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HEALTH

A JOURNAL DEVOTED TO HEALTHFUL LIVING

Edited by

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SEX-HYGIENE.

We owe an apology for introducing this rather intricate and delicate subject to our readers. We demurred for nearly ten long years before venturing to write in "Health" on sex topics but the innumerable literature on the subject with which the market in India and abroad is now flooded and the various cinemas and shows that exhibit love scenes, mostly obscene, have emboldened us to deal with this subject and give if possible a right lead to the youngsters of both sexes, whose minds may have been detracted by such scenes and literature. We had occasion to write about Child Marriage and Birth Control some time back and are glad to say that we met with no opposition to our views. Similarly, we hope we will have none this time.

It is extremely necessary that our youngsters of both sexes should be taught, the structure and functions of the sexual organs, in the same way, as they are taught the anatomy and physiology of the rest of the body, the means of keeping these organs in a healthy state, so that strong and virile children may be begotten of their union, and the diseases that follow the abuse of sex organs. Sex education, therefore, must form part and parcel of school curriculum and must be made a compulsory study. Dr. E. B. Lowry M.D., in her book on 'Teaching Sex Hygiene in the public schools' observes :—

" "In every normal school and institution of higher education, there should be introduced at once a course commencing with a study of eugenics and teaching how to improve the race stock of our country. This naturally would lead on to a study of those factors which are degrading this stock, the intemperance of high living, the social evil and its accompanying factors of venereal diseases. Then would be seen the duty of this generation to the next the necessity

of preparation for fatherhood and naturally, instruction in the sex education of the child. The most important thing at the present time is to introduce this great question of sex hygiene into every training school for teachers so that they may be prepared to realize and to meet the opportunities for guiding their pupils. In no other place is there the opportunity, to reach the masses, that there is in the schools. If we could teach every boy or girl who left the schools during the next ten years, we would have instructed the great majority of parents of the next generation".

Now, it is an open secret that all sex abuses originate in schools and in bad company. The right kind of instruction given at the proper moment will go a great way towards reclaiming many physical wrecks and moral sinners and help them to lead virtuous, healthy and happy lives. It is not our purpose in this article or in the suceeding ones, to describe the sex organs or instruct in sex acts but we are chiefly concerned here with some of the abuses of the sex organs and the results that follow, what ideal marriage is and the duties and responsibilities of parenthood.

The one great vice which youngsters are apt to indulge in, in bad company is masturbation or self-abuse. At the age of puberty, there appears in every male or female what is called sexual excitement. It is not possible to satisfy that excitement, unless you have your legal mate by, in a fit condition for cohabitation. Strictest continence and self-control must be practised before consummation of marriage. Apart from the loss of semen which is the secretion from the male organ responsible for procreation—and an ounce of which is equal to 40 ounces of blood in any other part of the body—the masturbator's nervous system gets so shattered that he becomes almost impotent at the time of marriage. "Let him always sleep alone and let him not waste his seed; he who from lust wastes his seed, destroys his vow," so says Manu. So, this mechanical and unnatural means of wasting one's seeds leads to disastrous consequences. At the time of his puberty, the youngster is perhaps a student in a College. His vicious habits tell upon his memory, his digestion, his sleep &c. so much so he may not be in a position to concentrate his attention on his studies. The result is failure in examination and the blasting of all his future hopes and joys. We do not wish to dwell further on this subject for obvious reasons and would like to close with this advice to youngsters that :—

(1) they must avoid bad company.

(2) refrain from self-abuse

(3) take simple diet and regular exercise and

(4) rid the minds of all thoughts of the other sex and avoid their friendship.

In the next article, we will deal with promiscuous intercourse and Venereal diseases resulting therefrom.

SCANDINAVIAN CHILDERN.

A Scandinavian physician reports that an examination of five hundred children between the ages of three and six years, in Oslo, in 1919, when repeated in a similar group in 1929, showed the children of like age to be two inches taller than in 1919. The increase in height was believed to be due to better condition of living, probably better feeding.—Good Health.

WHAT IS TUBERCULOSIS*

By

Rao Bahadur Dr. M. Kesava Pal, M.D.

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Though the most common disease of mankind and exacting a higher toll of mortality than any other single disease of human beings, comparatively little is known to the public of what consumption or tuberculosis is and how it is caused.

It has been estimated that about 5 million persons die yearly from tuberculosis in the world, which means that one human being falls a victim to this scourge every ten seconds. There is no country in the world today that is free from tuberculosis, though till recently the interior of the unexplored regions of America, Africa, Asia and Australia seem to have been free from the disease. The advent of civilization and the free intercommunication now existing have carried the infection into the inmost regions of all continents and consequently the mortality from the disease is on the whole on the increase. In India as in other ancient countries like Egypt, Greece and Rome, the disease has been known to exist from ancient times, but during recent years the congregation of the population into the cities and the towns and the establishment of the highways by railway and other communications into the interior have resulted in an increasing prevalence and mortality from consumption in all countries so that at the present day, India is losing about one million of her population annually from tuberculosis. The mortality in the cities and towns where industrial activity attracts the population from the country, living and housing conditions are defective and the stress and strain on life are heavier is greater than in the villages. Probably 3 to 4 persons per 1000 die from this disease in the cities and towns in India every year and 2 to 3 per 1000 in the villages.

Tuberculosis is a disease which affects most organs and tissues of the body. The lungs are most frequently attacked producing the condition known as consumption. When the glands are attacked, especially the neck glands, it is called scrofula which is responsible for the ugly scars seen in the necks of many people. The bones and joints may get affected producing various deformities like hunchback, knock knee, lame legs etc. The glands in the abdomen may get diseased producing enlarged abdomen, diarrhoea etc. as frequently seen in children. When the membrane of the brain is affected convulsions, unconsciousness and nervous symptoms are observed. In short any part of the body may become affected with tuberculosis.

The germ cause of tuberculosis is the tubercle bacillus which was discovered by the German doctor, Robert Koch in 1882. It is present in very large number in the phlegm of the consumptive patient and in less number in the discharges from the diseased glands, bones etc. of the other types of the

* Being a copy of Radio lecturers delivered in March and April last and specially sent to Health for publication.

disease. The greatest danger of infection is from the sputum or phlegm of the patient suffering from tuberculosis of the lungs. This person goes on discharging thousands and millions of the germ daily in his expectoration. The germ of consumption can remain alive for weeks and months in dark and dingy places like many of the ill-built, ill-ventilated houses of this country, but dies quickly in direct sunlight and less quickly in the diffuse sunlight of a well ventilated house. This is one reason why consumption is more prevalent in dark ill-ventilated houses than amongst people living in well lighted and airy rooms or in the open air as in tents. In fact tuberculosis must have been non-existant when the primitive man was a resident of the jungle and was nomadic in habits and must have come into existence when man became a social being crowding into communities in hamlets, villages, towns and cities. The experience of the present day is that the disease is more prevalent in the cities and towns than in the country and in the villages. This is partly because the conditions are more favourable in the former for the germs to survive in the houses and partly on account of the fact that tour and city life due to a combination of several causes makes the human body more vulnerable to attack by the bacilli of tuberculosis. Deficient food conditions, less air space, greater contamination of surroundings, greater crowding, greater strain of work in the industrial life of the town and other factors, each and all combine to make the prevalence of the disease higher in the cities and the towns than in the villages. Again it is found that amongst animals moving free in the forests there is practically no tuberculosis whilst in the same species of animals domesticated and reared up in houses, zoos, dairies etc. there is a greater prevalence of the disease. Epidemics of tuberculosis have been frequently met with amongst cattle of dairy farms, in monkeys and other animals kept in zoos and in domesticated animals like guinea pigs, rabbits, monkeys etc. caged in houses and laboratories. But in their natural state in forests, these animals have very rarely been known to suffer from tuberculosis.

The above facts give the most valuable clue to the difficult question of tuberculosis prevention. If man desires to rid himself of the tuberculosis pest, the sooner he takes to open air conditions, the better. The open air life of the scouts and the guides, the open air schools, the importance of which is slowly coming to be recognized in all countries, the open air exercises for children which are now being insisted upon by all school authorities, the open air type of houses now being built in accordance with the modern ideas of ventilation are all based on the recognition of the importance of open air life in the prevention of tuberculosis. The experience of health authorities has repeatedly shown that in towns and cities, the more crowded areas and slums have much more of tuberculosis than the thinly populated and better built areas where houses are surrounded by gardens. The so-called tuberculosis nests of towns and cities are situated in the most crowded localities and the modern extensions of cities in the outskirts with better ventilated houses and greater air space around them are intended to be the first step in the fight against diseases and death especially in connection with tuberculosis.

A WARNING! DON'T BE FOOLED

BY

DR. K. P. POPAT, L.R.C.P., C.S., L.M. (EDN.) *Eye Infirmary, Secunderabad.*

Spectacles are much exploited by unscrupulous opticians advertising so-called bargains.

All glasses look alike. So do all pills and all false teeth look alike. It is what you cannot see where you win or lose.

Eyes are precious. Select your opticians with discretion as you would your physician or dentist with qualifications or glasses recommended by ophthalmic-surgeons in the hospitals or private practitioners as there are ninety-nine per cent. optician-hawkers, quack opticians, watch maker opticians, general merchant opticians to one of qualified opticians.

Your eyes may be highly defective without any loss of vision in the early stage. *This is called ametropia, often the cause of* headaches and nervous disorders.

Glasses *to correct this condition are* worthless at any price, unless prescribed after a painstaking examination and careful diagnosis under mydriatics or in the dark room by retinoscopy by eye specialists.

You will find ninety-nine per cent. of frames badly fitted, either too broad, too narrow, too near the eyes having eye-lashes touching the lenses or too far causing strain and limited field of correct vision as the spectacles are not examined by the ophthalmic-surgeons after purchase from the opticians, Nowadays people follow fashion in round frames without any knowledge of scientific fitting.

Different types of faces require different shapes of lenses. There are four types of faces:—

A long face (longer from above downwards usually found in tall persons should be fitted with short oval lenses for cosmetic appearance and greater field of vision.

A wide face (longer in the horizontal) is found among short persons who should be aesthetically fitted with regular oval lenses.

A square jaw face (straight side face) is ideal for octagon lenses.

People having prominent eye-brows and deep set eyes should use *leaf-shape lenses to prevent upper edge of lenses from touching the eye brows*, and to set the lenses as near the eye-lashes as possible without touching them. Such lenses are stylish looking to a leaf shaped face (wide through the temples and tapering down to a point at the chin).

Big round lenses suit big round faces.

Different coloured skins require different coloured frames:—burgandy, mottled zylo, white gold, green gold, tan, rolled gold etc. to suit becomingly.

The zylo frame has taken a back seat in modern styles because it limits the visual field through its thick rim and sides *and is unsightly on small faces*, which is very common, resembling taboot tiger with big round shell spectacles. Heavy types of shell glasses are advised for sports and library use. For nut brown people corresponding tones of shell look in harmony.

A lorgnett is very handy for shopping only.

Ninety-five percent. of noses of the spectacle wearers have black marks, dents, or soreness, because they are fitted with wrong bridges for different kinds of *noses like young elephant's trunk, cat like nose, or potato nose.* People having broad noses should use almond shape lenses to prevent moisture of the skin smearing the margin of the lenses.

White gold, *platinum, rimless or semi-rimless with slender metal* rims are light, dainty, inconspicuous and smart-looking and have the power of subtracting years from one's age.

The final choice of the frame must rest with the qualified opticians as they have *studied the question with due regard to cosmetic effect, utility; comfort and scientific adjustment of the optical centers in the line of vision for distance and near glasses.*

GATEWAY OF HEALTH

By

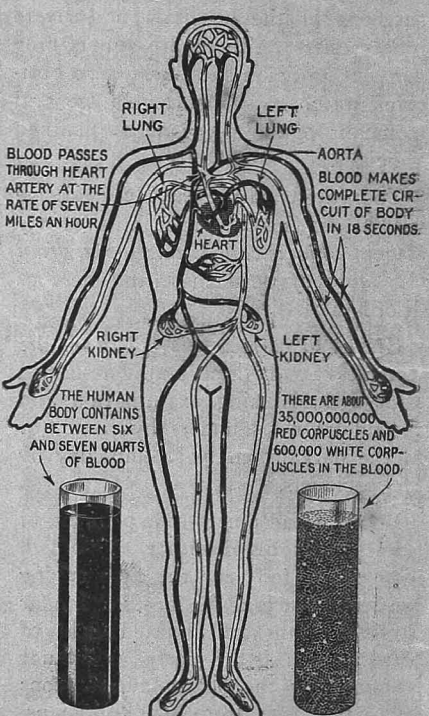
Dr. Parma Nand Ahuja, M.B., B.S. *Karachi.*

Teeth constitute the gateway of health to the body. If the gateway is weak or damaged, thieves enter and rob the body of its treasure of health. If the gateway is strong and sound, it resists any such onslaught by intruders and safeguards its treasure.

The true significance of the above remarks will be realised when it is borne in mind that all that goes into the body in the form of food or drink or air has to pass through this gateway. Teeth and gums are an index of the state of health. White pearly teeth and red rosy gums betoken sound condition of the interior of the body; tarred, tarnished teeth and spongy, pale gums indicate the contrary state of health.

If the teeth, which form the natural grinding mills of the body, are diseased or damaged, the food enters the body (stomach) in unchewed and contaminated condition. This throws greater strain on the stomach and exposes it to disease germs swallowed with the food. Even the air breathed in, gets fouled as it passes through dirty mouth and carries disease germs into lungs.

The disease germs and their poisons from unhealthy teeth and gums are also carried through blood stream and thus



Is your blood stream properly balanced, as above? If so, you are one of the exceptions

infect the general blood. There is a

growing recognition of the fact that diseased teeth and unhealthy mouth are responsible for many systemic ailments such as slow fever, joint pains, headache dyspepsia, ear and eye troubles heart and lung complications etc. and lead to chronic invalidism and ill-health. Besides, bad and carious teeth give rise to ulcers in the mouth, raw tongue, swelling of tonsils, sore throat, huskiness, foul breath etc.

It will thus be realised how important and essential is the care of the teeth if health is to be maintained in good order. The present civilization is notorious for early decay of teeth. We have now to analyse what factors determine such early decay of teeth, so that by obviating them, we can preserve our teeth in sound condition. Mainly they are three:—(1) Improper diet. (2) Lack of cleanliness. (3) Improper use.

Diet rich in sugar and other starchy substances and deficient in vitamines, fresh, green vegetables, fruits etc. leads to poor development and an early degeneration of the material that goes into the formation of teeth. This is very important in young growing children, pregnant females and nursing mothers. Excessive indulgence in animal food predisposes to early decay of teeth owing to excessive acidity of the blood causing gradual dissolution of enamel of the teeth by process of decalcification.

Contrary to this, a well balanced diet rich in vitamins, fresh fruit, green vegetables, milk, butter, whole meal bread etc. will help in healthy development of teeth in the period of growth, and sound preservation in youth and old age. Foods rich in calcium, like milk, butter, eggs etc. in the nursing mother and the teething child materially contribute to sound development of teeth. Salts and vitamines in fruits and vegetables like lemons, oranges, apples tomatoes, beetroot etc. help to cleanse the teeth and supply them with good nourishing sustenance.

Once endowed with good set of teeth how should we keep them in good order is the next step to be considered. This can be achieved by paying proper attention to mouth hygiene. Habits of cleanliness of teeth and mouth should be inculcated from very childhood. Simple way of cleaning for children is by taking some well powdered common salt and rubbing it all over with the moistened finger pulp, and gargling the throat with salt water. Regular use of good Datan or a green twig should serve for the rest of the period of life. These twigs of neem or other trees have a chemical as well as a mechanical use in cleansing teeth. The only drawback is that sufficient time must be spent in the act, to achieve the desired end and this may be difficult to spare in these days of hurry and bustle when speed seems to be the quintessence of life. A brush and toothpaste or powder (well powdered and strained fresh charcoal or burnt almond husks will be good substitute) comes handy in this respect and is in vogue in every household. It is a very serviceable article of toilet provided certain precautions are taken with regard to it.

(1) Brush selected, should be of good make, with medium bristles and properly sterilised. Every brush purchased should be left in carbolic lotion in 40 over night and then dried in the sun whole-day before it is applied to the teeth.

(2) After every use in the morning or evening as the case may be, it should be washed with carbolic soap, hung preferably in the sun to dry.

(3) Apply the paste or powder on a dry brush for cleansing purposes.

(4) The direction of the brush in cleaning should be from above downwards in case of the upper teeth and from below upwards in case of the lower teeth and then on the crowns of the teeth and on the cheek as well as the tongue side, taking special care to rub round the last upper and lower molars so as to remove every particle of food lodged in the crevices between the teeth.

(5) Special care should be taken to rinse the mouth and clean the teeth, with plain water and finger after every feed in the day. This washes away the debris of food from the teeth and tongue and leaves no residue for decomposition and fermentation round the teeth-a potent factor in deterioration of the teeth enamel.

Lastly a proper use of teeth is essential to preserve and prolong their life. Breaking of hard nuts and other undesirable use of the teeth may break the enamel covering and lead to premature decay and death of teeth.

When all is said and done it may be emphasised that excessive cleaning and vigorous rubbing several times a day may overreach the act and affect the dental apparatus adversely.

Good white teeth are a thing of beauty and joy for ever.

INDIAN DAILY HYGIENIC LIFE*

BY

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Continued from p. 202, Vol. X, No. 9.

The constituents of good diet are protein, fat, carbohydrate, salt, vitamin, and water. *The proteins* derived both from animal and vegetable kingdoms, are the building materials of the body needed to make flesh and organs e.g., heart, liver, kidney etc. Animal proteins occur in milk, meat, egg, and fish. Vegetable proteins occur in cereal grains such as pulses, rice, wheat, oats, barley, maize, ragi, cholam, cambu, nuts, fruits etc. Right kind and right amount of protein is necessary for our body, neither too much nor too little. Too much protein is not digested and the excess is left over in the intestines and gets decomposed with the generations of poisons——the results being headache, fatigue, pains and swelling of joints. Unsuitable protein gives rise to stunted growth, poor physique, poorly developed muscles, incapacity of hard work both physical and mental and rapid advance of senility. Resistance to T.B., cholera, dysentery, malaria, and leprosy is reduced.

Mineral salt, is a second kind of building material——namely calcium, potassium, sodium, manganese, zinc, copper, lethium, phosphorus, sulphur, chlorides, iodine and barium——needed to build bones and teeth and to keep the blood pure. They occur in foodstuffs i.e., fruits and leafy vegetables. They form about 1/25th part of the whole body. They are present

in bones, teeth, muscles, soft tissues, blood and bloody fluids. They prevent blood, tissues and bloody fluids from becoming acid or sour which cause illness of the body as fevers of any kind, rickets, weak and soft bones, thin bones, bad teeth, anaemia, lassitude poor appetite, bad digestion, constipation and goitre.

Fats are derived from animal and vegetable kingdoms. Examples of animal fats are——butter, ghee, and fish oils, mutton fat. Examples of vegetable fats are—margarine, cocogem, gingelly oil, groundnut oil, linseed oil, mustard oil, etc, etc. They are feul foods. Other fuel foods are carbohydrates and spare proteins. They produce weight for weight more than twice as much energy as either proteins or corbohydrates. Both animal and vegetable fats are good fuel but not equally good for nourishing the body. Animal fats, as ghee, butter, or fish oil contain vitamine A. Vegetable fats do not. Fats are needed by the body to provide energy and vitamine A, to make the tissues firm, to prevent loss of heat by the body, to fill out its contours thus adding to its beauty and to protect certain delicate organs like kidney from injury; to help the body to use calcium for its absorption from the intestines; to protect velvety lining of stomach and intestine from injury; to protect the foot and legs from being oedematous. Animal fats contribute their share against infection by microbes.

Carbohydrates are of two kinds, namely starch and sugar. Starches are found in rice, wheat, oats, barley, ragi, cholam, cambu, maize and from tubers and roots like potatoes, jam and topioca. Sugars are found in fruits, sugarcane, leafroots, datejuice and other plants. Excess of carbohydrates in our food are not properly digested and left over in the intestines where fermentations set up producing gases and irritating acids resulting in flatulence, indigestion and diarrhoea. Carbohydrate is a fuel food. The fuel foods namely fats, and carbohydrates are stored in the system. They help individuals during fasting and when these fall short in the daily diet.

Water:—The need for water in the body is craved by nature as thirst. The water taken with food or alone has very important bearings regarding our health. About 9-10th part of blood in our body is water and nearly three quarters of our flesh is water. It is the water in the blood and tissues which causes to circulate throughout our whole bodies to give nutrition and which removes from the body certain waste materials formed in the course of its work through mouth and nostrils, through sweat and perspiration, through kidneys as urine and through bowels as faeces, keeping the inside of the body clean. The water drunk should be colourless, bright, sparkling, cool, palatable, soft, pure and wholesome and also should be free from all impurities e.g. mineral, gaseous or organic pollutions. It should be free from contaminations otherwise water-borne diseases viz. cholera, dysentery, diarrhoea, enterics and other parasitic diseases through water might break out. Not counting the water which is contained in any food stuff we eat, we should drink two to three pints pure water every day. If good water is not available, it should be obtained from a distant place even for drinking purposes. If there be any suspicion regarding its purity, it should be purified before drinking.

From the food we eat, the intestines select different building materials needed for the building of the bodily house. The materials are passed through the blood stream which supplies each part special things reserved to build it but these body building materials are lifeless. Builders are needed and the great builder of the body is the vital force within us, employing many assistants called vitamins—A, B, C, D, and E, which according to Funk are used to designate certain bodies of unknown nature although only present in minute quantities in the diet, are essential to healthy nutrition. Vitamin-free diet gives rise to certain diseases known as deficiency disease and may even cause death. The vitamins cannot be seen by the eyes but can be felt by their actions in the body.

Vitamin A:—is made by the action of sunlight on the green leaves of plants and we get this indirectly through the vegetable kingdom and animal kingdom e. g. liver oils, codliver and fish oils, fat fish, fish roe, egg-yolk, butter, ghee, kidney, liver, mutton, animal fats, whole-milk, palatable green vegetables and yellow root vegetables etc. This vitamin works on the eyes, lungs, stomach and intestines and is needed for the growth and repair of the body specially of children, for keeping the proper composition of blood, to prevent water collecting in the tissues to cause oedema. To prevent the body from infectious diseases through any injury or through mucous membranes lining the organs. By the ordinary cooking this vitamin is not destroyed. It is destroyed by prolonged cooking and when the food is exposed through the air during cooking.

Vitamin B is made by plants from substances which they extract from the soil and air. It works on the brains, nerves, flesh or muscles and muscles of the heart, stomach and intestines to keep them in proper order and strong. Sources—cereal grains, pulses, nuts of all kinds, green leafy vegetables, milk, egg, liver and other glandular parts of the animals. It is found in the outer layers of rice grains. Where outer layer of rice is removed, and rice is whitened and polished this vitamin is lost and a disease called Beriberi is likely to arise in a person eating such rice. Plenty of this vitamin when eaten gives relish. It digests food and aids waste materials of the body to be properly discharged. Distaste of food, indigestion, diarrhoea, constipation, abdominal colic, muscular weakness, nervous irritation and lowered resistance of the body are the results of the lack of this vitamin in our food. Ordinary cooking does not destroy Vitamin B. Much washing loses this Vitamin.

Vitamin C is called antiscorbutic vitamin for it prevents scurvy when taken with food.

Sources: fresh green vegetables, edible green leaves, fresh foods, sprouts of grains when generated, liver, blood and milk of animals. It is easily destroyed by heat. Infants reared on boiled milk gets very little vitamin C and hence this vitamin should be supplemented by some juices of fruits and raw germinating grains containing this vitamin, should be eaten raw or after cooking for not more than two minutes.

Vitamin C is needed for the body to keep the blood in pure state, in proper composition and to prevent leaking of the same from blood vessels, to help other vitamins in the building of the body specially bones and teeth, and to keep bowles healthy and resist any invasion of microbes.

Vitamin D is produced by the action of sun rays on the skin. It occurs in milk, butter, ghee, egg-yolk, fish-oil. Gingelly-oil and other vegetables oils which do not contain this vitamin, should be sunned before use. This vitamin works on bones and teeth. Rickets, osteomalacia (softening of bones) cannot occur in children who are exposed to sun light. In India, these diseases occur less, as the children generally play in the open sun, than in Europe and America where there are so few foods in which this vitamin occurs plentifully, and because bright sunlight is scanty or children live so much in dark and sunless houses.

Vitamin E is plentiful in the same kinds of foods as carbohydrates such as rice, wheat, maize, barley, oats, ragi, cholum and combu etc. Deficiency of this vitamin in food probably causes sterility. Vitamins A and B are necessary for building the proteins of the food into living tissues. Vitamins A, C and D are all necessary for proper building of the mineral salts into the living tissues of the body. Vitamins A and B as well as Iodine and carbohydrates are necessary for the proper burning up of fats by the body. Vitamin B is necessary for proper utilization of carbodydrates by the body. Vitamins A.B.C and E as well as calcium and a substance produced by the liver are necessary for the proper utilization of iron by the body.

Milk, eggs, fruit and green leafy vegetables are very important parts of our foods because they contain all things—protein, mineral salts and vitamins—in which the other ingredients of the diet are poor. For this reason they have been called 'Protective foods'. They protect us from illness caused by the want of the essential proteins, mineral-salts and vitamin.

Though many kinds of food-stuffs are not mentioned in the table below, authorities hold that Vitamins A & D occur in animal fats, milk, butter, ghee, egg, yolk, fish oils carrots, tomatoes, sweet potatoes, bananas, and yellow root vegetables and vitamins B and E are plentiful in the same kinds of foods as the carbohydrates such as rice, wheat, maize, barley, oat ragi, cholam cambu, Vitamin C is plentiful in green vegetables such as cabbage, lettuce, turnips, bamboo shoot, pine shoots watercress and lucerne-grass.

The richness in vitamin content is indicated below by the numbers of signs of a few common foodstuffs of general use collected from Lukis and Blackham's 'Tropical Hygiene.'

FOODSTUFFS.	VITAMINS.			
Animal Kingdom.	A	B	C	D
Cod & other fish liver oils ...	++	...	...	+++
Liver of fish, bird's mammals ..	++	...	...	++
Liver (raw)	...	++	++	...
„ cooked (short time)	..	...	+	...
Fish roe	++	...	...	++
Fish	...	++	...	...
Egg yolk	++	++	...	++
Butter	++	...	...	+
Milk	+	+	+	+

FOODSTUFFS.	VITAMINS,			
Animal Kingdom.	A	B	C	D
Cheese	+	++	...	+
Body fat of mammals	+	...	...	...
Body fat of fish	...	...	...	+
Lean of meat	...	+++	...	...
Heart	+	++	...	...
Brain	...	++	...	...
Green vegetables,				
Green vegetables	++	...	+++	very little
„ cooked (short time without soda) ...	...	...	+	...
Root vegetables	...	+	...	...
Carrot	++	...	++	...
Turnip	...	...	++	...
Potatoes	...	+	...	...
„ boiled	...	...	+	...
Fruits.				
Tomatoes	++	a little	+++	very little
Oranges, lemons, Grapes	...	...	+++	...
Rose berries, Black berries, peaches & pine apples, ...	...	...	++	...
Bananas, apples, most other fruits, and tinned fruits, ...	...	...	+	...
Yeast dried	...	++++	...	...
„ extract (marmite)	...	++++	...	...
Wheat germs (Bemax)	...	++++	...	...
Grains.				
Pea nuts, bran, middlings, dried peas, beans, lentils, nuts ...	...	+++	...	...
Whole meal wheat, rye, maize. whole barley, whole rice (brown) ...	...	++	...	...
Whole meal flour	...	+	...	...

CHANGE OF MIND.

Orthodox physicians are in the habit of prescribing a change of scene, a change of diet or a change of climate

They know that the human system periodically requires change.

It is rather a pity that they do not more frequently advise a change of mind.

If people would try a change of mind, eliminating a lot of worn-out prejudices and ideas, they would be astonished at the result. The world would appear a different place. People might even find that their neighbours were quiet decent folk, and that romance still lives in ordinary life.

It isn't always the liver that needs toning up—Health for All.

A WARNING!

BY

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The colossal machine presses of the world are notorious for advertising the so-called panacea. In all sorts of glowing languages and attractive designs good for nothing synthetic chemicals are advertised. These drugs undermine the health of the users and make them all the more sick. If you just pass over a single page of any newspaper you are sure to find some 'magic-cure' for all the conceivable diseases. In the following few lines I want to impress upon the public that no reliance should be put in these quack remedies. They do more harm than good. I don't mean to say that all such advertised medicines are useless and injurious. Some can be used but only under the strict guidance of some duly qualified doctors. To use such drugs without the instructions of a doctor is to catch fish with hands from a pond where snakes live instead of fishes. To be more clear, suppose a man is suffering from headache. He sees in some newspaper the big bold advertisement of *Bayer's Cafaspirin*. He buys a capsule of it and starts taking it regularly. This relieves him of his pain for sometime. After a month or so he finds that his pain is growing worse and even the increased dose of aspirin cannot relieve his pain. He goes to a doctor who tells him that he has got a tumour of the brain. Now see, what has happened? He has lost one complete month of that valuable time when something could have been done for him.

It is always taking a great risk to treat one's own disease on the basis of symptoms only. There are thousand and one causes which give rise to more or less similar symptoms. It is only the experienced eye of a qualified doctor who can say which is which and what should be done at such times.

So far as I know the vernacular papers are especially notorious for publishing all sorts of bogus remedies. I have seen such ridiculous advertisements which have simply made me laugh a contemptuous laugh. I have seen quacks claiming to cure cancer and phthisis in the course of few weeks. One can imagine what an amount of harm such irresponsible literatures and advertisements can cause to the suffering humanity. Those who suffer lose their common sense and power of descretion and these are the Willo'-the-wisps which lure these staggering souls to their doom.

I warn those people who are Psychologically ill to be careful of such patent medicines. They will make them more ill than what they are. I have known people getting serious abdominal and heart troubles after taking such advertised drugs. Cases of poisoning have also been reported. In my next article I propose to go down such time tried remedies which have been found to be efficacious. They can be safely taken under the guidance of a qualified doctor.

The only way to stop such harmful advertisements is to see that the government takes some interest in it. A clinic should be started where

all such newly introduced drugs should be put to rigorous test under the guidance of medical experts. If they prove to be of real value a certificate of confidence should be given to such firms. All the newspapers, magazines etc., should be told not to publish any such advertisements unless the firm sends them the certificate of confidence also. In this way only we can stop this practice and can save millions of the public money which is draining away annually into the coffer of the quacks.

MIND AND BODY

BY SITARAM.

"For things can never go badly wrong,
If the heart be true and the love be strong."

Time was when many of the biological processes remained a sealed book to humanity. But modern science has made rapid strides in the realm of discovery of the causes of many a physical and mental phenomenon. Its triumph lies in its solid contribution to the sum total of human happiness. The correlation between body and mind is being increasingly recognised from day to day and the subject has gained added importance at the hands of psycho-physicists.

Every psychosis has its appropriate neurosis. Every good thought prolongs life. Every thought that enters the mind of an individual affects the brain-cells adversely or otherwise. This affection manifests itself on the body. It is therefore, the duty of everyone to devote at least an hour a day to fill the mind with happy thoughts and refresh that great centre. If good games and sports are necessary for the improvement of physical health good thoughts such as those of generosity, cheerfulness, self-sacrifice and love are essential to make the mind healthy and strong. It is imperative that every one should try by slow degrees to increase the allotment of time for this mental exercise. The result at the end of a month will be found to be simply wonderful. A welcome change will be visible in thought, word and deed.

It is common knowledge that intoxicating drinks and drugs are very injurious to health. Greater is the injury inflicted on the mind by baser passions to which many a man has been a victim. Anger, one of those evils which wreck weak minds, poisons the blood so dangerously sometimes as to cause one's death. Sudden and strong outbursts of passion weaken the heart. Great medical men have opined that the drops of perspiration from the body of a guilty person caused by the slings and arrows of conscience, and those of an innocent man in a peaceful state of mind, are found to be chemically different. Repeated researches have revealed that a peculiar colour in the perspiration of the criminal is due to the presence of selenic acid.

Fear is no less injurious to the mind than anger. "Woe to him that is faint-hearted." It is no secret that fear has been the instrument of death of tens of thousands. Courage, the enemy of fear, is the friend of man, for, it gives him longer life. A great veterinary doctor

who made a special study of the ways and habits of horses has discovered the truth that the angry words of a rider would increase the pulse-beat of the animal tenfold. Same is the case with dogs. If this should be true in the case of animals, how much more true should it be in little children?

Strong emotions often produce a tendency to vomit. Over powering anger causes the sudden inrush of blood into the brain which some times proves fatal. Extreme grief over night has ruined many a soul on the following morning.

We must remember that God never intended man to be a slave to his passions. It is in our power to control our senses. We must cultivate and develop this power inherent in all. It must be our endeavour to overcome evil with good. What do we do to remove the toxins in our blood? We seek the aid of a medical man. The

Physical Exercise for Girls.

antitoxins injected into the blood-stream or taken orally, remove the evil effect. In the same way should we employ good thoughts to expel the evil ones that prey on our mind. Healthy thoughts destroy diseased ones. One, whose heart is filled with love, knows no pain of mind. Many of the ills now found among adults and school-children would fast disappear like mist before sunshine, if we but teach them the influence of mind on body. Inactivity and want of cheerfulness would soon vanish. It is ignorance that has landed many a man in disaster. Nothing else saps our vitality more than anger, envy, malice and revengefulness.

Mental ailments, like diseases of the body, would easily yield to treatment. We seldom seek the right remedy when

we are obsessed with fear or envy. We forget for the moment that it is possible to root out anger with the weapon of love. If it is possible to purify dirty water it is no less possible to purify our defiled thoughts.

No man in his normal state of mind would dare commit a crime. It is when the brain-cells get diseased by means of repeated attacks of evil thoughts he takes to bad ways, and becomes a menace to society.

Man lives, moves and has his being in the vast ocean of thought. Rivers flow into that ocean from different sources. Some have turbid water and others, clear, sweet liquid in them. There are eddies and whirlpools in that abode of waters. Ignorance of these will cause the vessel of life to be drawn into them, and to escape from them would be impossible. Therefore, get rid of the evil desires and passions. Fill the mind, that fountain head of thoughts, with love. When love is in, hate is out. When the sun shines, darkness flies. When water flows in, fire dies out. Hate cannot live in the presence of love. Banish despair and disappointment and let in courage and hope. Happy are they who know these simple truths. A broken-hearted, miserable young man once married a cheerful, lovely lady to whom pessimism was quite unknown. The happy alliance soon transformed the youth. He became blithe as a bee and happy as a king. Think right, speak right, and do right. Therein lies happiness, and happiness begets health.

THE DUST NUISANCE IN CITIES.

BY

R. NARAYANSWAMI, M.A., *43. Big St. Triplicane, Madras.*

One of the important contributive factors for the prevalence of Tuberculosis, Bronchitis and other respiratory diseases on a large scale in towns and cities is the dust nuisance. One of the products of Modern Science has been quick locomotion, and motor vehicles have now spread to every nook and corner of the country. The invariable concomitant of the running of motor vehicles on public roads and streets is the huge cloud of dust raised by every passage of such vehicles No road can we pass through on foot, whether in the city or in the mofussil, particularly in the latter, without being covered over with dust by the pass of a motor vehicle. Added to the dust there is the foul-smelling smoke too issuing from the motor engines and this is enough to choke the pedestrians walking by. In the mofussil, especially in the South, many of the public roads and streets are laid with easily-breaking red gravel and the result is the passage of a motor vehicle results in a long trail of thick cloud of red dust and the pedesrtians on the road are literally bathed in the dust.

Now it must be remembered that dust passing into the lungs either through the nose or through the mouth engenders respiratory diseases of all kinds. Apart from the fact that the depositing of dust inside the lungs debilitates their powers and predisposes them to disease, there is the certain possibility of the existence of disease-germs in the dust

produced on public pathways traversed by all sorts of people, diseased and otherwise, who either spit or blow nose or throw up refuse in some form or other on the floor. If disease-germs once get into the lungs, the result is disastrous, for not only the person affected falls ill but he communicates his illness through contact (unknowingly of course in most cases) to the people living close to him.

What should therefore be done to avoid this dust nuisance rampant everywhere? For all the world, we are not going to stop using motor vehicles and other quick means of conveyances over roads. Nor can we avoid walking over dust-ridden roads and streets. The following precautions are therefore some of the best that could be taken.

(1) The roads should be made dust-proof *i.e.*, they should be either tarred, concreted or rubbered. If this is done, there can be little raising of dust by passage of vehicles however fast they may go. In the city of Madras, most of the bus-routes and other traffic-ridden roads and streets have been or are now being tarred. Recently some of the mofussil municipalities too have been providing for the tarring of important roads. Concreting and Rubbering, though more durable, are costly processes and it is therefore not feasible for them to be adopted in a poor country like ours. The Road Development Board can do a great deal in this matter.

(2) When we walk over dust ridden roads, we ought never to breathe thro' the mouth. If we breathe thro' the mouth, it would mean that we are voluntarily inviting disease-ridden dust to enter our system and do damage to it. If we breathe thro' the nose, the evil is lessened if not completely obliterated. God in His Infinite Mercy has provided for the growth of hair inside our nostrils. This hair forms as it were a barrier against the passage of solid particles like dust into our lungs. It filters the air entering the nostrils and lets in only pure air. Many of us not knowing this fact have this hair shaved off periodically. Obviously this is wrong.

(3) Again, while passing thro' dust-ridden roads, we should not as far as possible indulge in much hilarious talk and laughter lest dust should get in thro' the mouth.

(4) When we have returned home from our rounds, we should make it a point to wash our face and limbs and gargle our throats with pure water, thus cleaning the body of all particles of dust that might have been deposited on it while we were about.

(5) Lastly, thro' intense propaganda of all kinds, people, especially the 'low' classes should be made to realise the twin-danger to public health in crowded towns and cities viz., the spitting habit of the people and this dust nuisance.

SEWAGE AND THE SEA.

There is a difference of opinion between Dr. R. H. Wilshaw, M. O. H., and the town council of Worthing over a matter which has considerable interest at the present day. Towns on the seashore are generally considered very fortunate in being able to discharge their crude sewage into the sea but the blessing is not unmixed and as our seaside towns are gradually coalescing to form a continuous fringe, it is becoming a question whether what was formerly an innocent way out of an expense may not become a severe nuisance.

It is quite true that all the sewage which could ever be produced by man is but a drop in the ocean, but seaside town sewage is not discharged into the ocean, but into the tidal waters and under certain circumstances and in certain localities it does not diffuse, but is beaten to and fro by the tides and apt to return to shore. According to Dr. Wilshaw, Worthing is a place where this is liable to occur, for there is a great barrier of seaweed about three miles from the shore which throws about 45,000 tons of weed on the beach every year, where it rots. Dr. Wilshaw does not think that the town sewage does much to feed this weed, but he does believe that the admixture of sewage material renders its rotting particularly obnoxious. "If the sands on the seashore were pure they would not cause any unpleasant odour when disturbed." He pleads for treatment of the sewage before it is discharged into the sea. The town council, however, object to this, probably because of the expense, and though we do not know all the local factors, we are inclined to think on the facts as stated by Dr. Wilshaw that their policy is shortsighted. The visitor to Worthing will soon become acquainted with the weed and if he is of an inquiring mind, as people with nothing to do are prone to be, he may seek to know whether the odour he detects is due to "ozone" or sewage, which would be very awkward for the town's only industry.

A passage in Dr. Wilshaw's report, "any sewage discharged during prohibited hours is not polluting Worthing's foreshore but Lancing's," makes clear why a process which was tolerable in the nineteenth century may be highly objectionable in the twentieth, and what has been a cheap way out of a difficulty might become an expensive way into the law Court.—*Medical Officer.*

IT IS THE WILL OF ALLAH!

Health News says a European health expert responsible for effecting sanitary reforms in Syria asked a Damascus official for information on which to formulate a health policy and program. The conversation, quoted from "Mastodons, Microbes and Man," by Dr. W. W. Peter, was as follows,

Question: What is your birth rate in Damascus?

Answer: I do not know, I was not present. I hesitate to inquire.

Question: What is your population?

Answer; The people are many. But how many, I do not know. They have

never all gathered in one place at one time to be counted.

Question: What is your death rate?

Answer: It is the will of Allah that all should die. Some die young: some die old.

Question; What is your water supply?

Answer: From time immemorial no one in Damascus has been known to die of thirst.

Question: What comments have you to make regarding sanitary conditions in your city?

Answer: A man should not bother himself or his neighbor with questions that concern only God.

But, by the holy scimitar, it will be changed by the doctors and vastly improved.—*Medical World.*

EFFECT ON EYES OF VITAMIN G DEFICIENEY.

P. L. Day, W. C. Langston and C. S. O'Brien (*Amer. Jour. Oph.*) found in a series of forty-eight young albino rats, receiving a diet deficient in vitamin G bilateral cataracts developed between the sixtieth and eighty-seventh days in all but three of the thirty-seven rats that survived. One of the three developed unilateral cataract and was placed on vitamin G immediately, after which there were no further lens changes; the other two rats were killed before the maximum time of expectancy for the appearance of lens changes. It appears that the absence of vitamin G was the sole cause of the cataracts and other ocular changes, since the further progress of such changes was stopped immediately by the feeding of autoclaved yeast with its high vitamin G content. So it is advisable to feed our elderly patients a diet rich in vitamin G.—*Medical World.*

WHERE WOMEN ARE STRONG MEN WEAK.

A curious custom among the men of the Akikuyu tribe in East Africa has given scientists an opportunity of studying the effects of diet. These males regard vegetables and fruits as food fit only for women; they subsist almost completely on meat and starchy breadcakes. In consequence they are described as thin, poorly developed, weak-eyed and weak-lunged. They are almost all constipated and chronically sick.

On the other hand, the women eat freely of what the men consider inate foods, fruits and vegetables. A main article of their diet is a salad made up of the green leaves of various plants. These when analyzed were found to be rich in iron, lime and manganese. Before and after an Akikuyu woman gives birth to a child, she eats plenteously of red millet. These women in contrast to their husbands, are very strong and sturdy. They have very little lung disease and their digestion is excellent.

This is not merely the tale of some wandering traveller, but is based on the observations of Dr. J. B. Orr, director of the Rowett Research Institute for Animal Nutrition, at Aberdeen, Scotland, and Dr. J. L. Gilks, director of medical and sanitary service at Kenya, East Africa.—*Good Health.*

THE VALUE OF WATER

Water is an element of universal blessing to man. Its benefits are not even confined to its usefulness, for it is used by Nature to beautify the earth and enchant the eye.

The greater part of the planet on which we live is composed of water. So also is the major portion of the human body. The blood is a fluid. In fact, all the actions of the body, such as the absorption of food and the interchange of gases, take place in a fluid medium. Waste products are expelled in solution and the body loses several pounds of water daily. To preserve the balance of health this loss must be made good. Insufficient liquid in the system means sluggish and imperfect action, and the retention of poisonous waste matter.

To maintain perfect health, the body requires from two to three pints of water daily. This, of course, should be the purest water available and not too hard. The best times to drink are morning, evening, and between meals. Taking two glasses of hot water on rising is the best possible way of beginning the day. In contrast to this, to put poison in the form of tea into the water is about the worst thing to do in the morning. In time this bad habit produces headache, indigestion, and general weakness.

In addition to this, water has its external uses. It is the best solvent known, and with the addition of alkali in the form of soap it removes sebaceous material exuded by the pores of the skin. Warm baths should be taken frequently for this reason. Cold baths may be taken for their tonic effects by those who are strong.

Water, of course, has most wonderful effects in disease, equalizing the circulation, reducing inflammation, and easing pain. In this respect it is the most valuable remedy we possess.

Lastly, there are the soothing effects of the sound of running water. The music of the babbling brook relieves the tired brain, soothes the nerves, and induces sleep.

Be sure, then, that you appreciate the value of water and use it as it comes from the heart of Nature—free from impurity and adulteration.—*Good Health.*

REVIEWS

Our Baby for Mother and Nurses, 20th Ed.—By Mrs. J. Langton Hewer—published by John Wright and Sons, Ltd., Bristol. Price 2/6 nett.

This is a very useful book for mothers and nurses. The chapters are well arranged and the language is simple and can be read and understood easily by the laity for whom it is chiefly intended. The rearing of infants in the tropics is somewhat peculiar and the author has taken care to add a chapter on 'Baby in the Tropics', at the end, which will be found advantageous to Indian Mothers. We commend the book heartily to our readers.