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## THE DIET OF THE INDIAN.

### II

We have discussed in the preceding article (1) the time when food should be taken (2) the place and environments where meals should be taken and (3) the quantity of meal to be taken each time. We shall now proceed to deal with the *kinds of food* that should be taken and those that should be avoided. The food we take must consist of the following elements, in their proper proportions viz. (a) carbo-hydrates (b) proteins (c) fats (d) minerals and salts (e) water and (f) vitamins. As no single food contains all these elements, in their right proportions, except, perhaps milk—and it is impossible for all persons to subsist on milk alone for all time—a combination of food stuffs is necessary to provide sufficient energy and nutrition to the system. Thus man is made to live on mixed diet.

Rice and wheat, are examples of carbo-hydrates. Rice is the staple food of the South Indians. The more polished the rice is, the less is its food value. Before the advent of machinery, paddy was solely hand-pounded and rice then retained its vitamin content intact. In the process of polishing, the outer covering which contains all the vitamins is destroyed and the polished rice is responsible for a disease called Beri-Beri, which is very much in evidence in Bengal. Besides, the straining of kanji water when rice is boiled, deprives it of what little value is left. Thus, the rice-eater in the towns and urban areas of this Presidency consumes no rice but only chaff.

Wheat is generally consumed in Northern India, except Bengal. Wheat

is no doubt a good food but compared to rice is no better. This may be a revelation but all the same it is an established scientific fact now. Dr. MacCarrison says "Whole wheat flour contains some suitable proteins and more of less suitable proteins. It is therefore less suitable." Wheat, as a heating food is therefore less suitable to South Indian climate. Rice is said to be superior to wheat in this respect viz. "that the biological value of rice protein and wheat protein estimated in terms of body protein is 88 and 40 respectively, taking milk protein to be 100." So rice contains a protein more similar to the human body than wheat. In America, though wheat and barley are grown and used from remote ages, rice is steadily gaining ground in popularity through its early digestibility and energy supporting properties. Mr. James Henry Cooke F. I. S. A., writes in his book "*Health and Food No. 7.*" thus:—"The chief flavour of the rice being in the organic salts and fat, the undressed rice is much superior in this respect also, which accounts for the fact that travellers universally speak of the delicious quality of the rice eaten in the oriental countries." Stone in the kidneys seems to be very common among wheat-eaters while rice-eaters are said to be immune from this disease. Furthermore rice diet is of special value in diseases where there is a great irritation of the mouth, Oesophagus and stomach and when there is an acute disorder of the kidneys. Rice is more easily assimilable than wheat, within an hour or so and leaves the system soon, thereby giving perfect rest to the digestive and assimilative organs, whereas, wheat, barley and other cereals, legumes and many vegetables take 3 to 5 hours to digest.

Peas and beans contain a high percentage of proteins and therefore constitute a wholesome diet mixed with undressed rice. Then again, we have the various forms of pulses. These are classed as legumes which hold a place midway between carbo-hydrates and proteins. The rich nutritive material of the pulses is contained in the cellulose, which is hard to break and consequently difficult to assimilate. Dal contains nitrogenous matter, oil or fatty matter, starch or carbo-hydrates, nutritive salts and watery matter. Dal is in daily use in Indian households and takes only a secondary rank to peas or beans as nitrogenous food. It is well-known, however, that rice, dal and ghee together form a nutritious diet and are indispensable in the daily dietary of the South Indian. Meat also supplies the protein needs of the body but is now condemned on all hands as an undesirable and dangerous food-stuff. Tamarind is largely used in Indian dietary. It has all the properties of fruits and when fruits are not available, it forms a suitable substitute. "The pulp contains tartaric acid 5%, citric acid 4%, malic and acetic acids, tartaric of potassium 8%, invert sugar 25 to 40%, gum and pectin..... The unripe fruit is highly acid. The pulp of the ripe fruit is cooling, carminative, digestive and laxative; a valuable antiscorbutic and antibilious. The seeds are astringent. The tender leaves and flowers are cooling and antibilious. The red outer covering of seeds is a mild astringent. The bark is astringent and tonic.....". (*Indian Materia Medica.*).

The other ingredients Indians generally use in sauce or pepper water are chillies and curry powder which consists of black pepper, Turmeric, Fenugreek, (கெந்தி) Cumin seed (ஜீரகம்), coriander (கனியா), &c. Mustard and

asafoetida fried in ghee or oil are also used. A short description of the properties of these ingredients will not be out of place here. Chillies are "heart stimulants, stomachic and tonic but a powerful irritant." They should be used only in small quantities. Black pepper is "acid, pungent, hot, carminative, also used as Antiperiodic". Its use as a culinary spice is well known throughout the world". Turmeric is "aromatic, tonic and carminative." The seeds of Fennugreek are useful "in colic, flatulence, dysentery, diarrhoea, dyspepsia with loss of appetite, diarrhoea in puerperal woman, chronic cough and enlargement of the spleen and liver". Its young plants and aromatic leaves are also used as culinary vegetables. Cumin seeds are 'carminative, aromatic, stomachic and stimulant.' Coriander is 'aromatic, stimulant, carminative, stomachic, antibilious, refrigerant, tonic, diuretic and aphrodisiac. The fresh leaves are 'pungent and aromatic.' Mustard in small doses promotes "digestion and removes flatulency". Asafoetida is 'stimulant, carminative, antispasmodic, expectorant and slightly laxative.....It is fried before being used". Thus we see that these condiments, while adding flavour to the

food, act as carminatives and aid in its digestion. But they must be used in moderate quantities, lest they should irritate the soft membranes of the stomach and intestines. Garlic and onions are also used by a large section of the Hindus, though avoided by certain communities. Garlic is 'a stimulant, carminative, emmanagogue, antirheumatic and alterative.' Though its medicinal properties are many and varied, it is disliked probably for its repulsive odour and repugnant taste. Onions have been highly extolled as an article of food and condiment but like garlic they are also taboo by certain Hindu communities, probably on account of its bad odour. Recent experiments on dogs made by Dr. W. H. Sebrell of the United States Public Health service, however, go to show that onions either cooked or raw when given in quantities of 15 grammes or over per kilo of body weight per day, produce a severe anaemia in them. "So it appears that onions can only be used as a flavouring, not as a staple article of food."

We shall in the next issue deal with fruits and vegetables used by the Indians in their dietary and also what constitute incompatibles in diet.

## WATER IN CATARRH OF THE STOMACH.

BY

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*Brooklyn, New York.*

Water may be used to advantage in alleviating gastric catarrh in which there is an accumulation of mucous or fermenting material. Hot water is suitable for this purpose. It has a diluent and cleansing effect upon the mucous membrane and contents of the

stomach. In addition to this, the reflex effect of water at high temperatures, slowly sipped upon the muscular coats of the stomach further the passage of food into the duodenum.

The water is to be so hot that it cannot be gulped rapidly, is to be sipped

by tablespoonfuls in order to obtain the reflex stimulating effect upon the blood vessels, nerves and muscular fibres of the stomach. The quantity taken in this way is not to be less than half a pint, and not more than one and a half pints in order to obtain cleansing and yet not overdistend the stomach.

The water must be taken not less than half an hour nor more than an hour be-

fore one or more meals, so as to insure its removal from the stomach before food enters it. All these conditions taken into careful account, and carefully fulfilled, there is no remedy which affords so much comfort and expedites natural recovery in gastric catarrh, dilation of the stomach, and in some cases and forms of gastric neurosis, than the sipping of water before meals.

## ORAL HYGIENE.

By

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*Nagercoil.*

Twentieth century marks a distinct stage in the science of Oral Hygiene. Medical men have come to regard the enquiry into the condition of teeth and mouth as an important item of a thorough Physical Examination of the body. They find that many serious ills are caused by unhealthy teeth. Good teeth sparkle with the glow of health; while diseased teeth retard growth, influence resistance to communicable diseases, affect preservation of facial symmetry and grace and pre-dispose the individual to degenerative diseases.

The idea that healthy teeth indicate good health is not quite modern. Physicians even as early as 650 B.C. have detected the close relationship of oral sepsis to general health. Today the subject is found to receive a closer study than before.

Now that oral hygiene has attracted the attention of all Health Departments it is but right to enquire into some of the important causes of dental decay. Caries is caused by defects in the struc-

ture and position of teeth, malnutrition of the mother and the growing baby, the action of internal secretory glands, and saliva on teeth and bad health.

Tooth structure of a baby will be infected if the mother is poorly fed while in the family way. Deficiency of Magnesium, Calcium and other inorganic salts in the food of the mother causes differences in the tooth substance. And this gross neglect of the mother creates favourable conditions for the growth of hypoplasia on the surface or in the substance of teeth in a baby. This hastens early decay of both the deciduous teeth and the permanent set.

Irregularity in the position and arrangement of teeth helps dental decay. Ill-advised and early extraction of or delay in extracting deciduous teeth tend to crowding and overlapping of teeth. This state of affairs interferes with the normal dental arch and spoils the symmetry and grace of the face. Moreover effective cleansing of teeth is rendered difficult. Food particles collected between teeth begin to

decompose and cause acidity of the mouth. Further, malposition and crowding of teeth force one to breathe through the mouth, the cultivation of which habit exposes the individual to all its attendant dangers.

The influence of internal secretory glands over teeth is of vital importance. Parathyroids and thyroids are some of the principal glands concerned in the formation of tooth. The importance of parathyroid is in the lime utilisation and that of thyriod in the distribution of iodine. Malfunctioning of these glands of internal secretion is found to interfere with calcium metabolism and affect the formation of teeth. Saliva too acts on teeth. While some are of opinion that an abundance of saliva especially of a viscous nature, helps the growth and development of defective teeth, some others assert that dry mouth develops immunity to teeth affections. Whereas a few medical men hold to the curative quality of sulphocynate content of saliva. Whatever conflicting opinions may be formed on this, all are agreed on the fact that saliva is an important factor in the production and stopping of caries.

Acid forming bacteria in the mouth decalcify and harm both the enamel and dentin of tooth and predispose the individual to dental defects.

Diet too forms an essential contributory factor in the formation of teeth. The chemical and physical content of food help or hinder the growth of healthy teeth. Delicate diet especially of an artificial kind has raised the percentage of dental caries. Soft diet relieves tooth of its usual exercise in chewing, causing both the teeth and supporting structure to suffer while fibrous and coarse food gives plenty of exercise to teeth and stimulates

blood circulation, besides acting as an efficient cleanser of tooth surface.

Closely correlated with teeth troubles is the general health of the individual. If general health is impaired then teeth fail to develop properly, for bad health interferes with the proper supply of those inorganic salts necessary for tooth formation.

Teeth decay more rapidly in children than in adult life. The decay goes further deep and very soon the pulp gets infected and results in acute inflammation of the pulp and periodontal membrane. If this pathogenic condition of deciduous teeth is not attended to, it endangers the growth and development of permanent teeth. The neglect of teeth of children is directly responsible for the high percentage of chronic infection in the mouth of adults.

People never care to realise that their mouths are affected till they begin to suffer from some gum boil and toothache. But if there is little pain the care of the mouth and teeth does not receive their serious attention. In adults the toxic effect is manifested as headache, common cold and occasional gastritis. And if the warning of nature is disregarded serious ills make inroads into the system. Consequently at the age of forty a marked fall in the strength and vigour becomes evident and all kinds of ailments appear in their true colour.

It will not be out of place here to mention the economic loss to society as a result of the high percentage of tooth infection. Competent men on the subject assert that the working capacity of the labourers gets reduced considerably because of diseases arising from oral sepsis. Within a few years the figure of affected persons has risen to

an appalling total of fifteen millions. In India a large percentage of people die of cancer in the mouth, ulcers in the intestines, stomach troubles and lung diseases. And the root cause to most of these diseases is traced to oral sepsis.

It becomes very essential that mouth and teeth be kept scrupulously clean and healthy. Cleansing of teeth before going to bed is of greater importance

than cleansing in the morning. Some tooth paste or powder free from grittiness prevents formation of tartar and helps to clean dental surface. Fibrous food should be chewed to give exercise to teeth and to help cleansing. Alkaline mouth washes too prevent dental caries. It is always advisable that teeth be examined by a competent dentist at least once a year.

## "CONDITIONS NECESSARY FOR A HEALTHY LIVING."\*

BY

R. NARAYANAN, *Mylapore.*

"Health is wealth"; "Public Health is purchaseable"; "The Health of the children is the wealth of a nation."

We often hear the above maxims freely quoted both in schools and colleges and on public platforms.

If, as a nation, we are to be virile, healthy and strong and wish to exert a salutary and beneficial influence over the lives of our fellowmen, certain essential conditions relating to healthy living must be created and maintained. These conditions influence the lives of the adults, but particularly those of the youngest children; for the child of to-day is the citizen of to-morrow; and healthy habits, to have lasting effects, should be formed early in life. It is very difficult to inculcate health habits in grown-up children and adults. Therefore the best period to begin health training, is between 2 and 6 years of age. During this period the child can be made to learn and form correct habits and modes of healthy living. Once well formed, they last for ever. Such children, when they grow

up, are found better equipped to train future generations of citizens properly.

The training, thus begun early in life, should be continued through the first years of school-life (6 to 14). Mere teaching of hygiene to boys and girls of 7 to 14 will be of no good. An ounce of practice in the right time is worth a ton of theory during a whole life-time.

The essential conditions necessary for healthy living constitute a very vast subject which can be made to form the subject-matter of a whole text book. So let me briefly indicate them one after another. To my mind the first essential condition is:—

(1) A clean household with intelligent parents, who understand their duties to their offspring. They must realise their responsibilities in rearing their children to grow into healthy honest citizens. Cleanliness in thought, word and deed is necessary in addition to cleanliness of surroundings; next come in order,

(2) The house, though small and poor must be kept neat, well-ventilated, well-lit.

\* Being an essay which has been awarded the first prize, by the National Health Association of Southern India, in the recent Essay competition conducted by them.

(3) The windows must always be kept open and the house, well-aired.

(4) Dirt and dust must not be allowed to accumulate in the corners. The floor and corners should be swept clean and tidied with a wet cloth, systematically, at least twice a week, if not daily.

(5) Stables, cowsheds and latrines should be built far away from the house. Flies must not be allowed to breed there in the filth.

(6) Mosquitoes must not be allowed to breed in and near houses. All receptacles where water will stagnate should be emptied.

(7) Sick patients, particularly those suffering from infectious diseases such as influenza, typhoid, tuberculosis, cholera etc. must be isolated and not allowed to mix freely with the healthy.

Tuberculous patients should be taught how to keep themselves clean and not



A healthy Exercise for the legs.

be a source of danger to others. They must spit in a separate vessel and burn the spit every day.

(8) Particular care must be taken to use good drinking water only. All water must be boiled. If there is a good filtered pipe water supply, certified safe by water experts, we can use it unboiled. Otherwise all water must be boiled.

(9) We should eat wholesome, plain food, not overboiled or fried. Overheating and frying destroy the vitamins. Our diet must be well-balanced and should include plenty of vegetables, leafy greens, and fruits. Tomatoes must be taken regularly and also apples and oranges in addition to milk.

(10) All food must be kept covered and screened from flies, for the house-fly is the greatest enemy of mankind.

(11) We should be regular and systematic in our daily life. Eating, drinking, exercise and sleep must all be regular, moderate, and in proper proportions. Daily exercise suitable to one's age, is necessary.

(12) The use of coffee, tea, tobacco and alcoholic beverages must be avoided. When, as it has now become necessary with most of us, coffee and tea may alone be used sparingly and only when required. Coffee-hotels and tea-shops are a curse of modern civilization and those of us who can boast of not having been into one of these death-traps, are sure of living long.

(13) Children must be encouraged to spend most of their time, every day, in the open air and young children should be compelled to play for a long time every day in the open. This helps them to build strong lungs and bones and keep a healthy frame of mind in later life.

(14) We must learn to eat slowly and *not* between meals. Anger and exhibition of temper at meal-time ruin one's health much more than we imagine. So

we must cultivate a genial temper and avoid quarrelling and flying into a rage at or before mealtime.

(15) Our duty next is to our neighbour. We must not throw filth into the streets. When there is a disease in our house, we must warn our neighbours to be careful. If there is cholera or typhoid, we must tell the local Health Officer. If there is small-pox or plague we must notify at once, to the local Municipal Health Department.

(16) We must get vaccinated soon after birth and re-vaccinated every seven years. If there are epidemics of cholera, plague or typhoid in the city, we must get immediately inoculated against them. The Health Department does this free of cost for us.

(17) We should bathe daily, wear clean and washed clothes and avoid using other people's clothing.

If the above conditions are carefully kept in mind and established in our homes, our lives and those of our neighbours are sure to be healthy and happy and we will live to be a healthy nation.

## AUTO-MASSAGE

By

W. LUCAS, N.D.

If the skin is to be kept in a healthy, vigorous condition it must be exercised. Auto-massage is a method for exercising the skin.

Let us try to understand what massage is and what it does. The word "massage" is supposed to come from the Arabic *mass*, which signifies "pressing the muscular parts of the body with the hands, and exercising traction

on the joints in order to give suppleness and of stimulate vitality."

The value of massage has been known to mankind for thousands of years. In the *Odyssey* the Greeks are described as rubbing and kneading the heroes on their return from battle. The theory of the modern practice of massage is indicated in an account by Captain Cook of the treatment of sciatica by the Pacific Islanders. It appears that



the commander was suffering with a pain ranging from the hips to the feet. Some natives went on board with the express purpose of curing the disorder. A bed was spread on the cabin floor and he submitted himself to their directions. They began to squeeze him with both hands from head to feet, but more particularly in the region of the pain, till they made his joints crack. After bearing with these somewhat heroic measures for a quarter of an hour, he was released. The operation gave him immediate relief, and he was thus encouraged to submit to further treatment before going to bed. His physicians repeated their prescription the next morning and evening, after which his pains were entirely removed and the cure was completed.

Since that time massage has become a recognized science and is now utilized in most of our modern schools of healing. The practice consists of rubbing, stroking, and kneading the human body in order to stimulate the action of the skin, to assist metabolism in the tissues, to accelerate the circulation of the blood, to relieve pain, and to correct deformities. It has a very healthful action upon the spine, and assists very considerably in freeing the body from poisons.

Indeed, massage has a similar effect to that of muscular exercise in that it improves the circulation and clears away waste products from the tissues. It also has an extremely beneficial action upon the nervous system. Contraction of muscles is made through the nerves, and by means of massage the small muscles may be involuntarily set in motion without any strain or effort in the nervous system. Massage also enables the nerves to secure their full share of nutrition.

Practically all the muscles of the body can be reached by auto-massage, except those of the back between the shoulders, but friction can be applied to them with the aid of a towel, a long-handled bristle brush, or massage roller, or they can be treated with the aid of a second party.

In carrying out the process the feet should first be given attention. The skin should be gently but firmly pinched and rolled between the thumb and forefinger, after which the small muscles of the foot should be kneaded from below upwards. The foot should then be held firmly and moved freely in all directions. Next, the ankle should be treated in a similar manner, being stroked from the toes to the lower part of the leg. Circular friction should be applied to the leg and the muscles of the calf well kneaded. The hands and arms can then be dealt with in a similar manner. Attention should be devoted to the thighs, buttocks, back, and neck—friction, kneading and stroking being applied in turn. Afterwards the skin and the underlying muscles of the abdomen should be well rolled. The chest should be manipulated in an upward direction along the breast-bone and the pectoral muscles kneaded. Lastly, the muscles of the neck should be dealt with in a downward direction.

The above auto-massage movements form a sort of passive physical exercise and are of great health benefit. Sedentary workers will especially profit by them. After the confinement and physical inactivity of the day the brain-worker needs some form of activity which will be thoroughly refreshing, which will relieve the nervous tension incidental to the strain of work, and restore a normal balance between mind and body.

Auto-massage, or at the very least friction, should be made a daily habit by all. The best time to take this is first thing in the morning before dressing or in the evening after undressing. Never mind how cold the bedroom is: a vigorous rubbing of the whole body will bring about a feeling of warmth, and remember that not only will the skin receive great benefit, but this kind of self-treatment helps the nutrition of the whole body. Indeed, I know of no more powerful stimulant to the skin, which becomes clearer, softer, and smoother when given treatment of this nature.

To those who have not yet tried any regular plan of exercise I would strongly

recommend this method. It costs nothing except in time and will undoubtedly yield excellent results. I know this from personal experience in my own case, for it is a practice to which I adhere every day of my life.

The majority of patients who come to me for Nature-Cure treatment also speak in terms of highest praise of massage, and testify to its wonderful effect upon their general health. They sometimes come to my Clinic feeling weary, worn, and sad, and after a brief session of massage and other natural treatment, go away feeling younger in mind and body, with spirits uplifted and depression dispersed.—*Good Health.*

## THE RELATION OF POSTURE TO TUBERCULOSIS.

Of all diseases to which flesh is heir, probably none depends so much upon education for its prevention, management and treatment as tuberculosis. The disease has amply been proven to be both preventable and curable. In estimating the tubercular hazard of indoor occupations other factors than indoor confinement must be sought, among which consideration must be given to the physique, habits, social and economical conditions, and standard of living of the employees.

A study as regards the physique and habits of the employee warrants the conclusion that improper posture assumed during long working hours so interferes with the normal body function—particularly that of respiration—that it is readily chargeable as being an active factor in permitting tubercular bacilli to set up their nefarious work. Kober is among those

who maintain that work performed in a sedentary and stooped position interferes with the full development of the chest and limits expansion of the lungs. There are many forms of industrial occupation maintained under these conditions, e.g.: tailors, engravers, lithographers, shoemakers, watch makers and innumerable other occupations wherein the worker assumes a more or less stooped posture.

Since the majority of bone and joint deformities are developed during the earlier years of life, a slouched posture is particularly injurious to the youthful worker whose bone system has not as yet fully developed, but it is also injurious to those of mature years. All deformities of the chest, whether permanent in character or transient, through postural neglect, interfere with free lung expansion and limit the normal respiratory function. Such a

deficiency entails an enormous loss of oxygen, an element vitally essential to both the prevention and cure of tuberculosis. Sight must not be lost of the fact that there are many occupations which involve the elevation of one shoulder above the other and such an asymmetrical position will cause a lateral deviation in some portion of the spine, with a resulting diminished capacity of the chest accompanied by diminished mobility of the chest wall and resulting in impairment of the functions of chest, and a predisposition to tuberculosis.

Young people should be particularly impressed with the importance of assuming a proper posture at all times, and should be encouraged to walk, stand and sit correctly. In the office, factory or work-shop properly constructed chairs should be provided to the workers so as to encourage an erect sitting posture. To be properly constructed a chair must admit of adjustment in every particular so that it may be made to conform to the normal anatomical lines of the body and fitted

to its occupant with that same degree of accuracy and care as are his shoes and clothing. When such a chair is properly adjusted to the individual it invites a correct seating posture which is both easy to assume and maintain, is comfortable, is conducive to health, eliminates fatigue, and will do much to prevent the advent and development of tuberculosis.

A proper seating posture will at all times favour full lung capacity breathing, oxidation of the blood in a minimum of time, free exhalation of carbon dioxide, unrestricted function of the alimentary systems, lessened expenditures of nerve force, and a reduction in muscular effort, conditions which tend to increase body resistance, to eliminate fatigue, to promote better health as a whole and lastly, though by no means of less importance, to mitigate against the contraction of pulmonary tuberculosis, or if already existent in an incipient form—to retard its ravages and abet cure.—*Dr. J. R. Garner, M.D., International Journal of Medicine and Surgery*—K. L. N. R.

## INFLUENZA.

(Public Health Department, Bengal.)

If you have Influenza:—

1. The golden rule is to keep fit, and avoid infection as much as possible.

2. Keep fit by cultivating healthy and regular habits, eat good food; avoid fatigue, chill and alcohol. Healthy living makes a patient better able to avoid an attack and withstand the complications which kill.

3. The early symptoms of Influenza are usually those of a severe feverish cold. The disease is rapid in onset; is most infectious in its early stages; is

spread by discharges from the mouth and nose; and kills mainly by its complications. Every person suffering from the disease, no matter how mild the form, is a danger to others.

4. It is not always possible to avoid infection, but the risk can be greatly lessened by—

- (a) healthy living;
- (b) working and sleeping in well-ventilated rooms;

- (c) avoiding crowding gatherings and close, ill-ventilated rooms;
  - (d) wearing suitable clothing;
  - (e) gargling the throat and washing out the nostrils.
- 5. Do not waste money on drugs in the false hope of preventing infection.
  - 6. Avoid all gatherings of peoples in closed halls, rooms, theatres, and so forth. The risk of infection is greater in enclosed places than in the open air—*The Homeopathic Bulletin.*

## DIETARY AT OPEN-AIR SCHOOLS.

Encouraging results are being noted amongst the children sent to the open-air school at Smethwick. Dr. Hugh Paul, M.O.H., writes:—"Practically every child improves in tone and physique, but probably the best results are obtained in the case of the 'difficult' child. This child is admitted because he (or she) won't eat, picks at his food, is pale and listless, and generally is driving his mother to distraction. Often he is an only child. The fault in most of these cases is too much anxiety on the part of the mother, too much fussiness driving the child to introspection, and forcing him to think he is not well. A few days among normal children soon cures him. He is usually placed at mealtimes between two children with healthy appetites, who are interested in their own meals, but not in his. He continues to pick his food for a day or two, but as no one takes any notice of him, and no one sympathises with him, he soon finds 'a far better thing to do than he has ever done before,' and in a week or two he is eating as heartily as

his neighbours. Children of this description can only be cured when removed at mealtimes from the presence of their parents. I often find on examining the children that they complain of vague pains in the abdomen, and in many cases careful enquiry elicits the fact that in addition to the very generous dietary they receive at school, they are given another meal before going to bed, and in some cases this supper is of a very substantial character. In many cases it consists of fish and chips, or meat and potatoes. Education in matters of diet is still very elementary in the case of some parents. Children cannot be fattened up like animals by gross overfeeding; they will gain most in health if given a moderate diet, and the generous dietary given at the open-air school contains all the elements necessary for healthy growth, and should not be supplemented by any other food." Dr. Paul advises that if the parent must give the child supper, then an apple at bedtime is best.—*Medical Officer.*

## THE NOSE A SANITARY SENTINEL.

*A well-trained sense of smell is a sanitary safeguard. Said John Burroughs: "This keen, healthy sense of smell has made me abhor tobacco and flee from close rooms, and put the stench of cities behind me."—"Good Health."*

## CLEANLINESS IS NEXT TO GODLINESS.

By.

JEHANGIR BAJORJI SANJANA, B.A.

An ancient maxim teaches us—

“He handsome is who handsome  
does.”

If you expect to keep your beauty,

Keep clean your teeth as your first  
duty.

A filthy mouth and rotten teeth

Befoul the very breath you breathe.

Bear well in mind this truth, my friend,

That faith and sin go hand in hand :

Whilst Purity and Sanity

Twin blessings are assuredly

The greatest Stage that lived on Earth

Said “Purity is best from birth.”

Be pure in thought and word and deed,

For Purity doth Heavenward lead.”

To godliness if you aspire,

Then cleanliness you must acquire.

Keep clean the body and the mind,

If ye desire that God be kind.

Be pure so that you may be strong ;

Be strong that you may ne'er go  
wrong.

—*Indian Dental Journal.*

## TRUTHS ABOUT LEPROSY.

1. As weed comes from weed, so  
leprosy comes from leprosy.

2. Weeds grow in an unclean yard.  
Leprosy develops in an unclean body.

3. The body is made unclean by bad  
habits, unbalanced or deficient diet, lack  
of exercise, venereal diseases, and debili-  
tating illness such as malaria, hook-  
worm, chronic dysentery, etc.

4. You may not be able to avoid a  
leper, but it is in your power to get rid  
of the factors that would make your  
body unclean.

5. Leprosy is not hereditary but  
spreads by contact, by joint use of the  
bed of a positive leper, by living in the  
same house with him, and by close  
association with him.

6. Weeds do not possess seeds in all  
stages ; so also with leprosy. In the  
incipient stage it is not generally dan-  
gerous ; but years later, when it has  
fully developed countless seeds (the

germs), it is dangerous to others and  
has become difficult to cure.

7. Therefore, uproot leprosy in the  
very beginning.

8. A small reddish or pale patch or  
“pano blanco” with no sensation or  
that does not yield to the ordinary  
ointments and cures, or a thickened  
painful nerve should always be suspect-  
ed as a sign of leprosy in the initial  
stage.

9. Leprosy is practically 100 per  
cent curable at this stage.

10. During the last five years, over  
one thousand people have already been  
cured at Culion and at the San Lazaro  
Hospital, Manila.

11. Leprosy was stamped out in  
Europe when science was in its infancy.  
Today, with the aid of modern science,  
it is possible to stamp it out from the  
Philippines if the people here wish to  
do so.—*Bulletin—South Indian Medical  
Union.*

## GARBAGE DISPOSAL.

*League of Nations, European Conference on rural hygiene, Vol. II, p. 130, Geneva, 1931.*

In built up rural villages, the regular collection and systematic disposal of house garbage and refuse is the most effective method.

This material may be disposed of by dumping frequently in thin layers and covering with earth, ashes, or other dry refuse. Such a method of collection and disposal requires careful and competent supervision.

Garbage is also a prolific source of flies, and measures should be taken to prevent fly-breeding.

A safe rule to adopt is to treat garbage as infectious matter and to dispose of it in such a way as to prevent the pollution of the surface of the soil, the subsoil by percolation (ground water) and the houses in the neighborhood by flies, which breed in the garbage, and to avoid bad odors.—*Abstracts of Current Public Health Literature.*

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## THE NOISE NUISANCE.

The evils due to noises have been studied from various angles. One effect is to retard in many cases the recovery of the sick. The Noise Abatement Commission of New York City sent questionnaires to all the hospitals in the metropolis asking information on this subject. Seventy-nine replies were received. Half the institutions in Manhattan and Brooklyn reported that this nuisance was a serious deterrent to the recovery of their patients. In the outlying boroughs the trouble was naturally much less.

In some cases the noises were described as having a serious effect, in others as being important and still others as being merely annoying. It was noted by some superintendents that the physicians, nurses and other employees were also detrimentally affected. Both sleep and daytime rest were disturbed.

Traffic noises, especially heavy trucking, were the worst of the evils complained of. Blowing of horns and the

sputter of motorcycles were specifically mentioned. Fire apparatus and street cars also added to the din and so did children playing.

The commission recommended in its report that policemen be authorized to arrest drivers of trucks which made an unnecessary amount of noise in hospital streets. New signs requesting silence were suggested. It was advised that policemen be stationed at hospitals to send children to the playgrounds. Fire apparatus should avoid hospital streets as much as possible. Doormen's whistles and the cries of peddlers should be stopped.

Of course, most sick people are not taken to hospitals, so that the evil is far wider than the field covered by the commission in this report. Not to mention suffering and other features of sickness, the monetary loss due to prolonging illness is tremendous both to individuals and to the municipality which supports so many of the hospitals—*S. in Good Health:*

## APPLE DIET FOR DIARRHOEA.

*From The Lancet. Jan, 2, 1932, p. 48.*

Prof. Reyhe says he has had good results with the treatment of acute gastro-intestinal disorders with apples. (See also *The Lancet*, 1930, i., 526 and 672). He has tried it on patients suffering from acute gastritis, vomiting and profuse diarrhoea, sometimes with high fever: adults as well as infants. The patients must abstain for 12-24 hours from drinking, and during that time eat nothing besides mashed apples. They may eat as many as they like up to 20 a day, it amounts of 100 to 250 g. at each meal. Vomiting and tenesmus soon disappear, after a few diarrhoeal motions fever decreases, and on

the second day the faeces usually become solid. In severe chronic diarrhoea—e. g., in tuberculosis or sprue—a favourable effect was observed, but it was only transitory. Reyhe thinks that the tannic acid in the apples is the cause of the benefit, together with the reduction of food and especially of fluid. The method is very simple, and more agreeable to the patient than the usual cure by starvation, castor oil and gruel. After the acute stage a mixed diet can be given, but without milk or vegetables for some days.—*Abstracts of Current Public Health Literature.*

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## MEATS AS SOURCES OF VITAMIN G.

Vitamin G, growth-promoting factor for animals and man, is found to be from five to eight times more abundant in beef liver, pork liver and beef kidney than in lean beef, pork and lamb, according to a series of tests recently finished by Ralph Hoagland and George G. Snider of the U. S. Department of Agriculture.

The experiments involved the feeding of young albino rats which were kept in separate cages and weighed regularly. All comparisons were made on the basis of air-dry, fat-free materials. The rats were first fed a basal ration lacking only in Vitamin G until growth ceased, when meat or meat by-products were added to supply the growth-producing factor. Lean beef, pork, and lamb appeared to contain approximately the same quantities of the growth-producing Vitamin G

and when comprising from 15 to 25 per cent of the rats' rations, resulted in excellent growth. Beef spleen appeared to contain as much of this vitamin as beef.

The tests indicated that 3 per cent of beef liver or pork liver and slightly less of beef kidney, in a rat's diet, furnished an ample supply of Vitamin G for rapid growth. The minimum quantity necessary for normal growth is probably considerably less than the proportions indicated.

Among other foods known as good sources of Vitamin G are egg yolk, salmon, wheat germ, bananas, leafy vegetables, and milk. These are not however comparable with each other in the amount of vitamin supplied, but all furnish it in appreciable amounts.—*Journal of Iowa State Medical Society.*

## SOME ANCIENT HYGIENIC CUSTOMS IN THE TROPICS.

An enumeration of some of the more important and commonly employed hygienic items according to Ayurveda, may prove interesting to our readers. In estimating the value of these rules it must be borne in mind that they were intended for people living in a hot climate.

Daily bathing heads the list. Then follow regulation of the bowels; rubbing the teeth with fresh twigs of certain trees which possess astringent properties, and also brushing them twice a day; rinsing the mouth with appropriate mouth washes; rubbing the eyes with salves; anointing the body with perfumed oils; cutting the nails every five days, etc. Two meals a day were prescribed—the first between nine in the morning and noon, and the second in the evening between seven and ten. Only a moderate quantity of water was advised to be drunk during the meal; as it was considered to delay digestion, while a copious draught at the end was considered to produce obesity. After the meal the mouth was to be carefully cleaned and a short walk taken. Among the important articles of diet the following might be mentioned; rice, ripe fruit, the ordinary vegetables, ginger, garlic, salt, milk, oil, melted butter, honey and sugarcane. These practices became part of people's religion and are being practised even

nowadays in orthodox homes. If meat is taken, preference should be given to venison, wild fowl, and the flesh of buffalo. Pork and beef as well as fish are less conducive to health. Gymnastic exercise in moderation is beneficial. Sleep should be indulged in during the day only after some severe exercise; at night it should not extend beyond one hour before sunrise. Bathing immediately after eating is harmful, and it is not to be indulged in when one is affected with cold, with a high fever, with diarrhoea or with some disease of the eye or ear. A hot bath may be beneficial for the lower half of the body, but for the upper half it is harmful. Sea bathing and cold baths are beneficial. The clothing worn should be clean; soiled garments are likely to produce skin diseases. It is advisable to wear shoes, and an umbrella or staff should be carried, the latter to protect against animals and snakes. The wearing of garlands, finery, and jewels increases the vital powers and keeps away evil spirits. The following are good measures to adopt for the preservation of health: an emetic once a week; a laxative once a month; and a bloodletting twice a year. All measures enumerated above were subject to modification according to the changes in season, the locality, the weather, and various other circumstances.—*Medical Comrade.*

## HEAVILY BUILT MEN STRONGER THAN THE SLENDER TYPE.

Heavily built men are usually stronger than slender men of the same weight. This has been established by a series of tests carried out by the United States Public Health service. The tests, which included measurement of strength

in pulling, pushing, hand-gripping, lifting and lung power, were carried out on men between the ages of twenty to twenty-four, between the weights of one hundred and twenty to one hundred and sixty-nine pounds, and bet-



ween the heights of sixty-three to seventy inches.

The heavy-weight men, one hundred and sixty to one hundred and sixty-nine pounds, proved to be the strongest pullers. The most powerful pushers weighed between hundred and fifty and one hundred and sixty-nine pounds, the taller being the stronger. The men who were the tallest and heaviest had the most powerful handgrips. The

shortest men in the heaviest group were the best lifters. The men with the greatest lung power were found among the shortest of the one hundred to one hundred and fifty-nine pounds class.

As to general strength, it was found that the taller the men were for their weight, the less strength they had, on the average, and the shorter they were for their weight, the stronger they were.—*W in Good Health.*

## MENACE OF MALARIA.

### MRS. MOSQUITO PLEADS "NOT GUILTY"

Kipling wrote that the female of the species is more deadly than the male. Mrs. Mosquito, who probably had a nibble, at you recently, is no exception. Beside his buzzing consort, Mr. Mosquito is comparatively a harmless fellow. It is his wife who carries the sting.

Nature has equipped these little grey insects with a marvellous set of carpenter's tools and has packed the little outfit neatly in the wearer's long proboscis. Here, in a tiny cylinder, little thicker than a hair, are a pair of mandibles, a pair of tubes that eject poison, and an apparatus to take in liquids.

There is also a tiny mouth, complete with lips.

Mrs. Mosquito does not settle upon our sun-exposed skins in order to annoy. Nothing is further from her thoughts. She is merely visiting us as we visit a handy restaurant—to dine. The fact that the tip she leaves takes the form of a poison that irritates for days after is just our ill-luck.

Since 1899 the entomologists, who recently held their Third Conference in

London, have been devoting more and more time to the study of this tiny pest.

Science had always regarded Mrs. Mosquito with a certain degree of suspicion. But as the research workers learnt more of her, they became certain.

The result of those investigations has been the preparation of an indictment. Mrs. Mosquito is on trial, charged with the murder of many thousands of human beings annually.

### SENTENCE OF DEATH

She may plead "Not Guilty," but that will not help her. Science has already returned a verdict against her and the sentence is being steadily carried out. And that sentence is—death. Death to the billions and trillions of Mrs. Mosquitoes, who rise buzzing into the warm air of every clime in the world and even, too, into the crystal air of the Arctic Circle.

The story of the sleuthing of Mrs. Mosquito is one of the romances of science. Two great names stand out for all time in this connection: Sir Ronald Ross and the Italian scientist, Grassi.

These investigators proved conclusively that Mrs. Mosquito is guilty of carrying malaria and yellow fever.

Mrs. Mosquito lays her eggs in rafts, each one of which has anything from 50 to 500 eggs. These float in the water where the children of the Mosquito family spend their first days. But presently wings form and away fly the young mosquitoes, male and female.

This exodus occurs in spring and early summer. By the height of holiday season Mrs. Mosquito, in her millions, is about her business, which is to seek and find nice hot-blooded, well-nourished humans upon whom to dine.

If having learned these facts about her, you come to the likely conclusion that Mrs. Mosquito is a body you would rather did not call upon you, you had better make sure she does not slip in uninvited.

At the back of your house there may be a tub of water that has turned greenish with the coming of warmth. The sun has brought into life minute animal creatures, has stimulated the growth of water vegetation.

If you have such a barrel or even, a damp patch of shallow puddle water near your house you are hanging out a "To Let" notice for any passing Mrs. Mosquito.

Mosquitoes that frequent the woods do not come your way. But strange as it may sound, there are town folk among the mosquito tribe who go to where else. It is Mrs. Town-Mosquito who plagues you on summer nights in the cities; it is Mrs. Country-Mosquito who torments you on a holiday.

The best way to keep the unwelcome visitor away is to see that she has no quarters in which to set up housekeeping. A tiny film of paraffin on your

barrel of puddles will make her quickly lose interest in your habitation.

But in the country you cannot do this. And from being a personal affair the destruction for Mrs. Mosquito becomes one for the whole community.

This is why the Entomological Conference met recently in London. It was really a Grand Council of War, with every tiny insect pest as its objective.

This is why, too, the College of Pestology has been set up and equipped with laboratories at Havant. The College of Pestology experts have prepared a chart of country, which has been divided into divisions. In each of these areas the local command is carrying on the war against the mosquito with oil and spades and fire.

#### PLEA FOR THE DEFENCE

When we have cleared up all the nice cosy residential quarters that abound in our countryside for Mr. and Mrs. Mosquito, then we shall have conquered. But it won't be easy, for Mrs. Mosquito, as has been observed, believes in the large family.

But is there nothing that may be said in favour of this energetic females? There is.

Doctors who have in their care patients suffering from certain forms of paralysis have been known to write to the Ministry of Health asking, just as though it were a request for a rare drug, for a nice bottle of mosquitoes. Not any sort of mosquitoes, mind you, but lady ones, chock a block full of the poison of malaria.

Strangely enough the organism that causes paralysis when it enters the human blood stream is the deadly enemy of the malaria germ carried by the mosquito.

## GET IN FIRST

So now-a-days sufferers are purposely well stung by mosquitoes and thus infected with malaria. The malaria germs give battle to the paralysis organisms inside the patient's blood stream and in many cases a cure results.

But since you are a healthy person, with a pure blood-stream, all that the mosquito does to you won't affect your health (unless it is a malaria carrier). Even so, a constant attention from this unpleasant female can ruin a holiday. So here are a few hints to forearm you against the invasion if it does come off. First the use of oil of lavender, eucalyptus or some such strong perfume, dabbed lightly on the face, neck, and arms will help to keep mosquitoes and other insect pests too at bay. The application

will need renewing as the perfume evaporates.

Next—if you are bitten, don't scratch the spot! This is apt to break the skin and cause bleeding, so opening the way to infection and inflammation. There are many lotions on the market more or less efficacious in allaying the smart. Older remedies which are perhaps as good as any, are rubbing with a lump of washing soda on the moistened skin, or applying the family blue bag to the bite.

But the better plan is to hit first; that is, to do a little more work with a paraffin early in the year. No lady mosquito can stand that sort of treatment. She will go off in a huff and leave you severely alone which is presumably, what you want.—George Godwin in "Answers."—*The Journal of Ayurveda*.

## BOOK-REVIEWS.

**Warwick and Tunstall's "First Aid" to the Injured and Sick:**—13th Edition, F. C. Nichols M. C., M. B., [John Wright and Sons Ltd. Stonebridge House, Colston Avenue, Bristol, Price 2/6 nett.]

This is an exhaustive treatise on First Aid in which are incorporated all modern methods of diagnosis and treatment pertaining to First Aid. Methods of transport by steamship and air, a chapter on gas warfare and on competition work, and a glossary of technical terms used in the book are important additions which enhance its value and utility. Besides there are many fine illustrations which will undoubtedly provide the reader with the means for an intelligent understanding of the subject. The book certainly deserves to be in the hands of both the teachers of 'First Aid' and the taught alike.

**Malaria and the Child.**—[Bureau for increasing the use of quinine—Amsterdam W. 1932.] This is an exhaustive report on the subject of malaria in children. Chapter 1, very rightly begins with malaria during

pregnancy and malarial infection of children *in utero* has since been established after series of experiments and researches and administration of quinine to pregnant women advised. Chapter II deals with the effects of malaria on children, while in Chapter III is given the statistics of Infantile malaria throughout the world. Chapter IV deals with prevention and cure of malaria. The report is replete with illustrations and will prove to be a good guide to malaria investigating officers in this country and to research workers in this line.

**The Fasting Cure:**—Sharma K. Lakshman, B.A., B.L., [The Nature Cure Publishing House, Pudukotah (South India)] Ord. Ed. 3 as. Super, Ed. 6 as.

There is no method of Nature cure, more ancient, more widely known in India, and more neglected than fasting and the publication of any book on 'Fasting' for Indian consumption will be something like carrying coals to Newcastle, but for the fact that the Indians of to-day have so far degenerated as to make that

wholesome custom of fasting, a regular farce and an occasion for sumptuous feasting on altered diet. This booklet serves as a good and timely reminder, especially in view of the fact that fasting as a cure has been recognized by the savants of the West and teaches how exactly fasting should be practised and what its manifold benefits are to human beings. The book certainly deserves to be widely read and digested by our readers.

**A Treatise on Height-increase—**  
S. N. Sapru. [The Imperial Stores,  
Kasur, India.] Price Rs. 3/-

Height is a very valuable possession for human beings of both sexes and has been looked upon, in all ages and in all climes as high road to success in life. The author, after expatiating on the need and importance of height, in the first few pages of his booklet, gives a course of exercises with illustrations which with the adoption of certain dietetic, hygienic and auto-suggestive measures formulated therein, will, he asserts, result in an increase in height by about 1 or 2 inches in about 75 days. If what is claimed in theory for these exercises which are not more than half a dozen in number is proved to be a fact in actual practice, then surely the price of Rs. 3/-, which is really too much for the size of the book, will be money not wasted but well-spent. We commend the booklet to our readers.

**Care of the Eyes:—**[J. C. Basak, 363,  
Upper Chitpore Road, P. O. Beadon  
Street, Calcutta.] Price As. 12-

This is one of the many series of books compiled by "Experience" and reviewed in the columns of 'Health.' The author has taken considerable pains to bring home to the readers the defects and diseases pertaining to the eyes and how best to cure and avoid them. This is written in simple style

avoiding all technicalities and will be found really useful to the lay public.

**Composition of food materials:—**  
**Milk and Fruits:—**Charts Nos. 2 and 8 prepared by Miss. W. Park, Domestic Science Specialist. [The Christian Literature Society, Post Box. No. 501, Park Town, Madras.

Pictures, posters and pamphlets—these are the means, surest and safest, adopted now a days in educating children and the illiterate masses and in health education, especially, there is nothing more appealing to them than charts and pictures. The charts under review are well conceived, well designed and well-executed and we are sure that the charts will be more helpful in conveying to the masses a thorough knowledge about milk and fruits than a study of all the literature on the subject can do. We heartily recommend these charts to the readers of 'Health' and such others who are interested in 'Food Problem.'

**A Manual of Prescription in Ayurveda.**—Published by Deshabhandu Ayurvedic Works. 46-A. Surendra Nath Banerjee Road., Calcutta. Price 2as. in Postage Stamps. This small book is concisely written in easy and comprehensible English language to meet the growing need of the beginners and busy Practitioners and contains much useful information in small bulk necessary for the treatment with indigenous drugs of India. The Materia Medica portion of the book is alphabetically arranged and the common ills of the day have been thoroughly dealt with and it should prove useful to both qualified Doctors and laymen. The book is distributed free to popularise the cause of Ayurveda from Deshabhandu Ayurvedic Works, 40-A, Surendra Nath Banerjee Road, application for a copy should be made with two annas postage stamp. We wish success to the noble enterprise.