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Life & Health

WHY

Do you sometimes have the blues? Why are you so easily irritated and annoyed by trifles? Why is it that your work seems a burden and not a pleasure?

Life was not intended to be a burden, but rather an experience filled with joy, vigor, and enthusiasm.

DISCOURAGEMENTS

are usually the result of some abnormal condition of the complicated and delicate human machinery. The defect may be a small one, almost insignificant and easily repaired by the proper treatment, and yet sufficient to interfere seriously with the normal functions of the nervous, digestive, and circulatory systems, causing a cloud of discouragement to settle over the unhappy victim. If this is your experience,

COME

to the Chamberlain Sanitarium for a few weeks' rest and recuperation. Take advantage of the famous system of treatments employed for the relief of just such cases as yours, and become one of the many enthusiastic friends of the institution.

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Life & Health

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FIRST AID

Nothing displays the good fellowship existing in the army better than this picture showing how a wounded soldier is tenderly cared for and helped to reach the hospital division behind the fighting lines.

Life & Health

HOW TO LIVE

Editor H. W. MILLER, M. D.
Associate Editor L. A. HANSEN
Office Editor G. H. HEALD, M. D.

VOL. 33 July, 1918 No. 7

How to Keep Well in the Tropics

S. A. Oberg

ON Aug. 25, 1910, my wife and I arrived for the first time in the tropics. As we entered the beautiful harbor of St. Thomas, in the West Indies, it seemed that we had at last arrived in the most ideal climate that earth could afford.

We were appointed to the school located at that place, and as a goodly number of pupils were already enrolled, and more ready to come when we were settled down to work, we found ourselves the busiest that we had ever been since leaving school in the homeland. From eight in the morning till five and sometimes six o'clock, we would remain in the schoolroom nearly all the time.

This close application, and lack of time for exercise, soon told on my health. First, my digestion became affected, then general breaking down took place, until my wife, seeing how fast I was losing ground, wrote the Educational Department that it would be necessary to get me back to the States.

As it took considerable time to hear from this letter, I began to pray and to investigate the causes of my failing health, with the result that I decided to

S. A. Oberg

Charlotte Amalie and harbor of St. Thomas, West Indies

Upper left — First Position.
Upper right — Second Position.
Lower — Third Position.

return to my old physical-culture routine, which because of pressure in school duties had been dropped. Immediately I began to improve, so I settled down to a system of exercise that took but little time daily; and from that time until the present, now nearly six and a half years, I have been in splendid health, each year increasing in strength.

That I am not alone in the enjoyment of such good results from so little time invested (it takes me only seven minutes at the longest to take the exercise), the following note from Pastor M. B. Butterfield, just received a few days ago from British Guiana, shows:

"I am still doing this exercise a hundred times daily, except Sabbath, and I am sure it is helping me. I believe I have kept up where I might have failed had I not taken the exercise. I must thank you for all that it has done for me."

Brother Butterfield began taking the exercise over a year ago while we were together at a ministerial institute. I remember distinctly the first time I met him. His biceps were soft and flabby, and his chest expansion was very small. The last I saw of him at San Fernando he had greatly increased his expansion, and had a pair of biceps to be proud of.

Just a few days ago a note came from a worker here in Iowa (Shellsburg), showing that the same results obtain in this cold country. The writer, Harry Gray, said:

"The exercise is helping me in a marked manner. I feel so much stronger, and my stomach is working like clockwork. Thanks to you for passing a good thing along. Now I can let myself down with one arm, and then with the other arm."

As to why I have adopted this particular exercise to the preference of many others:

First, it takes but little time.

Second, it gives the greatest amount of work to the parts of the body that without special attention receive an insufficient amount. Lack of exercise is the reason why so many men and women of sedentary habits go down to untimely graves from lung troubles.

Third, it requires no apparatus, such as Indian clubs and dumb-bells, which soon become monotonous and rarely ever hold the interest over six months of daily application; nor saw, nor spade, which in themselves are splendid exercise. Few

men traveling can have daily access to such apparatus, and it is the daily work, like daily eating, that strengthens.

Fourth, it is better as a general exercise than even walking, for it takes less time; and not only the legs are exercised, but also the arms and the respiratory organs, principally the latter, which need exercise the most, especially of men and women who live by the power of the voice and lungs.

Fifth, it does not lose interest, as a goal can be set. I began with about thirty, and have reached one hundred forty. Pastor Butterfield began with about twenty; Pastor Gray began with about fifteen, and he is now doing fifty. When one has reached from fifty to a hundred, there are various stunts he can do that very few ordinary men can do, so that interest increases with accumulating muscle.

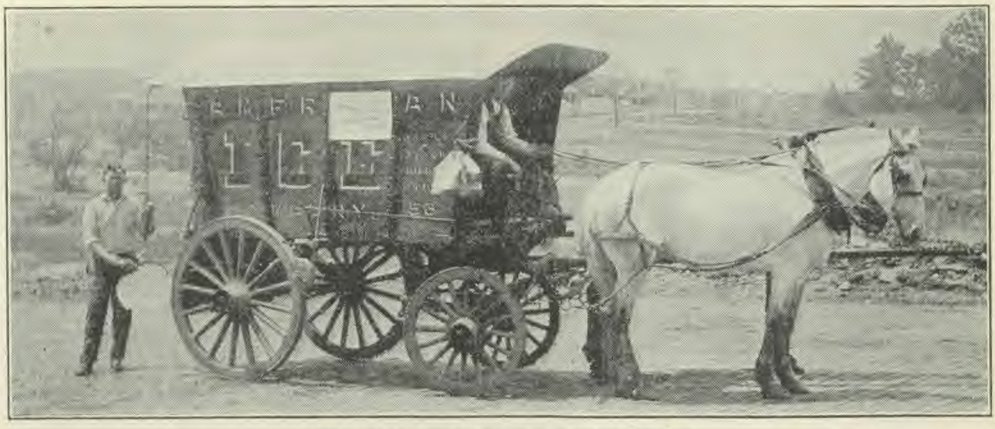
A description of the exercise might not be out of place here. Place the hands on the floor, about eighteen inches apart, the feet together, then let the chest down till it barely touches the floor, breathing out as you go down, in as you come up, raising the chest the full length of the arms and elevating the hips till the head comes between the arms. Repeat until moderately tired. A normal sedentary man should do this from ten to twenty times, depending largely on how long it has been since he engaged in active work that called into play the muscles of the arms and chest. One should not do this exercise many times at first, but gradually increase the number of times,— perhaps one a day, or one a week. When a hundred is reached, that is sufficient for any one.

True education is the harmonious development of the physical, mental, and spiritual man, and those who carry into daily life the principles of true education are the happiest, and as a general thing live the longest.

Iced-Water Drinking

G. H. Heald, M. D.

HAD the question been asked me a short time ago, "Is it healthful to drink ice water?" I might have replied, "Yes, provided you boil it first." Perhaps a good many persons would give a similar answer. I have been horrified to see ice which I had good reason to believe was natural ice, put *into* drinks instead of on the outside of the vessel. Knowing that temperatures much lower than freezing do not necessarily kill germs, and that freezing



HOW WE ENVY HIM ON HOT DAYS!

water does not rid itself of all its impurities, I thought that it looked like a pretty bad case against natural ice, unless it were from water of unquestioned purity. Moreover, have we not been taught from time immemorial that iced drinks chill the stomach, and thus delay digestion?

Well, if the question were asked me now, I might end my reply with the first word. My reasons are: (1) Though epidemics have not infrequently been traced to a water supply or a milk supply, no serious epidemic has ever been traced certainly to an ice supply; (2) ice as it freezes in nature, practically clears itself of impurities; and where ice is stored for considerable periods, as is usually the case with natural ice, the bacteria that remain, especially the types that might do harm in the human body, gradually die off; (3) many scientists of eminence have unhesitatingly indorsed the use of natural ice.

Professor Sedgwick, Lecturer on Sanitary Science and Public Health, in the Massachusetts Institute of Technology, Boston, and author of "Principles of Sanitary Science and Public Health," in his textbook wrote the following paragraph, which after ten years he reaffirmed in a public lecture:

"Still, when all has been said that can be said against ice as a vehicle of disease, and while it cannot be denied that ice may at any time under suitable conditions readily serve as such a vehicle, it nevertheless remains true that water certainly strongly tends to purify itself in freezing, and that no considerable amount of disease has ever been satisfactorily traced to ice, either as source or vehicle. As a vehicle of disease, ice is plainly far less dangerous to the public health than either water or milk."

Gustave Ruediger, M. D., Professor of Bacteriology and Pathology, and Director of State Public Health Laboratory, University of North Dakota, says:

"We may conclude from this investigation and previous investigations by the Massachusetts State Board of Health, that ice taken from a source like the Red River above Grand Forks sewers, the Red Lake River above East Grand Forks, and the Missouri River above the outlet of the Bismarck sewers, is as free from sewage bacteria, and therefore as safe for drinking purposes, as the average filtered water. In fact, there are very few sand filters in this section of the country that bring about as high a degree of bacterial purification at all times as is brought about by nature in the process of freezing. The process of freezing removes also

WHERE THE ICE SUPPLY

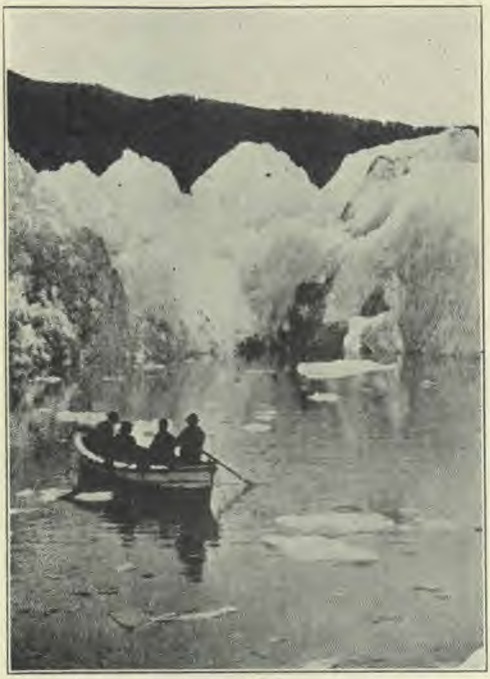
the inorganic constituents of the water which are not removed by any of the sand filters. We must remember, however, that ice that has been polluted on the surface after it has formed, and ice that has been harvested from a very heavily polluted stream, may contain enough sewage bacteria to render it unsafe for use in drinking water. Ice that has been formed in disturbed water, and is marked with dirty, gray streaks running through the blocks, may contain a large amount of organic matter and enough sewage bacteria to render it unsafe for use in drinking water. This is particularly true of ice that has just been harvested, since the danger decreases as the time of storage increases."

Dr. Wm. H. Park, Director of Bureau of Laboratories, New York City Department of Health, says:

"Natural ice not contaminated by surface deposits is always purer and freer from bacteria than the water from which it is formed, since impurities are largely excluded in the freezing and the bacteria retained gradually die.

"The danger from the use of recently frozen ice produced from slightly polluted water is therefore always much less than from the use of water itself. Every week that the ice is stored the danger becomes less, so that after

being frozen four weeks, it has become as much purified from typhoid and allied bacilli as if subjected to sand filtration. At the end of four months the danger from ice made from even



EXCEEDS THE DEMAND

moderately polluted water becomes almost negligible, and at the end of six months it is quite so."

The facts brought out by various authorities are these: Freezing does not kill germs. Given two vessels of water, one of which is frozen and kept frozen, the other being kept at a temperature above freezing, the bacteria in the water, at a given time, say in four months, will have died out faster than those in the ice. On the other hand, there is a gradual diminution of the bacteria, even in the ice; and there may be numerous opportunities for fresh supplies of bacteria to reach the water, but no new supply of bacteria can get into the ice.

Water in a lake or river or other natural body of water freezes gradually from the top, and gradually frees itself from impurities, whether in suspension or solution. This ice is much purer than the water from which it was formed.

For the reasons given above, men who have made a careful study of the problem, believe that natural ice when properly handled may be absolutely wholesome, even when put into drinks. We might have given quotations from others bearing out this contention.

It should be remembered, of course, that no matter how pure ice may be, it has many opportunities of contamination as it is handled by the ice man and others. Preferably it should always be washed with clean water before it is used in a drink.

As to the physiological effects of iced drinks. Do they not delay digestion?

The temperature of an iced drink is usually several degrees above freezing — perhaps about 50°. A cold drink before a meal usually acts as a stimulant to digestion; and a drink or two say half an hour to an hour after a meal, in many cases seems to have a beneficial effect. The practice of drinking freely of cold drink during the meal may not have much to commend it.

But does not drinking at or shortly after mealtime dilute the gastric juice?

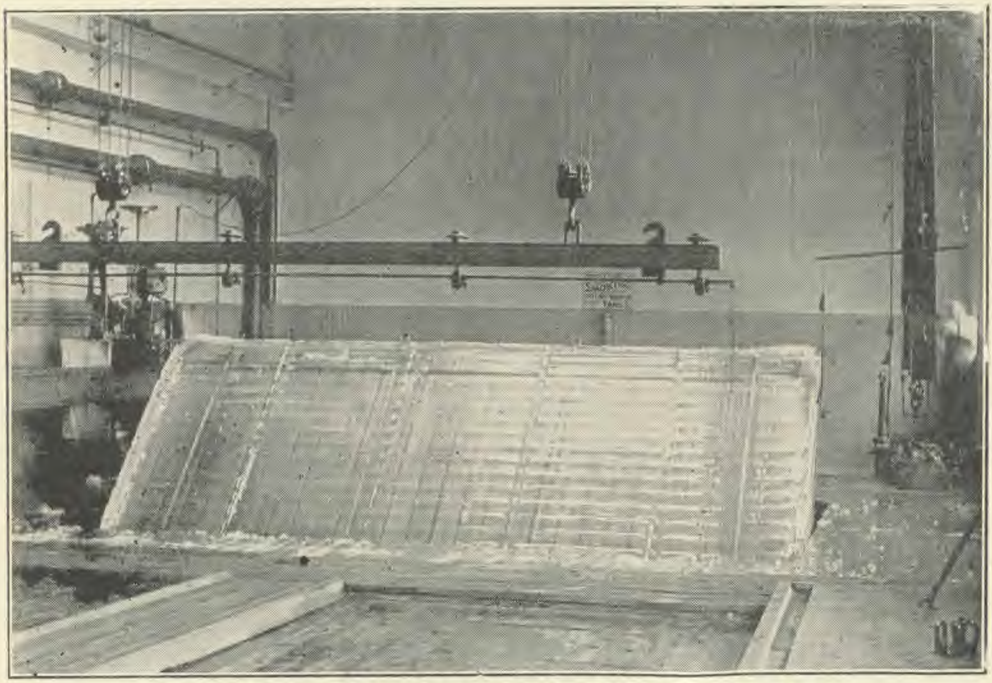
It undoubtedly does, but what of it? Chemical reactions are more energetic in diluted than in concentrated solutions. Moreover there is reason to believe that the gastric secretion is regulated according to the need. If water is drunk, it may leave the stomach early, within twenty minutes, carrying with it some gastric juice and portions of food in solution. This being the case, the tendency would be to stimulate the production of more gastric juice to take the place of what passed into the duodenum.

Granted that this explanation is inferential and theoretical, and therefore not worth much, it is worth at least as much as the inference that digestion is weakened by diluting the gastric juice. In practice there is nothing to show that a moderate amount of water taken shortly after a meal is harmful, and there are carefully controlled observations that show such a practice to be distinctly beneficial.

Photographs taken in plant of American Ice Company, Washington, D. C.

A HUGE CAKE OF ICE JUST LIFTED FROM VAT

The ice is formed in vertical vats. Filtered water is kept constantly



ICE CAKE BEING LOWERED ON HINGED SECTION OF FLOOR

agitated while the freezing proceeds. The ice first forms a thin film on each edge of the vat, and gradually increases in thickness

SAWING ICE SHEET INTO BLOCKS

till at the end of the week, the vat contains two cakes of ice approximately a foot thick, with a few inches of water between them.

READY FOR DELIVERY

During freezing the water is kept constantly in agitation. This process gives opportunity for any impurities to be frozen out, if there are any.

The Ladder of Health

R. A. Crawford, M. D.

Superintendent Chamberlain (S. Dak.) Sanitarium and Hospital.

Infancy and Childhood

NATURE endows each of us at birth with a certain amount of vitality. Whether this be much or little it is at least a matter which is entirely outside of our control. Happy indeed is the one upon whom nature has abundantly bestowed, as a first birthday gift, the blessing of good health. This is an inheritance which, like the wisdom of which Job speaks in the twenty-eighth chapter of his book, "cannot be valued with the gold of Ophir, with the precious onyx, or the sapphire."

As the question of how high we are placed upon the ladder of health at birth is outside of our control, so also is the direction and the amount of our progress along this ladder during infancy and childhood, but although outside of our control it will determine largely what the man or the woman shall be. Behold, parents, what a responsibility is intrusted to you and to the future home builders. There is none more sacred or filled with greater import. It is in infancy and childhood that the foundation of health is laid. Not only is injury to the delicate organs of the body and lack of proper development during this period the cause of much future difficulty, but infections very frequently have their origin during this period, and may crop out in adult life after remaining dormant many years. It is thought that most cases of tuberculosis have their origin in foci of infection contracted during childhood. Moreover, it is during this period that the habits and tendencies of life are formed, whether these be in the direction of right living or to the contrary.

Let us look this question fairly in the face. It would seem that it is a vital responsibility to be intrusted with these delicate innocent little bits of humanity. It would seem that the future of the nation and of society was intimately associated with the welfare of the child. And yet how much do the average youthful builders of the home know about the problem of giving their children a substantial foundation of health? What preparation have they had for this sacred responsibility they are about to assume?

We recognize the importance of scientific instruction in regard to the tilling of the soil and the care of our farms, and we have provided extensive departments in our system of schools and colleges along this line. We have departments of government, and hundreds of men employed for the sole object of disseminating knowledge of scientific agriculture. We send our children to institutions of learning to learn how to take better care of our horses and our cows and our hogs. We send our boys to expensive camps and give them months of

intensive training to prepare them for the responsibilities and dangers of modern warfare. But as for our children — those delicate and intricate little seeing and thinking machines — what preparation do we give to those who are to assume the responsibility of their care?

Thanks to the various infant welfare societies and other organizations of like nature, including the settlement workers and neighborhood house workers which are being organized all over the country, a start has been made in the right direction. One cannot estimate the great amount of good done, the number of precious little lives saved, and the thousands that are started along the ascent of the ladder of health by those who have so nobly and unselfishly engaged in this sort of work. But when we look at the immensity of the task and consider its importance, we have made only a start. Has not the time come when every girl should be taught something about the fundamental principles which stand at the foundation of the health of the infant and child? And should not every young parent know something of the tremendous influence that this period of development has over the future happiness and usefulness of the man or woman?

It will be impossible in the space here allotted to do more than to state a few broad principles for consideration. However, if I can emphasize the importance of this period of life as regards the building up of a strong constitution, and can impress upon my readers the fact that this is a matter that should receive the careful study and thought of all of us, I shall be quite satisfied. Proud, indeed, may the parents be who can see their boys and girls about to cross the threshold of manhood and womanhood with strong, healthy bodies, clean, active minds, and habits of right living so firmly rooted that they will not soon be discarded.

Dr. Holt, the eminent authority on children's diseases, has most aptly remarked: "The physical development of the child is essentially the product of the three factors — inheritance, surroundings, and food." The first of these factors, heredity, lack of space forbids us to discuss, and it is a matter which is largely outside of our control. The last two, however, are most important, and are matters which are almost entirely within our supervision and regulation. We will consider them very briefly.

Surroundings will include the sanitation and hygiene, the ventilation, the training as regards habits, discipline, sleeping, eating, exercise, etc., and the influence of the child's associates and teachers. It is in these first, tender years that these things leave an ineffaceable imprint, and play so large a part in the physical and mental development of the man or woman. Sanitation and cleanliness are of utmost importance to the infant and child, but, at the same time, we must not forget the delicate character of the little mechanism with which we are dealing. For the first few months the daily bath should be given with tepid water in a warm place, preferably before the open fireplace. The skin must be carefully attended to, and if it becomes rough or chafed, gentle oil rubs may have to replace the bath for a time, or the skin may be protected by the most finely pulverized stearate of zinc. To keep the child dry, sweet, and clean, is perhaps, the first axiom in the rules of infant care.

Fresh air and proper ventilation are of as much importance to the infant as to the adult, but great care must be used to avoid drafts. In summer the child may be taken out for an airing at the end of the first week. In the other seasons, though, this should not be done until the end of a month, and then only on nice days, yet the house should be aired daily so that the infant can get used to outdoor conditions. During the airing the child should be protected by warm clothing as if for outdoors.

Regularity of habits is another factor of extreme importance. Many mothers who realize the effect upon their own di-

gestive system of partaking irregularly of food, will, nevertheless, abuse the infinitely more delicate mechanism of the child's alimentary tract by feeding it at all hours of the day, and all sorts of mixtures, in order, as they say, to stop it from crying. Under those circumstances is it any wonder that dyspeptics in later life are so numerous?

The child should have regular hours for sleeping, and these should be abundant. From the very first, the infant should have its individual crib.

The mouth needs careful attention. It should be carefully washed daily with warm water and a piece of soft cloth. If thrush begins to develop, it should receive immediate attention.

The teeth must be cared for from their first eruption. Carious teeth in children are as dangerous as in later life, and are frequently the original foci of many severe infections.

Exercise is also important in infancy and childhood. At no time should the clothes interfere with the body movements. The clothes should be warm, but soft and loose, and suspended from the shoulders. It is of much importance that the infant be removed from the crib at times during the day, as it is in this way that it gets its exercise. In older children clean outdoor games should be especially encouraged. The child should be out of doors as much as possible.

The hygiene of the nervous system is something that is little understood. It may be fun to see baby laugh and scream because of the many nervous thrills which he may receive, but that it tends to develop an unstable nervous condition cannot be denied.

There might be mentioned hundreds of things, but there still remains the other factor of nourishment. Do not think for a moment that there is any food for the infant that can compare with that which nature has provided. Where this is not available, the next best thing must be resorted to. This is usually carefully studied modifications of cow's milk. In delicate infants this matter of nourishment may take prolonged study by a skilled physician, but it must receive attention at the very outset of trouble, or it will become more and more difficult.

The opinion generally exists that if a child is fat it must be healthy, especially if it is fairly good-natured. This is not necessarily true, and many a child has been permanently injured by being fed various proprietary mixtures which, although capable of making the baby fat, did not contain the proportion of food ingredients which could properly build up the bone, muscle, and brain of a child.

In closing, I wish to urge once more the necessity for diffusion of knowledge in regard to the proper scientific care of the infant and child. No parent can afford to neglect to make this matter one of most careful study. At no time during life is it more possible or more desirable for an individual to have his feet planted firmly on a high round of the ladder of health. The happiness of our children and the future of society depend in a large measure upon it.

Some Immortals

GRANDMA died of dread T. B.,
Still her dear old face we see
In the papers every day,
Praising good old Doctor Slay,
Telling how he cured her ills
With his Pulmonary Pills.

Father lies below the grass,
But his memory does not pass.
Brightly from the Tonic ad.
Smiles the well-known smile of dad.
There his honest name is penned —
"Fakem Drops I recommend."

Uncle Grover had a liver,
Now he's crossed the shining river.
Every day we gaze upon
Uncle's features though he's gone.
"Leecher's Pads I wore," says Grover;
"Now my days of pain are over."

Gone but not forgotten, they,
Comrades of a happier day;
In the ads. we see once more
Many a loved one gone before.
And we hear them from the grave
Telling what will heal and save.

— *Newark Evening News.*

Summer Diarrhea of Children

Its Cause, Prevention, and Treatment

G. H. Heald, M. D., and J. W. Hopkins, M. D.

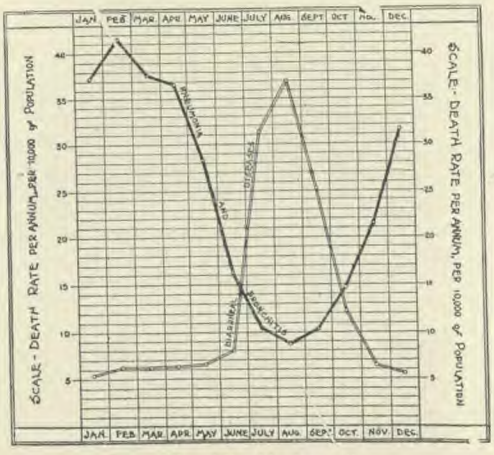
THIS disease, sometimes called cholera infantum, is often likely to be lightly regarded, and many times sufficient importance is not attached to it as a cause of infant mortality. It is a serious disorder, the percentage of deaths therefrom being from eight to thirty.

The symptoms are mainly vomiting and diarrhea; fever is also present, and may be as high as 103° to 105° F. The baby has great thirst, but loses its appetite and refuses to take the bottle. The abdomen is distended. There is much flatulence, and the stools are greenish, watery, and of a foul odor. The vomit consists of bile, mucus, and sour curds. The temperature may fall and the child become cold and clammy if the diarrhea and vomiting keep up for several days, and the child may eventually die of exhaustion or in coma and convulsions.

Among the causes, we note that this disease is most common among bottle-fed babies. Breast-fed babies seldom die of intestinal disease. For this reason breast feeding should be desired by mothers and encouraged by physicians, and bottle-fed babies should have the constant oversight and care of a good physician.

Improper mouth hygiene plays an important part in producing this sickness. In children of from one to five years, the teeth should be kept in good condition, and diseased tonsils attended to, while with infants, the nipples and bottles should be properly cleansed and disinfected.

The influence of the weather upon digestion must be considered and reckoned with. The extreme heat of summer deranges the digestion and produces fatal results. That this is true is seen by the accompanying chart, The "Double Cross," which shows the winter prevalence of certain diseases, such as pneumonia and bronchitis, and the summer prevalence of diarrheal diseases. When one of these types of disease is at the



The "Double Cross"

Temperature and diarrheal deaths

flood, the other is at the ebb. Quite evidently there is something connected with the seasonal variation in weather, probably the temperature, that accounts for the great change in frequency and fatality of these diseases.

Another chart showing the average temperature at Springfield, Mo., for a period of five years, and the number of diarrheal deaths for one year, indicates that there is some relation between temperature and infantile diarrhea. It will be seen that the diarrheal curve lags a little behind the temperature curve. This is as it should be, for the disease curve represents the *deaths* from diarrhea, and of course there are several days of illness preceding death. It will also be noticed that well up into June there is scarcely any rise in diarrheal deaths, though the temperature has been gradually rising for several months. Undoubtedly up to this time, the vitality of the babies has been sufficient to resist the unfavorable factors to be mentioned later, but the continued warm and even humid weather, soon lowers the natural resistance of the baby, leaving him more susceptible to attack. (See previous page.)

These causes combine to bring the little one to death's door. The enfeeblement comes from an overheated atmosphere, and though in many ways the cellar is the most insanitary part of the house,

See my teefies

Why not dress the kiddie for comfort in hot weather, like this little fellow,

yet the baby living in the cellar or basement during the summer is much more fortunate than the baby living up under the roof. Attic babies die in greatest numbers, and their condition is aggravated by congestion, excessive clothing, rubber diapers, house heating, poor ventilation, etc.

Another, and a very important factor in infant diarrhea is the food supply. In many cases the milk and eggs are not fresh; the milk has not been kept on ice and the bacteria have multiplied enormously. Pasteurization, or heating, will kill these germs, but will not destroy the poisons that they have manufactured. Pure milk may be turned into dirty bottles or pans, and thus be infected. The flies that persistently journey from the barn or outhouses to the kitchen and dining-room are another fruitful source of infection. Many children are encouraged to eat solid food long before they should. They should be fed liquids for some time after they have their teeth, and under no consideration should foods be changed or experimented with during hot weather.

PREVENTIVE MEASURES

Avoid weaning in hot weather, or, if it is necessary to wean then, let it be gradual, beginning with one artificial feeding a day, and let that be of milk, as will be described later. Even on

and not like this?

mother's milk baby may have trouble if the mother eats certain fruits,— lemons, tomatoes, etc. If baby is on the breast and suddenly has his digestion disturbed, the mother should take an inventory of the foods she has been eating, and avoid the offending food.

When changing from mother's milk, the best substitute is pure cow's milk properly modified. A common formula for the modification of milk is to add two parts of water to one of whole milk, and add white sugar in the proportion of about a level teaspoon to an eight-ounce feeding.

The milk should be the best obtainable, from a reliable dairy. If in a city where the milk is officially graded, get Grade A, or the best milk. Remember that "cheap" milk is not cheap in the long run, as it makes for doctors' bills and funeral expenses.

To prepare the milk, have a number of bottles sufficient for the day's feedings, one for each feed. Preferably these bottles should be of the kind without a constriction at the neck, in order to facilitate thorough cleansing. There are bottles of this kind on the market, with specially fitted nipples. After cleansing, bottles and nipples should be boiled for half an hour in clean water containing a heaping teaspoonful of bicarbonate of soda. After they are cooled, a feeding of modified milk should be put into each bottle, the nipple put on, and if the milk is not known to be free from contamination, the bottles should be sterilized. To accomplish this, place them in a wire holder, in a dish which should be filled with water to just below the level of the milk. The water should now be boiled for fifteen minutes. The basket containing the bottles should then be placed in the ice chest and kept cool until needed. Each bottle when needed should be warmed by holding in warm water, and heated to a temperature agreeable to the baby. If baby rejects the milk, it may be too cold.

We have suggested a modification for the milk, but it may not be the one best adapted to your baby. If your physician is experienced with children, he will know best. Be sure to follow his directions faithfully.

Do not under any circumstances use the long-tube nipples. It is impossible to cleanse them properly, and doubtless many baby deaths are due to their use.

Keep the flies away from baby. Do not tolerate them in the house. If baby is put on the porch, screen him carefully from flies and mosquitoes.

Dress baby for the weather. In real warm weather, a thin slip is all that is needed. Keep him comfortable.

Bathe the little fellow at least once a day, and be careful to avoid chafing and

What do I see?

heat rash. Do not bathe within an hour of feeding.

Feed regularly. On warm days, if baby seems to want a feed before the regular time, try a few sips of cooled boiled water, or of water you are sure is free from contamination. Baby may prefer the water warm.

Be sure to give the baby plenty of fresh air, but avoid drafts. And if he is put outside on a warm day lightly dressed, do not forget him and leave him to be chilled in the cool of the afternoon.

When placing baby outside, be careful to avoid sunlight in his eyes. As he comes from a dark room, even partial sunlight is bewildering, and the direct rays of the sun in the face are cruel and injurious. At no time should baby be compelled to face the sun.

Avoid scrupulously all patent medicines and drugs. None of them can do the baby a particle of good, and all of them are potent for harm.

When using boiled milk, use orange juice between feedings and also use vegetable juices for their salts.

HYGIENIC TREATMENT

The child should be kept in the cool, outdoor fresh air as much as possible. City children recover rapidly when sent to the country. We have seen this many times.

Digestion is arrested in the early stages, and therefore food is harmful and must be stopped for several days. Toast water or cool boiled water will relieve the thirst. Many physicians use two or three teaspoonful doses of castor oil. Castor oil is valuable because of the tendency to constipation following its use. It is often well to wash out the stomach thoroughly, as the vomiting often yields readily to this treatment. Flushing the colon with a one-per-cent solution of boric acid at 105° F., or a five-tenths-per-cent solution of table salt at the same temperature, will bring great improvement. This should be done once or twice daily, but a single flushing will often stop further development of the disease, if done early. Starch injections are also very soothing. Bismuth subcarbonate or subnitrate is valuable, but should be given under the doctor's supervision.

When purging and vomiting have been controlled, food may be given in small amounts. Milk should not be used at first. Rice, barley, or farina water may be given in about half or less of the usual feeding.

The fever is best controlled by cool sponging. Cool towels to the head and also to the abdomen will reduce the fever and help to control the diarrhea, but should be stopped and warm baths used if the child is cold or cyanotic (that is, blue). Drugs should not be employed to reduce the fever.

Importance of Diet

James Frederick Rogers, M. D.

TO most people the word "diet" is of unpleasant significance. It means a regimen prescribed by a physician. They must eat certain dishes and avoid others, or must reduce the quantity of this article and increase the amount of the other. The word is the more obnoxious because the articles of food restricted or proscribed are usually the things they especially like. Eating is for these persons a means of pleasure, and too often the chief pleasure of their lives, and it is but natural that they should object to any restriction of that pleasure.

A diet ought to be such a selection of foods in such amounts as will give one, in the long run, the greatest pleasure in life. Looked at in this way, it is certainly not such a dreadful thing after all. It may mean a change from our present course of living to another, but the change carries with it only a momentary hardship, and the person is soon adjusted, and thankful for his new way of living.

The existence and the activities of the body depend, from moment to moment, on what we eat. The body is made up of millions of most delicate living and working units called cells, and each of these is bathed and nourished by the food materials taken from the table, after their special elaboration by the organs of digestion. All our muscular and mental work and our general feel of health depend on the character of food — of diet — which reaches these delicate structures. They are helpless in themselves to choose, so that an intelligent choice, of quality and quantity, at the table, becomes imperative if we would serve them as they deserve, and as is necessary for the welfare of the body.

Doubtless the indiscretions of the unwise feeder are for a long time compensated for by other organs of the body, but the health and life of the cells are sooner or later influenced by the character of the diet. Degenerating arteries, a weakening heart, damaged kidneys, possibly cancer and other tumors, are the result of prolonged faults of diet.

Many persons are in their diet the victims of habit. Often they follow family custom in the choice of foods, and the family choice is bad, at least for the present generation. Many a man takes coffee three times a day because it was so served at his father's table; another must have meat for every meal because he was so brought up; another lives largely on pie and cake because he did so at home. We cannot all thrive best on the same diet, but often the diet we were "raised upon" is far from being what is best for us. We ought to try out the suggestions made by those who ought to know of such matters, and having found what brings us to our best condition, stick to that method of feeding.

It seems a pleasure-destroying act to give up certain dietetic habits, and yet, once abandoned, one often wonders why he ever was committed to them. It seems out of the question not to have meat for every meal, but those who become vegetarians often lose all taste for animal food. Pie and cake seem the end of existence to the liver on cake and pie, but once abandoned, he finds as much pleasure in life as he did before, and often a great deal more.

If life is worth while, the selection of the best foods to maintain life and to maintain it at its best is also worth while. One need not starve himself in so doing, nor need he remove all the joy from his existence. He needs only to select those articles in such amount as will bring him to his best, and will keep him in that condition through the days he has added to his life by such good judgment.

Conservation Menus and Recipes for July

George E. Cornforth

ROLLED OATS MUFFINS

SPONGE:

½ cup lukewarm milk.
1 cup left-over cooked oatmeal.
½ cup barley flour.
¾ yeast cake.

DOUGH:

1 egg.
2 tablespoons fat.
2 tablespoons corn syrup.
½ teaspoon salt.
1 cup, or more, barley flour.

In the evening set the sponge by dissolving the yeast in the milk, and then stirring into it the cooked oatmeal and flour and beating till smooth. Allow this to rise till morning. In the morning add to the sponge the remaining ingredients, using flour enough to make a stiff batter. Put into oiled muffin tins, filling them three fourths full. Set them in a warm place to rise, then bake.

Use the left-over muffins for making the sandwiches for supper on the first day.

The barley flour cake is made by substituting one and one-half cups barley flour for the potato flour and wheat flour in the cake recipe given in the June number of LIFE AND HEALTH.

RYE GEMS

1 egg.
2 tablespoons oil.
1 cup milk.
½ teaspoon salt.
1¾ cups rye meal.

Beat together the egg, milk, oil, and salt; stir into it the flour, beat till the batter is free from lumps, and bake in hot gem irons.

The superior figures (¹) indicate recipes in this number.

FIRST DAY

DINNER

Pine Nuts — Ripe Olives
Tomato Barley Soup
New Peas and New Potatoes
Vegetable Salad
Cottage Cheese
Strawberries in Jelly with Custard Sauce

BREAKFAST

Cottage Cheese
Creamed Potatoes
Rolled Oats Muffins¹
Fresh Raspberries

SUPPER

Nut Butter and Ripe Olive Sandwiches¹
Raspberry Sherbet
Barley Flour Cake¹

SECOND DAY

BREAKFAST

Toasted Corn Flakes
Cream or Milk
Creamed New Peas
Rye Gems¹ — Lettuce

SUPPER

Steamed Natural Brown Rice
Cream or Milk
Rye Gems (reheated)
Bananas

DINNER

Cottage Cheese
Baked Potatoes with Nut Gravy
New String Beans — Rye Gems
Maple Blanemange

UNFERMENTED BARLEY ROLLS

2 cups sifted barley flour.
¾ teaspoon salt.
2 tablespoons hard vegetable fat.
½ cup milk.

Mix the salt with the flour. Rub the fat into the flour with the fingers till the mixture is like meal. Stir in the milk and mix to a dough. The dough should be stiff. Knead till smooth. With the palms of the hands roll the dough over and over till a long roll about one-half inch in diameter is made. Cut this roll into two-inch pieces. Bake in a moderate oven till nicely browned.

The jelly roll is made by the barley flour cake recipe.

OAT WAFERS

2½ cups rolled oats.
¼ teaspoon salt.
1 tablespoon oil.
Hot water to make a stiff dough.

Stir the salt and oil into the rolled oats, then stir in enough hot water to make a dough. Work into a dough. Divide into small pieces, roll each piece into a wafer about one-eighth inch thick. Bake till lightly browned.

RASPBERRY PIE

CRUST:

2 cups sifted barley flour.
1 teaspoon salt.
⅓ cup vegetable oil.
Cold water to make a soft dough.

Line a pie tin with this paste.

For the filling mix together 2-3 cup sugar, 3 tablespoons flour, 1-8 teaspoon salt, and stir this mixture into 3-4 quart of fresh raspberries that have been picked over and washed. Turn this into the bottom crust, place strips of crust, lattice fashion, on top of the pie, and bake.

WAFER CORN BREAD

2 cups cornmeal.
½ teaspoon salt.
2 cups milk.
¼ yeast cake.
1 egg.
1 tablespoon fat.
1 tablespoon sugar, or molasses if desired.

Dissolve the yeast cake in the warm milk, stir in the cornmeal. Let stand in a warm place to rise. When light, add the remaining ingredients. Beat well, and spread in two oiled layer-cake tins. Allow to rise one-eighth inch, and bake.

THIRD DAY

DINNER

Baked Rice with Olives
Watercress Mayonnaise
Brazil Nuts Corn Gems
Raspberry Pie [1]

BREAKFAST

Scrambled Eggs
Lyonnaise Potatoes
Corn Gems
Fresh Cherries

SUPPER

String Bean Salad
Unfermented Barley Rolls [1]
Jelly Roll [1]

FOURTH DAY

BREAKFAST

Boiled Rice Cream or Milk
Blanched Almonds
Scotch Oat Cakes [1]
Fresh Raspberries

SUPPER

Lettuce with Cream Dressing
Wafer Corn Bread [1]
Cup Custard

DINNER

Cream Pea Soup
Boiled New Potatoes
Cucumbers with Lemon
Wafer Corn Bread
Strawberry Bavarian Cream

SCOTCH OAT CAKES

½ cup cold water.
2 tablespoons oil.
¼ teaspoon salt.
Oatmeal to make a stiff dough.

Make the oatmeal by grinding rolled oats through a food chopper.

Mix to a dough. Roll out 1-4 inch thick and cut with a cooky cutter or cut into squares, and bake till lightly browned.

MILKLESS, EGGLESS, BUTTERLESS, WHEATLESS FRUIT CAKE

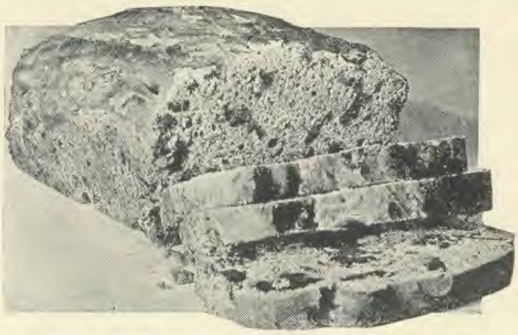
SPONGE:

1 cup lukewarm water.
½ cake yeast.
1½ cups barley flour.

DOUGH:

1 cup brown sugar.
⅓ cup hard vegetable shortening.
½ teaspoon salt.
1 cup barley flour.
1 cup seeded raisins.
⅓ cup citron, cut fine.
¾ cup water.

Set the sponge by dissolving the yeast in the water, stirring in the flour, and beating till smooth. Set in a warm place to rise. Allow it to become very light and spongy. While the sponge is rising mix together the following ingredients, and let them be heating together in a double boiler: the 1-4 cup water, the



Milkless, eggless, butterless, wheatless fruit cake

sugar, the shortening, the salt, the raisins, and the citron. Stir this mixture occasionally while it is heating. When the sponge is light, cool this fruit mixture and add it and the one cup of flour to the light sponge. Mix well. Pour into a bread tin into the bottom of which a piece of oiled paper has been fitted. Set in a warm place till it has risen one-fourth inch, then bake in a moderate oven about forty-five minutes.

CORN JOHNNYCAKE

2 cups cornmeal.
3 cups milk.
½ yeast cake.
1 egg.
1 tablespoon fat.
1 teaspoon salt.

Scald the meal with the milk. Beat well, then allow it to cool till lukewarm,

FIFTH DAY

DINNER

Rice and Cheese Timbales
Spinach with Lemon
Mashed Potatoes Corn Johnnycake [1]
Cherry Pie

BREAKFAST

Omelet
Baked Potatoes Barley Gems
Blueberry Sauce

SUPPER

Cottage Cheese and
Pimento Sandwiches of Potato [1]
Cold Spinach with French Dressing
Fruit Cake [1]

SIXTH DAY

BREAKFAST

Cream Toast (toasted corn bread)
Browned Potatoes Rice Muffins [1]
Bananas

SUPPER

Cold New Peas Creamed Potatoes
Blueberries and Cream

DINNER

New Peas Boiled Potatoes
Scalloped Tomatoes Barley Gems
Green Currant Pie

Rolled oats cookies

then stir into it the yeast which has been dissolved in one tablespoon of water. Set in a warm place to rise. When it has become light add remaining ingredients. Beat well. Pour into two oiled cake tins, or use one pan in which it will be about one inch or less in thickness. Set in a warm place to rise about one-fourth inch, then bake.

RICE MUFFINS

1 cup boiled rice.
2 eggs.
½ cup cream.
¾ teaspoon salt.
Barley flour to make a stiff batter.

Beat together the cream, egg yolks, rice, flour, and salt. Lastly fold in the stiffly beaten whites. Bake in hot gem irons.

DATE BARLEY ROLLS

Use the dough for the unfermented barley rolls. Roll it into a sheet 1-8-inch thick. Cut into strips 2 inches wide. Lay stoned dates along the middle of each strip. Moisten one edge of each strip, and roll the strip of dough around the dates so as to make a long roll. Cut into two-inch pieces, and bake.

ROLLED OATS COOKIES
(13 or 14)

½ cup brown sugar.
½ cup hard vegetable shortening.
2 teaspoons molasses.
½ cup seedless raisins.
½ cup walnuts, cut fine.
1 egg.
¾ cup barley flour.
1 cup rolled oats.
A few grains salt.

Cream together the fat, sugar, molasses, and salt, then beat in the egg, then stir in the flour and rolled oats, then mix in the nuts and raisins. Flour the hands and form the mixture into small balls. Put the balls on an oiled tin, flatten, and bake.

BARLEY BREAD

⅔ cup potato flour.
⅔ cup white corn flour.
2½ cups barley flour.
½ cake yeast.
1½ teaspoons salt.
1 tablespoon oil.
1½ cups water.

Scald one round tablespoon of the potato flour with the water. Allow it to cool, then mix into it the yeast which has been mixed to a paste with a little water. Allow this to set in a warm place for three hours or longer. Less yeast can be used and this mixture allowed to ferment longer. Then mix into this setting the remaining ingredients. Knead till smooth. Then place the dough in an oiled bowl, cover, and set in a warm place to rise. When light mold it into a loaf, put into a small bread tin, set in a warm place to rise, then bake.

For the raspberry shortcake bake the barley flour cake in cup-cake tins. Split the cakes and put crushed and sweetened raspberries between and on top of the

SABBATH

DINNER

Buttermilk Potato Salad
Barley Bread[1]
Raspberry Shortcake[1]

BREAKFAST

Toasted Puffed Rice
Cream or Milk
Walnuts Date Barley Rolls[1]
Rolled Oats Cookies[1]
Currants on the Stem

SUPPER

Hulled Corn and Milk
Cottage Cheese
Date Barley Rolls

cake; then place a spoonful of whipped cream over all, if desired.

COTTAGE CHEESE AND PIMENTO SANDWICHES OF POTATO

Pack the mashed potato that is left from dinner in a bread tin, first wetting the tin with cold water. When cold, unmold, slice, spread one slice with butter or nut margarine, and spread a second slice with a mixture of cottage cheese and chopped canned pimento, then place the two slices together.

A Correction

By an inadvertence the following recipe appeared last month without some of the author's changes; hence we reprint it with the changes made:

BAKED SPLIT PEAS

Wash well one pint of green split peas and soak them overnight. In the morning put them into a double boiler and cook until tender. They will get tender almost as quickly in a double boiler as if cooked directly over the stove, and there is no danger of scorching them. Then add to them 2 1-2 teaspoons salt, 1-2 cup rich cream or 1-4 cup vegetable oil. Put them into a baking pan in which they will be about two inches deep, having water enough to cover them. Bake slowly for one hour or more till they are thoroughly tender and dry and mealy. Serve with cream sauce or tomato sauce. A small clove of garlic may be added to the peas before baking them if it is liked.

For the French dressing to serve with the lettuce on the supper menu, use —

1½ tablespoons oil.
1½ tablespoons lemon juice.
½ teaspoon salt.

Beat till thoroughly blended, then pour over the shredded lettuce.

MOUTH HYGIENE

Teeth Food

W. C. Dalbey, D. D. S.

ANY substance taken into the body to build up cells or to repair their waste, may be called food. Of course all materials taken into the body for food do not accomplish their supposed purpose.

GENERAL FOOD CLASSES

Foodstuffs may be divided into four general classes:

Inorganic, including salts and water.
Carbohydrates, such as starches and sugar.
Proteins, found in beans, peas, and flesh meats.
Fats and Oils, found in the animal, vegetable, and mineral kingdoms.

During life the human body is the seat of constant activity. Worn-out cells are being thrown off and new cells formed to take the place of the old cells. Therefore, it becomes essential that at stated intervals food be taken into the body, and oxygen be supplied the lungs.

While, in a general way, the importance of proper food and drink cannot be overdrawn (because disease will surely follow the taking of improper food or drink), it is only specific foods — foods that build tooth structure — we wish principally to notice at this time.

DO WE INHERIT POOR TEETH?

The question is often asked, Do we inherit poor teeth? In answer to this question we can say in the strictest sense, No. Whoever heard of a tooth that was broken down and decayed before it ap-

peared in the mouth? But what we do inherit that seems to bring the affirmation to this question, is low vitality, which lessens our resistance to decay and disease.

Teeth are formed before they appear in the mouth. If they have not during their formation received the proper mineral elements to build good tooth structure, they are weak in resistant qualities. They may be composed of the same materials, but the cells are farther apart. This may be compared to bubbles and a solid substance made of the same materials as the bubbles, or to a straight-grained piece of wood and a knotty, gnarled piece of the same wood. The fibers of the knotty wood are interlaced or locked close together, making it harder, because of this, to break apart. Thus it is with the resistant qualities of different teeth.

FUNDAMENTALS TO GOOD TOOTH STRUCTURE

It is a fundamental law in building teeth, as in building anything else, that good teeth cannot be built without good tooth-building materials.

The first thing, then, is to look after the infant, then the child, and see that proper elements are given from which to build good teeth. One might safely say that the child's health is in direct proportion to its digestive machinery. The beginning of this "machinery" is the grinders — the teeth.

Two of the most important elements from which teeth are made are phosphates and lime. If the child is given food that is deficient in these two elements, the teeth of that child are of poor quality and cannot resist the pressure brought to bear upon them. Thus the child is at the outstart handicapped to battle with life's problems; and finally conditions are brought on that result in poor health or an early grave.

Many babies are deprived of their mother's milk, and other foods, many times deficient in proper tooth-building elements, are substituted. Nearly always these are refined cereal-food products, and refined to the limit. They are usually converted starch to a great extent. Oh, yes, the baby is fat all right, and that is the most you can say. But what about the bones and the teeth? It seems that the principal modern tendency in food preparation is to eliminate as far as possible the mineral elements that are found naturally in food for man, rendering it almost unfit for building material, especially for bones and teeth.

Dr. Wiley says: "It is a crime to feed children white-flour products."

SOME PROPER FOODS

We have not the time or place to discuss why, but some of the best foods are whole-wheat bread, potatoes with the jackets on (bake them and eat jackets and all); whole cornmeal, baked in thin layers. Cut out meat; it is not only an unnatural but an unnecessary food. Avoid much sugar, and eliminate as far as possible candy; at least do not allow it to remain around the teeth. The teeth should be well cleansed after sugar or candy is eaten. Pies and pastries are not in order for children. We all would live longer, and without the distressing diseases which follow improper diet, if we would follow this advice.

The proper training of the child as to its diet, as well as the training in other things, is in the home. Let the cook take notice! Then, mother, build your child's body for future endurance and happiness. Its coming welfare is in *your* loving hands. And, father, help your wife.

AS WE SEE IT

Conducted by G. H. Heald, M. D.

WAR IS CHANGING OUR ATTITUDE TOWARD FOOD

THAT most of the world—"present company excepted"—is governed by foolish prejudices regarding food is a matter of common observation. Only, as we observe, we are liable to except ourselves. (Of course OUR preferences and OUR dislikes are all founded on reason!) Probably nothing has so shaken popular beliefs and popular prejudices as the present war. This fact is so nicely brought out by Dr. Joseph T. Smith, of Baltimore, in an article "Our Mental Attitude Towards Food" which appeared in the February issue of the *Cleveland Medical Journal*, that I cannot forbear quoting him somewhat at length:

> "Few habits become so firmly fixed, as we advance in life, as our desires for particular kinds of food prepared and served in special ways; these are a bar to many, preventing them from measuring up to what the Government is calling us so loudly to aid her in accomplishing, the better feeding of the Allies. The present food conditions tend most strongly to break up food habits. People formerly living on refined wheat-flour bread and who did not see how they could get along without it, on eggs and other forms of concentrated food in excess, now cannot use such refined flour, and are taught the use of food of less concentration.
>
> "Turnips, carrots, oyster plant, spinach, eggplant, squash, parsnips, and foods of like character should be more freely used as furnishing less concentrated material and more refuse. Constipation is more prevalent than it ought to be, because people live on foods providing an insufficient amount of refuse for the needed intestinal stimulation. Bread ought to be made from whole-wheat flour; rice should be brown and undermilled; barley is not used enough; cornmeal should be yellow and made from the whole grain; white potatoes are best baked or cooked with 'jackets on;' canned goods ought not to be eaten when fresh vegetables are obtainable; fruits, and especially the banana, ought to have a large place in our dietary. What but war measures can wean some away from their injurious ways of eating, and compel them to adopt more free, generous, and healthier forms of diet? Good is thus being accomplished in improving the national dietary; the present food agitation is not an unmixed evil."

SOME SERIOUS RESULTS OF HIGHER PRICED MILK

THAT the rise in price of milk would cut down or cut off the milk supply of many children, thereby unfavorably affecting their growth and health, was freely predicted. An investigation in Baltimore, reported by the Children's Bureau, United States Department of Labor, indicates that the prediction is being verified. Of 756 Baltimore children between two and seven years of age, only 29 per cent are now having fresh milk to drink as against 60 per cent a year ago. And only 20, or less than 3 per cent of the children studied, are having as much as three cups a day. With the babies under two the Children's Bureau says the situation is a little less serious. Apparently their needs are more generally understood than the needs of children over two.

The number of families in this group who are buying no fresh milk at all has risen from 37 a year ago to 107, or 29 per cent of those from whom information was secured, and these 107 families include one fourth of all the children under 7. At the same time, the total daily purchase of canned milk by the families studied has increased from 25.5 cans to 84 cans.

Most serious, according to the Children's Bureau, is the general substitution in the children's diet of tea and coffee. Of the 575 children who are not drinking

milk, 64 per cent have definitely substituted tea and coffee, and 24 per cent are "sharing the family diet," which may or may not include tea or coffee, or milk in other foods.

While the group studied was comparatively small, yet the method of study and selection of cases was such that it is thought to be fairly representative of conditions elsewhere.

The bureau urges that in every community, during the children's year, emphasis be placed on the importance of furnishing each young child with at least three cups of fresh milk a day.

GIVE THE CHILDREN AN ABUNDANCE OF MILK

Owing to the scarcity and higher prices of milk there has been a tendency to cut down the milk supply and to substitute something else not so wholesome. It should be remembered that even at the present high prices, milk is still the cheapest form of animal protein we have. It is not only the cheapest, it is the most wholesome. We take pleasure in helping to give publicity to the following statement from the United States Food Administration:

> "For the proper nourishment of the child it is essential that milk should be kept in the diet as long as possible. Not only does it contain all the essential food elements in the most available form for ready digestion, but the recent scientific discoveries show it to be especially rich in certain peculiar properties that alone render growth possible. This essential quality makes it also of special value in the sickroom. In hospitals it has also been shown that the wounded recover more rapidly when they have milk.
>
> "For the purpose of stimulating growth, and especially in children, butter fat has no substitute. During this last winter when much agitation arose in some of the larger cities over the price of milk, which was advanced from two to three cents per quart by reason of the rapid rise in the cost of feed and labor, many families among the poorer classes were found giving their children tea and coffee instead of milk. Such methods of feeding fail to nourish the child properly. The widest possible publicity should be carried on through public channels to bring these essential facts to the attention of all mothers.
>
> "In spite of the shortage of milk in Germany, that country has at all hazards maintained the milk ration of the children and in the hospitals, even though to do so has meant that the adult population has had to forego largely its use. In a 'safety first' health campaign it must be remembered that it should be 'children first.'"

THE DISEASE GATE TO THE HUMAN BODY

Ancient Jerusalem had its Fish Gate, its Horse Gate, its Sheep Gate, and its Water Gate, each probably named from things or objects which passed through it. In a similar manner the mouth-nose opening might be named the Disease Gate of the body, for it is through this gate that nearly all infectious diseases reach the body. There are few exceptions, such as the insect-borne diseases, the hookworm disease, and the venereal diseases; but even some of these seem at times to be conveyed by mouth infection.

Disease rarely enters the body by the unbroken skin. Malaria is transmitted by a mosquito puncture of the skin. Hookworm enters the body through the skin, because it can burrow. Most infectious diseases are of bacterial origin, and as bacteria have no power to burrow, the unbroken skin is a protection against them. It is through the orifices of the body lined with mucous membrane that germs gain an entrance into the body, and probably even here, the entrance is greatly facilitated by some abnormality as a tooth cavity, or an abscess cavity in the gum, or a spongy tonsil which acts as a collector of food

and débris and furnishes a breeding place for the germs. The important fact to remember is that though the mouth and nose are the most favorable points of entry for germs, the advantage to the germs is much greater in cases where there are recesses in tonsil, tooth, gum, or nasal cavity, for rapid multiplication.

Observations have been multiplying that acute rheumatism is liable to follow or accompany tonsillitis. It is known that the same germ (the streptococcus) that is found in diseased tonsils, is also found in the joints in rheumatism. Sometimes recurrent attacks of rheumatism are stopped by removing diseased tonsils. There are other diseases or conditions of a very serious nature that may follow diseased tonsils; namely, kidney disease, and valvular disease of the heart. It is also quite certain that in some way chorea, or St. Vitus's dance, is a result of throat infection.

There are some physicians, or rather surgeons, who believe the tonsils are useless and dangerous appendages to the body, and they advise their removal, especially if they are large or appear diseased.

It is true we are not at all sure regarding the function of the tonsils; and where they are removed without accident there does not seem to follow any serious consequence. It should be remembered, however, that the operation is not entirely free from danger. There has been persistent hemorrhage following operation, even by skilful surgeons, and conservative men do not advise their removal merely because they are enlarged. When they are boggy and full of crypts for the lodgment of débris and bacteria, they unquestionably are a menace to the body.

There is, however, another side to the problem of keeping out dangerous germs. No matter how free the mouth may be from hiding places for germs, these minute organisms may still be a menace, and every reasonable effort should be made to keep them out. To this end it is strongly advised that milk be Pasteurized unless it is from a source entirely above suspicion. Even " certified " milk has been known to cause an epidemic of streptococcus infection of the throat. If milk and all food is cooked, and if the water is from a pure source, or else boiled, and if we put away our various ways of swapping saliva (the common drinking cup, or the soda-fountain glass, or the dishes in a restaurant when dishwashing is a mere pretense, or the practice among children of using each other's pencils, and other articles which are liable to be put to the mouth, etc., etc., etc.) we shall avoid very many of the conditions that favor the transfer of disease germs to our throat.

The diseases we may avoid in this way are: Tuberculosis, pneumonia, grip, colds, tonsillitis, with its resulting rheumatism and heart and kidney disease, scarlet fever, measles, diphtheria, whooping cough, mumps, meningitis.

The rules to be observed in prevention are few and easily learned:

Put nothing into the mouth or nose that does not belong there, and in any case be sure first that it is *clean*, that is, free from any contamination with disease germs.

Be sure that all food and drink is free from infectious germs. If in doubt, subject it to heat.

If there are breeding places for germs in tonsils or teeth or gums, have them attended to by a competent physician, or dentist. Do not neglect what may later prove to have been a sleeping volcano.

NEW AND DAINTY
WAR-TIME LUXURIES

We in America have hardly realized that there is a war. We are paying for it in increased prices, but usually with increased salaries. We wait awhile for coal and other necessities; we are scaling down our consumption of flour and some other staple foods; but we have not come to the place where foods are severely restricted in quantity and variety; and we see no immediate prospect of such a condition. As compared with the Allies in Europe, our lot is easy. In the *Illustrated London News* of March 16, is an article on "New and Dainty War-Time Luxuries," which, because it brings one more closely to a realization of the condition "over there," is worthy of the attention of the reader. To quote:

> "Now that all foods which come under the heading of 'luxuries' must of necessity be materially diminished, in order that tonnage may be saved and labor and land utilized to the utmost for the production of such as is of vital importance, those who desire to vary the bill of fare with a few little 'extras' must largely rely on their own resourcefulness and love of experiment. But such ventures must be confined to items obtainable within our own borders."

The article gives a list of sea foods not ordinarily used by the English, but in common use elsewhere. There are fresh-water mussels and crayfish for those who dwell inland.

> "Those who live by the sea have a much wider choice, though of all our numerous species of marine shellfish but six are commonly eaten. We might add to these at least the limpet, the cuttlefish, and the octopus. . . . Our supplies of crabs and lobsters must of necessity be limited now; but we might well make trial of the shore crab, which can be gathered at low tide by all who will. . . . Shrimps are supposed to be obtainable only from the sea; but as a matter of fact, large numbers may be taken from the larger brackish-water ditches bordering marshes along the coast."

And so the writer goes on, reminding his readers that while in England there is a prejudice against the use of these foods, they are eaten on the Continent with relish, and some of them have been eaten in England in olden time.

Other foods recommended are the "edible snail" and other species of snail. As an argument in favor of eating snails, the writer says: "Most of us have probably eaten snails unconsciously, for it is said they are much employed in the manufacture of cream. I am told of a milkman now retired, who declared them to furnish the most successful imitation known." What would Dr. Wiley be doing if he were over there?

Other foods recommended by this writer are frogs' legs, squirrels, the water vole, though from its resemblance to the rat the writer of the article thinks few people would have the courage to make trial of its flesh. The hedgehog, also, is recommended to "furnish dainty meat, yet none but gypsies will eat it." The flesh of the otter and that of the seal are also suggested.

Those who have learned to live upon the products of earth as furnished directly by plants, will, of course, find no necessity for scouring the seashore, the inland creeks, and the marshes for such "dainties" to give variety to the diet. They might be induced to partake of such food as a last resort in case there was a shortage of the accustomed plant foods. But one may well imagine that to the person who is a real vegetarian, the use of such foods would require considerable courage. Perhaps some of them will require courage on the part of some who are not vegetarians.

QUESTIONS AND ANSWERS

Conducted by J. W. Hopkins, M. D., Washington (D. C.) Sanitarium

This is a service for subscribers to LIFE AND HEALTH.
If a personal reply is desired, inclose a three-cent stamp.
If you are not already a subscriber, send also the subscription price with your question.
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State your questions as briefly as possible, consistent with clearness, and on a sheet separate from all business matters. Otherwise they may be overlooked.
For prompt attention, questions should be addressed to J. W. Hopkins, M. D., Takoma Park, D. C.

Saline Enema

"How much salt shall I use for a saline enema? Is colon flushing as good?"

Use a teaspoonful of salt to a pint of water. Use the warm enema first, finishing with a small cool enema. Flushing the colon is good, but should not be done very often. The ordinary enema is just as effective as the internal bath.

Two Meals or Three?

"Is it better for a man going to school, and not getting much exercise, to have two meals, breakfast at 6: 30 A. M., and dinner at 12 noon, or to have three meals?"

This individual should have three meals a day. In addition to breakfast and dinner he should have a light supper at 5: 30 or 6 P. M., consisting of stewed fruits, bread and butter, and perhaps some dextrinized cereals. The usual academy practice of having breakfast at 6: 30 and dinner at 1: 15 P. M. is to be condemned, as this long period between meals causes gormandizing and dyspepsia.

Fruit and Milk

"Are apples and milk a bad combination?"

For the average healthy stomach, apples and other fruits may be eaten with milk or cream without any disturbance. If, however, the stomach is sensitive, or if the individual has any dyspepsia, it will be much better to eat the fruit at the close of the breakfast meal and with supper, and use the milk at the midday meal. Those who have weak stomachs will do better by observing the above combinations, and by taking not more than four articles of food at the meal.

Water at Meals

"Is there any harm in drinking water at mealtime?"

The average person does better with a glass of water taken slowly at mealtime. This should be sipped between mouthfuls, and not used while food is in the mouth, or to wash the food down. The softening of food should be done by means of mastication and the saliva, not by any liquids taken otherwise. Those who have slow digestion and dyspepsia will do better without water at mealtime. This also holds good for the use of milk, coffee, and other drinks, unless the diet be liquid.

Water Before Meals

"Is drinking hot water before meals a good plan?"

Drinking hot water is apt to relax the stomach, if followed as a habit. In catarrh of the stomach it is a good plan to follow it up for a time, as it washes the mucus from the stomach.

Prunes and Raisins

"What is the food value of prunes and raisins?"

Prunes contain about three per cent protein and ninety-seven per cent carbohydrate. Raisins contain three per cent protein, nine per cent fat, and eighty-eight per cent carbohydrate.

Quantity of Olive Oil

"How much olive oil can one use a day without overeating of fats?"

The use of olive oil should be arranged according to the individual case. It is almost pure food, there being very little waste in it. Individuals who have much acidity in the gastric juice can use it freely. Those who are deficient in this digestive fluid must be sparing in its use, and should take it at the close of the meal, while the former class may take it at the beginning of or during the meal. The average amount of fat which should be used per day is from one to two ounces. If little or no butter is used, its place may be taken by olive oil or other fat.

Spinal Treatment

"Do you recommend chiropractic or osteopathic treatments?"

We have not made a practice of recommending either the chiropractic or the osteopathic treatments, believing as we do that the proper method of handling disease is to remove the cause, adopt the right diet and other hygienic measures in regard to sleep, exercise, clothing, etc., and to take rational treatments, as hydrotherapy and massage, under the supervision of a physician. It seems to me that you will get much better results from the simple home treatments which you can take yourself and from some massage treatments which you should be able to get from a good nurse. Nearly every town has a nurse who can give a good massage.

Fruit and Starch

"What relation has the eating of fruit to the digestion of starch?"

Fruit eaten before or during the meal delays the action of saliva upon the starch foods. It is therefore better to eat the fruit at the close of the meal.

Swamp Root

"Do you recommend Dr. Kilmer's Swamp Root for the kidneys?"

We do not. You will get better results by drinking plenty of pure water, keeping your skin active by fomentations and warm baths, and securing normal action of the bowels. Have the urine examined by your physician, and counsel with him. Do not use any patent medicines unless your doctor recommends them. The composition should be printed on the label.

Removal of Wart

"Do you recommend the removal by electricity of a wart on the wrist over the pulse?"

A wart in this location would be more safely removed by the knife in the hands of a skilful surgeon. If care is used, electricity will be satisfactory.

Warts on other parts of the body may be removed by repeated paintings of iodine, or the household remedy of milkweed juice. If the surrounding skin is protected with vaseline, the wart can be burned out by carefully repeated applications of nitric acid.

Honey

"Is honey harmful?"

Hutchinson gives the composition of honey as follows: Thirteen to sixteen per cent water; two and seven-tenths per cent cane sugar; one and three-tenths per cent protein; grape sugar and fruit sugar, of each about equal parts, amounting to seventy-four to seventy-eight per cent. Honey is therefore an excellent food, and if used in the proper amounts is not harmful. Some individuals cannot use it because of the reaction which they receive from the peculiar secretion which the bees leave with the honey.

You should be moderate in the use of sweets, as in excess they produce catarrh of the mucous membranes, and after eating them the teeth and mouth should be thoroughly cleaned in order to prevent decay of the enamel.

Olive Oil

"When living on a diet without any meat, and very little fat of any kind, is it well to take a little olive oil? If so, how much and when should it be taken?"

The olive oil takes the place of fats of meat which are ordinarily eaten, and may be taken in amounts of from one to two ounces per day. Those who have healthy stomachs may take the oil at the beginning of or during the meal. Those who have slow digestion, should take it at the close of the meals, as it hinders the flow or secretion of gastric juice. Those who do not eat meat, should have some other protein in the way of whole-grain preparations, legumes, nuts, eggs, or milk.

Rules for Longevity

"Please give a few daily rules for longevity."

1. Cultivate an optimistic spirit, and have firm faith and confidence in God. Read your Bible and pray at least once a day.
2. Abstain wholly from poisons, which include flesh foods, alcohol, tobacco, tea, coffee, and condiments.
3. Get eight or ten hours of sleep either in the open air or in a well-ventilated room.
4. Avoid overeating. Masticate the food thoroughly. Take two moderately heavy meals, with a light meal at night, consisting of ripe fresh fruits and bran, or of stewed fruits and bran. Let the diet be composed of grains, fruits, vegetables, nuts, with a moderate amount of eggs and milk. Use some fresh, raw food daily, and not too many kinds at any meal.
5. Take a cold bath daily, preferably on rising, and follow this with a short course of calisthenics. Get some daily exercise to perspiration in the open air, if possible.
6. Adhere to strict moral integrity in every phase of life.

Mineral Oil for Constipation

"How can mineral oil be used for constipation, and the passing off alone of small amounts of oil be avoided?"

Use the oil in smaller amounts and oftener, preferably on an empty stomach. It will thus be taken before meals in doses of a dessertspoonful or so. This trouble is also sometimes corrected by the use of bran at the meals. If you will take equal parts of paraffin and mineral oil, melting the paraffin and mixing the two with a little sugar, they will solidify upon cooling, and may then be divided into little squares or cubes. Two or three of these taken at meals are palatable, and will regulate the bowels without the above objectionable feature.

Venereal Diseases

"Are gonorrhea and syphilis curable?"

The former may perhaps be cured, but the results can never be entirely removed. Gonorrhea is responsible for a large percentage of blindness, rheumatic and heart trouble, and much pelvic disease. It is doubtful if syphilis can be entirely cured.

Dilated Stomach

"Give the diet for a dilated stomach."

A person with a dilated stomach should have a barium meal, followed by an X-ray examination to ascertain the cause of the dilatation. A test meal should also be given, and the amount of acid secreted by the stomach ascertained. In all cases the food should be nutritious and easy of digestion, containing only a moderate amount of residue, and that finely divided, so it will pass readily from the stomach. If the gastric juice is deficient in acid, dry foods may be used and thoroughly masticated, and in this class of cases the amount of liquid taken at the meal should be somewhat restricted. If the stomach secretes an excessive amount of acid, the food should be more liquid. Dry foods produce more appetite juices, and thus increase the acidity.

NEWS NOTES

Idaho to Go Wheatless

The entire State of Idaho has pledged itself and its citizens to abstain entirely from wheat "until such a time as the Food Administration decides that sufficient wheat and flour are available to permit its use by our citizens."

Ground Glass Scare

And now it would appear that all those stories of ground glass being found in candies, sugar, and flour in the different encampments were purely fiction. But how widely they were copied! Just why the perpetrators of such stories do not save them all for April 1, is not apparent. It is stated on good authority that coarsely ground glass in food could be detected, and that glass ground so finely as to escape detection, would be too fine to do material damage.

Wheatless Meals and Days Optional

The Food Administration has earnestly requested that the consumption of wheat in homes be reduced to 1½ pounds a week per person, the matter of observing wheatless meals and wheatless days being left optional with the individual household. But in all public eating places, the rule for wheatless meals and wheatless days is to be rigidly enforced, the full light of publicity being turned on establishments which violate the request of the Food Administration.

Drastic Wheat Conservation

At a special meeting in Washington, 500 leading hotel men from all parts of the country pledged themselves to abolish absolutely the use of wheat products in their hotels until the next harvest, in order that through their savings and their example, shipments of wheat to the Allies may proceed without interruption. Total abstainers' clubs are being formed among those who live at home, the members of which pledge themselves to abstain from the use of wheat absolutely until the next harvest.

Increase of Anthrax

The increased importation of foreign hides owing to the shortage of leather incident to the war, has resulted in marked increase of anthrax among those who handle the hides or hair or wool. The disease in human beings is also known as malignant pustule, and wool sorters' disease. It is characterized by the formation at the point of infection of a carbuncle which is always serious, and is often fatal. In some establishments, as a measure of prevention, employees handling raw hides are compelled, on pain of immediate discharge, to have all wounds, no matter how trivial, treated at once by cauterization with carbolic, followed by alcohol dressing. Another treatment is excision of the pustule, cutting deep and wide, swabbing out the wound with tincture of iodine, packing with the same drug, and later applying 1: 2000 mercuric chloride dressing, together with sufficient doses of anthrax serum, and quinine.

Water Damage to Flour

It is said to be known among sailors that flour floats after immersion in sea water, and suffers little damage. To ascertain the actual damage, according to the *Northwestern Miller*, a baker in New South Wales submerged a bag of flour in the ocean for 67 hours. A 98-pound weight was required to sink a 150-pound bag of flour. When taken out, the bag weighed 155 pounds. It was dried four days and yielded 120 pounds of perfectly dry flour, the bag and waste weighing 28 pounds. Baked into bread, it gave perfect results.

Ventilation and Respiratory Disease

An investigation carried on among 5,533 pupils of New York schools during a period of five months in the late fall, winter, and early spring, showed that in the rooms of the closed-window-mechanically-ventilated type, kept at a temperature of 68°, the rate of absence for respiratory disease was 32 per cent higher than in the open-window-naturally-ventilated rooms kept at the same temperature, and 40 per cent higher than in the open-window-naturally-ventilated rooms kept at a temperature of about 50°. Comment is unnecessary.

Physiology by Correspondence

Have you been disappointed in your plans to attend school? If so, the Fireside Correspondence School is still open to you. Theodore Roosevelt, referring to correspondence schools, said: "I look upon instruction by mail as one of the most wonderful and phenomenal of the developments of this age." You may take up by correspondence the study of physiology and hygiene, home nursing, or any one or more of a large number of subjects. A booklet, "The Fireside Correspondence School in a Nutshell," will be sent you if you send your name to C. C. Lewis, Takoma Park, D. C.

More Medical Officers Needed

Surgeon-General Gorgas, in an earnest appeal for further enlistments of physicians in the Reserve Medical Corps, says: "Although the medical profession of the country has responded as has no other profession, future response must be greater and greater. The department has already reached the limit of medical officers available for assignment." There are now more than fifteen thousand medical reserve officers in active duty. These will all be required for the first million and a half men that go to the front, and there will doubtless be other drafts, and still others, perhaps. General Gorgas says: "I cannot emphasize too strongly the supreme demand for medical officers." The requirements for commission in the Medical Reserve Corps are: Applicant must be a male citizen of the United States, between ages 22 and 55, graduate of a reputable medical college authorized to confer the degree M. D., and professionally, morally, and physically qualified for service.

Always Diphtheria

The old diagnosis "membranous croup" is out of date. The condition thus diagnosed is always diphtheria — a dangerous infectious disease, which should always be recognized for what it is.

Mothers' Aid

Miss Julia C. Lathrop, chief of the Children's Bureau of the United States Department of Labor, in her annual report advocates that our State and Federal Governments combine to guarantee to every mother the care and financial assistance that she needs for herself and her babies.

War Postpones Leprosorium

Though Congress has made provision for the establishment of a national leprosorium, war conditions have postponed indefinitely the carrying out of the program. Meantime, the number of lepers is increasing. In California thirteen cases were reported in 1916 and twenty-one cases in 1917.

Milling and Beriberi

British investigators of beriberi among the soldiers have reached the conclusion that, in order to prevent beriberi among troops in active service who are separated from fresh food supplies and must depend largely on tinned goods, it is highly desirable that the embryo, or germ, of the bran should not be excluded from the flour intended for the use of such troops.

Food Conditions in Italy

In Rome, bread, macaroni, and rice tickets came into use December 3. Milan is under general rationing. In December, beef in Rome was selling at from 40 to 75 cents a pound; adulterated butter, about 70 cents.

Trained Nurses Short

Owing to the scarcity of trained nurses, resulting from the demands of the war, there has been a demand that the entrance requirements for the nurses' training course be reduced from completion of nine grades to completion of eight grades school work.

Egg Conservation

A Food Administration expert says he expects the American people to save in eggs this year enough to pay three times the cost of the Food Administration, this saving to be effected by teaching the farmers how to curtail the $50,000,000 annual loss in handling and distributing eggs. The best kind of conservation!

Canning Widens Food Use

The packing of beans in cans has brought about a great increase in their consumption. It has multiplied the demand many times. Hominy is eaten today in tens of thousands of households which scarcely would have so much as heard of the existence of this most wholesome, nourishing, and economical food product. People are enabled by the canning business to have pumpkin pies the year round.

Large Potato Crop

A surplus crop of 90,000,000 bushels of potatoes in 1917, with a yield of 442,600,000 bushels, furnishes a valuable substitute food for the cereals. Learn the value of a potato. The more potatoes we eat the more wheat we can ship.

To Save Flour

Owing to the fact that some small families consume less than a pound of bread a day, the Food Administration has decided to permit bakers to issue a 12-ounce loaf. Heretofore the smallest permitted loaf under the food regulation was one pound.

White Plague in France

According to William Allen White, "Tuberculosis is the most gaping wound in bleeding France. Tuberculosis is for the French the greatest and most awful by-product of the war. Tuberculosis, if not checked, will conquer France after the German guns have been forced across the Rhine."

Honey in Ice Cream

An ice cream concern in Spokane, Wash., has effected marked savings in sugar by using 6 pounds of strained honey and 3 pounds of sugar to 46 pounds of milk and cream in its mix. While honey costs a little more than sugar, it makes a fine grade of ice cream, this concern reports, and the saving in sugar justifies a little extra outlay for the substitute sweetener.

Physicians Incompetent

The successful family physician is not necessarily fitted for service in connection with the army, and it has been found necessary to relieve from service more than 3,000 physicians who enlisted in the Medical Reserve Corps. Possibly some of those relieved were not even successful private practitioners, but misfits, who hoped to better their circumstances by taking a Government position.

Don't Believe the Rumors

General Pershing has issued a strict prohibition against the purchase of pie by his soldiers. Rumors had it that France is not suffering from a shortage of wheat, since American soldiers were buying pies and paying $1.25 apiece for them. As it is only the armies that now have pure wheat flour, the boys must have supplied the flour for the pastries. The French people have long been using whole wheat with an admixture of other cereals.

Eat Less and Live Longer

"Few of us," says Professor Stiles, of Harvard (in an article, "War-Time Diet and Health," in *Scientific American Supplement*, March 30), "have discerned the simple principle to which Dr. Lusk has lately called attention; that we can be large people, maintained by large rations, or much smaller people with a much lighter requirement. Whether the reduction is to be desired or not depends upon the original condition. For a considerable fraction of the adult population, weight reduction is calculated to add to the expectation of life." Be patriotic: eat less, and live longer.

England's "Eat Less Bread"

Those who have seen the British posters have noticed how often they say, "Eat less bread;" not, "Eat less wheat bread." That wording is significant. It means that there is no white bread there for the people to eat less of. In other words, they are not being asked, as we are, just to substitute one kind of bread for another, but to *eat less bread of any sort.*

Malaria in England

Once common in parts of England, malaria was eradicated. Malarial mosquitoes were still there, but as they found no infected humans, they could not transmit the disease; but since the war numbers of malarial patients have returned to the homeland, who serve as foci for the infection of the home population. Measures are now being taken to deal with the malarial mosquitoes.

Tapioca Flour

Measures are being taken by a California jobbing firm to secure a shipment of tapioca flour from Java, and if the flour proves all that is claimed for it, it may be more widely accepted as a substitute for wheat. Tapioca flour is considerably heavier than wheat flour, and makes into a larger and more compact loaf. The flour is said to have been extensively used for some time in California as a wheat substitute, and it mixes well with wheat flour and other cereals.

St. Helena Sanitarium

THE MAIN BUILDING—SHOWING THREE OF THE FIVE STORIES
New Concrete Hydrotherapy Building at the Right

AWAY from the noise, excitement, and contamination of the city, and nestled close to the heart of nature, on a beautifully wooded slope of Howell Mt., is situated the St. Helena Sanitarium.

ITS natural setting, in a forest of live-oaks, firs, manzanitas, and madronas, together with an almost unending variety of flowers and foliage, gives a beauty and fragrance to the place that beggars description. It must be seen and enjoyed to be appreciated.

EVERY modern facility favorably known to medical science in the treatment of curable conditions, has been incorporated into the institutional régime. Thus nature and science have combined to make the St. Helena Sanitarium all that can be desired by the diseased body or the weary mind.

Health is Contagious at St. Helena

Sixty-five miles from San Francisco, easily accessible by either steam or electric line; three and one-half miles from St. Helena; 750 feet above the sea level; splendid climatic conditions at all seasons of the year; pure mountain water; beautiful view of valley, mountain, and plain; seven physicians, seventy nurses; excellent service, liberal cuisine,—these and many other advantages are to be enjoyed at this beauty spot of California.

The St. Helena Sanitarium

Sanitarium, Napa County - - - California

"*As a man eateth, so is he.*"
PROVERB.

How Did You Stoke Your Furnace Today?

HOW did you eat today? Did you select your food with care? Or—did you, as a matter of course, eat what was placed before you? How you eat—what you eat—when you eat—has everything in the world to do with your health and efficiency.

What you eat *today* is walking around and talking *tomorrow*—so says one of the greatest medical authorities in the world. Because—the health of the whole body is tempered in the laboratory of the stomach.

Teaching people how to eat is one of the chief features of the Sanitarium program of health-building. Not alone is the food prepared with scientific precision—not alone is the right diet prescribed for each individual case—but it is provided in the exact quantity and variety needed.

Again—you do not miss the things that are banned because there are so many other things to take their places. Dieting is made a delight.

The diet system in use at these institutions is the result of almost half a century of thoroughgoing research. It is not based on fads, guesswork or unproven theories.

The wholesome daily dietary is supplemented in an effective way by a thoroughly enjoyable program — embracing rest, sleep, exercise and the outdoor life.

And now—if you want to see how a stay at one of these health-homes will lead you irresistibly back to the "Simple Life" and health—you will make it a point to write for descriptive literature *today*.

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307 Pepper Drive, Loma Linda, Cal.

The Glendale Sanitarium
207 Broadway, Glendale, Cal.

The Paradise Valley Sanitarium
107 Sanitarium Ave., National City, Cal.