

Health

*A Journal Devoted to
Healthful Living*

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EDITORIAL

Asthma

THIS is a dreadful disease, causing endless misery and suffering to the patient, should, unfortunately, it become chronic. The underlying causes are many and varied which must be found out before any treatment is begun.

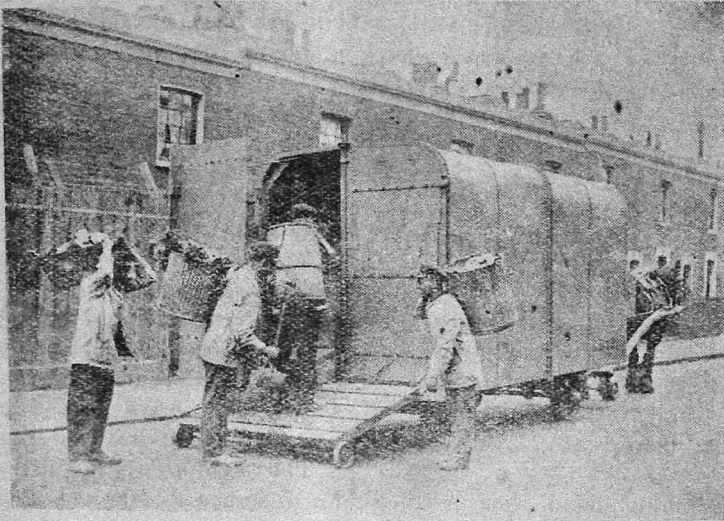
It is generally held that Asthma is caused by supersensitiveness to foreign proteins. The irritant protein may be, (a) *food*—e.g., cereals (rice, barley etc.), potatoes, eggs, cocoa, chocolate, orange, and beverages such as milk which is a more common cause in children; (b) *dust* e.g., cereal grains, street dust etc., (c) *pollens* of grasses and flowers; (d) *animal emanations* from cats, dogs, rabbits, chicken, horse etc., and *from feathers and hairs*, (e) *bacterial proteins* produced from bacteria, which have found a focus of infection in the bronchi or less frequently in the tonsils, nose,

teeth or intestines. In most cases of constantly recurrent or continuous asthma, there is definite bronchial infection. Recent researches have shown that nerves play a prominent part in the causation of this disease.

The symptoms of asthma, such for instance as, the hard breathing, the anxious expression, the inexpressible discomfort, sleeplessness, etc., are all too well-known to the lay public to need any mention here. We are not in a position to give definitely the morbidity and mortality rates for Asthma, for, we find from the Vital Statistics of the principal cities of India, that this disease is classed under 'other non-tuberculous respiratory diseases' and is not separately exhibited. While Asthma is practically ignored and the sufferers are left to their fates in this country, it has attracted considerable attention in Great

Britain. In 1927, the late Earl of Limerick and Capt. F. L. M. Boothby, R. N. (ret'd.), both long sufferers from Asthma drew the attention of the general public and the medical profession to the great suffering caused by Asthma and urged the institution of organized research. The Asthma Research Council was accordingly constituted at a meeting held on 26th October 1927 under the Chairmanship of Lord Greenway, to which sufferers from

disease. A report on the work of the Asthma Research Council from 1927-34 by Sir Humphry Rolleston Bart, G.C.V.O.K.C.B., F.R.C.P., has come to us for review and is a fine record of substantial work done during a period of heavy financial stress and stringency throughout the world. It has been estimated that there were 1,00,000 asthmatics in the London area alone and it is believed that there must be more than quarter of a



NEW TYPE OF DUST-CART TO ELIMINATE SPREAD OF DISEASE.

This type of Dust-Cart has been specially introduced by the Lambeth Borough Council, to prevent the wind blowing any of the contents in the surrounding areas, and so prevent the possibility of spread of disease.

Asthma, members of the medical profession and others interested in the subject attended. A Committee chiefly composed of Asthma patients, with the Earl of Limerick as President, and Lord Greenway as Chairman and Vice President was then set up to collect all the available information and to raise the funds necessary for a comprehensive investigation of the

million sufferers from allergic diseases in Great Britain. A new treatment for Asthma by breathing exercises which promises relief not only by cutting short the actual attack but by effectively preventing the recurrence of others has been devised and this is published in a book form "Physical Exercises for Asthma," which have been approved of by the Honorary

Médical Advisory Committee of the Asthma Research Council. Breathing exercises, as a corrective of all kinds of respiratory diseases—nay, of almost all diseases, which human flesh is heir to—are not new to Indians—in fact, breathing exercises have been included in the programme of the daily religious routine of the Hindus from time immemorial, though in modern times, they have been discarded with impunity. The trouble with the asthma patient is that his chest is already over-distended and the ordinary breathing exercises are of no avail to him. The exercises for the asthmatic, therefore, are planned to be the direct opposite of the ordinary breathing exercises. Special modifi-

cations have been made for children. The exercises, which are beautifully illustrated, can be performed in bed, sitting on a stool or standing but expert guidance is necessary in their performance. As this pamphlet has been published in aid of the funds of the Asthma Research Council, we would advise our readers to purchase a copy and thereby contribute to the success of the Council's laudable and humanitarian work or, in other words, to the relief of human suffering. We have been asked to announce that copies of the pamphlet can be obtained by sending a British Postal Order for 2 sh. to the Secretary, Asthma Research Council, C/o, King's College, Strand, W. C. 2. England.

Long Life and Health

By

DR. S. N. MALHOTRA, M.D., F.C.P.S.,

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HEALTH depends upon the harmonious working of all the different systems of the body. These are the Nervous System (controlling system), consisting of brain, spinal cord, and nerves, the Digestive System, Respiratory System, Excretory System and a system of Ductless Glands. Our Rishis used to pay the greatest attention to the Respiratory System and rightly so. This is indeed the Master System. They devised various methods to develop and control the functional capacity of the lungs. 'Pranayam' heads them

all. Various asans are intended to serve the same purpose.

They used to live long lives because of 'Pranayam' and other exercises of the lungs. I think, every person has a right to live one hundred years; but we come across very few centenarians in these days. The greater the development of lung capacity, the greater the chance of living long. Deep breathing means more fresh air going into the lungs; and so more oxygen goes to the blood which carries it to different organs of the body. They will

thus be better nourished; will function better, and for a much longer time. Deep breathing thus is the key to long and healthy life. The air inhaled should be fresh and dust free; as otherwise deep breathing will not serve its useful purpose. That is why people living in country live longer than those living in cities.

Slow breathing means deep breathing; and that is the principle of pranayam. Our rishis by constant practice could hold breath for hours. This is interpreted as follows: their one deep breath was equivalent to two thousands or more ordinary breaths according to their practice and control. Though that is the ideal to be aimed at, yet, every one of us must try to have a control on our breathing. The less you breathe per hour, the greater the chance of your living long. Quick breathing is a sign of ill health, and should always make such individuals consult a qualified medical man for the cause.

I am giving below a few deep breathing exercises which can be practised by all classes of people: men, women, children, young and old, sick and healthy. These are all done lying in bed.

1. Lying in bed flat on your back and with the bedclothes off, put your two hands on your abdomen, one higher than the other. Close your mouth, and as you inhale through your nostrils, send your abdomen up and out. Hold it up and out when you have finished inhaling. Then exhale quietly, and empty your lungs well while you draw your abdomen in, and at the end of the drawing in, press downwards with your hands. Repeat this exercise twice or thrice but

do not strain much. It is a very good exercise for nerves and endurance.

2. Lying on your back, and having two hands on your abdomen as in the first exercise, as you inhale, send your abdomen up and out, but instead of exhaling, hold the breath in, and move the abdomen up and down a few times. This exercise will give a good massage to the liver and stomach and help to send the air right up to the apex of the lungs which is commonly the seat of tuberculosis.

3. Lying flat on your back, hold your hands over your chest, about the middle of the ribs. Close your mouth, and as you inhale through the nostrils, send your ribs forwards and out to the sides. Hold them thus for a moment as you hold the breath in, then as you breathe out, contract the ribs and at the end of contraction, force them gently with the hands. Repeat this a few times without straining.

4. Lie down flat on your back, with your feet weighed down in some way perhaps by means of the metal bedstead at the end. Now, taking care to maintain this position and having the small of the back as hollow as possible, lift up your body till you come to the sitting position; be sure not to let the head come up first. Let the head come up last. After you have come up to the sitting position, with the trunk slightly forwards from the hips, go back slowly to the lying position. This should be combined with deep breathing.

5. Deep breathing Health Generator is a useful Apparatus for practising deep breathing: This gives an idea of one's daily progress as well. I will recommend it to all who want to develop their chests.

The Water We Drink

By

DR. D. R. PREM, M.R.C.S. (ENG.), L.R.C.P. (LOND.),

National Medical College, Bombay.

So that we may live, we need so many things from Nature. Some we use as we get them. In others we make some changes and make them artificial. Water is one of the most important things that we take from Nature and use as we get it.

This water, which is so essential for our existence, might, many a time, prove injurious to our health or even fatal. So we have got to know which water we should drink and which we should refuse.

The water, which should be refused falls under many heads, *viz.*, water with chemical impurities, water carrying decaying animal or vegetable matter, water carrying disease—producing germs, water carrying the eggs of intestinal and other worms.

These defects are observed generally in that water, which is taken from springs, rivers, tanks and shallow wells. The water supplied by water works in big towns is always free from these impurities.

Chemical impurities.—Some of these impurities, such as Calcium, Iron etc., may come with water from the source. During transit through manufacturing places, the water may become contaminated by manufacturing refuse. If the water is distributed through lead pipes, it may cause lead poisoning. The chemical impurities generally produce diarrhoea and indigestion.

Decaying animal and vegetable products.—In our country, thousands of people

drink water from tanks and rivers And they have also the dirty habit of throwing animal or vegetable matter freely into such rivers and tanks. In villages the people are in the habit of passing stools at the banks of tanks and rivers. Dead bodies, human as well as animal, are also often thrown into such rivers and tanks. Sometimes, there is some connection between a shallow well and a sewage and the well water gets contaminated. Such water may give rise to severe diarrhoea and vomiting and in many cases collapse and death.

Disease producing Germs.—There are many varieties of bacteria or micro-organisms, which may be carried by water. Those of typhoid, cholera and dysenteries are more common and more important. A man, who is suffering from one of these diseases, voids faeces near a place, where water is stored or flowing, and the faecal matter contains the germs. When faecal matter comes in contact with water, the latter also becomes contaminated. Those who drink such water, suffer from those diseases. In this way epidemics are born, particularly among the persons who assemble near a river or tank for fair or pilgrimage, such as Maghmela at Allahabad or Haridwar. Another way of contamination of water is when it comes in contact with sewage water or drain water. Because such waters generally harbour disease-producing germs,

and rivers is bad, but in many cases it can't be helped, because in those places there may not be any other source of water. If possible, the water should be made to stand for sometime. Then it must be boiled and filtered. Addition of a little potash permanganate is always better. The latter can be used for purifying well water too. For filtration four-gharra method might be used in homes.

Four earthen pots are placed one upon the other, upper three having holes in their bottoms. The second is filled with charcoal, the third with sand. Water from the first passes through second and third and in the fourth we get purified water. This, of course, cannot affect the germs, which need boiling and chemicals. As a safeguard against worms, those who work in water, should always wear shoes upto knees.

Artificial Feeding of Infants

By

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THERE are few children who do not thrive when fed on breast milk, provided, of course, that its quantity be sufficient and its quality good. But so many mothers are unable to nurse their babies that a large proportion of the infants have to be brought up by artificial means. The problem in artificial feeding is to imitate the breast milk, of which the child has been deprived.

An ideal infant food should satisfy the following :—

1. It should contain all the nutritive elements as closely as possible in the same proportion as human milk.
2. The quantity should be within the reach of the child's stomach.
3. It should not leave any undue residue to ferment in the bowels.
4. It should be always fresh and rich in vitamins

Cow's milk is always at hand and can be easily adopted to suit the above requirements without much difficulty

and as such becomes the best infant food next to breast milk.

	Water	Sugar	Curds	Fat	Ash.
Breast milk	87.163	7.407	1.046	4.283	0.101
Cow's milk	88.549	4.898	2.792	3.310	0.451

As can be seen from the above table cow's milk contains a larger proportion of curds and is deficient in sugar and fat. So to bring it to the standard of human milk it should be diluted and sweetened. The suitable dilution of the milk according to the age of the child is given in a table below :

Age of infant in months.	Proportion of Milk.	Water.
0 to 2	1	1
2 to 4	2	1
4 to 6	3	1
6 to 9 & upwards.	Whole milk.	

The dilution of milk brings down the sugar and it must be made good by the addition of cane sugar. One level teaspoonful of sugar is to be

added for every 3 ounces of one in one dilution; For 2 in 1 and 3 in 1 dilutions, one teaspoonful for every 4 ounces; and for the whole milk one teaspoonful for every 6 ounces is proper amount. Formerly it was customary to add cream to make up for the fats. But now it is proved that the cream is not absolutely necessary and the addition of Codliver oil makes up for the deficiency of fat and incidentally provides the antirachitic vitamin D. A convenient dose of codliver oil is $\frac{1}{2}$ a teaspoonful morning and evening best mixed in the feed. If the milk is used unboiled as it is delivered to the house it is swarming with germs, probably many of them harmless, but it may be also capable of carrying disease germs, as tuberculosis. So it is essential that milk should invariably be boiled before administration. Unfortunately boiling deprives the milk of its vitamins, but it is wiser to make this sacrifice for the sake of avoiding the dreadful diseases. Moreover these vitamins can be easily supplied in the form of fresh orange juice. The water should be added to the milk always before boiling and boiling should not be prolonged indefinitely. There is a very wrong belief among some mothers that milk should be boiled to half its original bulk before it could be administered to the children. Milk prepared in this way is very difficult to digest and should not be given to children.

The amount of food required:—The healthy infant requires 2 to 2½ ounces of fluid for each pound of its body weight during 24 hours. The total quantity of milk required per day should be calculated and divided into the number of feeds. The milk should

not be prepared in bulk and stored, for usually it ferments in our climate easily and contamination with disease germs is very easy. Each feed should be prepared just before the time and administered at once. For instance, a baby weighing 10 lbs. will require $10 \times 2\frac{1}{2} = 25$ ounces of fluid and if it is fed every 3 hours, 4 ounces per feed. During the hot weather an extra amount of boiled water may be necessary. Infants that are below par and premature require slightly more fluid and should be fed more frequently.

Time of feeding.—It is a good plan to feed infants up to 3 months every 3 hours, *i.e.*, 6 feeds a day—example—6 A.M., 9 A.M., 12 noon, 3 P.M., 6 P.M., and 10 P.M., After 3 months 4 hourly feeds may be given. Premature babies require an additional feed in the night. When changing from a weaker dilution to a stronger one, it should be done gradually, first of all substituting the strong mixture for one feed only and then two feeds and so on. The importance of iron in the growth of the child is well established now and hence every baby should get iron in some form if it is to thrive well.

The essentials in the feeding of infants by cow's milk can be summarised as below:—

1. Weigh the baby and calculate the amount of fluid required for its weight.
2. Choose the correct dilution according to its age, and the amount of diluted milk required for each feed.
3. Dilute the milk just before administration, boil and add sugar in proper proportion.
4. Feed the baby at regular intervals and avoid feeding whenever the baby cries.

5. Add $\frac{1}{2}$ a teaspoonful of good cod liver oil for the morning and night feeds.

6. Give a teaspoonful of fresh orange juice daily.

7. Give a teaspoonful of iron mixture thrice a week at least. The following mixture can be used:—

R	Ferri et ammonii Citras	grs. 2
	Glycerinum	m 3
	water to make	m 60

Sig. A teaspoonful to be added to three feeds in the day.

Tinned Foods—When fresh cow's milk cannot be obtained as in travelling or the particular baby cannot tolerate cow's milk, one is driven to the necessity of using tinned foods. All the tinned foods in the market come under the following groups:—

1. Dried milk.
2. Condensed milk.
3. Foods.

Dried Milk.—This is prepared by evaporating fresh cow's milk of good quality to dryness and as such is always sterile and can be given without fear of infection. There are two varieties in the market *viz.*, full cream and half cream. Examples of full cream milk are—Ambrosia; Cow and Gate; Glaxo and Tru food. Half Cream or Humanized milk is modified to resemble the breast milk and suits well for routine feeding requiring no addition of sugar. Examples of this brand are—Allenbury's No. I. and No. II, Ambrosia humanised, Cow and

Gate half cream, Lactogen, and Sunshine Glaxo (Oster milk).

Condensed milk.—This is prepared by evaporating cow's milk to $\frac{1}{3}$ of its bulk. It is available in two forms as sweetened and un-sweetened. Un-sweetened milk *viz.*, Nestle's Ideal milk—For babies up to 3 months $\frac{1}{2}$ part of milk is to be added for 3 parts of water and for older children the proportion is 1 in 2. For every 4 ounces of milk so prepared 1 teaspoonful of sugar should be added. This constitutes one of the best ideal infant foods. Sweetened condensed milk, *viz.*, Nestle's milk (Milk maid brand). This is very poor in fats and rich in sugar and hence well suited for premature babies for short periods. In no case should this be selected for the routine feeding of infants

Foods.—These are intended for thickening the milk for babies over 6 months old. This strengthening should be done gradually for fear of upsetting the stomach.

Examples of this class in the market are:—

Allenbury No. III; Glaxo malted milk; Nestle's milk food; and Robinson's Patent Barley. Benger's food and Mellin's food when made up according to the directions, contain only simple, easily digestible forms of sugar and as such are very valuable for sick and debilitated children.

References:—

1. W. Sheldon, M.D., F.R.C.P. *The Practitioner*, April, 1935.
2. E. Smith, M.D., F.R.C.P., *Allbutt and Rolleston's System of Medicine*.

Leprosy

By

T. P. TIWARI, L.M.P.,

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AMONGST all the recognised and unrecognised infectious diseases which have been exacting their heavy toll in this vast Indian sub continent, Leprosy is perhaps the only disease which can boast of a conspicuousness peculiarly its own. The tragic deformities and the hideous changes in appearance which are the inevitable terminations of this most wretched disease have secured for it the reputation of being a disease at once the most dreaded and the most detested. Its victims are regarded by the general laity as the chosen objects of divine

wrath and the resulting condition of social forsakenness which these unfortunate people are invariably relegated to, creates in their minds a feeling of misery, parallel to which is hardly imaginable. Nothing would be more desirable than to see this evil stamped out of the land but the thing is easier said than done. Attempts have been made in the past and are being made at present both by Government as well as charitable institutions to fight

the disease but its eradication seems to be yet a far off dream. The remedies at our disposal have not yet obtained that state of potency when they shall bring about a cure of the disease in its advanced stages. The only hope of success lies in the commencement and perseverance of treatment when the disease is still in its early stages. But here we are faced with a handicap. The disease in its early stages is either not recognised or even if recognised is kept hidden. For the fear of social

boycott which would be their lot on the disease becoming known, the poor patients try their level best to hide the same as long as they can. Recourse is taken in the meantime to all sorts of quack remedies but more harm than good is the usual result. Valuable time is thus deliberately lost and when approach to proper scientific treat-



A deformed hideous-looking leper.

ment is sought, the disease in most cases has become well nigh incurable. This deplorable state of affairs is mainly responsible for the disease baffling all attempts at eradication. The object of writing these lines is twofold. The first is to mention a few of the important initial symptoms so that people may be able to recognise the appearance of the disease and get the same treated promptly and the second is to impress upon the people the desirabi-

lity of realising that leprosy instead of being a cumulative manifestation of sins is just an ordinary incidence of infection and that no sense of shame or degradation should be associated with it. Since early commencement of treatment offers the only chance of success, any delay deliberate or otherwise on the part of the patient to get himself treated is tantamount to a moral crime of the greatest magnitude. The patient thereby not only loses his chance of recovery but also continues to remain a potent source of danger to his family and society. Leprosy is a disease of a very chronic nature taking years to develop and one or more of the following symptoms usually make their appearance in the beginning.

1. **Superficial anæsthesia.**—This is an important symptom and may be the earliest one to appear. Anæsthetic patches appear at one or more places usually on the extremities. If such areas be touched with a piece of paper, feather or cotton wool with the patient's eyes closed and if he be asked to point out the area touched in this manner, he will not be able to do so indicating a loss of tactile sensation.

2. **Loss of thermal sensibility.**—These patches may also lose their thermal sensation. If test tubes containing hot and cold water be applied to these areas the patient is unable to make out the difference between the hot and the cold test tubes.

3. **Deep analgesia.**—Indicates a leprous involvement of the deeper layers of skin. There may be no superficial anæsthesia but the patient may even bear a knife cut without much pain or discomfort.

4. **Skin Manifestations.**—(a) **Depigmentation.** Patches of skin here and there may lose their pigment and become light coloured. Such patches are usually anæsthetic. (b) **Macular eruptions.** These are usually pinkish eruptions well defined and having raised up margins. They do not itch and are free from scales. They look like patches of ringworm but differ from it in being free from itching and in not yielding to usual antiparasitic treatment.

5. **Thickening of superficial nerve trunks.**—Any superficial nerve is likely to be thickened. The most commonly affected ones are the ulnar, great auricular and the superficial peroneal. Thickening of the ulnar can be very easily made out by bending the forearm at right angles and feeling for a thick cord like structure in a depression behind the elbow.

There are many other signs and symptoms which could be mentioned but I have deliberately omitted them and mentioned only those which are the most usual to appear in the beginning and which can be easily recognised by any one. We of the medical profession in this country have been at war with this evil for quite a long time. Let our efforts be supplemented by public co-operation. This can be very easily accomplished if the people realise their sense of responsibility and make it a point to notify the disease and get the same properly treated as soon as it makes its appearance. Let them realise that delay is always dangerous but it is never more so as in the treatment of this disease.

Dental Health Alphabet

(Some instructions about your teeth)

By

DR. S. K. GUPTA,

Surgeon Dentist, Ambala Cantt.

Artificial Denture in the mouth should always be provided whenever necessary.

Bleeding should not be interfered with, after having any tooth extracted.

Cleaning of the teeth is essential after every six months.

Dental Surgeon should be consulted in all dental troubles however minor they may be.

Enamel—the uppermost shining layer—of the teeth should be protected as far as possible.

Good teeth maintain good health and so they should be much cared for.

Hæmorrhage from the gums is a sign of Pyorrhoea Alveolaris which should be checked there and then.

Infection of the mouth should be checked by the use of weak solution of Potassium Permanganate gargles.

Juice of fruits should be taken daily to have strong teeth.

Keep your teeth well cleaned and the mouth sterilised.

Listerine gargles provide a great relief in the beginning of Caries (Gradual Decay of the Teeth).

Milk-teeth provide foundation for the Second Set (Permanent Teeth) and so they demand great care.

Never pin-prick your teeth after meals.

Operation is the only treatment for the gum-boil.

Powder or paste should always be used to have pearls-like shining teeth and strong gums.

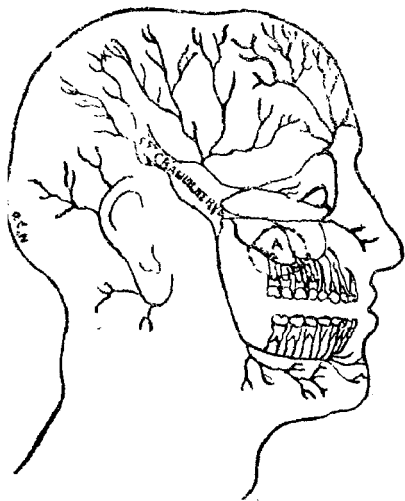
Quack dentists should never be consulted about dental trouble of any kind.

Roots of the teeth should always be covered under the gums.

Scaling of teeth frequently robs the enamel of the teeth.

Tartar should never be allowed to deposit on or in between the teeth.

Unclean teeth cause bad breath in the mouth and the gums bleed frequently.



Showing the distribution of Nerves supplying the teeth. They are all branches of one large nerve. This explains why pain arising from a decayed tooth is felt in front of the ear and in other parts of the face and head.

Filling of Cavities in the teeth should be done as soon as they appear.

Vitamin D is the necessary element in building strong teeth.

Well masticate your food because it relieves the stomach of strenuous work and hardens the teeth and the gums.

X-ray is essential if any supernumerary (extra) tooth is to be extracted.

Yellow-film on the teeth is the harbinger of Caries and Pyorrhoea Alveolaris.

Zero result, if above Dental Instructions are not followed.

Virtues of Tomato Juice

By

D. F. FRASER-HARRIS, M.D., D.SC., F.R.S.E.

RECENT studies upon tomatoes have shown us that in tomato juice are to be found all the three vitamins called, provisionally, A, B, and C. The only other vegetables which contain all these vitamins are raw carrots among the root vegetables, and uncooked cabbage, cauliflower, lettuce, and water-cress among the green. The tomato is second to none as a vitamin source. While the orange contains much vitamin C (the one which prevents scurvy) it contains practically no vitamin A, and only a trace of vitamin B, the vitamin which keeps the nerves in proper condition.

Vitamin A not only promotes growth of the body generally, but by keeping the mucous membranes healthy, it imparts to the body a distinctly anti-infective capacity. This is quite a recent discovery and one of the utmost value.

As a juice-providing substance, the tomato obviously has an enormous advantage over raw vegetables such as carrots and cabbages, for the juice of the tomato, with its slight acidity, is quite pleasant to the taste, and it is now possible to obtain a palatable preparation of raw tomato juice in bottle form. Thus we have a vegetable product possessing in a most concentrated form all the three vitamins A, B, and C, whose presence in the diet of everyone, and especially of infants and young people, has been proved to be of immense importance.

Even the infants, therefore, may have their "cocktails" (to borrow that ugly Americanism), in the shape of a few drops of tomato juice in milk. Mothers would be well advised to keep a stock of this tomato juice in the nursery larders. It may be added to pasteurized or to boiled milk, as the case might be.

It is scarcely necessary to remark that the tomato contains also mineral salts such as calcium phosphate and salts of the mild and wholesome citric and malic acids. These contribute towards maintaining that state of chemical "neutrality" of the blood so necessary to health. Finally, there is one great advantage which tomato juice has over many other vegetable juices, namely, that it contains no oxalic acid. Those who know how injurious this substance and its salt oxalate of lime are to persons of a gouty constitution, and to those whose kidneys are not acting too well, will fully appreciate this.—*Good Health (London)*.

Is Meat necessary for the Human Body?

IN a pamphlet issued by the B.B.C. the statement is made: "There is a mistaken idea that meat is not needed by the young, but this is not-so, as on the contrary, it is most necessary for growth". The London Vegetarian Society argues in a reply that this view is negatived by the fact that thousands of healthy "vegetarian" children, so-called, have never tasted flesh foods. The International Scientific Food Commission declared that "no absolute physiological need exists for meat, since the proteins of meat can be replaced by other proteins of animal origin, such as those contained in milk, cheese and eggs, as well as by protein of vegetable origin". Prof. E. V. McCollum said: "We could entirely dispense with meats without suffering any ill-effects whatever"; while Sir Robert McCarrison, whose knowledge of the diets of India peoples is unrivalled, states in 'Food' (p. 69): "If the food contains milk and milk-products then it is not necessary to eat flesh-meat at all." Moreover, Dr. Corry Mann in an article entitled "An Important Experiment in First-Class Protein", wrote: "The protein of milk appears to be of more value for purposes of nutrition than the protein of meat." Mr. Sibley, a house-master at Wycliffe College, whose house has been vegetarian since 1910, publishes an account of a "Twenty Years' Practical Experiment in Food Reform" in 'Vegetarianism and the Growing Boy', which abundantly proves that flesh meat is not necessary in the diet. The pamphlet is well worth reading. But "vegetarianism"

is a misnomer, since only flesh foods are not eaten: animal products, such as eggs, and milk and its products are taken freely. The latter in infancy and childhood are of course a *sine qua non*.—(*Clinical Journal*).

Years do not Tell Your Age

Styies, W.A.L., "Hygeia", July, 1934.

Observers are agreed that obesity is a subject having a widespread appeal among all classes of the population. Since feminine fashions have decreed slender configurations, medical quacks, quick to sense the public pulse, have seen fit to commercialize the fad by selling alleged antifat cures to a gullible public, who have swallowed holus bolus the most preposterous claims advanced in behalf of the most inert remedies.

The belief that medical science has made it possible for human beings to violate with impunity the laws of nature explains largely why charlatans are continuing to reap a golden harvest in the sale of antifat remedies. For the person who is led to believe all that these quacks tell him in their antifat literature and advertisements, the problem of obesity is the very essence of simplicity.

Antifat remedies may be conveniently classified into two general groups, those that contain drugs, such as laxatives or the more dangerous thyroid extract or dinitrophenol, and are capable of reducing the weight of the body under certain conditions; and those that are devoid of active drugs and are powerless to effect a given loss in weight.

Seemingly, there is no end to the

number of tablets, powders and prescription nostrums used in the internal treatment of overweight. If these products contain thyroid extract, they may be effective by rapidly burning up food and tissue instead of storing them, only at the cost of an increased pulse rate, palpitation, fever, tremors, insomnia, and general lassitude. Such a powerful drug should never be employed in self medication, as its indiscriminate use has led to serious consequences.

In the absence of thyroid as an ingredient of tablets and powders, their use is to no purpose unless they contain certain drugs capable of deranging digestion and delimiting the assimilation of food.

Middle-aged business men, anxious to part with unsightly and handicapping accumulations of fat, little realize that the violent exercise commonly prescribed by many physical conditioners may cause irreparable damage at their time of life.

An overweighted body is like an overloaded truck; something is liable to happen at any moment. Heart strain, impaired digestion, and high blood pressure are common sequences of overweight. The only safe way to reduce is by dieting along the lines suggested by a qualified physician. In the ambition to shed weight, men and women have never paused to consider the advisability of misdirected endeavour. As a consequence, death has been the end-result of numerous treatments for obesity.—(L. P. T.)—*National Health Review.*

Cholera and its Prevention

ERNEST HART once well expressed: "you can eat cholera and you can drink cholera but you cannot catch it." This disease results from a specific microbic infection. There is a special kind of bacillus which gets into the intestine and produces this disease. The constitutional symptoms of the disease are due to absorption of toxins from the intestine.

We can trace three stages in the development of cholera. The period of suffering is usually very brief—the average being probably about two or three days. The period of invasion may be gradual or sudden and this depends upon the amount of the infective agent received into the body. When the attack is gradual it may last for two or three days. In this case the disease is marked by the moderate diarrhoea with colicky pains, a sense of exhaustion and general depression, noises in the head and a pale and anxious countenance. It is during this period that we may hope to be able to counteract in an effectual way, the toxic influence of the infective agent. When the invasion is sudden, the patient is struck down suddenly with alarming depression and generally with violent purging. The contents of the bowels pour out in a copious liquid stream and rapidly drain the blood of its fluid constituents. The evacuation, at first bile-stained, soon becomes colourless and is called 'rice water stools.' They contain enormous numbers of comma bacilli, which bring on cholera and other bacteria. At the same time profuse vomiting of the same kind of fluid usually occurs, violent and very

painful cramps may now appear, affecting chiefly the lower extremities and the abdomen and the patient may pass into the second stage. This may come on within a few hours of the commencement of the purging and its symptoms have been regarded as dependent either on the amount of toxic material absorbed from the intestine or on the enormous drain of fluid from the body. So that there is failure of the circulation as the thickened blood cannot flow freely and the pulse becomes feeble, thread-like or imperceptible. The surface is livid, cold, shrunken, and covered with clammy sweats. The eyes are sunk, the tongue and the breath, cold. There is intense thirst and restlessness. Another consequence of the drainage of water from the blood is suppression of urine. The third stage is that of reaction. After perhaps a brief sleep the circulation improves and the surface becomes warmer. If the relapse does not occur, the patient generally recovers. Cholera in which there is no purging is very fatal.

Food serves to carry cholera when it has been contaminated with cholera germs in a moist state and not subsequently sterilized before being swallowed. Flies have been proved to be capable of conveying living cholera bacilli from evacuations to food supplies. Infection by soiled clothes, contaminated water, milk and other articles of food are the general sources of infection.

Preventive treatment is of vital importance in an epidemic. [*Isoculation of the contacts with cholera vaccine will prevent the epidemic from spreading.*—Ed.: H.] The purity of drinking water must be assured.

Boiling and filtration afford perfect protection. All foods and drink should be quite recently cooked or boiled. Fruits, as a rule, should not be used, except those which are in the best condition. Water for cleaning purposes should be boiled. The excretions from the body should be destroyed instantaneously. All water supplies in wells and reservoirs should be prevented from pollution. The wells should be permanganated. Medical treatment by best doctors should be given without delay. — (*The Indian Medical Journal.*)

A Simple Method of Bug Destruction

THE reputation of a house, hostel, or hospital is sometimes gauged by the presence or absence of bugs. The innumerable ways of destroying the bed bug have proved useless, for none of the methods brings about the total and complete destruction. But recently Colonel W. Houston, I.M.S., has devised a means which eradicates bugs completely.

He suggests that cocoanut oil is a poison to the bed-bug and that the application of cocoanut oil is the only effective and economical way of destroying the bugs completely.

The procedure of disinfection is very simple. The mattresses and pillows are exposed for half an hour to steam and disinfected. All cots and mosquito poles are immersed in boiling water for ten minutes each. The cots and poles are then painted with pure cocoanut oil and put back in their places.

Disinfection of all cots and mattresses etc., is again repeated after a week.

In addition, the corners and the junction between the walls and the floor are all painted with coconut oil. All doors and windows, corners and crevices are sprayed with a solution of kerosine oil emulsion, prepared by mixing half a pound of soap with a gallon of cold water, boiling and mixing it with two gallons of kerosine oil. This emulsion should be mixed with 50 gallons of water. Disinfection is carried out as in the previous weeks until all the bugs are completely destroyed. This method acts as a barrier to future invasion of bugs and is not costly.—*The Indian Medical Gazette.*

Insomnia or Sleeplessness— Its Causes and Treatment

SOUND natural sleep is Nature's best healing and refreshing medicine. But how many people there are who always suffer from want of sleep. Lucky are those who can enjoy sound sleep at night. Insomnia, which is on the increase at present, is a positive curse. Drugs are being discovered to induce artificial sleep but they are not free from harm. Insomnia is responsible for thousands of suicides. Though ner-

vous exhaustion plays a great part in these tragedies it is not the sole cause. Often there is financial or other worry. Sometimes people with active brains cannot help working after they are in bed. Diet has some effect on sleep. Heavy stomach causes sleeplessness in some while an empty stomach excites it in others. Drinks also add their share. Muscular changes can bring about sleeplessness. Lie easily in bed with your muscles relaxed; then you can enjoy a sound sleep. Mind should be free of all thoughts. So try to create the mental attitude favourable to sleep by repeating the first word that occurs to your mind. This in most cases will produce drowsiness. Exercise helps much to solve this trouble. The question of supper is not the easy one. Heavy supper should be condemned always. Cocoa ensures a comfortable night's sleep and is strongly recommended, whereas coffee or tea causes sleeplessness. The most necessary thing is that one should not worry himself much if he does not get sleep. Be optimistic and think only of funny things. This kind of self-discipline is the best cure for insomnia.—(*Indian Medical Record*).

Fruits, roots and the succulent parts of vegetables appear to be the natural food of man: his hands afford him a facility in gathering them; and his short and comparatively weak jaws, his short canine teeth not passing beyond the common line of the others, and the tuberculous teeth, would not permit him either to feed on herbage or devour flesh, unless those aliments were previously prepared by the culinary process.—BARON CUVIER.—(GOOD HEALTH. U.S.A.)

Health Tit-Bits

Nazis Decide to Abolish Divorce for Happiness in marriage.—New marriage regulations almost abolishing divorce have been published by the Nazi Lawyers' Association of Berlin.

The Government is expected to adopt this new legal code, which declares that, "as the Teutonic spirit must be spread throughout the world," there must be as many healthy, happy marriages as possible.

In the interests of the child, or children, divorce is to be forbidden except in special cases, "it being better that the individual should suffer through an unfortunate marriage than that easy divorce should encourage thoughtless unions."

Marriage is to be permitted to the "racially healthy citizen."

Betrothals, it is declared, should be arranged only when the parties have passed marriage-fitness tests.

Childless couples should be obliged contribute to the upkeep of children of relations.—*The Indian Naturopath*

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Rest After Meals.—In one particular at least the Orientals are ahead of us in personal hygiene. Among the natives of tropical countries, the custom of resting after the midday meal is almost universal. In Mexico and other hot countries, it is customary to take a siesta for one to three hours after the midday meal, and at this time most places of business will be found closed. From midday to three p.m., business is almost wholly suspended during the hotter months of the year.

This practice is a very salubrious one, especially for persons in advanced years. Elderly people should always rest an hour after the principal meal and half an hour after lighter ones.—(*Good Health, U.S.A.*)

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Dr. von Noorden Advocates a Salt-Free Diet for Many Disorders.—The noted Professor C. von Noorden, of Vienna, advocates a salt-free diet in certain inflammatory conditions. This is not on account of the chlorin but of the sodium, the absence of which makes it possible for the calcium to gain supremacy in the acid-base metabolism (*Klinische Wochenschrift*). He has long used this diet for the treatment of inflammatory diseases associated with diarrhoea, and regards the success of the apple diet in this disease to be due chiefly to the lack of salt. He has had favourable results with omitting salt from the food in cases of phlebitis, diabetic gangrene, inflammation of the joints, lupus, gastritis, enterocolitis, gastric and duodenal ulcers and pneumonia.

Professor von Noorden has repeatedly suffered from croupous pneumonia. The first attacks were long drawn out; but from the first day on which he left off salt, he felt much better. He recovered much more quickly than before. In pneumonia he gives nothing but fruit juices, raw fruit and sweetened stewed fruit for the first four or five days.

With chronic diseases such as arthritis, gastrointestinal disorders, diseases of the bladder and gallbladder, and skin diseases, strictly salt-free

days, at first two or three, later one or two, a week should be prescribed. Care should be taken that all the vitamins are supplied adequately.—S.—*Good Health.* (U. S. A.)

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Tell-Tale Nails.—An experienced doctor, when feeling the pulse of a patient, will often assist his diagnosis by a casual glance at the finger-nails. The healthy nail is renewed once in 110 days, but the rate of growth is retarded by disease. Nails are highly specialized portions of the skin, and as such are subject to bodily ailments, of which they always show signs.

Serious illnesses always leave distinct transverse grooves in the nails, which gradually disappear with new growth; also, broken bones and fractures leave deep ridges which do not disappear for eighteen months or more. People constitutionally strong have large, heaped-up nails and thick nails usually denote a strong personality—though the converse does not hold good.—*The People.*

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Doctor Mud.—A new kind of radioactive mud is now being used in Harrogate Spa. Discovered accidentally on Harlow Moor, medical specialists say that it has rejuvenating properties, so it is now a permanent side-line to the Spa's attractions. Treatment with this mud tones up the facial muscles and gives a youthful and healthy look. When combined with massage and diet, it works miracles of slimming. It is impossible to compare it with any other kind of medicinal mud, for it has properties that are peculiarly its own. With its help, however, Harrogate should fast become one of

the "beauty parlours" of Britain.—*The People.*

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Enuresis investigation.—An investigation is to be made by the London county council into the question of nocturnal enuresis in children. The complaint is not only serious while the children are in boarding schools and homes, but may be a handicap in later life. Twenty boys from other schools and homes who suffer seriously from nocturnal enuresis are therefore to be gathered into one unit, under the supervision of a specially qualified medical officer, at Anerley residential school. The additional expenditure involved is estimated at about £250.—*The Medical Officer.*

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Birth control Discussion in the Japanese Diet.—The Japanese House of Representatives discussed the population problem; according to the *Japan Chronicle*, Mr. Isao Naka (Minseito) asked the Home Minister whether his Department had studied the question of birth control as one means of settling the population problem. He gave many instances of social tragedies, and declared that birth control is urgent for easing low-class officials and salaried men of their difficulty of living.

Mr. Goto (Home Minister) said that although he believed in the restriction of births of the children of mentally defective parents, he was against birth control as means of easing conditions of life. "History shows that once the idea of birth control holds a firm grip over a nation and is widely practised, such a nation is destined to ruin. The exertions made a people under the

pressure of a population problem furnish a motive power for national progress".—*Birth Control News*.

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Summer Do's and Don'ts

- Spend as much time in the open air as ever you can,
- but Don't sit reading with the sun glaring full on your book.
- Learn to swim,
- but Don't go bathing directly after a meal.
- Play games and take exercise,
- but Don't forget to put on a coat when you leave off.
- Eat plenty of fruit and vegetables,
- but Don't touch unripe or unsound fruit.
- Go for picnics,
- but Don't leave litter about.
- Make lemonade if you like it,
- but Don't make it in an enamelled jug, use china or glass
- Take a few flowers home with you,
- but Don't pick them extravagantly or carelessly.
- Ride your bike,
- but Don't ride in the middle of the road.

—From the 'Junior Red Cross Journal.'
—The Home and Country.

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Double Value of Sleep before Midnight.—Some experiments were recently made on 15 young men-students in Germany which confirm the popular belief that the ideal time for sleep is before midnight. If taken at this time of its greatest effect, four to five hours will suffice. All of the students who underwent the experiment found that if they went to bed at 7 p.m., they awoke spontaneously about 11-20 p.m., and were able to continue their work or study for the remainder of the 24

hours. Not only so, but their work improved in quality, and far from showing any signs of fatigue, after following this regime for six months or a year, their health was unimpaired or improved.—*The Treasure Chest*.

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Prayer as a Spiritual Tonic.—Speaking at the Methodist Church Circuit rally at Stamford, Dr. E. S. Waterhouse, of London, said that one of the most obvious uses of prayer was in time of sickness.....

Prayer, he said, was really medicine, and it was much more sure in its action than most physical medicine. It was not a "cure-all," but its spiritual tonic was bound to make a difference. Use all medical means you can, but prayer, though not a spell or magic, is going to be a help.—*The International Physic Gazetteer*.

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Accident People.— People can be divided into two groups: those who break cups and saucers and those who do not. This proneness to accidents has been scientifically investigated. As a result it has been found that out of any hundred workers, ten are responsible for three quarters of the accidents. A branch of the Medical Research Council in England which has been investigating road accidents has found that the law of proneness to accidents applies to drivers of motor vehicles as well as to factory workers. The Council suggests that the results of their researches might be used to prevent road accidents in two ways: by psychological tests to find out accident proneness before a driver is granted a license, and by the removal from the road of those drivers who have an undue number of accidents in their initial period.—*The Treasure Chest*.