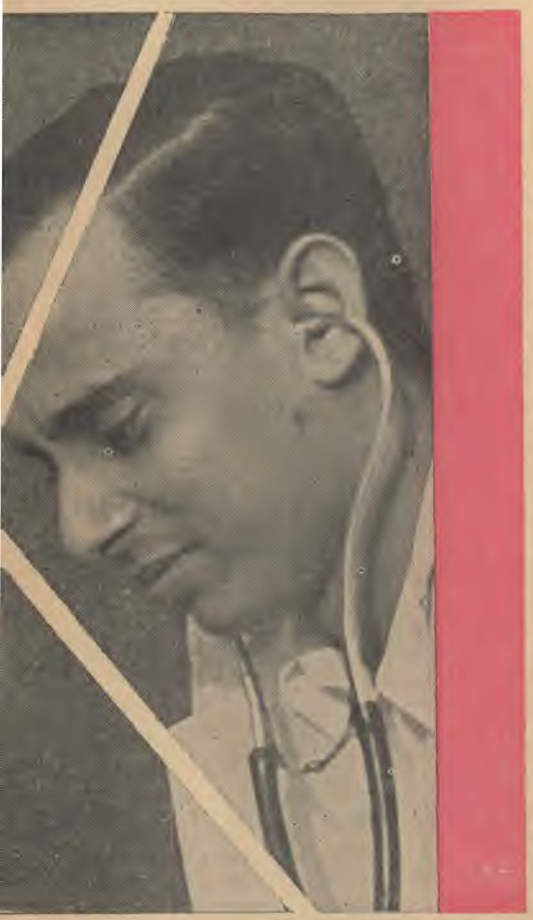
"Why didn't you go back to your doctor?"

"Well, I thought I'd save the money. You know, living is not too easy these days, doctor."

"That's true, but your health is important. Why would you want to take a chance on that? Tell me, are you feeling any better now than you did four months ago?"

"No doctor, I'm much worse. Why, I've lost nearly twenty pounds in weight during the last few months. I have no appetite, and now I can't sleep. Whatever am I going to do?"

"There's no question about your needing some help. But let's



oto: N. Ramakrishna

go back to the beginning of your illness. Are you sure you were 'perfectly well' before you took those pills that the doctor gave you?"

"Oh, yes, doctor, I was feeling fine—except that I did have a nasty skin rash, and also some pains in my stomach. And of course, I've always had some trouble with my hæmorrhoids."

"Hm-m, it seems to me you were a rather sick woman when you went to see the doctor. You could hardly say that you were in the best of health with all those troubles that you've mentioned."

"Well, perhaps I wasn't too well, but I'm sure those pills were to blame. I think doctors should be far more careful in what they prescribe for their patients."

"Maybe you're right. But let's not blame the doctor for *all* of our ills. Sometimes the trouble may be within ourselves, especially when we start taking pills that have been prescribed for someone else! A medicine that may help one person may be of no benefit whatever to another. Taking someone else's medicine, in the hope that it may help you, is always a waste of good, hard-earned money. Such medicines may do you more harm than good."

"But don't you think those pills were the cause of all my troubles, doctor?"

"No, I am sure they were not. You were a sick woman before you went to see the doctor. Then instead of following his advice, you decided to treat yourself. What else could you expect?"

"But doctors do make mistakes at times. Why, I know of several."

"Yes, yes. I've heard those tales before. Let's not waste any time on them now.Doctors are only human, after all. But most physicians are perfectly honest. They have the interest of their patients at heart. They work long hours and carry many heavy responsibilities for those under their care. Well-trained doctors are not deliberately trying to poison their patients. They want them to be well and happy, and I'm sure this was the case with your doctor, too. So let's forget all about those pills and get down to the problem that's really making you sick, shall we?"

"Oh, yes, doctor; I'll be glad if only someone can find out the real cause of my trouble. Maybe it wasn't those pills after all."

"I'm sure you're right. Too many patients foolishly try to blame some poor doctor or someone else for all their illnesses, when the real trouble lies within themselves."*

Was it a "Hidden" Nervous Breakdown?

This lady had talked so incessantly about "those pills" that in the end she and her whole family had come to believe that her doctor had poisoned her. The only medicines he had prescribed were a few vitamin pills. They would certainly not do her any harm. But now, because she was so run-down in health, she was advised to remain in the hospital for several weeks, so that her condition could be more closely observed. After a time she began to forget her obsession about "those pills" and to concentrate on the cause of her illness. A thorough physical examination revealed that she lost considerable weight, as she had claimed, but nothing very serious was found. An X-ray of her entire gastrointestinal tract revealed a moderate amount of gastritis, which was causing some abdominal pain. Aside from this, her physical condition was fairly satisfactory.

What was the cause of this lady's trouble? It was some time before the full story came out. She was sick mainly because of a *"hidden nervous breakdown*. Her physical discomfort was largely due to the constant nervous tension under which she lived. Even as a little girl she had always been tense and unable to control her feelings. She was never sure of herself. Her married life was unhappy because she had never learned to grow up. When things did not go her way, she would promptly throw a temper tantrum. Early in her marriage her husband became rather tired of this attitude, and after a time he turned to someone else for companionship, although he continued to live with her. Both of her children were unhappily married. The daughter came home to live with her mother. And because they were both rather dominant personalities, they spent a good deal of their

What Constitutes Good Nutrition ?

S. B. Pal Choudhury, M.Sc., M.B.B.S.

TODAY A DISTINCTION is made between a child's getting plenty of food and his being well nourished. Parents, doctors and teachers are interested not merely in how much a youngster eats, they are thinking about whether the food furnishes the variety of materials his body needs for building and repairing itself, for regulating and protecting itself, and for energy. A child may "eat like a horse" three times a day, but if some essential nutrient is absent from his diet, he is not well fed. One important discovery about nutrition is that the various nutrients are dependent on each other in a complex and endless interaction. If a youngster's protein intake is inadequate, for instance, his body cannot properly use the starches, sugars, and fats that he consumes, and as a result he will not be in good health. An extreme vitamin lack can lead to what is now called a "deficiency disease," such as pellagra, rickets, or scurvy. On the other hand, if a child's meals contain a good balance of all food needs, so that he is truly well nourished, he is likely to live longer and enjoy it.

The study of nutrition is comparatively recent and by no means complete. Experiments are constantly going on and new discoveries are being made. For some substances the precise function in digestion and growth or how much of them the body requires is not yet known. But the importance of certain key nutrients has been definitely established. The accompanying chart indicates some of the most important functions of these nutrients and where they may be found.

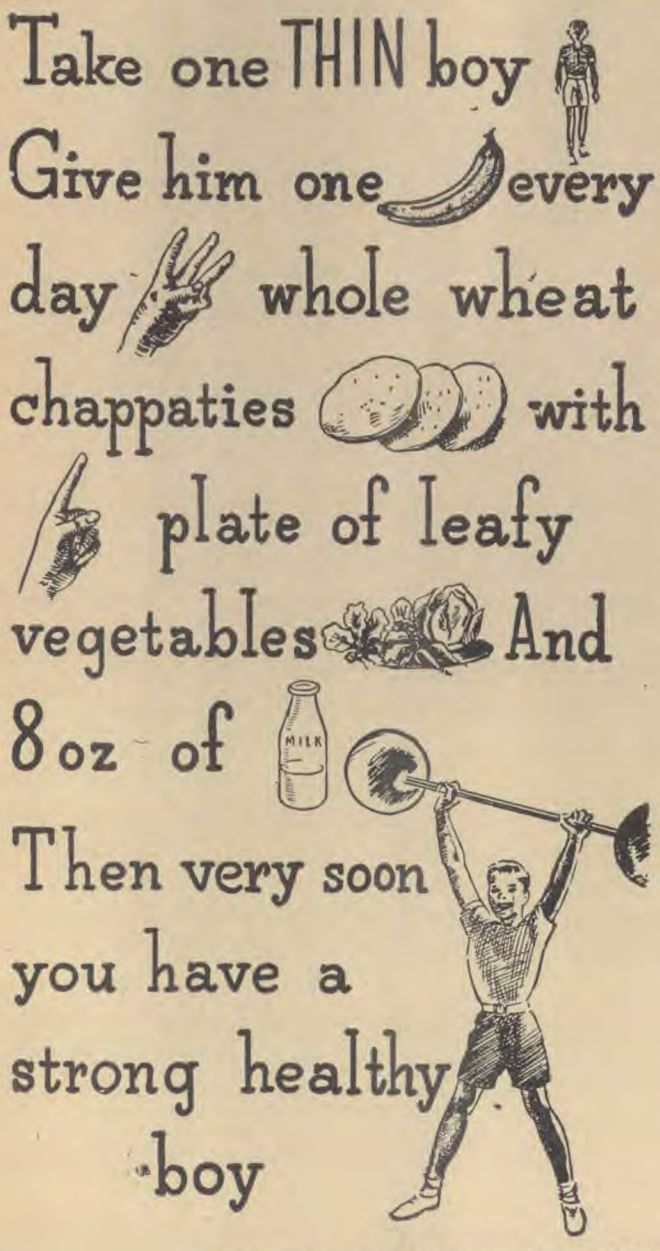
With this new awareness of nutrition, the modern homemaker becomes something of a dietitian. Chem-

CHART OF KEY NUTRIENTS

Key Nutrient	Important for	Where available
Proteins	Building and reparing body tissues—bone, blood, hair, skin, muscles, etc. Building resistance to infection. Functioning of enzymes and hormones.	Animal products, such as egg, milk and cheese. Dried peas, beans, dhals, nuts, peanut butter, cereals and bread.
Calcium	Formation of teeth and bones. Blood coagulation and functioning of the muscles.	Milk, cheese, and eggs. Some green leafy vegetables, cereals, and dhals.
Iron	Formation and functioning of red blood cells.	Egg yolk. Green leafy vegetables and dhals. Enriched and whole grain cereals and bread. Dried beans, peas and fruits, potatoes, animal products.
Iodine	Thyroid function. Growth of body.	Iodized table salt. Salt-water fish.
Carbohydrates Starches Sugars Fats	Energy	Cereal products, dhals. Potatoes, dried fruits. Sugars and sweets. Cream, oils, butter, milk, margarine, cheese and other animal products. Nuts, chocolate.
Vitamins	Growth and Health Resistance to infection Good eyesight	Green leafy vegetables, fruits, fish oils, milk and eggs, cereals and dhals, nuts, dried yeast.

istry has taken foods apart and can tell her approximately how much of different foods her children need daily at different ages. For practical meal planning, however, this complex scientific study can be broken down into basic types or groups of foods. If a child eats some of each different food group daily, he will have on the whole, in good balance, all the kinds of nutrients his body needs.

The average homemaker has more to think about, however, than what ought to be on the table. How to get it there depends, in each family, on different conditions: how much money there is to spend on food, how many people and of what ages have to be fed and where the family lives (affecting availability of different foods). The following general suggestions, however, should be helpful in most cases.



(Courtesy: Govt. of India, Ministry of Food Bulletin)

1. Have a food plan. Weekly planning and weekly shopping can make for greater convenience and flexibility and can save money and energy in the preparation of meals.

2. Find out something about foods, how to judge a really fresh vegetable, for instance.

3. Experiment. "Just like mother used to make" is not always the best way. The up-to-date homemaker does not mechanically carry on the dietary habits and cooking methods of her own home or community without weighing their soundness.

4. Buy staples—canned goods, flour, certain vegetables, etc. in quantity, and watch for sales of canned goods. Buy fruits and vegetables in season for preserving or freezing.

5. Use left-overs whenever possible.

The shrewdest marketing can be ineffective if it is not followed up with wise storing and cooking. Many foods lose a good deal of their nutritive value if they are improperly stored. Although there are a few exceptions, almost all vegetables, fruits and animal products require refrigeration, or else must be used while fresh. One of the gravest faults in Indian cooking, from a nutritive point of view, is overcooking. Generally speaking, foods are much more valuable the less they are cooked. Pressure cooking, steaming or using small amounts of water leave foods more nourishing than cooking them in water to cover or for long periods of time.

Some school systems today are trying to help children understand their own nutritional needs. As young people become increasingly interested in their own growth, strength and appearance, they seem to benefit from learning about their food requirements and discussing their food habits. Many doctors feel that education about nutrition should be more widespread. Working through parent-doctor groups, parents who agree with them may be able to help bring about such teaching.

Important as it is to maintain balance in meals, it is equally essential to maintain balance in attitude. In an effort to make sure her children are well fed, the homemaker should not permit good intentions to deteriorate into anxiety and nagging. A mother may be aware, for example, that her child should have daily a food from each of the various food groups: leafy green and yellow vegetables, butter or margarine, bread, flour and cereals, citrus fruit, cabbage and tomatoes, milk, cheese, eggs and legumes. But she must also be aware that "daily" cannot be taken too literally. In various phases of growth a youngster may ignore fruit completely for a while, and make up for it later. Meanwhile it is important that the essential foods be available daily. Perhaps the most important nutritive factor in the diet of the well-fed child is that he take pleasure in eating.

Interview by MADHUKER D. OHAL

Stephie D'Souza

The Fastest

"As an athlete competing in games at home and representing my country overseas I was often surrounded with friends who offered me cigarettes, but I had made a firm decision early in life never to touch alcohol or tobacco and I am glad for this decision. The struggle for success and recognition has been difficult enough without being handicapped by such body-weakening habits as smoking and drinking. I had the opportunity to watch a few outstanding athletes who could not do as well as they had expected, but after discovering what had destroyed their performances they naturally gave up these evil habits.

"When I see young people with strong and healthy bodies smoking and drinking, I wish I had the power to dissuade them from these habits. I wish they realized that they are diminishing their chances to excel in wholesome and worthwhile activities. I believe that strength of body as well as strength of mind will be the reward of any person who develops the habit of firmly saying "No" to tobacco and alcohol."

STEPHIE D' SOUZA.

STEPHIE D' SOUZA, the frequently spoken of young lady in the sports columns of the newspapers, is at the top of the Indian list in track performance. Having always captured the titles in 100 and 200 meter sprints from 1957, she has proved herself to be the fastest woman runner in India. With all her dazzling achievements Stephie is quite unaffected and friendly.

"She is the most jolly girl that I know of," says her pal.

Stephie hails from Goa. Her family shifted to Poona during the war years. Times were hard for the "sports family." Education for the children was beyond reach. "But Stephie believed," says her brother, "that the price of success is not gold; it is often a stubborn will."

Through the influence of her sister-in-law Stephie gained admittance to Dastur High School in Poona. Here for the first time the thirteen-year-old fleet-footer attracted notice. She was sent to take part in

Above: The Union Railways Minister, Shri Jagjivan Ram presenting a medal to Miss D'Souza for her outstanding abilities.

Right: With Olympic team in Tokyo. Stephie is seated third from the left.

Woman in India

the hurdles event in the Junior Olympics in Bombay in 1950. She shattered the record which had stood unbroken for three years, her first great triumph.

1951 brought more success. Stephie left the Junior Olympics with the titles for the hurdles, 100 and 200 meter sprints, high jump, and broad jump in her bag. This was indeed outstanding for an adolescent of thirteen. Only a week after the Junior Olympics Stephie was invited to participate in the Senior Olympics. She came out second in the 100 and 200 meter sprints, third in the hurdles and amazed everyone by breaking the running broad jump record.

Stephie also is an ace hockey player. In fact, "she excels in any game she puts her heart into," says one of her schoolmates, who herself is an athlete. "Sports is in her blood." Stephie touched the hockey stick for the first time in 1950. Within an incredibly short period of three years she won a place in the Indian hockey team which went to play a festival tournament at Folkstone, England, in 1953.

She was the youngest in the group and was aptly nick-named the "baby" of the team. Baby indeed she was in age but not in skill! She proved to be a valorous left extreme and scored some spectacular goals.

She has ever since been representing Maharashtra in Hockey. Her speed and precision in the game is worthy of admiration. She was even selected later to captain the Indian team against Ceylon at Bhopal.

On her way back from England Stephie heard the heart-breaking news of the death of her mother. "But she took it courageously," says a friend of Stephie. "We admire her for the spirit. Through all her hard-luck she always faced the situation with a bold front."

Stephie has a busy programme every day. She is up very early and betakes herself to the grounds, sun or rain. After breakfast she reports to the railway station where she is employed. In the evening she puts in some more practice and is home by 8:30.

(Please turn to p. 33)

We keep the batteries of our cars well charged, but have you ever thought of—

Charging

GEORGE A. SKINNER, M.D.

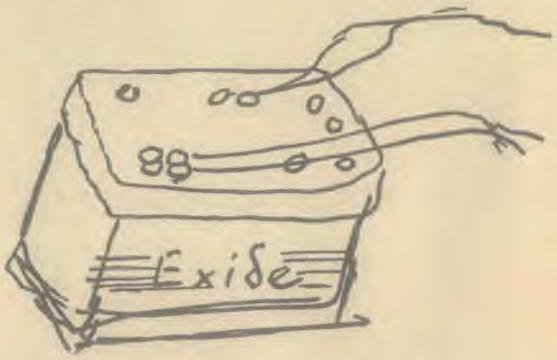
IF A MACHINE gets out of order, especially when that machine is our family car, we hasten to have it repaired. It is much better, however, to keep it up all the time, so that repairs will rarely be necessary. It is the same way with the human machine, and especially in regard to keeping the battery, or nervous system, fully charged. Sometimes the drain on the battery is very heavy; and, like all batteries, if the output is greater than the charging rate, the charge will run down.

The human charger will keep your "battery" charged if it has half a chance, and will maintain it in fair condition under severe overuse for a long period. In a surprisingly short time the reserve power of the nervous system can be "boosted" until it can carry its load with efficiency.

The greatest difficulty with an overtaxed nervous system is that the warning signals are frequently overlooked, or erroneously attributed to some other cause. The signs of the run-down human battery are not as readily noticed as they are in the motor-car battery, yet they are quickly recognized by experts, and may be readily observed by anyone who checks up on his body machine from time to time.

If we have a human battery that is nearly run down, what can we do about it? Fortunately, plenty, if we will make use of the knowledge that is ours for the seeking. The human battery is, like most other parts of the human machine, capable of taking an enormous amount of punishment, yet making a rapid and complete come-back if proper opportunities are given it.

In order to recharge our nervous batteries fully, we may have to make some radical changes in our ordinary routine; perhaps we may think this cannot be done. Probably the fear of disaster if one quits his job keeps many a man sticking desperately to his routine, when he and everyone else know that the best thing would be for him to rest. All well-planned organizations can readjust their work assignments to provide for such rest periods, if they will. Most people can take on considerable extra work for a limited



time to relieve someone who needs rest. It is done regularly at vacation time. If someone needs rest for rebuilding, the most economical and satisfactory thing that can be done is to allow the overworked person to stop and regain his health. A change of occupation at the proper time will often save a serious disaster and prevent a complete nervous break in which the time lost and the expense of repair may be so great that a small organization or individual may be wrecked financially.

When the motor-car battery is so completely discharged that it will no longer crank the engine, we may take it out and send it to the service station. This puts the car temporarily at rest. We should do exactly the same thing; that is, put the body at rest if we wish to restore the human battery. Up to the present, however, we have not been able to put a rented battery into the human machine and keep going while the regular one is being recharged.

To bring a battery back to full strength, it is necessary to supply not only the current but also the proper fluid, or electrolyte. If the battery acid is spent, no amount of charging will bring it back to capacity. If the plates are buckled, insulators cracked, or if the paste is falling off the plates, expensive repairs are required which take much longer than for a mere recharge.

the Human Battery ?

In cases of nervous exhaustion, a condition comparable to that of the battery exists. The nervous system is badly damaged, and much time is necessary for repairs to take place. Proper materials must be supplied in the diet in order that these repairs may be made. Often what seems to be an excellent diet is lacking in one or two vital factors, such as the vitamins, iron, or calcium; and these must be supplied. Thus it is that long periods of rest and sometimes "forced feeding" are necessary to restore a badly exhausted battery, or nervous system, to normal.

Where the person is merely run down, a short rest and change of locality will sometimes work wonders in giving the battery a chance to build up. The great value of vacations is many times apparent in this particular, if the vacation is not so strenuous as to do more damage than good. This happens at times, and it is well to plan vacations with the idea of a change of environment, and with plenty of time for idling. The human body is a master mechanic at making repairs if given suitable materials and enough time. Serious conditions can be remedied in a pleasant way, if we recognize nature's way of doing it.

The mental attitude in making this restoration is of great importance. Nervous irritability can be largely controlled when the cause is recognized. The tendency is to flit from one thing to another, changing tasks before they are completed, and being generally "fidgety." Fussing over unimportant details does much to exaggerate the condition we are trying to cure. The fusser not only makes himself nervous, but also everyone else around him. Fussing can often be readily restrained, and its restraint reacts favourably on all concerned.

Sleep is a great restorer, and if one sleeps soundly, the nervous build-up is rapid and marked. Often, however, there is a tendency to lie awake and worry about one's condition. The mere fact of lying awake need not disturb one, for if he is at rest and relaxed he is rebuilding almost as rapidly as if he were sleeping. But if lack of sleep does worry him, several simple remedies may be tried. Usually one of them will be effective.

All normal animals will go to sleep when the stomach is full, if they are permitted to do so. This is because the effort of digestion tends to draw the surplus blood from the brain, which action produces a marked lessening of mental activity. If we adopt a similar method, it will in many cases produce a like result. There is a general tendency to believe that going to bed with food in the stomach is harmful, but it really is normal. By custom we have our evening meal some hours before bed-time, but the children frequently retire soon after tea. Normal youngsters sleep soundly with a full stomach. Babies start that way. So if one is suffering from insomnia it is well to take a moderate, warm meal before retiring—not the snack variety, but something that the individual knows he can readily digest, and which he enjoys eating. If this fails, sometimes a neutral bath, quite prolonged, relaxes one enough to make him glad to go to sleep. Many relax by reading some mildly interesting story. If medicines become necessary to produce sleep, they should be taken only upon competent medical advice.

Play is another factor in maintaining a nervous system in the best condition. There is much relaxation in play, laughter, and good fellowship in the fresh air, and a definite time for such relaxation should be planned. This has the added advantage of keeping the whole body in better physical condition, for most play in the open requires more or less physical activity. Such activity should be adapted to the age of the individual, and be something he likes to do. The value of various hobbies is notable in this connection; and hobbies, especially those that require some physical activity, should be encouraged.

Comparatively simple measures, if kept up regularly, will keep our human batteries in excellent condition, ready for the day's work, and with plenty of charge left over for enjoyment. But a constant overdemand, with undercharge, will wreck a battery, be it human or car.

Homemaker's Helps

FEEDING BABY

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BABY FEEDING is a very old business in this world. Success or failure depends more on your attitude than on how you feed your baby. If you are comfortable parents, your problem is more than half solved.

Follow the suggestions of your doctor, read, and take advantage of classes for expectant parents, if there are any. Take time to be informed, so that parenthood will be a wonderful and happy experience right from the start.

A well-fed baby is usually a happy baby. The business of feeding requires accuracy and care in following formula and feeding instructions. Should you have a fretful baby in spite of your preparations, do not be too quick to blame yourself or feel inefficient.

Parents have a universal weakness of comparing one baby with another. The neighbour's baby eats more. The baby down the street sleeps all night, but our baby wakens for a feeding.

We overlook the most important fact. Each baby has his own individual inheritance. He is a complex combination of his mother, his father, and their ancestors. There is no other baby just like him.

You must consider the conditions your baby encountered during the months his mother cradled him before he was born. Consider also the experience he had of being born.

Your doctor wants you to have a healthy, well-fed baby. That does not mean your infant should be a roly-poly overweight. There is a normal average weight for each period of development from conception to adulthood.

Baby's size is not necessarily a measure of his health. One hungry baby I saw had a spurt of growth that the average formula didn't satisfy. Because he had always waited comfortably for a change in feeding, his mother saw no reason for catering to his demand for extra attention. He gained two inches in height but did not gain in weight. The mother was aghast when I told her the baby was hungry, not spoiled. Being a sensible mother, she didn't go to the

Feeding time is loving time for baby and mother. It is not a time for hurry and bustle, but for quiet and relaxed loving.

extreme of feeding him too much. She fed him until he shook his head or stopped opening his mouth for more.

As a parent you are in charge of a very considerable business. A successful business is run by well-informed people. Your doctor is your business adviser. Count on his help. He will watch the progress and development of your baby. Get the facts you need to know, and take his advice. Use them to help baby fit into your family.

Modern mothers should want to nurse their babies. Most mothers can successfully breast-feed. There are exceptions, which may be owing to health conditions or the necessity to work. I have a patient who works and goes home to nurse her baby, who is on a four-hour schedule.

A breast-fed baby is sensitive to the physical and mental condition of his mother, because these factors affect the quality of her milk. A calm, relaxed mother will very likely have a happy baby. To mothers who breast-feed, a well-balanced diet is a must. The kind of food is far more important than the quantity eaten. Drinking quantities of milk or a high-calorie beverage is not necessary. The mother should drink plenty of water. It increases milk volume.

Feeding from one breast may satisfy your baby. If not, it is best to feed half the nursing time on each breast. To maintain a good supply of milk, your breasts may need to be emptied manually if your baby does not do it.

Relax and enjoy baby's meals with him. The semi-upright position is probably the most comfortable. It allows gas bubbles to rise above the milk. Should you feel better lying down, you may cradle your baby in your arm to get his head higher than his stomach. It is of benefit to you to nurse the baby. It helps your system return to normal.

Don't rush baby's meals. Make them a happy and restful time from the start. Indulge in sweet talk, singing, listening to the music you enjoy most, or blissful quietness, depending on your mood.

The largest part of baby's meal is consumed in the first five or ten minutes. He loves to suckle ten to fifteen minutes after his first hunger is appeased. He is combining pleasure with exercise. Most babies need to be bubbled during and at the end of the feeding. Hold him over your shoulder and gently rub or pat his back. Some babies do better if they simply sit up on your lap. There is the occasional bottle-fed baby who prefers to drain his bottle without being disturbed. If left alone, he will eat more and have no trouble getting up the air bubbles in his own good time.

Bottle-fed babies are still in the majority. Hold your baby to feed him. Cradle him in the right arm for one feeding and in the left arm for the next meal. This change is good for his development. Cuddle him gently and tenderly. Let the suckling time be the same as for the breast-fed baby. He will repay you with love, smiles, good disposition, and less finger-sucking.

Father, if it is your turn to feed the customer, hold him according to your own preference.

Never let bottle feeding be an excuse for propping your baby's bottle while he is nursing. That is giving your best customer short change. Some of the best deals are made while lunching. Business executives are not careless about keeping important appointments. Remember that unnecessary and frequent interruptions are not flattering to your client. Your baby may also protest when her meals are interrupted by too many phone calls or by too many visitors.

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Diabetes and Diet

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BLOOD *is* thicker than water, and sweeter too. The total amount of sugar in the entire human blood system is a little less than two teaspoonfuls.

The presence of sugar in blood at a particular level is important for the efficient working of the human body. The level varies within a certain range, like the body temperature, but the normal is said to be 80-120 mg. of sugar for every 100 c.c. of blood. This is the normal *fasting* blood sugar level, long after the night meal or before breakfast.

Rise and Fall

When we eat a meal and it is digested, the starchy food (carbohydrate) is converted to sugar (glucose) and the glucose passes into the blood through the gastro-intestinal tract. The blood sugar therefore rises; it reaches a certain maximum level, within an hour, but comes down again to the normal level within about two hours. This is so because, part of the extra sugar (glucose) is changed into glycogen (animal starch) and stored in the liver, and a part of it undergoes combustion in the muscle tissues. Glucose is the fuel of the body and furnishes energy; each time a movement is made, the muscles burn glucose.

While in normal persons, the blood sugar level comes down within about two hours after a meal, in the case of some, the sugar level does not come down on account of the inability of the individuals to store sugar as glycogen or burn it. Therefore, the circulating blood of such persons contains an excess of sugar (glucose) which spills over into the urine. This condition, known as DIABETES, which means 'to pour through a syphon', is therefore, a disturbance in the utilization of sugars and is evidenced by an increase in the level of sugars in the blood (hyperglycæmia) and the presence of sugar in the urine (glycosuria).

Other additional symptoms of the disease are great thirst, frequent urination, loss in weight, weakness, dry skin, often an inability to sleep, and in some cases, a tendency to coma. The diabetic is also unusually susceptible to certain kinds of infections, particularly skin infections, such as boils and carbuncles. The blood of the diabetic, which is rich in sugar, offers an excellent medium for the growth and spread of bacteria. Cuts and wounds do not heal quickly and prevention of infection may often be a matter of life and death.

Disease of Rich

Millions of people in the world suffer from diabetes. The Italians and the Jewish people are said to be particularly susceptible to the disease. In India according to Chopra, Mukerji and Chopra, the Bengali Hindus appear to be most prone to the disease, the proportion being 68% of the total cases.

No age is exempt, but most sufferers are over forty. Males are affected twice as frequently as females and fat people more than lean people. Among the upper classes, diabetes is more often the rule than the exception. What gout is to the nobility of England, diabetes is to the aristocracy of every country. The greater prevalence of diabetes among the richer classes

The importance of diet, and particularly some foods like milk protein, tender field-beans, idlees, the vegetable knol-khol and Bengal gram in the treatment of diabetes is stressed in this article.

may be due to sedentary habits and the use of unnecessarily large quantities of starchy foods and fats which lead to a breakdown of the carbohydrate metabolism. According to one view, as the excessive use of condiments usually results in over-eating, condiments are the indirect cause of diabetes.

Stress has sometimes been laid on inherent pre-disposition to diabetes, and in several cases, the disease has been tracked down to two or more generations. Climate is believed to be one of the important influencing factors. Lack of physical exercise, hurry, worry and other conditions may also be predisposing factors.

The Root Cause

In 1889, von Mering and Minkowski showed that the complete removal of the gland called pancreas from dogs was followed by symptoms that resembled those observed in diabetes. This indicated that the root cause of diabetes must be centred in the pancreas. Resembling a bunch of grapes and about seven inches long, the pancreas, in humans, lies transversely along the rear wall of the abdomen.

Langerhans, in 1869, discovered a group of cells in the pancreas that was apparently unconnected to the rest of the gland. Further investigations suggested that these islets of Langerhans secreted an unknown hormone. The hormone was called insulin and several investigators tried to get a workable extract of it from the pancreas of experimental animals. In spite of many attempts, the insulin remained elusive. Finally, in 1921, Banting and Best succeeded in obtaining from the pancreas a potent extract containing insulin. The extract was injected into diabetic dogs and found to lower the increased blood and urinary sugar levels of the animals. This epoch-making experiment indeed laid the foundation of modern diabetic therapy, by the administration of insulin. Further research indicated that improper working of the islets of Langerhans is not the only cause of diabetes, and that other glands, like the pituitary, have some definite relation to it.

Necessary Evil

The chemical composition of insulin has been worked out by Sanger of Cambridge. Insulin is essentially a protein; when given by mouth it is digested like any other food and therefore confers no benefit on the diabetic. This is why insulin has to be injected into the blood. Also, as the action of insulin is short-lived, injections have to be given rather frequently. It must be remembered however that insulin is not a cure for diabetes, for, as soon as its use is discontinued, the blood sugar will increase again.

The condition of the diabetes varies in severity from cases that do not require any insulin to those that need a hundred or more units

of insulin daily. Careful adjustment of the diet will often help to prevent the mild cases of diabetes. However, to the overwhelming majority of sufferers, insulin is a necessary evil. Thanks to insulin, the diabetics lead normal lives, but the eternal spectre of the insulin syringe as well as the repeated needle pricks often haunt them and cause discomfort.

Research all over the world has therefore been directed to prolonging the action of insulin to reduce the number of injections and to the search for orally administrable anti-diabetic substances. Work in Coonoor and Bangalore has shown that the use of *ragi* as staple food has a favourable effect on diabetics. The reason is found to be due to the lower rate of digestibility of *ragi* starch and consequently the slower release of sugars in the blood. Extracts of the seeds of jambul fruits (*Syzygium jambolanum*) have been recommended and used in folk medicine and fresh seeds are stated to be superior to the dried ones. To what the beneficial effects attributed to this fruit are due, is not clear.

Many reports have appeared on oral anti-diabetic compounds. BZ 55 and orinase are two instances of oral anti-diabetics. However, none of the attempts to produce insulin substitutes have given till now more than encouraging results.

Food instead of Drug?

Can diabetes not be overcome without the help of drugs? Investigations conducted at the Central Food Technological Research Institute, Mysore, under the leadership of Dr. V. Subrahmanyan, seem to indicate that composite protein foods may eventually provide the answer. The studies at the Institute were stimulated by a casual observation of the effect of certain foods on a diabetic. For about three months, the patient who required twenty units of insulin daily, was fed on a diet which included 4-6 ounces of tender field beans *(Dolichos lab lab)*. During this period, he took very little fat but large quantities of rice (carbohydrate). He *took no insulin,* yet there was no sugar in the urine and his blood sugar level was normal during the period. Surprisingly enough, only the tender field beans had this effect, the mature seeds being less successful.

Other Observations

The same patient derived similar benefits from diets containing a lot of skimmed milk powder as well as a diet of *idlis*. The *idlis* were prepared from one part of pasted black gram and two parts of rice, fermented into a dough.

These observations were made by the scientific method. They were verified with other diabetic patients. Similar results were obtained, but the response of the different individuals varied in degree.

To understand the cause of these changes, Dr. M. Srinivasan and M. V. L. Rao of the Central Food Technological Research Institute determined the effects of the ingestion of known quantities of some protein foods on the blood sugar levels and glucose tolerance of three diabetics and two healthy men. The glucose tolerance was determined by giving a definite quantity of sugar (glucose) and finding out the height to which the blood sugar level rose and the time taken by it to return to its initial value.

The experiment showed that casein (milk protein), protein from tender field-beans and protein from black gram, as well as black gram, brought down the blood sugar, in a striking manner. The pulse, *tur dhal (Cajanus indicus)*, did not possess a similar effect. While the milk protein, casein, was effective, a mere mixture of the various constituents (amino acids) of this protein was less effective. The vegetable *knol-khol (Brassica oleacea caulorapa)* as well as the extract of Bengal gram, prepared by cooking the gram in water, were found to have a beneficial effect in bringing down the blood sugar level.

Further Experiments

Further experiments in the laboratory showed that skim milk, tender field beans, black gram and Bengal gram, as well as the proteins isolated from them, when ingested orally resulted in a speedy utilization of sugar by the body tissue. This was confirmed by directly injecting sugar (glucose) in the blood stream of normal subjects an hour after the oral feeding of the proteins. Thus, light was thrown on the mechanism by which the blood sugar level was brought down. In other words, the proteins seemed to play a positive part in bringing down the blood sugar level by activating the speedy utilization of the sugars.

Another interesting observation was that ingestion of these proteins when continued over a period of time increased the capacity of the body in a better and more speedy utilization of sugar.

Silent Revolution

The reduction of the blood sugar by protein after ingestion of a carbohydrate has been demonstrated by earlier workers, but the experiments at the Food Technological Research Institute throw fresh light on the effect of protein on blood sugar levels, about which there have been conflicting reports. Systematic investigations are in progress in continuation of these preliminary exploratory studies. The day may soon come when composite foods based on certain types of proteins can be used to treat diabetes successfully.

And then science would have truly made another silent revolution.

The Doctor Answers

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2. No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases.

3. All questions must be addressed to The Doctor Answers. Correspondence personally with the doctor is not available through this service.

4. Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES. Answers cannot be expected under ONE MONTH.

5. Questions sent in on Post Cards will not receive attention.

6. Make questions short and to the point. Type them or write them very clearly.

7. Questions and answers will be published only if they are of such nature as to be of general interest and without objection, but no names will be published. Address "The Doctor Answers," Herald of Health, P. O. Box 35, Poona 1, India.

HEADACHE: *Ques.*—I am a boy of 21 years. For the last several months I am having a bad headache. Sometimes for days I have no headache and sometimes they become rather severe. My doctor feels it is due to nose trouble, but there appear to be no good results even after my nose is treated. What remedy can you suggest?

Ans.—Headache may have many causes, which vary from diseases of the brain to diseases of the peripheral nerves, ear, eye and nose diseases, or to diseases of the stomach. Besides that, headache may be caused by external influences like heat, smoking or by conditions of the body like nervous tension, for instance. You will understand, therefore, that the treatment would depend strictly on the cause of the headache. The fact, however, that your doctor ascribes it to your nose might indicate that you have nasal or sinus trouble, which causes your headache. The treatment may require nose drops and perhaps antibiotics. Light treatments are also sometimes of value.

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WHITE SPOT ON LIP: *Ques.*—I am thirty years of age. For the last two years one white spot began to appear on my lower lip. I am in the habit of smoking and chewing. Will you please suggest a remedy for the same?

Ans.—The presence of any lesion on the lip, especially in one who has been smoking necessitates investigation by a well-qualified physician who has access to a good pathological laboratory. The proper way for this to be handled is that your physician should remove the lesion and send it to the pathological laboratory for diagnosis. There is no one who can tell by looking at it grossly whether or not it is malignant. For this reason a biopsy or an actual piece of the tissue must be sent to the laboratory. Cancers of the lip respond very well to X-ray therapy.

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ASTHMA: *Ques.*—Recently I caught a cold which I neglected. This developed into a cough which I treated with hot water mixed with salt. But the cough not only persisted but rather increased to such a level that after about a month one night it troubled me for a full hour continuously. In the subsequent days the coughing at night troubled me for still more time with difficulty and strain in breathing, and hissing in the breath. I now find difficulty in walking uphill. In spite of intensive medical treatment, there is still little or no improvement. Since I have a strong aversion to drugs, can you kindly let me know your opinion and suggestions for a balanced diet which might bring about a cure?

Ans.—Having gone through your detailed history, I would conclude that you have been suffering from an asthmatic type of lung trouble.

We know that corticosteroids like Prednisolone and others are acting very well and promptly on this disease. It should, however, be kept in mind that the patient should remain under the care and observation of a doctor as long as he takes this drug. This is because of certain possible side reactions which should be recognized. Aside from possible side reactions, which can easily be controlled, there is no danger in Prednisolone. It is, however, good not to continue this drug for a very long time. Therefore, many doctors prefer to use Prednisolone for asthmatic cases, not as the main drug, but use different drugs like combinations of Aminophyllin, Phenobarbitone, Ephedrine and Antihistamines as the basic medication. On top of this, they then use Prednisolone as may be required.

With regard to your question on diet: there is no typical diet for asthmatics, but care is to be taken to watch the diet, which ought to be well-balanced, otherwise, any particular food may worsen the chest symptoms. This does sometimes happen in cases of allergic asthma.

Repeated X-ray examination of the lung and repeated White Blood Count is suggested.

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SCALY SKIN: *Ques.*—I am suffering from a disease which affects me in the following way. In winter the skin goes hard and dry, with scaly eruption. It is, in fact, all over the body. I have applied external creams and oily massage, but to no effect. It may be noted there is no itching sensation, but the skin gets fish-hard. I have been taking Vitamins A and D on the advice of the doctor, but with no effect. Would you be good enough if you could point out any medicine which can cure such scaly eruption?

Ans.—You give a very good description of Ichthyosis vulgaris. Ichthyosis is also called fish skin disease because of the scaly quality of the skin.

This disease is, with the exception of severe cases, quite harmless and causes neither itching nor any other uncomfortable sensations. The treatment is not so easy. For such cases Vitamins A and D have been recommmended. However, the poor result which is obtained with these vitamins in many cases proves that Ichthyosis is not a vitamin deficiency. It is rather an abnormal behaviour of the skin for which there is no known reason.

We know, however, that the skin is thickened, particularly the superficial layers (the corny part). The application of Salicylic Acid containing ointments helps in many cases on account of its keratolytic action.

CORONARY HEART DISEASE

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paralysis, gangrene of the leg, impaired kidney function, or abdominal pain with obstruction of the bowel.

Abnormal clotting may occur in the veins of the pelvis and legs because of blood stagnation resulting from the prolonged inactivity of enforced bed rest. These clots are not firmly attached to the walls of the veins. Long sections may break off and float to the heart. From there they are pumped into the arteries of the lungs, and are wedged into one or more branches, to produce what is called pulmonary embolism. If large, this condition may be quickly fatal. If small, it may only cause chest pain, breathlessness, spitting of blood, or what seems to be pneumonia.

Abnormal clotting usually can be counteracted by medicines called anticoagulants. One type is heparin, which slows clotting directly. It must be given frequently and by injection. The other type, which may be given by mouth, inhibits clotting by causing the liver to make less prothrombin, a substance necessary to blood-clot formation. It needs careful control and checking of the blood at frequent intervals.

When the patient and his family understand the risks and the available treatment, they can see why it is so important for him to be hospitalized during the first few weeks. Unless the attack is mild, the patient should be in the hospital at least three weeks. Even in mild cases, any of the complications may occur. The amount of activity that is advisable, the number of visitors he should have, and many other details must be determined by the physician on the merits of each case.

Most patients can begin sitting a little by the end of the third week, and can safely leave the hospital after four weeks. After another month of gradually increasing activity, they may be fit to begin to return slowly to work. The purpose of prolonged convalescence is to give time for the heart to compensate for the part of its muscle that was lost and to develop new blood-vessels to supply the remaining muscle with adequate amounts of blood.

During this period of illness and convalescence some patients become quite discouraged. It can be an opportunity for them to appraise their goals in life and plan for a more realistic and satisfying life. There is nothing like a serious illness to make a person consider what things are most worth while in life.

The victim of a coronary attack should adjust his life permanently to a more gentle pace than he was living before his illness. Unless he has disabling symptoms of angina pectoris or congestive heart failure, it is rarely necessary to keep him out of work for a long time or to have him give up work altogether.

He should remove the burden of overweight. The well-treated coronary patient is underweight. A reasonable dietary programme involves limiting fat in the diet, particularly animal fats such as butter, cream, sauces, gravies, and fried foods, and at the same time supplies enough proteins and vitamins to provide a balanced and nutritious diet. The patient should assume that he has years of life ahead, and should make that life as happy as possible.

Just how long a person can be expected to live after recovery from a coronary attack is indicated by a careful follow-up study of a large group of patients seen in consultation by the American heart specialist Dr. Paul Dudley White between 1920 and 1930. About one-third showed evidence of heart weakness or failure. They did not do well even though a few lived several years. None lived more than ten years. Another third had angina pectoris. A good many recovered and lived as long as ten or more years. The final third had no significant effects from the attack. Most of them (83 per cent) survived five years, and more than half (56 per cent) survived and were active for more than ten years.

These encouraging figures may be further improved by a promising treatment too new to be of proved benefit. It is the long-term use of an anticoagulant to prevent clotting in the coronary arteries. Dicoumarin or a related substance is taken by mouth, and the effect on clotting is checked by blood tests at intervals of one to four weeks.

In spite of all that has been done to help victims of coronary attack, it remains one of the most common causes of death. For example, about 200,000 people die of coronary thrombosis each year in the United States, most of them men. Under the age of 40 it is 24 times more common in the male than in the female. In the forties the ratio is about 5 to 1, in the fifties about 2 to 1, and after 60 it is even. This is the chief reason for the great preponderance of widows over widowers in that country.

People whose parents had heart or vascular disease, who are over-weight, who have high blood cholesterol, and who smoke heavily are more susceptible to coronary attack. They cannot change their parents, but they can and should correct the other predisposing factors.

The symptom of a coronary attack is a pain or sense of oppression in the front of the chest, often radiating to the upper abdomen, shoulders, arms, and neck. If it occurs, the person should promptly consult a physician and follow his advice. Without treatment the mortality is 35 to 50 per cent. With good treatment it is reduced to 15 to 20 per cent. About nine-tenths of those who recover will be able to return to work, more than one-fourth to full-duty status in their old jobs. ***

DON'T BLAME OTHERS

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time quarrelling. It isn't easy for such folks to live happily together. The son, who was always the centre of his mother's affections and interest, never matured in mind. In his late teens he had taken to liquor as a way out of his troubles. Soon he had become a confirmed alcoholic. It was a tragic family picture.

As time went on the lady became more and more bitter with life. In her younger years she had been rather pretty, but now the lines of disappointment were deeply etched all over her face. All her life she had been looking for some scapegoat. First she had blamed her parents for her trouble. Then it was her teachers at school, then her brothers and sisters, and finally her husband and her children. But she could never see that *she* was her own worst enemy.

Such patients are not easy to treat. It is difficult for them to accept any good, sound medical advice. They drift around from one doctor to another, hoping that someone can recommend some surgical operation or some special medicine that will straighten out their troubles once and for all. They demand that the doctor be perfectly honest with them, that he tell them "the whole truth, and nohing but the truth." Then when he does they become annoyed and rush off to the next doctor complaining about the last doctor that they've seen and describing in detail all his supposed "mistakes." So the process is repeated year after year.

What Is a Neurotic?

Such people are known as "neurotics." They suffer from deep-seated mental conflicts which often arise from the earliest days of their childhood. Some wonder whether these tendencies are inherited. Probably not. But there is no question that they are developed very early in life, largely because of the stress and strain of an unhappy and unsatisfied childhood environment. It is surprising how often these early conflicts affect decisions in later life, after one has completely forgotten all about the original problem.

As babies we are born neither good nor bad, although some of us may have a better chance for success than others have. But it is most encouraging to think that a child with a poor hereditary background may be trained to become a real success in life if he is surrounded with the right kind of influences at home and at school. On the other hand, a child with the finest birthright in the world may make a complete failure of life if he is not given the right kind of home training.

Such training can come only from parents who have learned how to discipline themselves. They can then give their children an example of obedience to the highest principles of life. The parent who throws temper tantrums and who runs away from his responsibilities can never train his children to meet the problems of life successfully. His own example undermines all that he may try to teach.

A vacillating disposition is another poor example for a child to follow. People who "blow hot and cold" and "fly all to pieces" whenever things don't go their way have never really grown up, either in mind or in personality. Such folks are always trying to pin the blame for their troubles onto someone else. Their judgment is perverted, and they can never reach a really sensible decision.

Don't Pamper a Neurotic!

Neurotic people of this type are to be pitied, but not excused. Catering to their constantly changing whims and fancies will never cure their diseases. Relatives who have to live with such immature people need to realize that sympathy is often the worst medicine they can give. Such people have been badly spoiled in childhood, but nothing will ever be gained by continuing to spoil them. They should be treated kindly, but with due firmness, realizing that, regardless of their age, they have never really grown up. That's why such people often do better in a good hospital, under the orderly care of well-trained nurses. Their physical ailments are relieved, and their emotional problems are greatly helped by the atmosphere of a well-disciplined medical institution.

Such was the result in the case of the woman who blamed the doctor's pills for all her troubles. After several weeks of good hospital care she returned to her home considerably improved. Her troubles were not completely solved, but at least she had learned a better way of living, instead of nursing her grudges and continually putting the blame on others.

D'SOUZA

(Continued from p. 23.)

"I don't remember Stephie's ever staying out late," says her brother, "she avoids all functions that will keep her out too long." Stephie herself believes that to keep in condition one should have sufficient sleep.

"I have never seen Stephie in a restaurant or a coffee house," says a friend, "and she never eats between meals."

This wholesome living has blessed Stephie with a sound physical condition.

"She is most merry about anything," says her friend, and then adds knowingly, "full of life."

Her boss, the station superintendent, seems to be highly satisfied with her thorough work. "She has been working in my office," he delares, "for the past three years and it is gratifying to note that she has been regular in her attendance and to my knowledge she has not been absent from duty due to ill health or any such complaint," then he emphatically adds, "I am sure this achievement is due to her temperate and healthy habits."

In drawing such a conclusion he perhaps did not realize himself how strong Stephie's convictions really are regarding healthful living nor how great a part these convictions played in her athletics achievements. She however knows wherein her strength lies as indicated by her clear-cut answers to some questions recently put to her.

What is your attitude towards smoking and drinking?

I can't think of a reason why a person should smoke or drink. If one wants to achieve something in life—it may not be athletic or sports—it may only be studies, work, or every day pursuits of life, it is better for him to stop smoking and drinking. It's necessary for success."

Stephie, were you ever coaxed by a friend here or abroad to sip a cocktail? What was your answer?

"Yes, I was. I tried to be as polite as I could and asked for fruit juice instead. My friends respect me for that."

What do you think smoking does to a person?

"It makes him shallow of breath and still worse, shallow of personality."

Do you know of a world-renowned athlete who smoked or drank?

"I have met many athletes, heard of many and read of still more but I can't think of a champion who smoked or drank."

Do you know of an athlete who clipped a few seconds off his time after he quit smoking?

"Yes, one athlete friend of mine in the club was a smoker. I advised him to stop smoking, which he did. As a result he has improved his speed (in 200 meters) by 2 or 3 seconds!"

Stephie's supreme moment was in the last Asian games in Tokyo, where she won a silver medal in the 200 meters, her favourite event. In the heats of the same event she had clocked 25.8 to eclipse the Asian record. In fact her consistent timing is 25.5 or 25.6. Thus unofficially Stephie may rightly be called the uncrowned queen of the Asian track.

Lately one more medal was added to her collection when she was "decorated" by Shri Jagjivan Ram, Minister of Railways, for her outstanding service. Stephie's almirahs are loaded with a wide assortment of medals, cups and awards of various kinds, but she thinks, the greatest award in her possession is the health she enjoys.

Stephie has been selected to represent her country in the fourth Asian games at Djakarta in August, this year. She has been preparing for the event and chances are this sprint-double will do well.

FEEDING BABY

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Are there older children? Provide entertainment for them reserved for feeding time only. There are a great many activities to choose from. Your local librarian can get books that are helpful. You may run into difficulty in trying to keep everybody happy, but once you have things organized, everyone will benefit.

Don't feel that you must watch the clock too closely. Schedules have their places, but it is better to feed your baby an hour earlier than for him to get indigestion from prolonged crying. Demand feeding gives baby a sense of well-being. Be sure you understand the true meaning of this kind of feeding.

Do you have a one-year-old whose change in eating habits worries you? He is merely trying to tell you in his instinctive way that he needs to slow down his rate of growth. Should he eat enough to triple his weight the second year, you would be alarmed and he would be a freak. Do not create a feeding problem for yourselves.

Do not let your smallest customer keep you up nights. Daytime is for business, nighttime is for sleep. For the very young, a feeding every three or four hours during the day will provide enough food so that they may sleep at night. For the older babies, plenty of outdoor exercise and no in-between sweets should assure a good appetite for nourishing food at regular mealtimes.

To make eating fun, use the ideas you read about plus some of your own. Imagination is a wonderful thing. Foods can be arranged so as to arouse interest. Baby foods and simple home-cooked foods adapt themselves to many of the loved everyday objects and animals in baby's world. If he is hungry, he will eat. Let him have fun, he is little only once.

Help baby learn to enjoy the beauty and flavour of good food in a cheerful atmosphere. As he develops, he will manifest a sense of security when he feels that he is respected as an individual. He will reward you by fitting happily into your home and your way of living. ***

GIFFARD MEMORIAL HOSPITAL

Nuzvid, Kistna Dist., Andhra Pradesh, India

LOCATION: Forty-five miles north-west of Vijayawada
Twenty-five miles south of Ellore
Bus service from either city

SERVICES:

- ★ *Surgery*
- ★ *Obstetrics*
- ★ *Gynaecology*
- ★ *Medicine*
- ★ *Pediatrics*
- ★ *Excellent X-ray and laboratory facilities.*

A kindly sympathetic approach is made to determine the patient's diagnosis. Thorough laboratory examination is done on all problem cases.

For further information write to:

Philip S. Nelson, M.D.
MEDICAL SUPERINTENDENT

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