

The Sanitarium Bath and PPR **Treatment Rooms**

ELECTRIC LIGHT BATH. RUSSIAN BATH. ELECTRIC TUB BATH. MEDICATED BATH. SITZ BATH. NAUHEIM BATH. SHOWER BATH. SPRAY BATH. GRADUATED BATH. NEUTRAL BATH. FOMENTATIONS. BLANKET PACKS.

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SHEET PACKS. PERCUSSION DOUCHE. FILIFORM DOUCHE. ALTERNATE DOUCHE. REVULSIVE DOUCHE. PHOTOPHORE. MASSAGE (general), MASSAGE (special). SCHOTT'S RESISTIVE MOVE-MENTS. SWEDISH MOVEMENTS. ELECTRICITY

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ELECTRIC LIGHT BATH

This is nature's blood purifier. It has been found of inestimable advantage in dealing with all classes of chronic invalids. Its chief theraneutic value is not so much in its eliminative effects as in its influence upon the sirculation. Under the influence of a general electric light bath, the skin is filled with blood. The sweat glands are stimulated, and they throw off toxic matters from the system, thereby influencing the general metabolism The complete filling of the skin with blood removes the congestion of the liver, stomach, spleon, and other internal organs. This relief is made more or less permanent by the fixation of the blood in the skin, affected by the cold application which always follows the electric light bath.

HYDRO-ELECTRIC BATH

The patient lies in a tub of water at a given temperative. This water is charged with a graduated current of sinusoidal electricity, the effect of the sinusoidal current being stronger than that of any other. The effects of this bath is that of improving the nervous and circulatory functions. This is a splendid bath for relieving the nervous symptoms brought on through over-work.

RUSSIAN BATH

The patient is placed in a room filled with vapour; in cases of pulmonary disease, the vapour is medicated. This is a good eliminative measure, stimulating the action of the skin and relieving the body of accumulated poisons. It is of especial value in overcoming a cold in the head, throat, or lungs, also in bronchial and rheumatic affections.

50, Park St., Calcutta

HERALD OF HEALTH

H. C. Menkel, M. D.,

Editor

The Health Movement

WE are to-day witnessing a world-wide movement for the improvement and preservation of health, and the consequent lengthening of human life. The average span of life in India is twenty-five years; in America and Europe, forty-five to fifty years. But there is no need that the length of life in India should be only half that of Europe and America.

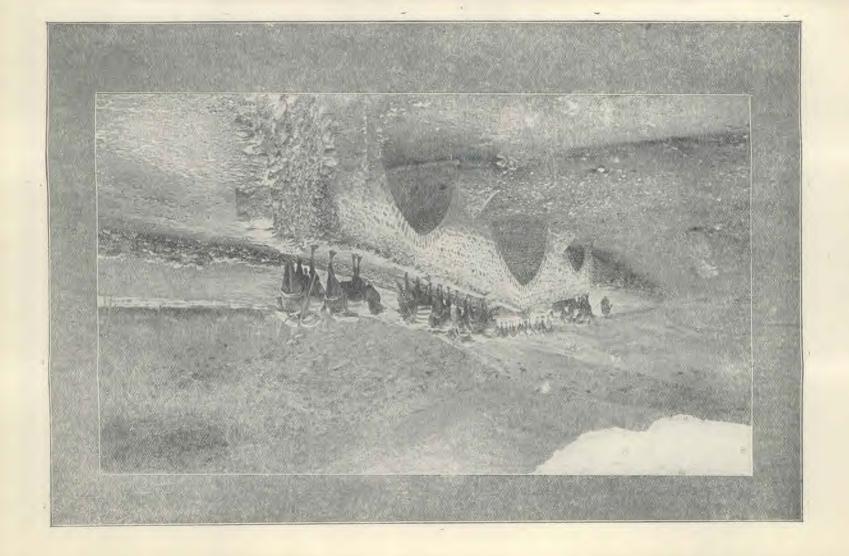
If the present knowledge of personal and municipal hygiene were put into universal practice it would revolutionize many of the habits now prevalent that are undermining the vitality of the Indian people, and result in prolonging the average life of this generation about fifteen years. But to accomplish this, it is necessary that the upper classes take the initiative; for society is largely governed by customs that grow out of imitation. To free the masses from causes responsible for preventable diseases, such as cholera, malaria, tuberculosis, bowel troubles, typhoid, and pneumonia, they must be shown the example of personal and domestic hygiene by their leaders, and a public sentiment must be created that will favour enforcing legislation on matters of public hygiene.

The pure food question is perhaps now uppermost in the public mind, due to the recent epidemics of disease that have been traced to bad rice, adulterated oils, diseased meats, contaminated milk, etc. We need a far better protection against an impure food and water supply; but legislation not too far in advance of public sentiment is required.

The daily ration that is almost universally followed throughout India is very good, consisting of grains, dhal and oil, with the addition of vegetables and fruit, thus furnishing the necessary food elements from the very best sources. But this food is frequently so prepared by frying, cooking in ghee, and mixing with irritating condiments as to render it most difficult of digestion. It also produces serious derangement of the digestive glands. This can best be remedied by instruction in the more wholesome methods of preparing foods.

The art of mastication has well-nigh disappeared, so that Mr. Horace Fletcher's chewing reform comes to us almost as a new revelation. Philanthropic Indian gentlemen would do well to follow Mr. Fletcher's example in establishing schools of economic nutrition.

Fresh air, day and night, is an absolute guarantee against tuberculosis and pneumonia; while sanitary premises will do most to exterminate mosquitoes, flies, and other insects responsible for malaria, plague, and bowel disorders.



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Diabetes

The Editor

DIABETES is on the increase in India, doubtless due to the increase of digestive disorders. It is not primarily a disease of the kidneys, but a condition in which the body is unable to make proper use of the starch and sugar contained in the food.

During the process of digestion, starch is converted into sugar in the mouth and intestines. In this form it is carried to the liver, where it is changed into fat and other substances, and is dealt out to the blood according to the requirements of the body. When the starch and sugar-digesting organs become disordered, especially the pancreas and liver, so they can no longer make use of the starch and sugar that is taken in with the daily meals. an excess of sugar is found in the blood and urine, and the individual is said to have diabetes. This excess of sugar in the blood diminishes its alkalinity and lowers the vital resistance of the body against disease, and is thus responsible for the frequent grave complications, such as boils, tuberculosis, etc., from which the diabetic suffers.

Diabetes is a nutritional disturbance, depriving the body of essential food elements, and placing a severe tax upon the kidneys to eliminate the undigested sugar and starch. Unless this condition is relieved, the individual will die of malnutrition or kidney failure.

Treatment

Experience has demonstrated that drugs have little or no value in the

treatment of this malady. The first essential is to remove the causes re sponsible for the digestive disturbance, as indigestion is the prime cause of diabetes. The individual must be careful not to overeat, and should discard all substances that irritate or tend to produce congestion of the kidneys, among which are alcohol, tobacco, tea, spices, and curries. Avoid all patent medicines. In fact, no drugs should be taken unless ordered by a physician.

Diet

Careful regulation of the diet is the most essential feature in the treatment. For many years the belief prevailed that an almost exclusive meat diet was indicated in diabetes, as its adoption is in most cases followed by a decrease in the amount of sugar thrown off by the kidneys. Very recent observations have, however, brought to light facts which have led many eminent medical authorities, especially in France where diabetes is so prevalent, to no longer prescribe a meat dietary in this disease. It is found that a flesh diet leads to the accumulation in the system of highly poisonous substances which produce degeneration of the heart, blood-vessels, and kidneys. Many patients also suffer great discomfort when deprived of starch-containing foods, especially bread.

Major B. D. Bose, I. M. S., in a recent work on the "Dietetic Treatment of Diabetes," calls attention to the interesting fact that many diabetic

patients in India live much longer than the same class of cases in Europe, and attributes it to their vegetarian practices and the eschewing of alcoholic beverages.

The vegetable albumins of dhal, peas, and beans, being much more easily digested than the animal albumins, are better adapted to the demand for an increase of proteids. They are also free from organic waste poisons, and do not readily undergo decomposition in the alimentary canal. The same is true of gluten, the proteid of wheat.

Vegetables are essential, as the large amounts of potassium and other inorganic salts which they contain increase the alkalinity of the blood.

The diabetic patient has lost the power to convert starch and sugar into fat, and therefore requires a considerably increased amount of fat in his diet. This must be taken in the form most readily assimilable, and is to be found in the natural emulsions, as cream and especially the fat juices of nuts, which are the most easily digestible of all oleaginous substances. Fats that melt at the temperature of the body, such as oils, ghee, lard, and butter, should be avoided, as well as foods cooked in them. They interfere with stomach digestion.

Nuts are superior to all natural food substances for the diabetic, possessing the following properties:-

1. They contain only an insignificant amount of starch (the chestnut excepted).

2. They contain a large amount of easily digested fats.

3. The albumins of nuts, especially of the almond and pine nut, are more easily digested than flesh meats.

French physicians have recently pointed out the fact that the potato,

notwithstanding the large amount of starch it contains, is a wholesome and highly beneficial food substance in cases of diabetes, allowing their patients to eat from two to three pounds of potatoes daily in connection with proper amounts of albumin and fat.

The following line of diet is recommended: Baked potato, nut preparations or fresh nuts, dairy cream, volk of eggs, gluten bread or biscuits, lettuce and spinach, peaches, apricots, strawberries, the quantity being varied to suit individual conditions. Water may be freely partaken of between meals.

Aside from diet, the treatment must be such as will increase the reactive powers of the body, which is best accomplished by physiological measures. Baths

A carefully graduated course of cold baths is particularly beneficial. This will increase the oxidation of sugar, encourage the liver, strengthen the heart, and increase the alkalinity of the blood. The sun bath, or, better still, the electric light bath, massage, and electricity, where available, are valuable as vital stimulants.

Exercise

Exercise is a measure of the highest value, as the active muscles consume sugar in large quantities, reducing the amount to be thrown off by the kidneys. It is important, however, in exercising to avoid the point of exhaustion. Walking and hill climbing are the best forms of exercise, covering from six to ten miles at several easy stages.

The above regime, with the careful regulation of all the habits of life under the direction of an up-to-date physician, will aid in prolonging the life of the diabetic, and often cure his malady.

HERALD OF HEALTH

How I Made Myself Young at Sixty

Horace Fletcher

("FLETCHERISM" has become a fact. Ten years ago it was laughed at: to-day the most famous men of science indorse it and teach its principles. Scientific leaders at Cambridge University, England; the University of Turin, Italy; the University of Berne, Switzerland; the University de la Sorbonne, France; the Universities at Berlin, Brussels. and St. Petersburg in Europe, as well as Harvard, Yale, and Johns Hopkins Universities in America, all indorse "Fletcherism" and teach its principles The American Association for the Advancement of Science has made Mr. Fletcher a fellow; the honorary degree of M. A. has been conferred upon him at Dartmouth. Chautauqua indorsed the movement last summer by making Mr. Fletcher its lecturer on Vital Economics. In the following article. Mr. Fletcher tells how he rescued himself from the prospect of an early grave to his present splendid physical and mental condition at the age of sixty .- EDITOR.]

Twenty years ago, at forty years of age, my hair was white. I weighed two hundred and seventeen pounds (about fifty pounds more than I should for my height of five feet six inches). Every six months or so I had a bad attack of "influenza." I was harrowed by indigestion. I was afflicted with that "tired feeling." I was an old man at forty, on the way to a rapid decline.

It was at about this time that I applied for a life insurance policy and was turned down by the examiners as a "poor risk."

This was the final straw. I was not afraid to die; I had long before learned to look upon death with equanimity. At the same time, I had a keen desire to live, and then and there made a determination that I would find out what was the matter; and, if I could do so, save my life from the threatened demise.

I began to think seriously of eating and its effect upon the health. I

argued that if nature had given us personal responsibility it was not hidden away in the dark folds and coils of the alimentary canal where we could not control it. The fault or faults must be committed before the food was swallowed. I felt instinctively that here was the key to the whole situation. The point was, then, to study the cavity of the mouth; then came the vital discovery, which is this: I found that each of us has what I call a food filter, a discriminating muscular gate located at the back of the mouth where the throat is shut off from the mouth during the process of mastication. Just where the tongue drops over backward toward its so-called roots there are usually five (sometimes seven, we are told) little teatlike projections placed in the shape of a horseshoe, each of them having a trough around it, and in these troughs or depressions terminate a great number of taste buds, or ends of gustatory nerves. Just at this point the roof of the mouth, or the "hard palate" ends; and the soft palate, with the uvula at the end of it, drops down behind the heavy part of the tongue.

During the actual process of chewing the lips are closed, and there is also a complete closure at the back part of the mouth by the pressing of the tongue against the roof of the mouth. During mastication, then, the mouth is an airtight pouch.

Having this brief description, please note, the next time you take food, what happens during mastication. Hold the face down so that the tongue hangs perpendicularly in the mouth. This will show how food properly mixed with saliva is lifted up in the hollow part in the middle of the tongue, against the direct force of gravity, and collects at the place where the mouth is shut off at the back, the food-gate.

It is a real gate; and while the food is being masticated, so that it may be mixed with saliva and chemically transformed from its crude condition into the chemical form that makes it possible of digestion and absorption, this gate will remain tightly shut, and the throat will be entirely cut off from the mouth. But as the food becomes creamy, so to speak, through being mixed with saliva, or emulsified, or alkalized, or neutralized, or dextrinized, or modified in whatever term Nature requires, the creamy substance will be drawn up the central conduit of the tongue until it reaches the food gate. If it is found by the taste buds there located to be properly prepared for acceptance and further digestion, the food-gate will open, and the food thus ready for acceptance into the body will be sucked back and swallowed unconsciously,-that is, without conscious effort.

I now started to experiment on myself. I chewed my food carefully until I got everything out of it that there was in it and until it slipped unconsciously down my throat. When the appetite ceased, and I was thereby told I had enough, I stopped, and I had no desire to eat any more until a real appetite commanded me again. Then I again chewed carefully—cating always whatever the appetite craved.

I had now found out five things, all that there is to my discovery and to the fundamental requisite of what is called "Fletcherism":--

First. Wait for a true, earned appetite.

Second. Select from the food available that which appeals most to appetite, and in order called for by appetite. Third. Get all the good taste there is in the food out of it in the mouth and swallow only when it practically "swallows itself."

Fourth. Enjoy the good taste for all it is worth, and do not allow any depressing or diverting feeling to intrude upon the ceremony.

Fifth. Wait, take and enjoy as much as is possible: Nature will do the rest.

The more I tried my experiments, the more fully I realized that I had found the true source of health. But I soon realized from talking to friends how futile and well-nigh hopeless was the attempt to get credence and sympathy for my beliefs, scientifically well founded as I felt they were. Fully three years passed before I received encouragement from any source of recognized authority.

Still I persisted. At last I got hold of my first convert, a medical man, sick and discouraged; a member of a family long distinguished in the medical profession. He was Doctor Van Someran, of Venice, Italy, where I had made my home, and where I now live.

In less than three weeks the sick physician found himself relieved of his acute ailments, and it would have taken several teams of horses to "pull him off the job." A little later we transferred the field of experiment to the Austrian Tyrol, and tested our endurance qualities, only to find a capacity for work that was not before considered possible. Then Doctor Van Someran wrote his paper for the British Medical Association, which excited the interest of Professor Foster, of the University of Cambridge, England, and the first ball of scientific attention was set in motion .- The Ladies' Home Journal.

Opium and Indian Children

By Annie Agnes Lackey, Superintendent Christian Orphanage, Deoghur, Bengal

For years I had heard much concerning the custom in India of feeding opium to babies; but not until last year, while engaged in zenana work, did I come to know how common and widespread is this practice. As I became intimately acquainted with Indian women of different classes, I found that nearly, if not quite, all mothers give their babies opium regularly each day.

When I explained to various mothers the evil effects of this drug on the minds and bodies of children, they always seemed surprised to hear that it was harmful, and some promised to discontinue its use; but many thought it necessary in order to prevent their babies from crying. They often said: "But how can I do my work if I do not give my baby opium?" Even in orphanages where the babies are carefully tended, if there are Indian women about, one has to be careful lest opium be secretly given them. Three cases have come under my notice where little ones were almost killed in this way.

On several occasions I visited in a home where there were twin babies. One was a chubby, healthy child, and the mother usually had it in her arms; the other, although very thin and miserable, was nearly always sleeping quietly on a cot. On questioning the mother, I learned that she did not have sufficient milk for both babies, and the favourite one was allowed to have all it wanted. This left very little nourishment for the other, and in order to prevent its crying the child was kept under the influence of or ium.

Children usually receive opium regularly until they are about six years old, and in many cases it is given until they are twelve. The following incident, related by a former zenana worker, well illustrates how common this practice is. One day, while giving a Bible lesson to a woman, her notice was attracted by a little six-year-old boy who kept yawning. She called the mother's attention to the child, but her only reply was: "Oh, he wants his opium."

It is distressing to know that through the administration of this drug by those who are ignorant of its ill effects, multitudes of innocent little ones are being ruined mentally, morally, and physically. Especially do those engaged in free dispensary work come in contact with these little sufferers. One such physician has expressed his belief that many of the cases of ear trouble which come daily for treatment are due to the effect of opium in decreasing vital resistence, and no doubt other ailments might be attributed to the same cause.

Examples of its effects upon the mental faculties are seen among coolies who in early childhood were dosed with opium. Many of these men seem unable to comprehend the most simple instructions, and the intelligence manifested in the performance of their work is scarcely above that of dumb animals.

Of the effects of opium upon the moral nature, mention is almost unnecessary; for it has long been observed that those addicted to its use appear to soon lose all finer esthetical sensibilities, and from this it is but a step to lower degradation.

With this knowledge of the effects of opium, no one can afford to lose an opportunity of warning against its use, and this can most effectually be done by zenana workers and those engaged in educational institutions.



ONE who understands the art of properly applying a fomentation is in a position to relieve a vast amount of suffering. There is scarcely a pain from any cause which cannot be relieved, to some extent at least, by its intelligent use.

The only articles necessary for this treatment are two flannel cloths, a few quarts of boiling water, and a towel. The best fomentation cloths are made

from half-woolen blankets. A large blanket will make four excellent cloths. If these cannot be obtained, any heavy flannel of sufficient size (a y ard square, at least) may be used. Cotton cloths lose the heat so quickly that they are not practical. Thick

towels may be used, however, if no woolen cloths are available.

The clothing should be removed from the part to be treated, and the patient covered with a blanket. Double one of the fomentation cloths and place it next to the body, over the seat of pain, half of it being left free to cover the wet cloth. Fold the other cloth three or four times, according to the area of the part to be treated. Usually we fold the cloth three times for the chest, abdomen, and back; four times for the spine, a limb, or the throat. Grasp the ends of the folded cloth and twist it several times, dip it into the boiling water, twist very tightly and lift out of the water. Continue the wringing by changing the ends from one hand to the other several times, then forcibly extending the cloth. If this be repeated several times, the cloth will be dry enough to prevent burning the



patient; but it must be done quickly, or too much heat will be lost. It is well to have the boiling water on an oil stove or ungiti near the patient; but if the cloth must be carried some distance, it should be protected by a towel to mini-

The Fomentation

mize heat dissipation. To adjust the cloth, drop one end and shake slightly; now grasp the loose end again and place the hot cloth over the dry one; fold the ends over, and cover with the free half of the dry cloth. In three to five minutes the wet cloth should be wrung again from boiling water and applied as before.

As a rule, we apply the hot cloth three times, making the treatment last from three to ten minutes; but it may be continued somewhat longer if necessary to accomplish the desired result,

To finish this treatment, sponge the part quickly with cold water, dry thoroughly, and oil well with vaseline or mustard oil.

If you have never experienced the benefit of this treatment, give it a trial. You will find that it greatly relieves pain in the stomach, liver, abdomen, and pelvis. It is also a splendid treatment for neuralgia and painful joints; but in these cases. instead of using the cold sponge to finish the treatment, leave the hot cloth on until it gradually cools. dry thoroughly, and protect the part with a dry flannel.

Applied to the spine, fomentations have a very soothing effect on the entire nervous system. In cases of nervous headache, the application should be to the back of the neck. If the pain is in the side of the head, apply the fomentations there. In giving fomentations to the head it is best to use soft flannels of light weight. Try treating a cold on the chest or throat with fomentations, followed by the Heating Compress, which will be described

next month.

One important advantage of this method of treatment over drug medication is that you are working in harmony with nature, actually benefiting the patient not only by relieving pain, but by establishing a better circulation the poisoned blood is drawn from the congested part and the way prepared for purer, lifegiving blood to renew the diseased tissues. Whereas, when drugs are em-

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Wringing the Fomentation

ployed as a palliative measure they usually benumb the nerve endings and retard the circulation, thus really hindering the healing processes.

Picric Acid in Burns

First bathe the burn in a solution of picric acid in sterile water, 1 to 250, until the wound is clean; then cover with gauze. Over this place a wet compress of cotton saturated in a solution of picric acid, 1 to 500 or 1 to 1,000, and cover this with oiled silk or paraffin paper. Renew this dressing before it gets dry. If the dressing is thick enough, it will not have to be renewed for twenty-four hours. Should the tissues begin to harden under the wet dressings, change to a dry dressing of 10 per cent boric acid rubbed up in finely powdered talc. Over this put gauze wrung out in sterile olive oil (the oil prevents the gauze from adhering to the wound), and cover with dry cotton and oiled silk.

The picric acid relieves the pain immediately, is not escharotic and not poisonous.

Stimulate the heart. It is also important that the bowels be thoroughly cleansed out, and then kept clean and disinfected.—*Selected*.



Soups

Soup, when appetizing and served really hot, adds very much to the relish of a dinner; and if prepared from good, nutritious material, slightly flavoured with harmless herbs instead of seasoned with irritating condiments that tear down more body tissue than the food principle in the soup can build up, is not deterimental, but a wholesome adjunct to the dietary. It is important, however, that soup be eaten slowly, allowing each spoonful to remain in the mouth a moment or longer. This stimulates the glands of digestion to secrete a digestive fluid strong in peptic power.

Soups afford an opportunity for using "left-over" foods that are in perfect condition which otherwise might be wasted. A cupful of potato, a few spoonfuls of rice, some stewed peas or beans, or a little tomato, may be combined to make a palatable and nourishing soup.

Potato Soup

Two medium sized potatoes, Three cupfuls sweet milk, One stalk of celery or one bay leaf, Two egg yolks, One-half teaspoonful butter, Salt to taste.

Pare the potatoes, and cook in very little water until tender. Rub through a colander and add the milk which has been heated. Add the celery or bay leaf, also the butter. Beat the egg yolks, gradually adding the hot milk so as not to cook the egg in hard lumps. Add the salt. Bring to a boil, and remove from the fire.

Dhal Soup

One cupful red lentils, One medium sized onion, Two cupfuls cocoanut milk, One teaspoonful butter, Two-thirds teaspoonful salt, One cupful water.

Boil the lentils in a small quantity of water. When half done, add the salt and the onion that has been sliced and browned in a little butter. When the lentils are done, rub through a colander; then add the cocoanut milk and one cupful of water, also the butter. Reheat to boiling.

Vegetable Soup

One-half cupful diced carrots, One-half cupful diced turnips, One-half cupful chopped cabbage, One cupful chopped onion, One tablespoonful rice, One cupful diced potato, Two tablespoonfuls butter, Noodles, Six cupfuls water.

Cook the carrots, turnips, cabbage, and onions together until they begin to get tender; then add the rice, diced potatoes, salt, and noodles. Cook until the potatoes and noodles are done before adding the butter.

Noodles

Beat one egg yolk, to which add onefourth teaspoonful of salt and sufficient flour to make a stiff dough. Roll very thin, fold, and roll like a jelly roll, Cut in very thin slices cross-wise and unroll, making long slender strips. Add to the boiling soup as directed above. M. P. M.



The Teething Period

Mrs. M. P. Menkel

Some of the difficult problems that confront the mother are those just before and during the teething period of her child. This should not be if the little one be normal at birth, each organ performing its functions properly. After the first week or ten days, the child begins to increase in weight from one-half to one ounce a day for the first five or six months. This emphasizes more strongly than any other factor that the child is thriving, and loss in weight or failure to gain for some weeks at a time indicates a serious disturbance of health.

A child should feel no discomfort while eating or digesting its food. Pain or colic is not natural, but generally due to gas formation resulting from fermenting or spoiled food in the alimentary canal, too frequent feeding, or improper quality of food.

When the child begins to be fretful and wakeful night after night, crying out suddenly and drawing up its legs at the same time, or if it falls into a restless slumber, cries out in its sleep, the eyes partially closed and the hands clenched, you may be certain that there are conditions which need immediate attention.

Under no condition feel that you are justified in giving a soothing syrup, which only deadens the nerves; but search out and remove the cause. By this means you may correct a comparatively small matter which, if left to

continue, might result seriously or lay the foundation for poor health in after life.

A few days ago, a mother and five children entered a compartment in a train. It was a warm afternoon and fatiguing to grown-up people; but how much more trying it must have been to the little five-months-old baby wrapped in warm flannels and shawls, fretting because of the burden and heat. Soon it was nursed into a fretful slumber, awakening in half an hour with a wail of distress, only to be quieted by feeding, this time from the bottle, the food being prepared with the water found on the train. Another half hour passed, and the mother nursed it again, the baby crying continually between feedings. This kept up until late in the night, when the little stomach revolted altogether, ejecting quantities of putrid milk. The bowels, too, began trying to throw off the poisons. The little body took this course to rid itself of deadly, putrefying material. The tired, anxious mother said she could not understand why her children had such trouble when babies, and never seemed strong afterward. Poor mother, it seemed difficult for her to realize that her method in the feeding of baby, and later her little ones two years old and up with highly seasoned meats, curries, greasy foods, and spiced cakes, was laying the foundation for lifelong suffering, if not premature death.

HERALD OF HEALTH

If the trouble lies in irregular habits, correct them. Feed the child at regular intervals, and if on an artificial food be most careful as to its preparation. There is no time when perfect cleanliness is more essential and accurateness more necessary than in artificial feeding. Follow instructions in every detail. Give accurate proportions of food, and see to it that the food is perfectly fresh. Before feeding, rinse

the clean bottle and nipple with boiling water; after feeding, rinse with cold water, followed with a thorough cleansing in boiling water, allowing the bottle to stand in boiled water between feedings. Use only boiled water for preparation of baby's food, or for drinking purposes.

If the first signs of indigestion are not recognized and corrected, serious trouble may be expected during the teething

period, beginning about the fourth month. This is especially true if the child be teething during the hot, sultry summer months. The intense heat depresses the physical vigour of a healthy child; how much more severe on one whose digestive organs are already weakened.

When the teeth begin to show symptoms of cutting, there will be an increase of salivary secretions and a slight congestion of the mouth, bu inflammation or decided functiona disturbances should not result. Should vomiting begin, dispense with one feeding and give water instead. It vomiting and purging persist, it is well to withhold all food for twelve on twenty-four hours, giving water to drink every half hour.

An enema twice a day, the tempera-



ture of the water from 100° to 105 F., is necessary to cleanse the bowels of irritating, undigested foods and poisonous germs. Especially if the child be constipated is it absolutely necessary that the bowels be moved by enema once a day. Under no circumstances should the bowels be allowed to go over twenty-four hours without performing their function. Boiled water should always be used for enemas.

Apply fomentations over the bowels after the enema, finishing with a cool or tepid sponge. Between treatments, keep the abdomen warm by protecting with either a flannel band or a flannel vest that fits snugly over the whole abdomen.

If the child has fever, a neutral bath at 99° F. is most refreshing and soothing.

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NFECTION THROUGH FOODS

THE more widely our knowledge of the bacteriology of food extends, the more is it porne in upon us that many articles of diet are liable to become the channels of infection. Recently it has been shown that the eggs laid by a tuberculous hen may contain living tubercle bacilli, and if this be true of tuberculosis it is far from improbable that many other pathogenic organisms may be able to gain an entrance into the body through the same vehicle. It may be urged that as eggs are nearly always cooked before being eaten, the risk of infection from this source is but small; but the cooking which an egg usually receives is quite insufficient to destroy the vitality of included micro-organisms. When an egg is lightly boiled the proteids of the yolk are not coagulated. Therefore, it is practically certain that any organisms contained therein could not be destroyed by the temperature to which the egg is subjected. Too much stress is often laid on cooking as a sterilizing process. It is true that there is no other method to be compared with heat for efficacy in destroying the micro-organisms of disease, but it is rare indeed that cook. ing is effected at such a temperature as tc sterilize the food. The interior of a loaf, even while it is in the baker's oven, never reaches a temperature sufficient to destroy living microbes, though the outside may be baked brown. This has been conclusively shown by enclosing within the interior of a loaf sealed glass tubes containing living germs. And what is true of bread is true also of meat, which is not subjected in the most thoroughly roasted joints to a temperature sufficient to be efficacious against diseases. Even when a joint is boiled and the water in which it is placed is kept at a temperature close to the boiling point, the interior has a much lower temperature. The mere fact that the interior of a joint is usually red is a conclusive proof that it has not reached the temperature of boiling water. Some processes of cooking are more efficacious than others, but the chances of the introduction of pathogenic germs in food are very great indeed, so great that the occurrence of sporadic cases of epidemic disease may be traced to this source.—*The Lancet.*

TEA AND COFFEE

PROBABLY tea and coffee are most universally used as drinks, but the millions who use them daily scarcely give a thought to the poisons they contain. Both will produce intoxication. Thein is the active property, and it is for the effect of this poison on the system that people drink them.

It has been found by experiment that twenty grains of thein is a poisonous dose. Tea contains from three to six per cent of thein. A teaspoonful of tea weighs a dram. There are sixty grains in a dram; hence there are three and five-tenths grains of thein in a teaspoonful of tea. A dram of tea, at least, is used for a cup. Two cups of tea therefore contain seven grains of thein, which is enough to kill any small animal like the cator rabbit; while six cups contain enough poison to make a person insensible. A smaller amount will excite the nerves, cause sleeplessness, and incite a spirit of gossip. Tea has even been known to cause delirium tremens.

The continued use of tea produces nervousness, sick-headache, disordered digestion, and a sallow complexion.

One often hears it said, "I cannot do without my tea or coffee; if I do, I am sick all day, and unable to work." This of itself is an evidence that there is something in the tea or coffee that has a powerful effect upon the system. If one goes without a glass of water or milk for breakfast, he sustains no serious inconvenience. It is said that a cup of strong tea contains more poison than an equal quantity of beer, and is more harmful.

Tannin, another property of tea and coffee, interferes with digestion by its action upon the gastric juice (one of the most important of the digestive fluids), hindering its secretion and rendering it almost lifeless.

E. R. PALMER.

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A NEW YORK PHYSICIAN ON ALCOHOL

DR. FREDERICK PETERSON, of Columbia University, in an address on "The Influence of Alcohol upon the Public Health," after a terrible arraignment of alcohol drinking as the cause of disease, insanity, idiocy, and degeneracy, said : -

" It is claimed by some that alcohol is a food. If so, it is a poisoned food.

"The discussion as to whether alcohol is ever a lood is idle and evasive of the main issue. It is not a food like bread and butter; for it has venom in it. As Professor Abel, of Johns Hopkins University, says; 'It is an easily oxidizable *drug*, with numerous untoward effects, which inevitably appear when a certain minimum dose is exceeded."

"1 have italicized the word 'drug' because it is as a drug that alcohol is now regarded by most physicians. It is placed among the narcotics and anesthetics.

"1. It is no longer considered to be a stimulant, but rather a depressant.

"2. It perverts digestion.

"3. It depresses and weakens the heart action.

"4. It decreases the capacity to do muscular work.

"5. It brings about slow, far-reaching anatomical changes, such as fatty degeneration of the heart, kidney diseases, diseases of the blood-vessels, changes in the muscular tissues and in the cells and fibers of the nervous system.

"6. Its habitual use lessens the normal defenses of the organism against infectious diseases, especially tuberculosis.

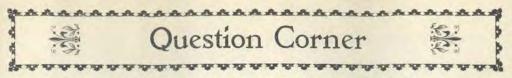
"I believe that human evolution has now reached the stage when the abolition of the use of alcohol as a beverage is expected and required. Abstinence is one of the principles of human eugebics, that new science that is just being born.

A NEW PARASITE

WE are already acquainted with the malarial parasite and the mosquito which carries it; with the dread yellow fever parasite and its host, another mosquito; with the plague-carrying flea; with the tuberculosis-inoculating bedbug; with the typhoid fly; with the tick whose bite inoculates its victim with the deadly spotted fever; with the sleeping sickness parasite, to say nothing of the trichina, which infests the pig for our special benefit; with the tapeworm, which the ox serves as an incubator: besides a host of parasitic germs too numerous to mention which produce various infectious disorders, and all sorts of skin maladies, gall-stones, intestinal autointoxication and even old age. It would seem as though we have about as many parasites as we can cope with, but here come Drs. Goldberger and Schamberg with the discovery that there is a little mite which lives in straw mattresses that produces a particularly distressing form of dermatitis, a sort of inflammatory nettle The parasite was first discovered rash. among the crew of a private yacht docked in the Delaware River, and has since been spreading among the residences and boarding houses of Philadelphia. It is not likely that parasites are multiplying. We are only finding them out, and the more we discover in this direction the plainer it will be that the only hope for us in the battle with these deadly enemies, which are for the most part quite invisible, is to keep clean and live above them. Man was intended by nature to be a king, and he should not permit himself to be trampled underfoot by bugs and fungi.-American Good Health.

APPENDICITIS

DR. CHAS E. PAGE, one of Boston's most widely known physicians, declares that he has followed the records of appendicitis operations ever since the craze started, and says: "I confidently believe that the day is coming when the people will finally realize that appendectomy—cutting off the appendix— is a criminal operation. As for the widely proclaimed benefits and saving of life by operating to cut the appendix, it seems hardly necessary to cite the long list of deaths following the operation."



7. Catarrh.—Since the age of sixteen I have suffered from nasal catarrh. I have used Glyco-Thymoline and other remedies with no relief. I think there is possible prolapse in the right nostril. Is relief still possible?

Ans.-The deflection of the nasal septum can be cured by any throat specialist, who will operate on the septum to cure the deformity. The most successful operation seems to be the submucous, or "window" resection. The polypus should be removed. It is very important not to depend upon surgical operations alone for the cure of nasal catarrh. The general health must be built up. This can be done by breathing exercises, physical training to improve the tone of the abdominal muscles, a laxative dietary, so that there will be no accumulation of putrefactive foodstuffs to cause auto-intoxication. A daily sponge bath on rising is very helpful.

8. Cocoa. - Why do you consider cocoa an injurious beverage?

Ans.- Cocoa is considered an injurious beverage on account of the tannic acid and the theobromin which it contains. Both of these substances are injurious.

9. Tender Feet. - Please give cause of and remedy for soreness or tenderness on bottom of feet. They feel parched and dry, similar to a burn.

Ans.—The soreness may be due to some skin disease, or it may be due to bruises. The alternate hot aud cold foot bath ought to be helpful. Make ready two pails of water, one very hot and one cold. Place the feet first in the hot water for half a minute, then in the cold water for five or six seconds; continue alternating with the hot and cold for three or four changes, ending with the cold.

10. Dizziness after Meals.—Why should one feel dizzy after meals? 2. What will relieve this condition?

Ans.-1. Overdistension of the abdominal blood-vessels, so that an excess of blood is diverted from the general circulation. The result is insufficient blood supply to the brain. 2. The remedy is to maintain a horizontal position for half an hour or an hour after eating. This suggestion will be found highly beneficial by most persons suffering from gastric disorders. It is better often to lie upon the face, inclined toward the right side. Some people find it advantageous to lie across a small hard pillow. The pressure of this against the abdomen prevents overfilling of the abdominal vessels.

11. Gas on the Stomach.—What can 1 do to permanently cure gas on the stomach? I have been troubled with my stomach and sciatic nerve for two years. My doctor said 1 had excessive acidity of the stomach. Pains are around my heart, my back, and right side, and occasionally in the top of my head.

Ans.-Gas in the stomach may arise from fermentations, from the swallowing of air, or from the excretion of gas from the blood into the stomach. This latter is especially common in cases of hyperacidity. If air is being swallowed, the habit should be overcome. If the gas results from fermentations, take pains to chew the food very thorough-It should be masticated sufficiently lv. long to convert the food into a semi-liquid state before it is swallowed. Sipping very hot water sometimes relieves distention of the stomach. Starchy foods should be used only in moderation. Dextrinized starches are best, such as zwieback, toasted wheat flakes, browned rice, rice flakes, malted nuts. Fruits may be eaten in abundance, if pains are taken to reject the fibrous part. A void meat of all kinds, including fish and fowl, also tea and coffee. Use an abundance of fats, especially good dairy butter and cream, olive oil, ripe olives (well chewed), and egg yolk. Gluten preparations are excellent for you. A variety of food taken at one meal should be avoided. Avoid the sour fruits. Sweet fruits, such as stewed prunes, pears, baked sweet apples, and sweet oranges, are best. Use as little fluid at meal times as possible.

12. Cod-Liver Oil.—Is not cod-liver oil necessary as a medicine under some circumstances?

Ans.—No. The only possible use which the body can make of cod-liver oil is as a food. Nut oils are much more easily digested and in every way preferable to it. The same may be said of dairy cream. All the benefits which can be derived from codliver oil may be more easily obtained from the use of almonds, pine nuts, ripe olives, and other vegetable products rich in fat.

Merald of Mealth,

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THE FLY AS A CARRIER OF DISEASE GERMS

WRITING in a recent magazine, Lewis Edwin Theiss tells us that the common house fly is "known to transmit not only typhoid fever and diarrheal diseases, but also tuberculosis, and probably influenza, pneumonia, diphtheria, and scarlet fever." He corroborates his statement by statistics secured from a number of health officials throughout the United States, showing that many epidemics of typhoid fever have been directly traceable to the carrying of disease germs by flies. And not only does the fly often carry about with him the germs of typhoid and the other diseases mentioned; but he quotes Daniel D. Jackson, a prominent bacteriologist of New York City, as saying: -

It has been for some time thoroughly well demonstrated that the fly is one of the chief agencies in the spread of Asiatic cholera. Hitherto the fly has been regarded complacently as a harmless nuisance, and considered to be an annoying creature with great persistence and excessive familiarity. Regarded in the light of recent knowledge, the fly is more dangerous than the tiger or the cobra. Worse than that, he is, at least in our climate, much more to be feared than the mosquito, and he may easily be classed the world over as the most dangerous animal on earth.

Mr. Theiss goes on to say:-

The term "the world over" expresses exactly the range of the fly problem. Wherever there are open sewers, or garbage piles, or heaps of manure, or stacks of oyster shells, or exposed human excreta, or festering corpses of animals, or mouldering paper, or decaying vegetables,—in short, wherever there is filth the fly exists; for the fly treeds in filth.

The solution of the problem is, of course, to exterminate the fly. That sounds like a big task. Perhaps it is. So it is a big task to exterminate the mosquito. Yet when we found that the mosquito was our enemy we made warfare upon him. The yellowfever-bearing stegomyia has been subdued. The less harmful malaria-carrying anophele is destined to meet the same fate.

It will be a long time, however, before the country is fully awake to the danger, and a longer time before the fiy is subdued. In the meantime, because of flies, babies are dying-perhaps yours among them. There is work for you to do, for the fight against flies, like charity, should begin at home. . . . Cleanliness is the watchword of this fight against flies. Keep your home clean, your yard clean, your neighbourhood clean, your city clean. Perhaps you think that, because flies travel only short distances, it is a matter of no importance to you whether a part of the city two miles away is clean or not. It is important. Flies get into cars and wagons and on horses and are carried miles. The garbage pile two miles away may be just as harmful to your babies as though it were in your own back yard. But it is in the home that most care should be exercised; for it is there that we contract disease by eating infected food.

"Father, I should like to try one of these systems of physical exercise that are advertised in the papers. They are cheap, and you don't need any apparatus."

"I'll furnish you one, my son, that I tried will great success when I was a young man, and I'll warrant it to be as good as any in the market."

"Could I take it here at home?"

" Yes: that is one of its chief merits."

" Any apparatus necessary ?"

 $^{\prime\prime}$ Yes; but it's quite simple. I'll furnish it.''

"Can I take it in my room?"

"No; you take it out at the woodpile. You will find the apparatus there, all ready for you, my son."—Selected.

16

The Diet Question

The Natural Food Products of the Earth

when properly prepared are undoubtedly best adapted to the development of a clear mind and a healthy body, the possession of which is essential to real success in life.

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WHEAT takes the first place because it contains an almost perfect proportion of the various food elements required by the body. Raw wheat, however, is not digestible; the more thoroughly it is cooked the more easy it is of digestion and assimilation. For this reason, such foods as Granose Flakes, Granola, and Gluten Meal have been produced. Granose Flakes consist of super-cooked kernels of choice wheat in the form of delicate, crisp flakes, and constitute the ideal food for all. The weakest infant and the feeblest invalid, as well as robust people, thrive better on Granose than on any other cereal food extant.

Gluten Meal is a wheat food of great value: It is sometimes described as "Wheat Extract," because the gluten, which is the life element of wheat, has been extracted from the grain. Gluten Meal is practically a necessity for invalids (it ought to be in every sick room), is a luxury for the well, and an excellent food for young and growing children.

Granola consists of wheat and several other grains combined in the proper proportion to secure perfect nourishment. It is in the form of "nuts," but is a better food in point of nutriment and digestibility than any of the muchadvertised breakfast "nuts." It is the best concentrated cereal food. Try it.

3

Under this heading Caramel Cereal, though not actually a food, ought to be mentioned, because it is made from wheat and other grains so blended as to produce a fragrant, healthful, and refreshing beverage designed to take the place of tea and coffee, which are injurious to the nerves on account of the poisonous principles bley contain.

NUTS are of very high nutritive value. Indeed, bulk for bulk, dry nuts are nutritious than meat, containing the same elements, proteid and fat, but in larger proportion, and are now being largely substituted for meat in the every-day diet.

A close resemblance to meat is obtained in the the following prepared nut meats: Protose and Nuttolene, the former being especially remarkable for its similarity. These nut meats are packed in tins in three sizes. They may be eaten cold, as taken from the tin, or cooked and served in any way like flesh meats.

Maited Nuts in the form of a fine, granular powder, are very digestible and nourishing. May be served dry, sprinkled over Granose Flakes or stewed fruit, or taken as a liquid with the addition of hot water or milk. In this form they are far superior to any meat extract on the market.

All of the foods mentioned above are manufactured by the Sanitarium Health Food Coy., 50 Park St., Calcutta, who for many years have been giving careful scientific study to the diet question. They will send you a box of assorted samples, price list, and pamphlets for Re. 1, or a price list on application.

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