

# Health

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## EDITORIAL

### PUBLIC HEALTH AND DEPRESSION.

"Sweet are the uses of adversity, which, like a toad, ugly and venomous,  
Wears yet a precious jewel on its head".—*Shakespeare.*

THE depression which the whole world is now witnessing has had its repercussions already and the one department of Government that has been severely hit in almost all the countries through ruthless curtailment of expenditure, is the Public Health department. Apprehensive of the many dangers, physical and moral, which threaten the public health during this grave period of economic crisis, an urgent Conference of experts was held from 16th February to 18th February '33 and again from May 5th to 6th 1933, under the joint auspices of the Health Organization of the League of Nations and the International Labour Office, to devise the best methods of safeguarding the Public Health during the period of depression and their report is published in the Quarterly Bulletin of the Health Organization Vol. II. No. 2. June '33, covering

47 pages. The report begins with the harrowing tale of reduced provision in the budgets of the Governments of Germany, Czechoslovakia, The United States of America, Roumania and Yugoslavia, for services and agencies responsible for the protection of health and sums up the effects of depression generally, in these words:—"In many countries, the sums provided for the protection of public health by the State and communes and by voluntary subscription have diminished. In terms of the percentage of national, provincial and communal budgets which it represents, the expenditure under this head has frequently suffered a greater proportional reduction than other items. Moreover, in many cases, not only the sums devoted to public health work in the strict sense of the term have been decreased, but also the funds of social insurance (in particular, sickness inva-

lidity and accident insurance), which, in many instances, defrays some part of the expenditure required for the protection of the public health'.

The Conference having carefully considered the question, *viz.*, which is more important of the two, the curative or preventive aspect of medicine, decided that 'if it is true to say that the curing of disease is a matter of utmost importance to national economy, then, *prevention* must, *a fortiori*, be still more important, because it obviates, not only the loss caused by disease to national economy, but also the expenditure necessary for its treatment'.

From this two fold point of view, the Conference deprecated reduction of expenditure on preventive work, owing to its anti-economic character. "On the contrary, in the interests of true economy, prevention should become to an increasing extent an integral part of health policy and should be developed by every means in the power of legislative bodies".

We do not wish to go in detail into the various remedial measures suggested by the Conference but the following two points may be emphasized:—

(1) Economy in prescription and treatment, and

(2) Elimination of the use of secret remedies.

With regard to the latter, the Conference observes:—

"Misleading publicity and the use of worthless medicaments may not merely involve a waste of money for the individual and the community, but may also indirectly injure health and even endanger life by leading the consumer to forsake reliable medica-

ments and preventing recourse to medical advice at the proper time; similarly quackery is doing serious harm both to natural economy and to the public health". Our readers! Beware!!

The one great advantage of depression is that it has tended to lower death-rate, in some countries, for instance, the United States of America, where people have resorted to simple and natural ways of living and consequently enhanced their power of resistance to diseases. The problem of unemployment, which has become more acute now than before, is sought to be solved by people taking an exodus to the country parts and engaging themselves in the old avocations of cultivation, gardening &c.

"The depression is teaching the world a lesson which it could have learned in no other way. The good results are shown already in the lowering death rate and changes in living habits. It is an excellent omen that the need of a return to the simpler mode of life, especially the necessity for a movement from the cities back to the country and the rural modes of life, is being widely recognized," says 'Good Health'.

'Back to the village, back to the soil' is the cry too in India, and if only the unemployed, whether of the middle class or of the working population should seize the present opportunity and shaking off all their prejudices, till the lands and try to live by the sweat of their brow, so much the better for them and their bodies. The depression will then prove a real blessing in disguise.

# PROPERTIES AND RELATIVE IMPORTANCE OF FOODS

BY

DR. A. RAKSHIT, B.SC., M.B.,

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**What is food?**—Food is anything which when taken into the body is able to furnish heat and energy for repairing wastes of the body and building up new tissues. Food is the most important of all, if it is properly selected to keep you healthy and to prevent you from falling a prey to disease. You are not aware how you destroy your health bit by bit through the bad process of eating, by overfeeding yourself with ill-nourishing substances, by wrong selections and combination of foods. In course of time nature warns you by pulling the ears and you suffer from disease.

The dreadful word disease is only a red signal that your body is filled up with toxins owing to your long-continued wrong dieting and lack of elimination. Now you should be careful to eliminate the toxins from your system if you care to enjoy health.

Life is the continuous maintenance of the equilibrium between assimilation and elimination and when this delicate balance is disturbed disease follows. One might live in the twilight zone of health and ill-health without any apparent symptom of disease and might fall an easy victim to an infection in the time of epidemic. Faulty diet and irrational living predispose people to ill health and sickness. Nutrition is not identical with the food ingested but rather that could be

absorbed and assimilated. You will see a fat person is taking lots of heavy spicy farinaceous foods but do you think he is healthy? He cannot be because he cannot absorb the food for building up of tissues—the waste products of the system are accumulated and stored in the form of fat which causes lack of energy and vigour. It is not the quantity but the quality of the food to which we should pay our strict attention and the smallest amount of the food which we will digest very easily.

In acute infection and metabolic diseases, solid foods should be forbidden. They are not digested and the toxic matters develop from their fermentation — decomposition ensues which is surely a harmful thing to the organism.

Proper selection of food exerts a dominant influence on growth, development, mentality and the type of the race. It is of the highest importance to take good foods unadulterated and to take it leisurely with relish. We should take foods according to the sharpness of the appetite and not merely due to habits. There should be at least six hours interval between the two meals.

The chief characteristics of a diet should be :

1. Nourishing.
2. Easily digestible.
3. Fresh and economical.

Heavy bulk of food is highly objectionable on the ground that it produces heaviness, lethargy, digestive derangements and that it brings on acidity, and flatulence. Overdieting is a prolific source of oxalates and phosphates in the urine, leading to dyspepsia, gravel troubles and other chronic ailments.

Feasts are wasteful pleasures—three fourths of the amount are wasted. People take voraciously not because of the appetite but for the satisfaction of the tongue. The next day after the heavy feast they realise the bad effects such as heaviness of the stomach, feeling of lethargy, constipation or diarrhoea and other mental disorders.

We should really eat plain nourishing, easily digestible diet without loading the stomach to any extent. We are not aware how much small quantity of nourishing diet is actually required to keep ourselves healthy and strong. It is an erroneous idea to take enormous quantity of food with the idea of developing bodily constitution. The rich men of our societies do actually suffer more than the average people owing to two obvious reasons (1) Overfeeding, (2) Sedentary habits. Our motto should be 'Eat to Live and not Live to Eat'.

Fasting is one of the blessed things for the upkeep of the health. It should be observed at least once in a week that is to say 4 days within a month to cleanse up the stored toxins of the system. It is the restful condition of the stomach. As the rest is necessary for tired up condition of the nervous system so our stomach should get rest when it becomes tired up in

digesting the food. If you do not permit rest to the stomach it will strike its work—the digestive apparatus will become weakened after continuous strain.

Nature warns you by producing diarrhoea or vomiting but if you go on carelessly feeding yourself on injudicious diet gradually some form of organic changes will develop which will make you permanently crippled. You suffer from dyspepsia which becomes gradually from bad to worse. During fasting one should take saline purgative to open bowels freely and take plain water to flush the system thoroughly. In chronic diseases fasting helps a good deal. During the period of fasting rest is essential. Carrington says "a man can fast for 44 days without any serious troubles. The long fast should be done under the guidance of a physician who is an expert in this line. A fat man can stand fasting more than a thin man. In the course of fasting the adipose tissues which are deposited in the system are oxidized and supply internal energy. Fasting for a sick man means the conservation of strength whereas starvation of a really healthy man means the consumption of the strength.

I will roughly tell you now the properties of the edibles that we regularly consume.

**Vegetables.**—Raw vegetables such as Peas, Beans, Spinach, Lettuce, Tomatoes, Germinating Gram, Raddish, Onions, Cauliflours, Cabbages, Asparagus, Carrots, Beets, Water-cress etc., if combined together and taken in the form of salads are of high nutritive value. Here vitamins

are preserved but they are lost on boiling.

Steamed vegetables are better than cooked vegetables. We cook it to give relish. By cooking the natural aroma, flavour and nourishing salts are lost and wasted.

**Rice.**—The method of cooking rice is wasteful. The outermost coating which contains vitamin is cleaned away by rubbing and the rest nourishing internal is thrown off with rice water. We eat only ill nourishing mass. Due to lack of vitamin, people suffer from Beri-beri and become lethargic. We should not put lots of water over a small quantity of rice and throw off the water.

*Kichri* is good in this respect that it contains the nourishing substance of both the rice and pulses combined.

**Wheat.**—Is more substantial than rice for it contains about double the protein of rice. Whole-wheat bread without throwing off the outer coating is of high food-value.

Fried breads are richer than *chappattis* and we should use therefore *chappaties*. As regards loaf we should use the inner crumb which is digestible; because of its spongy structure the gastric juice enters into the sponge and renders the digestion very easy.

*Sooji* which is the coarse outer grain of the wheat is said to be more nourishing than *Atta*. The sweet preparation of *sooji* which is termed *halva* is not so much easily digestible because the coating of the ghee hinders the penetration of the digestive juice into the interior of the grain.

*Atta* is better than flour because in it we get certain coarse stuff containing

vitamin which excites the intestinal muscles for the proper evacuation of the waste matters.

**Meat.**—is much constipating. In preparing highly rich dishes and by cooking with spices it becomes really a source of pleasure to the tongue but a very hard thing for the abdomen to digest. By cooking at a high temperature this becomes stiff and an indigestible mass. The proper way should be cooking at a lower temperature under slow heat for a long time.

**Fish.**—People should avoid big and oily fish such as *frousts*, *Hika*, *Mango-fish* and other *shell fish*, but instead they will take black living fishes such as *kai*, *magoor*, &c. which are nourishing and easily digestible. Fish should be fresh for use for, on keeping, it gets a tendency to decompose easily.

**Eggs.**—Raw or half-boiled eggs are easily digestible for on full boiling or cooking the albumin matter coagulates in forming a hard mass over which the gastric secretion fails to act for the purpose of assimilation. Eggs are best taken in the form of egg-flip by frothing and beating the egg vigorously mixing with a little milk and brandy and flavoured with some essences.

**Milk and its products.**—Milk to get its proper food value should be taken in a raw state, fresh or unboiled and should be drunk in sips or with the help of a spoon to combine freely with the saliva. Those who have a distaste for taking raw milk should put the pot of milk in boiling water and let it be heated for sometime and then to drink by sips. Milk is not very difficult for digestion but those who complain of the formation of wind in the abdomen

after its use are taking wrongly—first they drink very hurriedly and secondly, they take after loading their stomach with other foods. Fresh and unboiled milk is the complete food for the human beings. *Dahi* or curd is very soothing for the intestines, allays irritability of the stomach and it is a very good thing. People like to take it by diluting with water and use it as a form of buttermilk. For diarrhoea and intestinal fermentation this buttermilk is much beneficial. It destroys the intestinal flora (*coli bacilli*).

**Casein.**—It is of high protein value and is a good substitute for meat proteins.

**Kluer** is condensed milk sweetened with sugar. It causes heavy feeling of the abdomen and produces belching and formation of gases. The other sweet preparations of milk are *sandesh* etc., but really they have got no food-value except their sweet taste.

**Fruits.**—Calm the mucous membrane, dissolve and cleanse out the impurities, and disintoxicate the whole organism by alkaline salts. Itoeko confirms that fruits make the uric acid soluble. The flavour and aroma of the fruits are due to containing ethereal compound and volatile oils. They are fresh products of nature and supply nutrition to the body. Persons who are heavily built, go out of breath on slight exertion should essentially live on fruits excluding all other diets from their list for the reduction of their weight and the acquirement of energy. Oranges, Apples, Pomegranates, Pine-apples, Grape-fruits, mangoes are fruits of first order and contain enough vitamin to supply vital fluid to the body. A person on keeping fruit-diet

should surely lose his weight owing to the fact that the fruit cleanses the foreign materials out of the body and eliminates the waste stuff from the system.

I will conclude by writing something about drinks. Solids and liquids should not be combined together for, this gives the feeling of heaviness to the stomach. Liquids should be taken at least at 1 hour interval of solids. Liquids ought not to be swallowed all at once but should be taken by sips. One coming from hot climate and, being tired up feels much thirsty and drinks enough quantity to one's heart's content and this produces a sort of choking feeling after sometime but instead, to relieve his thirst, he should drink it very slowly and gargle some amount of water before swallowing to his benefit. Liquids flush the system thoroughly and activate the kidney, by establishing the free flow of urine. One should drink at least 2 seers of some fluid in 24 hours; human body is composed of about 75 % of water.

We should not run to work immediately after meal for, by so doing the stomach gets dilated and the person feels cramp like pain in the abdomen which is relieved on hard pressure. One should observe a certain period of rest after principal meal.

In the 3 stages of life the following doctrines of diet are to be observed carefully.

- (1) In the first 25 years *i.e.*, the period of rapid growth and development — tissue building proteid foods such as meat, egg, cheese, pulses, nuts can be taken.
- (2) In the next period *i.e.*, adult

life—Energy producing foods (calories) present in fats preponderate.

(3) In decline of old age, bland diets like carbohydrates are essential.

## CONSTIPATION

BY

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CONSTIPATION is one of the common diseases which are eating into the vitals of modern men.

If we study Nature we find that the crow enjoys a long life. We scarcely see it dying. It passes the excreta oftentimes because it has got no large intestine for the accumulation of the same and it is a well-known fact that we are careful to pass under the tree where the crow sits.

It can be easily understood from the complications which arise from constipation that how important it is to have a thorough cleansing of the intestinal tract in order to enjoy a long life. The Hindu yogin cleanses his alimentary canal by taking plenty of water and then drawing air inside.

By constipation is meant 'delay in the passage of the contents of the intestine'. The stools may be hard or semi-solid in consistency but not well-formed.

The most common cause of constipation is the neglect to the call of nature. This negligence is due to the hurries and burries of modern life. In practice we find it a common complaint with the young ladies who are too shy to attend to the call of nature.

Besides this, muscular weakness of the intestines and irregularity in diet will also make one a victim to this fell

disease. A diet which leaves too much residue causing spasm of the intestine or which leaves too little residue will cause constipation.

Weakness of the abdominal muscles due to obesity in males and repeated pregnancies in the females are amongst other causes.

The victim of constipation suffers from lassitude, mental depression, headache, loss of appetite etc. Owing to his foul breath, his presence is not welcomed by others. Thus life becomes a veritable burden to him and loses all its charm.

Habitual constipation will make the sufferer a victim to serious diseases like piles, appendicitis, intestinal obstruction, and even ulceration and perforation of the intestine. It is also a cause of painful menstruation in the females.

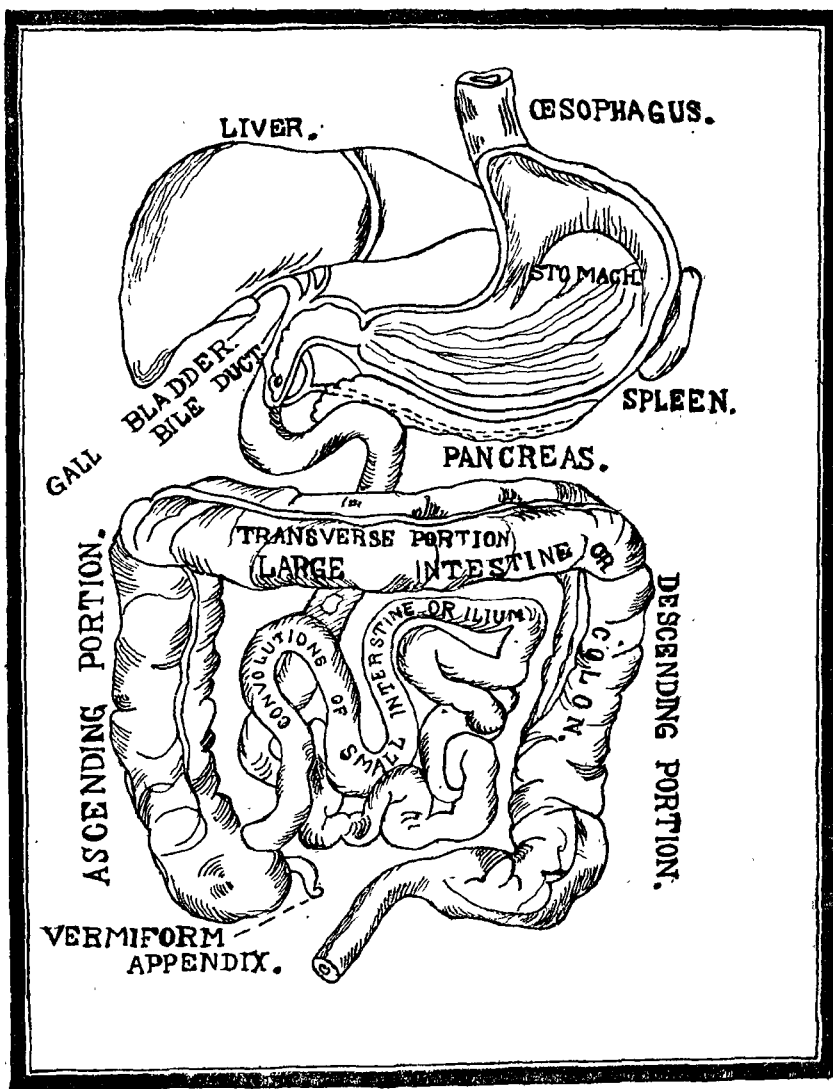
'Prevention is better than cure'. One should always be on the guard that he may not fall a victim to this fell disease. It is distinctly clear that constipation is the outcome of the breach of natural laws. A man of regular and temperate habits will never contract it and will enjoy a healthy and cheerful life.

It is also important to learn how to get rid of this evil. Constipation is mostly a disease of habit and we

must depend to a great extent, on nature for its cure. The sufferer should first of all rectify his habits. He should perform natural functions at a fixed hour everyday even if there is no desire, which habit he will

Lying prostate in bed and sitting up alternately is a good form of exercise which every one can practice in his own bed.

Diet is to be regulated. In this respect the intake of vegetables and



*The organs of digestion.*

gradually acquire. A glassful of water at bed time and after rising in the morning will be of much help to him. He should take exercise to relieve the atony of the abdominal muscles.

laxative fruits should be considerably increased.

The market is full of the so-called purgatives and laxatives and the patient tries one after another till he is dis-



appointed and seeks the help of different physicians for better prescriptions.

The course of treatment mentioned below has been found to be of great help to the patient and will lead to the natural course of movement of the bowels. It will certainly give him relief if tried along with hygienic and dietetic measures.

The course of treatment is as follows :—

	Morning.	Noon.	Evening.	Night.
1st Week	A teaspoonful of mag-sulph in a tumblerful of water.	4 teaspoonfuls of liquid paraffin.	A teaspoonful of mag-sulph in a tumblerful of water.	4 teaspoonfuls of liquid paraffin.
2nd Week	Do	Do	Nil	Do
3rd Week	Do	Nil	Nil	Do
4th Week	Nil	Nil	Nil	Do

From the 5th week the bowels will move naturally and the patient will soon regain health and vigour. Instead of being a burden, life will become a blessing to him.

## INFANTS AND THEIR FEEDING

BY

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"IF we follow nature we cannot err" is well weighed and said by a great author. Further it has been rightly said that, "we should eat to live and not live to eat." These maxims or wise words as we may call them of experienced personages, should be borne in mind especially in the case of the feeding of children. The well-being of individuals depends on their right feeding during childhood—I mean in infancy, and a sickly and an unhappy member has only to thank its parents and not the stars for its deplorable plight.

Modern fashions and fancies can be mainly attributed to the wrong feeding of infants and the sickness amongst them, since they are not naturally fed but artificial feeding is resorted to. The mother who immediately after the birth of the child leaves it to the care of a maid, herself busy at her toilet day in and day out, not even feeding

the baby on her breast lest it should detract her beauty, and attending with a quasi-knowledge to sewing and knitting, brings only ruin on herself and her infant. We often hear and see mothers taking pride in saying during their post-prandial orations that their children were fed on so many times of such and such a milk and even the mother with her breast fed healthy infant, droops her head and looking askance would say that she too fed her baby on tinned foods, lest she should be considered behind the times.

"'Twas a sage said it and the sayings good  
The mothers milk's the only wholesome  
food."

Nature has provided food for the infant in its mother itself. The infant requires food in various combinations and quantities as it grows and so also nature has provided several changes in the composition and amount of milk to suit the needs of the growing infant

in its mother. The milk of one woman will not suit a different baby unless the age of the infant is the same as that of the other. Hence in choosing wet nurses this factor is taken into serious consideration.

If mothers are made to understand the advantages derived to them and their children of their breast feeding, they would not shirk to do so. The reason for this is, the expanded uterus has to take its own time to contract and suckling would stimulate process of reduction to its normal condition.



*One mother fed Baby=23 artificially fed Babies.*

The wrong feeding of children is the main cause of their sickness and death. Money is no consideration in the feeding of infants. The child in wealthy homes is liable to be wrongly fed as the one in a poor home. A study in the right direction on food composition, its value and the patience with which it is put into practice is what is required of every right thinking parent.

For infants, mother's milk is the best food and if for any reason this milk is not available or advised, the next best would be cow's milk. There

is however no substitute for mother's milk but cow's milk with careful additions and care can be brought to the level of human milk. Milk coming from a particular animal varies in composition and is best suited to its own young as intended by nature. Such milk would be free from contamination coming as it does direct from the udders. Animals which grow rapidly produce milk richer in proteins and salts. Taking the rabbit, the calf, and the infant which grow rapidly in their respective order, we find that mother's milk of the first contains more protein and salts than the second, the second more than the third. Human milk contains only 1.5 per cent of protein and 0.2 per cent of ash. It is stated that the milk of the dolphin which is exposed to great cold contains 46 per cent of ash and that of the ass 1.4 per cent since its young is protected by a thick, warm coat from cold.

Goat's milk is used by some in the feeding of infants, and in Switzerland it is stated that this milk is extensively used. Goat's milk has certain advantages in that it produces greater quantity of milk, the goat can be purchased at a low cost, its feeding does not cost much and that it is within the reach of one and all. The important factor is that goats are said to be immune to tuberculosis.

Asses' milk is also used in certain countries. The carbohydrate and protein contents of this milk are the same as that of the cow's milk but there is much less of fat. Asses yield smaller quantities of milk than cows and it would be costly to go in for them. Asses are also said to be immune to tuberculosis,

If either the mother or the child show any indications of the undesirability of breast feeding, it should be discontinued and feeding either on a wet nurse or artificial feeding should be resorted to.

To have wet nurses is very expensive, although it is the best substitute for the milk of the child's own mother. With the modern improvements on artificial feeding, breast feeding, it may be stated, has become obsolete.

*(To be continued.)*

## BANANAS. ARE GOOD FOR YOU

BY

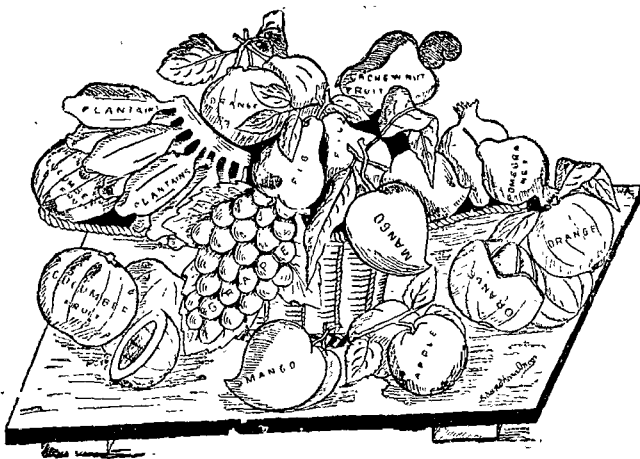
E. W. MELSON.

FRUITS generally contain very little body building or energy—producing materials and are chiefly of value for the vitamins and mineral salts they contain. The banana is an exception to this rule, and is a valuable food as well as a body regulator. “It is well to bear in mind in the case of the banana,” say Drs. Myers and Rose, “that its caloric value is very high, in fact, higher than that of any other common fruit in its natural state. Furthermore, bananas may

sugars, of which the easily assimilable forms dextrose and levulose form the major part. Its starch content is about 1.3 per cent; protein, 1.3 per cent; and fat 0.6 per cent. The percentage of mineral elements is 0.8 per cent.

Dr. Walter Hollis Eddy thus explains the significance of these elements:

“The high water content makes this fruit a valuable insurance against over-consumption of cold drinks in hot weather. It also supplies a satisfactory sweet without the



*Fruits contain varieties of vitamins in abundance.*

be readily obtained at any time of the year, and at a cost per caloric value about half that of other fruits.”

In numerous analyses of the edible portions of the ripe banana by eminent authorities, this summary of its constituents is presented. The pulp contains about 75 per cent water; 22 per cent of

danger of excess sugar. Its caloric value lies mainly in its carbohydrate content. Of the 100 calories provided by three ounces of banana pulp, eighty-eight are furnished by the carbohydrate.

“The banana's low protein value is an asset in certain ways, permitting us

to increase calories without adding excess protein and weight. It means, however, that we must not rely on the fruit to supply this element. While the fat content of the banana is negligible as a source of calories, it is important as a holder of the fat soluble vitamin A, for which the fruit is a valuable source.

"The proportions of minerals are more significant than the actual amounts. The preponderance of calcium and magnesium over phosphorus makes the ash alkaline in reaction, and combats tendency toward acidosis. The use of bananas helps to combat the acid tendencies of meats and cereals in the diet. Its iron content, though small, exceeds that of any other fruit except strawberries. And its cellulose is an excellent natural roughage for ameliorating tendency to

constipation."

In addition to its high content of vitamin A the banana also contains vitamin B in moderate amounts. In this respect the banana has proved as potent in the prevention of beri-beri as the tomato. Its vitamin C content is about equal to that of the orange and the tomato, so that it can be used instead of either of these as an antiscorbutic. Vitamin E is present in perceptible quantities, but vitamin D, the anti-rachitic vitamin, is absent, and must be supplied by some other fruit or cod-liver oil.

The digestibility of the banana is largely a matter of ripeness. When the tips are green, cook or keep them for a few days at room temperature to ripen. They are ready for eating when all yellow, and are specially good when brown flecked—*Good Health*.

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## GROWING FAT AND OLD

BY

DR. J. A. FELTON.

THE average woman, in personal appearance, is at her best between the ages of 16 and 20. Most of them are at their best in physical fitness between these ages.

Then the beautiful, trim, active girl of 20 gets married, and within a few short years her weight has increased 20 pounds or more, lines begin to appear in her face, aches and pains begin to irritate her body, and by the time she is 40 she is an old woman, and appears almost like a feather-bed with a string around the middle.

It is unnatural for woman to degenerate in this rapid manner. It is due to the faulty care she takes of her

body. She does not know the first lesson of living existence, and simply follows the course pursued by women in general. This is the course that carries them down to degeneration, decay, and early death.

The one big factor that makes any woman look middle aged is fat. Some women never seem to grow older, and we notice that they are the ones who keep their slender, youthful figures. They keep their youthful vim, vigor, and vitality.

Fat is the foe of beauty, the hallmark of middle age, the instrument of early decay. Fat is the result of excessive eating, of eating wrong food, of lack of

exercise, and failure to observe other rules of health.

It is easy to remove this unsightly and degenerative fat. The best and safest remedy is a diet of raw fruits and raw vegetables, eaten without seasoning of any kind, and nothing to drink but water. The water must be pure rain water or distilled water.

Follow this course a few months and watch the degenerative fat disappear. Also observe the improvement in your health. The skin will grow clear and pink, the eyes will brighten and glitter, the foul breath will sweeten, the step will become elastic and springy.

If you want to rejuvenate your body, get out in the fresh air, take plenty of exercise, drink nothing but pure rain water or distilled water, eat only raw fruits and raw vegetables without seasoning, go to bed early and get all the sleep you can, and in a few months you will be delighted with your physical and mental improvement. For what improves the physical also improves the mental.

Speaking of sleep reminds us of the fallacy usually taught, that a person should sleep so much and no more. For instance that eight-hours sleep is sufficient for an adult, and that more is harmful.

As taught in Advanced Orthopathy, the great repair work of the body can occur only during the hours of slumber. That is what sleep is for; it is to give the body an opportunity to repair the wear and tear resulting from physical and mental activity.

No person should be required to arouse from his slumber by the signal of an alarm clock. Every person should be allowed to sleep until he

awakens of his own accord. For the wear and tear of the body, suffered from the activity of the previous day, is not fully repaired until the person awakens of his own accord.

It is the body's need of repair that causes sleep to come upon us. It is a signal that the repair work has been completed when we awaken of our own accord.

The person who labors diligently all day, goes to bed at night utterly exhausted, quickly falls asleep, and sleeps like a log. Then it is that the machinery of the body is busy performing its repair work, and putting the body in shape for further service. The repair work is not completed until the person awakens of his own accord, and he should not be aroused before that time.

The medical world entirely disregards the natural needs of the body. Eat regularly, three times a day, whether you are hungry or not. And yet, hunger is the only rule to be followed in eating, no person should ever eat when not hungry. The very best food, eaten when a person is not hungry, is a poison to the body.

Then you should drink eight or ten glasses of water each day, whether you are thirsty or not. Why? To cleanse the body and flush the kidneys says the medical world. But cats and dogs and horses and cows never do this, and they have fairly good health—better health than humans have.

Water drunk when a person is not thirsty, simply means extra work for the kidneys, in filtering the surplus water from the blood and passing it off through the bladder. This extra work

does the kidneys no good, and this extra water does the body no good.

Try giving your body a chance to perform its own work, and listen less to the teaching of a profession, whose members head the list in poor health

and early death. Do not follow the teaching of a profession whose members suffer just as much as do their patients, and from the same ailments, and whose average life-span is just as short, and even shorter.—*How to live for Health and Strength.*

## THE SIGNIFICANCE OF THIRST.

THE sensation of thirst is referred to the mouth and throat. Like hunger, thirst is primarily due to changes in the blood. The blood normally contains seventy-eight per cent of water. This percentage is decreased by the addition of solids, such as chlorid of sodium, sugar or the products of digestion. Water is demanded to restore the blood to its normal state. This nice balance between water solvents and solids in solution is maintained by an automatic mechanism, and thirst is the signal of the necessity for adjustment.

When water is absorbed into the blood, any excess is at once removed by the kidneys or skin. The volume of the blood, as well as its composition, is automatically regulated. A copious intake of water prompted by the sensation of thirst is almost immediately followed by an output of water through the kidneys or skin.

It is well known that thirst is induced by profuse perspiration resulting from exercise or exposure to heat, by the use of food containing considerable quantities of salt, and by the use of alcohol and various other drugs. Fever also creates a demand for water, which is now recognized to be essential as a means of aiding Nature in her efforts to bring about recovery, al-

though less than a century ago the free use of water by fever patients was forbidden. At the present time, water externally and internally is recognized as, next to rest, the most important of all means of combating fever.

Cannon has shown that thirst is due to a relative dryness of the mucous membrane of the mouth and pharynx resulting from a suppression or a diminution of the secretion of saliva. This may be the result of excessive perspiration or urination, or of diarrhea, as well as of deprivation of water, or the excessive use of salt. The sensation of thirst may be considerably relieved by moistening the mouth with water even though none is swallowed. Pack has shown that salivation produced by giving pilocarpin destroys thirst in rabbits that have been deprived of water for seven days.

Persons who suffer from auto-intoxication and whose tongues are usually thickly coated, are particularly likely to neglect water-drinking, greatly to their detriment. Such persons often do not experience the sensation of thirst except when a great loss of water occurs through vigorous perspiration.

The lack of appetite for food, very common in such cases, is very frequ-

ently accompanied by lack of thirst, even when the need of water is as great or even greater than the need of food. The absence of the thirst sensation may be due to a sort of paralysis of the thirst centre, just as the lack of hunger may possibly result from a like failure of the hunger centre. In such cases, the patient must be required to eat, even though he feels no desire for food; and in like manner he should be required to drink freely, even though the sensation of thirst is not experienced. Since it is sometimes very difficult to induce the patient to drink any considerable amount of water at any one time, he should be asked to drink small quantities, from an ounce to three or four ounces, very frequently. An ounce every twelve or fifteen minutes, or four or five ounces every hour when not asleep, will not exceed the needs of the body.—*Good Health*.

### ORIENTAL SAMSONS.

NOWHERE in the world are such prodigies of strength to be found as in Oriental and Near-Eastern countries, among people who live almost exclusively upon plant products. The strongest and most enduring animals are plant feeders, from which fact we should naturally expect the same to be true of human beings. The elephant, the hippopotamus, the bison, the rhinoceros are all animals of prodigious strength, and only the gas fed automobile can compete with the wild horse in speed and endurance, as shown by Roy Chapman Andrews in his wonderful moving pictures of his experiences in Mongolia.

In Smyrna, many years ago, the writer saw a Turkish hamil or porter marching down the street with a pyramid of trunks on his shoulders that would have been a full load for a Ford truck. And he did not shuffle along as though over-burdened, but easily kept pace with the throngs of men and animals moving along the crowded street leading from the pier.

In Biskra, an oasis in the Sahara Desert, the site of the famous Garden of Allah, I saw incredibly huge loads of dates balanced on the broad shoulders of the porters. I paid a porter 10 francs (40 cents) to allow me to weigh his load. An ancient and very primitive but accurate weighing machine was hunted up and the weight was found to be over four hundred pounds.

In Tunis, I saw a sturdy mountain Arab who had been raised on a diet of camel's milk, wheat and green vegetables, rise from a crouching position and start off on a trip to a neighboring ware-house with a bale of silks on his back which bore an official weight stamp of six hundred and sixty pounds.

Oswald, for many years a close student of the racial and individual effects of dietary habits, tells us that "A gardener in the terrace-lands overhanging the lake of Janina, will make his way to the water's edge with a wooden tub, resembling a pepperbox in shape, and a beer barrel in size, and return to his uphill plantation with a load of

water, which not one of a thousand western farmers would undertake to move along a level road, without the aid of a horse and cart. On the cattle-market of Adrianople, rustics can be seen, carrying along two fat sheep, tied together by their hind legs, and hanging down left and right from the carrier's broad shoulders, like two huge sacks; and the 'longshoremen frequenting the wharves of the Golden Horn often astonish their foreign employer by shouldering a fivehundred-pound box of dry goods, as our roustabouts would shoulder a bag of wool. On his way to the merchant's warehouse the loaded porter does not stagger; he does not pant or fidget under his burden, but walks along complacently, kindly chatting with the little boy who brings up the rear with a smaller box, or even disengaging a hand for a moment, to fumble for the address card in his capacious breast pocket.

"And the muscles of that paradoxical biped have been developed on a frugal, almost exclusively vegetable diet, although the term vegetable in our green-grocer's sense of the word, would hardly be the right term. Our Turkish porter does not care much for cabbage and string beans. A compensation of four *piastres* (about forty-five cents) will keep him at work steadily from 8 a.m. to 4 p.m. relying for his noonday lunch on such scraps of bread or dried figs as he may fish out of his pockets. But an hour before sunset, he has reached his little cottage in the suburbs, and after changing his heavy jacket for a linen blouse, he sits down in the shade to a meal of rice and butter, sugar (eaten in lumps like candy), bread, dates, figs

and grapes, washed down with cold, slightly sweetened water, and on luck-days, perhaps, a sip of black coffee. . .

"In feats of bodily, agility, the Hindoo vegetarians stand unsurpassed and unrivaled. At the fair of Hyderabad, Victor Jacquemont saw a native juggler run at full speed *on his hands*, keeping his feet straight up in the air, and maintaining his balance without any apparent effort. Another clambered up and down a long pole that stood free on a stony pavement, without any other support than the manipulations of the climbing performer, who at once counterbalanced the swaying of his frail support by turning the preponderance of his own weight to the other side. Captain Burton speaks of an old Hindoo athlete who leaped over three elephants standing side by side, and on his descent from his aerial excursion, landed on his feet with the gracefulness of a ballet dancer. 'Why, that's nothing!' said the old fellow, in reply to the traveller's compliments; 'there is many an older chap who would do that for half a rupee. You ought to have seen me jump when I was thirty years younger'.

"Abstinence from flesh food is observed with a degree of strictness that would have amazed our fasting forefathers, who considered fish a perfectly legitimate article of Lenten fare, and according to the satire of Erasmus, were apt to mistake seals for fish, and otters for seal. The prohibition of flesh food, according to the Brahminic commentators, extends to mammals, birds, fish and insects. 'Harm nothing drawing the breath of life,' is a precept which tens of millions observe in its strictest sense."—J. H. K.



## THE MID-DAY MEAL.

**T**HE mid-day meal should be the principal meal of the day. The practice of taking the heaviest meal in the evening is not good. One reason for this is that the stomach, together with the other organs of the body, is tired at the end of the day, and it is a well-known fact that fatigue hinders digestion. Also it is most unwise to eat heartily within four or five hours of retiring.

There should not be more than three meals per day, and these should be taken approximately as followed, breakfast, 8 A. M., dinner, noon to 1 P. M., tea, 5 to 6 P. M. If this timetable is followed, a healthy stomach will empty itself after each meal and probably have a short rest before the next one is introduced. This is a most important point.

The fault to be found with most dinners to-day is that there are too many courses and mixtures. This weakens the stomach and is in itself a great cause of indigestion. A sensible dinner should consist of not more than two courses. For the first, two vegetables and a moderate amount of protein are suitable. The latter may take the form of eggs, peas, beans,

nut-meats or other vegetarian preparations such as roasts containing lentils, etc. A suitable second course is the usual sweet or pudding, but this should not be heavy or rich.

An important point to notice here is that it is not advisable to finish this meal with fruit, especially the acid variety. The alkaline salts of the vegetables form with these a bad combination. The best time to eat fruit is at breakfast, or it may be taken at the evening meal.

On no account should tea or coffee be taken after dinner. This is of special importance when flesh-foods are eaten. Tea and meat form a combination which will ruin even the healthiest stomach in time. This practice is common to-day and is undoubtedly responsible for a large proportion of the endless number of gastric complaints one sees everywhere.

Thorough mastication is, of course, important for good digestion, while pleasant thoughts and laughter are a great aid. No meal, especially a heavy one, should be followed either by heavy exercise or sleep. Severe mental exertion is not good.—D.A.R.A. *Good Health.*

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## HEALTH-TIT-BITS.

**Apple Peelings Rich in Vitamin C:—** Don't discard the apple peelings. They hold the greatest proportion of the precious vitamin C.

Of the six hundred odd edible fruits which the earth produces, the apple unquestionably stands at the head. American horticulturists have brought this wonderful fruit to a state of

development in variety and quantity which leaves it without a rival as a dessert fruit.

In nutritive value the apple is inferior to the date, the fig, the avocado and many other fruits, but its rich store of vitamins B and C give it a high dietetic value.

Recent studies of the vitamin C con-

tent of apples at the Lister Institute of Experimental Medicine, London, England, have shown that cold storage, for five months at 37.4°F. does not impair the vitamin C content of the apples.

Another observation by the same investigators showed that the vitamin C of the apple is concentrated in the peel. This part of the apple was shown by Zilva and Bracewell to contain six times as much vitamin C as the flesh of the fruit near the core. In peeling the apple in the ordinary fashion, its most valuable part may be thrown away. The peel may be eaten if care is used to chew it well so as to break it up into small bits. If it is discarded, pains should be taken to remove only the thin, waxy pellicle, as the best part of the apple lies next the rind.—*Good Health.*

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**A Simple Method of Relieving Itching.**—Complete and almost instantaneous relief from skin itching or irritation as well as in ivy poisoning, may be obtained by intense hot applications. The heat must be very intense, hot enough to cause blistering if continued long enough. The applications must be very short, a fraction of a second repeated at intervals of two or three seconds. The source of heat may be cloths dipped in hot water or hot water (130°F.) splashed upon the parts held over a bathtub.

The relief usually lasts for some hours if care is taken to protect the affected surfaces from the air by covering or applying some simple ointment.—*Good Health.*

A laugh is just like music,  
It freshens all the day.  
It tips the peaks of life with light.  
And drives the clouds away;  
The soul grows glad that hears it,  
And feels its courage strong—  
A laugh is just like sunshine  
For cheering folks along. —

*American Medicine.*

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**Our bodies.**—To the average urban American, the body is a lump of flesh to be deposited at a desk at nine in the morning and taken home again at night, bundled up in overcoats, laced into shoes, and poured into stiff shirts. The nerves and the mind (such as it is) make all the decisions, run all the races. The body, battered into insensibility by the unrelenting pressure of noises, sights, and smells, drags through the days and sinks at night into a sleep of exhaustion that eight years, let alone eight hours, could not wipe away. The Victorians, in their most prudish days, never achieved a more complete separation of body and mind than modern city civilization has unwittingly produced. The urban American is never aware of his body until it gets sick and causes pain. The play of muscles, the satisfaction of controlling and using a delicate, coordinated physical machine—these are pleasures quite remote from the temper and tempo of our life. And D. H. Lawrence was not mistaken when he told us, in no uncertain terms, that even the sex life of moderns is a mental affair. It has more to do with the theories of Freud than with the satisfaction of physical

emotions. The fact that we have made no provision for allowing the body to function as it should does not mean that we have done away with the need for it. Since we have no time for any pursuit which does not pay a living wage, those of us who are not professional athletes must get the pleasure of physical control vicariously, through watching the acrobats who crowd our vaudeville stages or, more rarely, the dancer who uses his body as a medium of art as well as a physical machine.

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The body, as a friend of the Drifter's recently remarked, is all we have. To have created a civilization which is inimical even to mere physical health, not to mention the more subtle satisfactions of physical expression, is surely one of the less amusing ironies in the history of human achievement.—*The Nation*.—*Thro'—Medical Times and Long Island Medical Journal*.

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**Music as Medicine.**—For some time hospitals for the mentally ill have been employing various forms of music to amuse and soothe patients, but it is not until very recently that other hospitals have come to consider music as a prescription or as a curative agent. As far back as the thirteenth century the Arabs equipped their hospitals with music rooms. Also the ancient Greeks were strong believers in the curative properties of music. It is said that Hippocrates, "father of medicine," took his mentally disordered patients to the Temple of Æsculapius to listen to music. That was as far back as 400 B. C.

According to Charles M. Diserens,

who has summarized the results in *The Reader's Digest*, music increases or diminishes muscular activity, increases bodily metabolism, accelerates respiration, stimulates or retards heart action, stirs the emotions and influences internal secretions.

Perhaps the most notable work in the application of music in hospitals has been done by Mr. William van de Wall, Dutch psychiatrist and musician, in mental hospitals in the East. He feels that music not only affects the body but through some mysterious power of association awakens the soul. Music is being used to good advantage, too, in treating tuberculous patients. The report states that, indirectly, music has increased the chance of recovery and has become a real adjunct in the treatment of disease. St. Mark's Hospital, New York City, went a step farther in the application of music. Inspired, perhaps by the old Swedish surgeon who had the habit of singing to his patients before and after operation, St. Mark's employed a musical accompaniment for operations performed with local anesthetic on both adults and children.—*Hosp. Top. and Buyer*, December, 1930.

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**Increased Growth of Under weight Children secured through use of Wheat-germ.**—Drs. A. F. Morgan and M. M. Barry, Barkeley Calif writes in *American Journal of diseases of children* that they used the wheat-germ in children of under-weight from 11 to 13 years of age and the growth in weight, height and certain other physical measurements were observed. They used in their experiments three ounces of rolls made with 50% of wheat germ

and 50% of white flour in the experimental group for each child. The control group had usual white flour rolls. The weight increase in the experimental group were about three times as great as the control ones. As to increase of height certainly it was more in the wheat-germ group. "Alveolar carbon dioxide tension was observed to be increased in the children who had wheat-germs, which might have been due to the diminished acidosis following increased food intake. The significance of these observations is discussed in relation to the recent discovery of multiple nature of vitamin B and of the poverty of major foods, fruits, vegetables, milk and meat in the antineuritic substance (Vitamins B. BI. F.) The importance of whole cereals, but more particularly of grain embryos, such as those of wheat and rice as a possible source of this vitamin is pointed out. The probable relation of the decrease in vitamin B content of the modern diet to decreased appetite in children, nervousness, constipation and possibly other gastro-intestinal disturbances is also discussed."—*Per J. A. M. A. Vol. 94, No. 24, 1930.*

(It is interesting to note here that long before these scientific observations were made it is customary with the Hindus to offer germinating grains daily to their Deities after which they distribute and take it as 'Prasad')—*Advance Therapy.*

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**Walking Behind a Plough.**—While to some walk in the country is "an end in itself" and enjoyable for its own sake, there are others who need the incentive of some recreation, such as athletic sports, or work that accomplishes something, to make their outdoor exercise enjoyable enough to be beneficial. Tolstoy found one of his most delightful recreations in walking behind a plough.

"You cannot conceive," he says, "What a satisfaction it is to plough. . . It is not hard work, as many people suppose; it is pure enjoyment. You go along lifting up and directing the plough, and you don't notice how one, two and three hours go by. The blood runs merrily through your veins; your head becomes clear; you don't feel the weight of your feet; and the appetite afterwards, and the sleep!" —*Extract from Good Health.*

#### A CORRECTION

In our Editorial of last month we said "Four District Boards, Vizagapatam, Krishna, Chingleput and Bellary maintain portable cinema outfits for Health propaganda". We now understand that the Nellore District Board has also been maintaining a cinema lorry for the last 1½ years and every month not less than fifteen cinema demonstrations are shown in the village parts, at which films on hygiene, agriculture, and veterinary science are exhibited. Between 1000 and 2000 villagers, we are told, attend each show.