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Sanitarium, Napa County - - - California

Life & Health

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BRINGING IN THE SAP IN A MAPLE-SUGAR CAMP

Life & Health

HOW TO LIVE

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

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Making the Most of It

W. A. Ruble, A. M., M. D.

NOW that the war is over, many may think that some of the food measures forced upon us by circumstances during the war may be dismissed. In many ways the war has been a great blessing. It has made of a heterogeneous populace a united nation. It has broadened our ideas and views in regard to our neighbors overseas. It has made us much less selfish. One of the best lessons, though, has been the lesson on conservation. Possibly I should not use that word any more, for some have come to feel that they never want to hear it again. Some have passively yielded to the pressure of war regulations, and have chafed under the restrictions. All loyal people, however, have gladly acquiesced, and many have learned valuable lessons from the experience. Now that war regulations no longer constrain us to be saving, peace conditions should cause us to be still more careful in the use of all commodities. Let us, then, study for ourselves and for our own profit healthwise, financially, and economically the judicious and wise use of all our substance.

"A careful study of these principles in detail is the business of every housewife, in order that she may supply the necessary elements in proper quantities to her family."

There are several reasons for the economical use of foods:

1. Preservation of health. Simple food in reasonable amounts is best.

2. Increase in wealth. Much saving of means, labor, and worry can be accomplished by adopting a simple diet.

3. Ministry to others. There is at present great poverty and want in many parts of the world, and in large cities. Save for this purpose.

We have no right to waste food for which others are in need. Great saving in means can be accomplished by economy in the use of foods and other staples. There has never been greater need for funds with which to alleviate suffering in the world than now. Then, too, missions and gospel work in heathen lands of late have been neglected. Our study should be to save in every way possible in order to be able to contribute

A STREET SCENE IN CHOSEN

"Then, too, missions and gospel work in heathen lands of late have been neglected. Our study should be to save in every way possible in order to be able to contribute liberally to gospel work in other lands and to worthy philanthropic calls in our own and other countries."

liberally to gospel work in other lands and to worthy philanthropic calls in our own and other countries.

A table of reference, such as the accompanying, may be made most helpful in accomplishing this saving, and at the same time enable us to decide upon the best kinds of food for certain purposes.

The more common foods are taken and classified first as to their predominating constituents, as carbohydrate, fat, and protein. Besides these commonly recognized food elements, four other elements are of importance: (1) Vitamine B (water-soluble, necessary substance found in green vegetables); (2) Vitamine A (fat-soluble, necessary substance found in milk, butter, green leaves, etc.); (3) Pabulum, or coarse fiber, necessary as a stimulant to intestinal peristalsis; (4) Soluble salts, as iron, calcium, common salt, and potassium.

The capital letters in the third column denote that said food is high in the certain element indicated by the letters given, C standing for carbohydrate, F for fat, P for protein, Va for vitamine A, Vb for vitamine B, S for salts, and Bal for balanced ration. The last column gives amount of calories, or food value, of each article that can be purchased for ten cents at prevailing prices. If prices in your market differ, you can make a close enough estimate by comparing prevailing prices in your market with those given, and make similar variation in last column.

FOOD VALUES	PRICE PER POUND	PREDOM'T'G ELEMENT	CALORIES FOR 10C
Apricots, dried	20 cents	C	630
Apples, dried	15	C	879
Apples, fresh	04	C	535
Bananas	15	C	290
Beans, dried	20	P	782
Bread	12	Bal	980
Butter	60	F	581
Cabbage	4	Va and b	600
Carrots	2	C and Va & b	795
Cheese	30	F and P Va	664
Corn, canned	12	C	370
Cornmeal	6	C	2,688
Corn Flakes	20	C	815
Crackers, Graham	15	C	1,270
Dates	20	C	708
Eggs	40 for 8	P and F	150
Farina	15	C	1,100
Lentils	20	P	790
Macaroni	15	C	1,100
Milk, condensed, sweet	15	C	1,200
Milk, con., unsweetened	15	Bal	700
Milk, whole	9	Bal	350
Molasses	10	C	1,300
Rolled oats	15	P and C	1,200
Olive oil	50	F	810
Oranges	10	S	169
Peaches	5	S	306
Peanuts, shelled	20	P and F	1,244
Pears	5	S and Flb	512
Peas, dried	15	P	1,000
Potatoes	3	C	1,004
Prunes	20	C	580
Radishes	20	Vl and Flb	46
Raisins	20	C	703
Rice	15	C	1,060
Spinach	10	V and Flb	108
Squash	3	C and V	330
Sugar, granulated	10	C	1,814
Tapioca	12	C	1,500
Tomatoes	4	S and Flb	250
Turnips	2½	S and Flb	500
Walnuts, shelled	50	P and F	604
Flour	4½	Bal	700
Shredded wheat	20	Bal	828

With this table before you, arrange menus having proper amounts of the essential ele-

A VEGETARIAN DINNER

" A poorly balanced diet results in such diseases as pellagra, scurvy, gout, rheumatism, beriberi, Bright's disease, and many others. A well-balanced dietary tends to health, wealth, and happiness. Study these things carefully for the good of yourself, your family, your country, and the . . . world."

ments, noting the foods furnishing the greatest amount of calories for the price paid.

Each person (adult) requires from 2,500 calories to 4,000 calories each day according to activities. This is about 20 calories to each pound of body weight in moderate exercise. This amount of calories must come from the three food elements, fat, carbohydrate, and protein, and they should be furnished in the following proportions approximately:

Protein (meat, eggs, beans, peas, etc.) should furnish 1-10 of the amount of calories.

Fat should furnish 2-10 or 3-10, and carbohydrates (sugar, starch, vegetables, grains, etc.) should furnish 6-10 to 7-10 of the amount of calories.

The use of protein is to build up torn-down muscle tissue, and is needed in comparatively small amount. If taken in excess of this requirement, it becomes a clog or irritant to the system and tends to impair the health. Carbohydrate, supplemented by fat, furnishes the energy and heat of the body, and is needed in the greatest quantity of any foodstuff. Vitamines — B found in green vegetables, covering of grains, etc., and A in fat, oils, etc., from milk, butter, eggs, etc.— are most important substances. In fact, disease, starvation, and death result, if they are withheld.

The salts of potassium, sodium, calcium, and iron are essentials in building blood, bone, teeth, etc. These are obtained from vegetables, eggs, milk, and grains.

Fibrous substance must be furnished to stimulate intestinal activity, and to prevent stagnation of intestines and consequent auto-intoxication. This pabulum is furnished best by vegetables, bran, and other coarse foods.

A careful study of these principles in detail is the business of every housewife, in order that she may supply the necessary elements in proper quantities to her family. A poorly balanced diet results in such diseases as pellagra, scurvy, gout, rheumatism, beriberi, Bright's disease, and many others. A well-balanced dietary tends to health, wealth, and happiness. Study these things carefully for the good of yourself, your family, your country, and the hungry world at large. Figure out your meals and menus until you know from habit the proper combinations and proportions. It becomes a fascinating study to plan the best rations for the least money. Try it.

If we noticed little pleasures
As we notice little pains;
If we quite forgot our losses
And remember all our gains;
If we looked for people's virtues,
And their faults refused to see,
What a comfortable, happy,
Cheerful place this world would be!

— *Anon.*

Keeping Well *vs.* Getting Well

L. A. Hansen

GETTING health is serious business. It is worthy of our serious thought. It is one of the most important things to which we should give attention. It ranks in importance with that of giving attention to our spiritual life. Indeed, physical health is very closely associated with spiritual health.

It is when we lose our health that we realize how dead earnest we must be in our efforts to get it back. And after we do regain it, we seem to appreciate more its value. It is worth just as much before losing; in fact, a great deal more. Our appreciation or our lack of appreciation does not affect the par value of health.

It is easier to keep our health than it is to regain it after it is once lost. There is no advantage in getting sick. It does not leave us better off physically any more than it does financially. The advantage is all on the side of staying well, so we ought to give just as careful consideration to keeping well as to getting well.

Health measures have value besides that of curing sick people. No new power is exercised in curing a sick man. The same power that heals him would keep him well to begin with. In fact, it is the repressing, the inhibiting, the hindering of that power that lets the man get sick. The full and free working of that same power would give a proportionate measure of health.

"Temperate living has its reward."

Another way to put it would be to say that healing power is keeping power. The healing process is simply one of restoring to a normal condition. It must be apparent that when the body is diseased it does not possess the same strength of healing power that it has when well. Very seldom is it that disease does not weaken the body as a whole. Recuperative power is not so great as resistive power. Hence, the preservation of a normal condition is of highest value in the maintenance of health. Perfect resistance against disease conditions is everything in health; it is the whole thing, for with that assured we have no disease.

Barring accidents and emergencies which the individual cannot help, staying well is a matter of one's own control. It is a question of working for health, caring for it, and guarding against disease. The means of health maintenance are in one's own possession to a large degree. What others may do may affect the matter some, but no one is more responsible for a man's health than the man himself. He cannot, of course, help it that his neighbor does not keep his premises clean, or that somebody else pollutes his water supply or fills the air with second-hand tobacco smoke; but he can do a good deal toward resistance against the harm of such things and a thousand and one others through which good health must run the gauntlet.

The very fact that we are subject to many conditions, over which we have no control, that make for ill health, makes it all the more important that we improve to the fullest degree our means of building for health. There is no danger of having too much health; the risk is all on the other side. A good stock of health is in place all the time, and serves especially well in time of emergency. At best, poor health is bad enough any time, and is nearly always sure to fail in time of test.

No one knows what emergency may occur, but we do know that emergencies come unannounced, and that we are generally unprepared to resist them. Epidemics take their heavy toll because of unpreparedness. Normal health, or a strong natural resistance, is the best kind of preparation against an epidemic. It is only the well people who can fight it. They are the ones who go safely through it themselves, and who are able to care for those who succumb.

"It is easier to keep our health than it is to regain it after it is once lost."

The chances of a person's recovering from influenza, typhoid fever, or any other disease are much according to the pre-sick condition of the individual. The treatment, nursing, and general care have a good deal to do with one's recovery, but more may depend upon the natural physical ability to pull through. Good care will add to the chances of recovery. Even the lack of it and sometimes wrong treatment, in addition to the disease, may be overcome by a strong constitution.

But it is not alone some epidemic against which we should prepare. Many occasions of health or endurance test are possible. There may come an unusual task, such as making a journey through a storm, or in the heat; staying up late at night for an unusual time; caring for a sick person; fighting a fire; cooking for a large number of persons; or doing some other thing out of the ordinary. To meet such things as these without ill effects, the health level must be higher than the everyday requirements demand. It is not enough to be just able to do the regular duties and get along.

Sickness is not something to be regarded as a visitation of Providence or as a judgment. It does not strike its victims here or there according to the decree of some mysterious and evil fate. It does not come without a cause, and that cause is usually a very plain and definite violation of health principles. The way a man lives determines whether he will be sick or stay well. It is his environment, his habits, what he does, and not an unseen, avenging or evil power that makes him sick.

Getting well again demands getting back to a right way of living. The intelligent physician prescribes a course of treatment that will assist the natural recuperative powers. His directions cover a careful dietary, needed rest, and those things that give health.

Staying well is not merely a streak of good luck or fortune. Health is not a mysterious something that comes by chance to some people and by chance is withheld from others. It is not something uncertain, vague, indefinite, or obscure, beyond our understanding. Health is founded upon definite principles. It is governed by laws. We can reason fairly accurately from cause to effect when it comes to questions of health and disease.

To keep well we need to follow in a normal manner the kind of program that the doctor outlines when we get sick. A proper diet will work on a well man. Adequate rest is just as good before a man gets sick as after, and just as necessary, too. A man does well to sleep enough at all times. Temperate living has its reward always.

After all, keeping well is a simple thing rather than something complex and strange. It is greatly favored by simple living. And the rules of simple living are not difficult to work out. It is much a matter of exercising reason and good sense, and of following the natural and unperverted inclinations of the normal physical being. Regular habits in temperate living will aid in the building up of health. High living means low resistance.

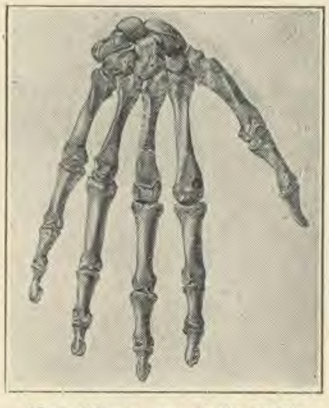
Is There a Danger OF Lime Starvation?

G. H. Heald, M. D.

OF the various inorganic, or mineral, elements in the body, "lime," or calcium, is the most plentiful, constituting about 2 per cent of the entire body weight. Practically all this calcium, about 99 per cent, is in the bones. The 1 per cent circulating in the body is important because of its influence on the movements of the heart, and on the coagulation of blood. So important to the proper functioning of the body is this 1 per cent of calcium that when it is not forthcoming from the food, the deficiency must be made up from the bones.

This was shown by an experiment on a pigeon, which for a year was fed on food adequate in all ways except that it was poor in calcium. Apparently the bird was well nourished. But at the end of the year, when it was killed and dissected, some of the bones were found to have been partly absorbed in order to supply the calcium for the body's metabolism. Certain of the bones, as the breastbone, were actually perforated by this lime-absorption process.

May this experiment not serve to explain why some persons' bones are so fragile that they seem to break without provocation? Is it not probable that cases of exceptional fragility of the bones are caused by a diet deficient in lime? As it was with the pigeon, so it may be with persons — they may be apparently well nourished, while the lime supply of their bones is being slowly eaten away. Granting this, we can understand why diseases favored by a deficiency of lime are nutritional in character, caused, we may say, by an unbalanced diet, deficient in lime.



About 99 per cent of the body's calcium is in the bones.

The result of a lime-poor diet is naturally more severe on a growing child than on an adult, for with the child there must be additional lime supplied for the growth of the bones. A child on a lime-poor diet must be retarded in growth, or must develop the disease commonly known as "rickets." A litter of puppies which were fed entirely on meat developed weakness and limberness of the bones, while others of the same litter which were given bones to gnaw in addition to their meat, developed normally.

A diet poor in lime may also be disastrous to a woman who is bearing or nursing a child, for she must furnish the extra lime required for the bones of the child. Osteomalacia in the child-bearing woman and rickets in the child are diseases characterized by deficiency of lime in the bones, brought on doubtless by a deficiency of lime in the food.

It is quite evident that growing children need more calcium in their food than adults, and that child-bearing or nursing women need comparatively large supplies. Children while nursing, and while on a diet largely of milk, obtain sufficient lime, but when they are changed from a milk diet to one largely cereal, the lime is very liable to be deficient.

It is believed, with good reason, that lime in the inorganic form is utilized by the body, and hence that persons drinking "hard" water are a little better supplied with lime than are those who drink soft water. But the quantity of lime in the hardest water is not enough to add greatly to the body supply. The best course to pursue

is to choose foods with reference to their lime content.

Sherman has suggested .67 gram, or ⅔ of a gram, as a safe standard allowance of lime per person a day. In his book "Chemistry of Food and Nutrition" (The Macmillan Company, New York) he has given the accompanying table showing approximate amounts of calcium in food material, with reference to which he makes the following comment:

"It will be seen that there are enormous differences in the calcium content of different foods, whether expressed in percentage of the food material or in relation to its protein content or energy value. Meat is exceedingly poor in calcium and is therefore, notwithstanding its high protein content, a very one-sided and inadequate source of 'building material.' Milk is so rich in calcium that one need take only 400 calories of milk to obtain the entire day's supply of this element, while to get the same amount of calcium from round steak and white bread it would be necessary to take 10,000 calories. Polished rice and new process corn-meal are even poorer in calcium than white flour. The difference in calcium content between the whole grains and the 'fine' mill products, while not so great as in the case of iron or phosphorus, is still considerable. In general the milling removes more than half of the calcium. The fruits and vegetables in general are fairly rich in calcium, while some of the green vegetables are strikingly so; but in most cases the intake of calcium depends mainly upon the extent to which milk (and its products other than butter) enters into the dietary. A quart of milk contains rather more calcium than a quart of clear saturated limewater. By far the most practical means of insuring an abundance of calcium in the dietary is to use milk freely as a food."

Approximate Amounts of Calcium in Food Material

Food	Calcium Per 100 Grams Edible Substance GRAMS	Calcium Per 100 Grams Protein GRAMS	Calcium Per 3,000 Calories GRAMS
Beef, all lean	0.007	0.03	0.18
Eggs	0.067	0.5	1.35
Egg yolk	0.137	0.9	1.1
Milk	0.120	3.7	5.2
Cheese	0.931	3.5	6.4
Wheat, entire grain	0.045	0.33	0.40
White flour	0.020	0.18	0.18
Rice, polished	0.009	0.06	0.04
Oatmeal	0.069	0.4	0.5
Beans, dried	0.160	0.7	1.4
Beets	0.029	1.9	1.9
Cabbage	0.045	2.8	4.3
Carrots	0.056	5.1	3.7
Potatoes	0.014	0.6	0.5
Turnips	0.064	5.0	4.8
Apples	0.007	1.9	0.36
Bananas	0.009	0.7	0.27
Oranges	0.045	5.7	2.6
Prunes, dried	0.054	2.6	0.5
Almonds	0.239	1.2	1.1
Peanuts	0.071	0.3	0.4
Walnuts	0.089	0.5	0.4

From this it will be seen:

That a flesh diet, unless it includes the bones, is a particularly poor source of calcium.

That milk and cheese, if taken as the entire food supply of the day, would much more than supply the required .67 gram of calcium.

That beans is another food rich in lime.

That the vegetables and fruits are rich in lime when compared with the protein or calory content, but might not be eaten in quantity to insure a sufficiency of lime, unless combined with some of the lime-rich foods, such as milk and beans.

That so far as the lime is concerned, bread and milk, or any cereal and milk, makes an excellent combination. If white bread is eaten at all, it should have some lime-rich food, like milk, to go with it. And this would be rather a constipating combination. Why white bread, anyhow?

Prevention of Measles

G. H. Heald, M. D.

PERHAPS the first evidence generally noted that a child has contracted measles is a coryza, or "cold in the head." But when that appears, the child has already been infected for a number of days, and, it would seem from recent investigations, has during that time been capable of transmitting the disease to others.

There is a sign that precedes the "cold" by about three days, known as Koplik's sign. When there is an epidemic of measles, all the children should, as a matter of routine, be examined daily for the presence of this sign. Children who are isolated as soon as Koplik's sign develops, are much less liable to transmit the disease to others, and are less liable to be infected with one or more of the dangerous secondary diseases which so often follow an attack of measles.

Koplik's spots are small pin-point, pearly-white spots on the inside of the cheeks opposite

the molar teeth. These spots are surrounded by a red zone. When they are present, the child has measles, and should be immediately isolated, though he may appear to be as well as ever. Promptness in isolating and caring for those showing the disease may prevent transmission to others, and may lessen the danger of secondary complications.

In guarding against the transmission of measles, it is well to bear in mind that the disease does not always travel alone, but is often accompanied or followed by other so-called secondary diseases, which greatly add to its fatality. In fact, the greatest danger from measles is that it leaves the body more susceptible to the inroads of tuberculosis, diphtheria, pneumonia, and the various forms of streptococcus infection, such as rheumatism, heart disease, inflammation of the ear, etc.

For this reason, when there are a number of measles patients to be cared for, they should not be herded together, but should be so isolated one from the other that there will be no danger of spreading one or more of the secondary diseases from patient to patient. If the patients are put into a ward, each individual bed should be inclosed by means of sheeting hung on wires, or in some similar way, so as to prevent the spread of infectious droplets from one patient to another.

What to Do With Old Potatoes

TOWARD the end of the season there are always a certain number of badly shriveled potatoes. Many of these are almost useless from the cooking standpoint, but they may be turned to valuable account in the following manner:

A well-developed potato, having eyes, ears, and nose.

In most houses it is possible to discover some dry corner that is perfectly dark. This might be in a cupboard or in a cellar. On a shelf or the floor spread a layer of dry soil an inch or so in depth, and into this press the old tubers so that they are covered to about half their extent. See that each potato is quite distinct, as it is rather important that they should not touch one another. Here the tubers may be left, and they will require no further attention save a very occasional slight sprinkling of water. The soil should never be really damp, or mold will be likely to appear. Sometime during the summer little white spots will begin to appear on the potatoes, and these will finally develop into small potatoes. When these are about the size of walnuts they may be gathered and cooked; they will be found to be altogether delicious. Strange though it may appear to be, the old potatoes will go on producing the new crop for many months until there is nothing left of them save a little skin. The only essential feature of the treatment is that the old tubers be kept in total darkness. If any light can reach them continuously they will tend to send out shoots rather than the tubers that are desired.— *Scientific American.*

NEWS NOTES

Poor Food in Austria

Dr. Von Pirquet, in charge of the Government Institute for Children in Vienna, states that on account of the food situation, the birth rate in Austria has fallen off fifty per cent during the war, and the poor quality of the food has reduced the total weight of the population one third. It is not uncommon to find a man whose normal weight would be 170 pounds, reduced to 120 pounds.

Quinine as Malaria Preventive

According to G. W. Scott in the *British Medical Journal* of Oct. 26, 1918, an experiment was made on a rubber plantation to determine the value of quinine as a preventive of malaria. The members of one group of workers, the tappers, were given ten grains of quinine daily for a year, while a second class, the weeders, received no quinine. Comparison of the results showed that the quinine gave no protection whatsoever against malaria.

Hints on Home Dental Remedies

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

FREQUENTLY patients come to me with their mouths burned from using remedies recommended by sympathizing friends. Sometimes these remedies leave the mucous membrane in bad condition. Each condoling friend has some pet remedy that he is convinced will prove efficacious. These remedies are often only too active in burning the patient's mouth without materially helping the difficulty, and often these self-doctored ones suffer. The tissues are so inflamed that before the teeth can be treated by the dentist the work of these solicitous friends must be undone.

Recognizing the fact that when one is suddenly attacked it is difficult to procure the proper emergency remedies, we offer a few suggestions, which, if properly followed, will tide the sufferer over until he can reach the dentist. Of course the best of all plans is to go to one's dentist regularly, say twice a year. At least, go before the teeth give trouble.

ACHING GUMS

Among the principal causes of aching gums are, an accumulation of tartar beneath them, colds, and lacerations due to extractions. Frequently pain is felt after the teeth have been recently cleaned.

TARTAR ACCUMULATION

When, in bad cases, the gums have receded from the necks of the teeth, the teeth are loose, the breath foul, and pus oozes from pockets around the necks of the teeth, the mouth should be well rinsed with tepid water containing two teaspoonfuls of bicarbonate of soda. Hold the solution in the mouth a few minutes at intervals of an hour.

COLDS

When pain results from inflammation caused by exposure to air currents below the normal body temperature, paint the gums with equal parts of aconite and iodine. Dry the parts the best you can before this is done. Or, rinse the mouth with a solution of borax, about one spoonful in a glass of water. A rather strong solution of chlorate of potash in a glass of water is also good. If you have none of these, a solution of common salt water is very good. Have the water warm in each case.

LACERATED GUMS AFTER EXTRACTION

When the gums have been lacerated from extraction, pain usually follows. The breath may also become foul, due to consequent sloughing. In this case use tincture of calendula, diluted with an equal part of water, as a mouth wash every two or three hours. Tincture of orris root, used the same way, is very beneficial. Keep the bowels well regulated.

PAIN FROM RECENT CLEANING

Sometimes after the teeth have been scaled and otherwise cleaned, especially when they are not cleaned regularly, they ache through sensitiveness for a day or so. When they thus give trouble, rinse the mouth every half hour with warm water in which is dissolved a teaspoonful of common salt to a glass of water. A mild warm solution of bicarbonate of soda will also be efficacious.

LIVE ACHING TEETH

While there are other reasons why teeth ache at times, usually there are but two common causes. The first, when there is a decay to such an extent that the pulp (nerve) is involved, principally because of uneven temperatures. To tell whether the pulp is dead or alive, take some very warm water in the mouth and let it come in contact with the tooth involved. If the pain is increased, the pulp is alive. Or, insert a toothpick or small instrument into the cavity, and press upon the pulp; if pain is increased, the tooth is alive. If the pulp is alive, syringe out the cavity with lukewarm water. Then insert into the cavity a pellet of cotton saturated with spirits of camphor, oil of cloves, or laudanum. If your pellet is as small as it should be, you may put a dry pellet on top of the one containing the medicament.

DEAD ACHING TEETH

When the pulp is dead, the patient may be suffering from mere inflammation of the lining membrane or tooth socket, or the inflammation may have developed into an abscess, or gumboil, as the layman usually calls it. It is the part of wisdom not to let this condition progress any farther than the first stage. The symptoms are similar in both stages, except that in the first stage there is little or no swelling. Much swelling in the second stage is usually met with, and the teeth are elongated above the level of the surrounding ones. The teeth at this second stage are very sore, so that in closing the mouth much pain is felt by striking the sore teeth first. These teeth are always darker than living teeth, as the coloring matter from

National Conference for World-Wide Prohi

the blood has permeated the tooth structure, causing a permanent darkening. A bad odor always accompanies trouble of this kind.

To treat at home a case where there is slight inflammation of the tooth-lining membrane, apply a dental plaster obtained at most drug stores; or, after drying the gums, rub iodine and aconite in equal parts around the gum, with cotton. Don't swallow this remedy; it is poisonous. Lastly, employ a cathartic — preferably salts, which will reduce the water in the blood. In the second, or abscess, stage apply warm poultices of capsicum or flaxseed or raisins. To make a capsicum, or red-pepper, poultice, take three parts of flour and one part of red pepper in a cotton bag, warm and apply *inside* the mouth directly over the head of the abscess. Change every three hours. These poultices need not be larger than a five-cent piece. Under no circumstances place a poultice on the outside of the face. Many lifelong scars have been the result of doing this. Also, never permit an abscess to be lanced upon the outside of the face,— this is entirely unnecessary.

A flaxseed poultice may be made by putting flaxseed into little bags, one by two inches; after heating, apply upon the abscessed gum. When the poultice becomes cool, remove, and replace with a warm one.

Raisin poultices are made by cutting open large raisins, removing the seeds and heating them. Place one upon the gum directly over the point of the abscess. When cool, replace with a warm one. This should be continued until the abscess is brought to a condition where it can be lanced. Patients should never, however, attempt to do their own lancing, as blood poisoning might result.

As the breath is usually foul and feverish during the development of an abscess, the patient should use either the bicarbonate-of-soda mouth wash, or a glass of warm water containing a few drops of carbolic acid to which may also be added a spoonful of rose water and the same amount of glycerin.

Sometimes the cheek is badly swollen and feverish. In such a case *cold* applications may be applied to the outside; but in no circumstances use heat to the cheek, lest the abscess break through and a scar result. When an abscess is developing, the patient should take a liberal dose of salts with plenty of water. This is important.

TEETH THAT ACHE AFTER BEING FILLED

If the dentist has filled a tooth before the nerve is thoroughly quieted, or if a tooth that is dead is filled before the pulp canals are thoroughly disinfected, it probably will give trouble. Again, in spite of apparent precautions, the nerve occasionally dies beneath the filling when the tooth at first is comfortable. The writer has observed that fillings known as synthetic porcelains are especially liable to cause pulps to die beneath them. There should always be a cavity lining inserted before such filling is placed.

When the pulp is alive beneath a filling, the patient may suffer from a jumping, or intermittent, toothache. If so, take a hot foot bath or leg bath. This will usually equalize the circulation by relieving blood pressure, when the

1. Held at Columbus, Ohio, Nov. 19-22, 1918

pain will cease. Then visit the dentist as soon as possible. Sometimes a saline cathartic will accomplish good results.

WHEN PULP IS DEAD BENEATH THE FILLING

The treatment of this condition is the same as already given under the heading, "Dead Aching Teeth." If possible, go to the dentist before the second, or abscessed, stage is developed.

NEURALGIA

Neuralgia is usually, but not always, due to a bad condition of the mouth or teeth. Neuralgia may sometimes be due to constitutional disturbances, such as poor elimination, resultant uremic poisoning, and trauma, or injury, to the facial nerves, either internal or external. The nerves of the face are very numerous; they form a complex network which is instantly aroused if any of the filaments are irritated. A small cavity in a tooth may cause sensitiveness, and through sympathy cause intense neuralgia. Such pain ceases immediately when the tooth is properly treated. If there is no danger of abscess, usually a hot-water bottle or hot applications consisting of woolens wrung from hot water are indicated. Take a large dose of salts. If neuralgia is due to an abscess, treat as under "Dead Aching Teeth." Remember you cannot have an abscess until after the pulp of the tooth dies. Many do not understand why a dead tooth aches. In reality the *tooth* does not ache; pain is caused by the formation (swelling) of the abscess outside of, and usually at, the apex of the tooth root, thus pressing upon the nerve endings found in this region. It is a boil with a tooth set in the center of it.

HEMORRHAGE

Sometimes after the extraction of a tooth there is excessive bleeding due to failure of the blood to coagulate. A small amount of bleeding at the time of extraction is normal. But the bleeding that sometimes worries the dentist is the secondary bleeding which occurs in the case of "bleeders" several hours after the extraction. If the patient thus in trouble cannot return to the dentist right away, have him placed in a reclining position, with head higher than the rest of the body, and apply hot-water bags to the feet, or, better, place the feet in hot water. This will draw the blood to the lower extremities. Now wash the cavity out with warm water, then make a firm plug of styptic cotton and force it into the cavity, having the patient bite down upon it to hold it in place. If the bleeding does not stop in five minutes, prepare a cork the size of the cavity, put the styptic cotton over the point of this cork plug, remove the first cotton plug and insert the cork plug firmly. Have the patient close the jaws upon this plug. Now tie a bandage beneath the chin and around over the head tightly. This will cause the cotton to go far down into the bleeding cavity and the hemorrhage will cease. The writer believes he once saved a patient's life by this heroic method. Powdered alum on ordinary cotton acts the same as styptic cotton. After these methods are employed, send for a physician or dentist.

AS WE SEE IT

HUMAN SALVAGE BEGINS IN THE FAMILY

In his Manchester speech, David Lloyd George spoke words of warning which, from such a source, deserve respectful attention by all who have the nation's good at heart, and should serve as an admonition not only to his own nation, but to other nations and states, and to cities and families. Lloyd George said:

> "I solemnly warn my fellow countrymen that you cannot maintain an A-1 empire with a C-3 population.
>
> "And unless this lesson is learned, the war will have been in vain. Our schooling has cost us dear, but if we make the best of it, I believe it will be worth it all in the end, even in the saving of human life.
>
> "Care for the health of the people is the secret of national efficiency. It is the secret of national recuperation."

Not only is "care for the health of the people" a problem for the nation,— for England, France, Italy, the United States,— but it is a problem for the city and the small town — for New York and Milpitas, for Chicago and Squash Center. You cannot maintain an A-1 city or town with a C-3 population. And as it is the cities and the towns which go to make up the nation, it is in the cities and the towns that the work of reformation must begin.

As the strength of a chain is limited by its weakest link, so is the efficiency of a town conditioned by its slum districts, its red-light area, its booze center. The establishment of Carnegie libraries and civic centers, and the erection of marble post offices have as little effect in counteracting the evil of a neglected slum district as the use of face powders, perfumes, and silks have in counteracting the results of a festering sore that is poisoning the system.

But in order to effect a reformation in the town, there must first be a reform in the smaller unit — the family. And to this end Premier Lloyd George's warning may well be taken to heart by the heads of homes. As the premier said, "The most important workshop in the land is the home." No amount of costly ornaments or bric-a-brac can atone for conditions or habits or practices which make for wasted vitality. You cannot maintain an A-1 home with a C-3 family. If drink or other indulgence, including venereal exposure, is allowed to sap the vitality of the boys, no amount of art, or music, or literature, or luxury that wealth can buy will atone for the wrong. The parents' first duty is not to secure luxuries and social standing for the children, but to protect them from the things and the conditions that make for ill health, and to instruct them carefully how to protect themselves.

The pernicious old theory that "a young man must sow his wild oats," has had its day. It has been weighed in the balances and found wanting. Heretofore it has been taught that in the army and navy it is necessary to wink at vice, and to prevent infection by giving the men some protective medication. Owing to the fact that our army and navy, in the recent war, were headed by energetic Christian men with high ideals, their splendid record has proved that this "wild oats" theory is but the mouthing of those who want an excuse for indulgence, and has no foundation in fact. It is now proved beyond all possi-

bility of successful denial that a young man, whether in war or peace, has no necessities that prevent his remaining pure. What the army and navy heads have done for the vast majority of our boys, determined parents could do for their own boys and girls. But this presupposes that the parents will have for their children such a high ideal that they will make the effort necessary to accomplish their purpose. Success requires on the part of the parents a careful study of physiology and hygiene, especially of sex hygiene, and a study of the best methods of getting into sympathetic touch with the young folks before they arrive at an age when they are liable to contamination from other children. Most parents, if they give their children any instruction, begin too late. Long before the parents have thought of giving proper instruction, the boys and girls have usually had the story from smutty lips of playmates or nurses, and the instruction does not accomplish on a smutty mind what it would on a pure mind.

If we have clean boys and girls, we shall soon have clean families, clean cities, and a clean nation. But so long as parents neglect their duty to their children, and leave it for others, or take it up when it is too late, just so long will the old story be repeated that boys are different from girls, and cannot be expected to conform to the same standard of morality, and just so long will your sister and daughter be in danger, and just so long will the loathsome diseases of vice be rife in the land. And you will never have an A-1 nation so long as the C-3 idea of purity is in vogue.

FORTUNES BUILT UP BY THE POOR

An editorial in a recent *Independent* contains a suggestion worthy of careful consideration by those who are wont to rail at predatory wealth exploiting labor and grabbing the sources of wealth. As the *Independent* suggests, many of the well-to-do obtained their money by no such means, but by ministering to the weaknesses of those people who, having a few spare dimes, are not satisfied until they have squandered them for some foolish temporary pleasure.

Among those who thus cater to the desires of the people, taking the surplus of the weekly pay envelopes and thus keeping the people living literally from envelope to mouth, are the liquor sellers, the tobacco dealers, the soft-drink purveyors, the candy stores, and the movies. And there are others. These minister almost entirely to a certain class of people.

There are two classes in the community: one which is willing, for a future good, to forego any temporary supposed pleasure; another, which thinks of nothing but the satisfaction of the present. Andrew Carnegie, to mention only one of a large number, started with no better prospects, and with not so good wages as many persons began with who have been all their lives on the pay roll. But Andrew was not trying at the end of the week to see how soon he could come to the end of his pile. Rather he was managing in one way or another to save a little, which later he invested wisely, and eventually his money began to work for him. And now he can have pleasures which his pay envelope could never have given him.

The other class is typified by the darky who was in sore need of a heating stove for winter. He had been a great sufferer without it. By some

unusually good fortune he secured enough money to buy the much-needed stove, and he went to town to make the purchase. As it happened, there was a circus in town, and without further thought, Sambo proceeded to invest his stove money in the show. A friend, desiring to caution him, said: "Sambo, what are you going to do when winter comes, if you do not buy that stove?" to which Sambo characteristically replied, "Wintah am a long way off, but the circus am heah now!" There are many Sambos.

Many a person who is now struggling with poverty, has spent for that which did him no good, money which, if saved and rightly invested, would have given him a competence.

There is another class who save money, but after having accumulated a small amount, they are carried away with the prospects of some get-suddenly-rich scheme, and invest their all in some nicely engraved certificates of stock that they could not sell on the market for ten cents.

By spending their money foolishly for what they do not need, or by investing in wildcat schemes, the poor help to build up the fortunes of people whose only occupation is that of ministering to the weakness and the foolishness of the poor. If these canny people whose fortunes have been made for them by the poor, should put in front of their fine residences funnel-topped strong boxes with the legend, "*Drop in your spare coin: we know what to do with it; you don't,*" the scheme might be too transparent for even the most simple; but it is the same in principle as that which they are now working.

MOTHERS, THINK OF YOUR RESPONSIBILITY

FOR one reason or another a mother feels justified in giving her baby the bottle instead of the breast. It may save time. In some cases it may save embarrassment when visitors come. The feeding can be done by a nurse. There may apparently be an insufficiency of breast milk for baby.

No doubt these and others that might be given are all valid excuses, and would count weightily were it not for the serious consequences to the child.

As has been shown repeatedly by statistics, a much smaller proportion of bottle-fed babies survive than of breast-fed. And the inference from this is that of those who do survive, a certain proportion must be permanently damaged. It is known, for instance, that mother's milk contains something which tends to protect the little one from infectious diseases. This point alone would suggest that when a mother is not able to furnish sufficient milk for her baby, she should supply all she can, and piece out with cow's milk, rather than place the baby entirely on the bottle.

An additional reason for nursing the baby instead of feeding it from the bottle is given by Dr. J. P. Crozer Griffith, Professor of Pediatrics, University of Pennsylvania, in a paper in the October number of *Archives of Pediatrics.* He says:

> "There is no question that the ability to nurse an infant successfully is to a large extent a matter of inheritance. Further, it seems very probable that a line of mothers who, though able, practice a voluntary refusal to suckle their offspring, finally develops an acquired characteristic that can be transmitted, resulting in an inability in the mothers of the younger generation to perform the maternal function of nursing."

When a mother refuses to mother her own baby, not only does she deprive it of its due, but she is unfitting it to be a complete mother.

It has been shown that in certain regions, owing to the custom of bottle feeding, mothers are much less able to nurse their babies than in other regions where breast feeding is common. Fish in the Mammoth Cave eventually become sightless, because they do not exercise the function of sight. Mothers who do not exercise the mother function, may lose it for their daughters. Mothers, dare you treat your daughters — your babies — thus?

THE MIND AND INFLUENZA

SOME time ago some of the Christian Scientists, probably with benevolent intent, used whole pages of the daily papers, for which they must have paid an enormous price, to inform the public that influenza is a disease of the mind, in other words, that people get influenza because they are scared. While the statement as they made it is absurd, still there may be an element of truth back of it to the extent that the use of amulets may have had some protective force in preventing infection. *American Medicine*, commenting on the use of camphor "charms" for warding off influenza, puts it in this way:

> "In the presence of every epidemic, the reintroduction of amulets [charms] recurs. The beneficial effects are psychical, but this in turn has indirect physical benefits in permitting a more rational and reasonable method of living, with greater freedom from fears and consequent effects upon the endocrin [ductless gland] system. When medical advice cannot be completely reassuring, the recourse of the public to charms is understandable, and the indirect benefits which may be achieved are not to be laughed at. Calmness through sense of being protected is a state of being, meriting consideration, and if a bag of camphor can add to this state of the public mind, there is no danger to the public health, so long as the charm is not deemed of greater importance than adhering to the recommendations of the constituted health authorities."

And so the publication of the articles by the Christian Scientists, *if they did not lead people to neglect precautions against infection*, may have done some good. But it is hard to conceive how one could drink in the philosophy of the Christian Scientist without throwing to the winds all precaution about avoiding infection.

IMPORTANCE OF LIME SALTS IN NUTRITION AND DEFENSE

W. PITZ (the *Journal of Biological Chemistry*, November, 1918) gives the result of an experimental study of the influence of meat and of various salts in the development of scurvy, in the summary of which he makes the following statement:

> "The physical character of the diet and the character of the flora [the bacteria, or "germs"] of the digestive tract are clearly of prime importance in the production of this disease, but other factors, such as those which make the diet more nearly chemically complete, which stimulate appetite and increase the flow of digestive juices and increase the resistance of animals, which decrease the permeability of the intestinal wall, and which aid in correcting a deranged chlorine metabolism, are of great importance, and will protect the animals from scurvy for a considerable time. *These experiments point to the little-emphasized rôle of calcium salts in nutrition; namely, that of controlling the permeability of various animal tissues and thereby affording protection against invading agents.*" [Italics his.]

The point in which the present writer is interested is that which Mr. Pitz has put in italics, namely, the rôle of the calcium (or lime) salts in nutrition.

Undoubtedly these salts are of great use to the body; so much so that if there is a marked lime deficiency in the food, the bones will be robbed to make up the supply. But this robbing of the bones, while it may help to prevent disaster, may not altogether do so. There is reason to believe that the tendency of the bones to fracture without adequate cause, and of the bones of the growing child to develop abnormally (rickets) may be due, in part at least, to lime starvation. Then there is good reason for believing that tuberculosis is favored by lime starvation, and is overcome to a certain extent by a diet rich in lime. This has been definitely proved by animal experiment; and clinical experience with human tuberculosis bears it out.

It should be made known to all that a meat-and-cereal diet is poor in lime. Carnivorous animals gnaw bones with their meat, and thus get lime. Man, eating his meat without the bones, fails to get lime. Milk and eggs furnish a diet rich in lime; and it may be this fact rather than the protein content of these foods that have made them a favorite diet in tuberculosis.

The bread-and-meat eater, or the nonmeat eater who is confined largely to cereal foods, is starving himself as regards lime, and is depriving himself of an element which, according to Pitz, controls the permeability of various animal tissues, and thus affords protection against invading agents. We do not as yet know all the functions of the lime salts in the body; but what we do know convinces us that a diet which is poor in lime salts is a most serious blunder.

The "idea," hailing from a noted Michigan town, that cereals (plus nuts) are the staff of life, and that vegetables are not fit for a place in the human stomach, is fast going into limbo. Vegetables, as compared with cereals, are rich in lime salts.

FAILURE OF BLOOD TONICS TO RELIEVE ANEMIA

THE Stanford University Medical School has established in San Francisco an outpatient clinic for adolescent girls — girls from eleven to sixteen, in the higher grammar and the lower high-school grades. Dr. Amelia E. Gates has made, in *Archives of Pediatrics*, April, 1918, an interesting report on the work done with the first hundred girls who came to the clinic.

A good many of the girls were found to be anemic — all of the chlorotic variety with normal red cells and low hemoglobin. There were no very severe cases. Dr. Gates's experience with blood tonics was disappointing. According to her report, they began "rather an intensive treatment," using "increasing doses of iron, arsenic, or iron and arsenic combined." She continues:

> "The results obtained from this vigorous treatment seemed very insignificant in proportion to the amount of drugs swallowed; and lately we have abandoned in great part all direct medication, relying for the abatement of the anemia on general hygienic measures, good food, fresh air, cold bathing, etc., and I believe our results are just as good. The anemia as shown by the blood count is very persistent during the adolescent period, and we have learned to somewhat ignore the blood picture, and be guided more in our treatment by the state of general health, appearance, and well-being of the child."

Here we must read a little between the lines, for the report is incomplete. Evidently the clinic doctors were expecting results from the iron and arsenic, at least when given in heroic doses, but in this they were completely disappointed;

nothing they did, either with drugs or food, remedied the adolescent anemia. But the food, when properly balanced and in sufficient quantities, together with fresh air, cold bathing, etc., with or without drugs, gave a notable improvement in general health and well-being.

In another paragraph mention is made of the fact that these girls gained an average of 10.7 pounds a year in the period from eleven to sixteen years, as against an average of 8.9 pounds a year for the same period, in the only other available records, made in the East. There being no other available California statistics, it is impossible to determine to what extent the increased gain is due to the California climate, and to what extent it is due to the supervision of the girls' menu and general hygiene. But one thing seems to stand out prominently: that the gain made by the girls is not due to the use of iron and arsenic, but to ample diet, open-air life, and other hygienic measures.

Perhaps, if more physicians, in place of depending so much on the traditional value of some of the old drugs, would make more careful and critical observation, there would be many more who would relegate the "blood tonics" to the scrap heap — and also the "blood purifiers."

THE WAR COMPELS TRUER ESTIMATE OF DRUGS

IT is another illustration of the changing viewpoint brought about by the war, when Dr. Torald Sollmann, one of the greatest authorities on drugs, comes out in an article, "Pharmacology in the War," [1] and makes the startling admission he does. As in the matter of foods and various luxuries, so in the matter of the use of drugs, we are finding that what was supposed to be necessary was not only not necessary, but harmful in the quantity used.

In his article, Dr. Sollmann refers to the fact that in various ways the war has cut off or diminished the supply of drugs. He continues:

> "Until sources of supply could be found or devised, it was necessary to do without many of the drugs to which we had become accustomed.
>
> "This may not be so great a misfortune as many would have supposed. The demand for many drugs was an artificial one, fostered by commercial enterprise, as had often been pointed out. What years of preaching could not accomplish in the way of testing out a restricted materia medica was accomplished by necessity at one stroke. As was to be expected, the results show that many of the drugs could be spared without great disadvantage, and some with actual advantage. Nearly every physician has found it necessary to 'give up' some of the drugs that he prescribed before the war; and nearly every one must have noticed that the return to the older standard drugs was, in many cases, not detrimental to the patients. It is to be hoped that this lesson will be heeded, and that the war will have weeded out many of the products of commercialized overenthusiasm. It behooves us to take care that this advantage is not lost by the introduction of equally or more worthless or unnecessary imitations and substitutes."

[1] *Journal A. M. A.*, Aug. 10, 1918, pp. 455, 456.

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.

Replies not considered of general interest are not published; so if your query is not accompanied by return postage for a personal answer, it may receive no attention whatever.

Remember that it is not the purpose of this service to attempt to treat serious diseases by mail. Those who are sick need the personal examination and attention of a physician.

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.

Oysters

"Do you recommend the use of oysters as food?"

No; oysters have a place, and their proper use is that of scavengers or to filter filthy water.

Epsom Salts Enema

"Do you approve of Epsom salts, 1½ tablespoonfuls to a quart of water, for an enema used three or four times a day?

It depends upon the reason for which the salts are used. Epsom salts are irritating to the kidneys and to the mucous membrane of the intestines when long continued. The constipation should be relieved by some other means.

Urticaria — Hives

"I am troubled with periodic attacks of a skin eruption which comes out in white blotches, itches terribly, and finally turns red. What is this, and what shall I do?"

You have what is known as urticaria, or hives. It is usually caused by gastrointestinal disturbances produced by the use of shellfish and sometimes by acid fruits, as oranges or strawberries. You should rid yourself of the offending material by a good-sized dose of castor oil and an enema, and stop using the food which causes the attack. For the itching, take a sponge bath of a solution of sodium bicarbonate, about a tablespoonful to the pint of water, or take a full tub bath containing a pound of sodium bicarbonate in a bathtub of water at 98°. Remain in the bath for twenty or thirty minutes.

Nasal and Pharyngeal Catarrh

"What treatment do you prescribe for nasal and pharyngeal catarrh?"

Cleanse the nose and throat once or twice a day with a solution made up as follows: Take equal parts of salt, soda, and borax, and of this mixture use one teaspoonful to a quart of water. Use a douche or spray to apply this solution to the throat and nose. Stronger solutions are likely to irritate the mucous membrane, and aggravate the condition. When the odor is bad and crusts form, a solution of potassium permanganate, one to ten thousand parts water, is beneficial. These cleansing solutions should be followed by an oily spray containing 5 to 10 grains each of menthol and camphor, to an ounce of liquid petrolatum. Careful attention should be given to the sleep, clothing, diet, and bowels. Slow digestion should be relieved. The diet should be nourishing, and should include milk, eggs, and plenty of green vegetables and ripe fruits.

Constipation

"What is good to cure constipation?"

The cure for constipation calls first for regular habits in caring for the bowels. Second, the food should be laxative. Use bran bread or gems with other foods containing much bulk, as spinach, asparagus, lettuce, celery, etc. Get some liquid petroleum or mineral oil and take a tablespoonful before each meal and at bedtime. It may be necessary to use an enema occasionally at night.

Acid Stomach

"Please give corrective diet or treatment for a highly acid stomach."

Relieve the constipation by exercise, proper laxative diet, mild laxatives, as cascara and mineral oil; also by enemas when necessary. Fatty foods, as olive oil, butter, and cream, decrease the production of acid, especially when taken at the beginning or early part of a meal. Protein foods, as cottage cheese, beans, and eggs, neutralize the acid. Dry foods, as dextrinized cereals, moistened slightly, so as not to require much mastication, will pass quickly through the stomach, and thus not call for the secretion of much acid. Bicarbonate of soda gives only temporary relief, and calls for an increased secretion of acid, thus making the final condition worse. Inasmuch as the condition in this case is coincident with and dependent upon pregnancy, I would suggest that you put yourself under a physician's care, and follow his orders.

Throbbing Temple

"Please indicate treatment for throbbing in the left temple, developing into pressure all through the head. This accompanies enlargement, and perhaps hardening, of the liver and spleen, with catarrh of the head."

The throbbing in the left temple and pressure all through the head are secondary to the enlargement and torpidity of the liver, and are most likely accompanied by a slight rise in blood pressure.

You should secure free action of the bowels, and adopt a diet which, while nourishing, will

be digested with little difficulty. Avoid excess of sugar and starchy foods, and abstain from condiments, spices, tea, and coffee. We recommend a vegetarian diet in these cases. Each evening take a hot foot bath with two fomentations to the liver and abdomen; follow this by a full bath at a temperature of 98° to 100°, gradually reduced to 92°. The whole period of the bath should occupy twenty to thirty minutes. Apply cold to the head during the bath, and dry off without heavy rubbing; retire in a warm bed. Wear a moist abdominal girdle during the night. A warm enema each morning, followed by a small cool enema at a temperature of 85°, will be beneficial. These measures, patiently followed for several months, will bring relief. Visit a well-equipped hospital for an X-ray and full physical examination.

Cold Spray — Smarting Neck — Influenza Effects

"1. I am twenty-five years old, and for five winters have had much difficulty in keeping warm after the morning spray.

"2. What shall I do for a smarting sensation in the left side of my neck?

"3. What shall I do to recover from the aftereffects of the 'flu'?"

1. You should not take the morning spray or sponge bath quite so cold, and you may be able to get less harmful aftereffects by using a warm foot bath with the spray or sponge. Exercise moderately for a little time following the sponge or spray, and then rest for fifteen or twenty minutes, being careful to be warmly dressed.

2. For the smarting sensation in your neck you should visit a specialist in nose, throat, and ear diseases, and follow his instructions.

3. For the aftereffects of the influenza you will find instructions in this LIFE AND HEALTH Question Box. To strengthen your lungs, you should continue the program you are at present using, but be careful not to overdo. Special attention to breathing exercises is important. Endeavor to increase your weight and general vitality.

Heart Weakness after Influenza

"Weakness and palpitation of the heart followed a severe attack of influenza. What treatment do you suggest?"

Influenza often leaves some severe sequel in the way of involvement of the heart, nervous system, or digestive tract, and more or less general weakness. Like one who is convalescing from pneumonia, the sufferer from influenza should reckon on a period of several weeks, and perhaps of three or four months, before considering himself well.

For weakness and irregularity of the heart, the great indication is rest at stated periods during the day, with sufficient sleep at night. Make a habit of lying down for an hour both in the forenoon and in the afternoon. After your meals you should sit in a chair or lie on a couch and rest for thirty or forty-five minutes. Secure normal action of the stomach and bowels. Increase your nutrition as much as possible. Take warm to neutral full baths every night or every other night at bedtime, or take a warm full bath one night and a warm foot bath the next night, retiring in a warm bed afterward. Get out of doors as much as you can, but be moderate with your exercise. An ice bag over the heart, when lying down, for twenty minutes, two or three times a day, may strengthen the heart.

Psoriasis — Dry Tetter

"Give cause and treatment of psoriasis."

A person with psoriasis is liable to have recurrent attacks, and should be under the constant care of a physician. We have had the best results with patients who have been persuaded to adopt a strictly vegetarian diet, restricting also the use of eggs and using largely of rice. We cannot indicate the proper medicines, as that must be under the direction of your physician. As far as external applications are concerned, we have had the best results with ointments of salicylic acid or sulphur. It is better to use one remedy for a time and then change to another. It is supposed to be hereditary in about five per cent of the cases. Anything causing internal disturbance is liable to aggravate the trouble, especially indigestion and the use of tobacco, alcohol, coffee, and too much protein food. A course of hydrotherapeutic treatments calculated to raise the general health is also advisable.

Pain under Left Arm

"My husband is forty-one years old; uses coffee and pork at nearly every meal, and tobacco very freely. He chews tobacco very freely, and was a heavy smoker until about eighteen months ago. He had pneumonia at that time, and for some time has been troubled with a severe pain under his left arm, just below the armpit. This comes in the early morning after heavy work the preceding day."

Your husband is at an age when he should be at his best, but he has ruined his constitution by the use of flesh meats, coffee, and tobacco. He undoubtedly has tobacco heart, which has been made very much worse by the pneumonia. His is probably a case of chronic heart trouble. He should put himself under the care of a physician, and follow his instructions carefully. We advise the use of a vegetarian diet, with no coffee or tobacco. He should be regular in his habits of exercise and sleep, and have his meals at regular hours. A warm bath at night at a temperature of about 98 degrees Fahrenheit will rest his heart and equalize the circulation. With these precautions, he may secure a certain amount of relief.

Nasal Catarrh

"Please give treatment for obstinate nasal catarrh, and for a sore on the septum where an incision was made at the time of a surgical operation."

Nasal catarrh of long standing is very difficult to heal. The nasal passages should be carefully examined to be sure that no pressure from enlarged turbinates or from deformities or from growths of the septum are causing the catarrh. The alkaline watery sprays may be used in weak solution once or twice a day. These should be followed by an oily spray. A spray

containing menthol and camphor, five grains of each, with oil of eucalyptus, ten drops to the ounce of liquid albolene, is good. In some cases this oily mixture is best applied by a medicine dropper, with patient in a reclining position. Sometimes the addition of a half grain of iodine to the ounce of the above oily mixture brings a more rapid cure.

It is important that flesh foods and coffee be eliminated from the diet, but it is equally essential to use plenty of nourishing, easily digested food, and to get the necessary allowance of sleep. If a scab is forming over the old incision made during the surgical operation on the septum, this is better treated by a bland salve or ointment. The ordinary zinc-oxide compound ointment is very good. Touching the sore with a caustic pencil or with a five-per-cent solution of silver nitrate will help to heal the sore. Physical exercise is of great importance in hastening the cure.

Germicide for Drinking Water

"Will lemon, or rather a few drops of lemon, in a glass of water kill all the germs contained in it?"

Dr. Seneca Egbert, in his book on hygiene, page 203, says: "Citric acid is said to destroy algæ and many kinds of bacteria." Citric acid is the active acid of lemons, oranges, grapefruit, limes, and tomatoes. My suggestion would be to procure a Pasteur-Chamberland filter or a Berkefeld filter for home use. Such a filter, in order to do good work, requires thorough cleansing and baking at frequent intervals. The requisites of a good filter, according to Parkes, quoted by Egbert, are: First, that every part shall be easily accessible for cleansing, or for renewing the medium. Second, that the filter medium shall have sufficient purifying power and be present in sufficient quantity. Third, that the medium give nothing to the water favoring the growth of low forms of life. Fourth, that the purifying power be reasonably lasting. Fifth, that there be nothing in the construction of the filter itself capable of undergoing putrefaction, or of yielding metallic or other impurities to the water. Sixth, that the filtering material shall not clog, and that the flow of water be reasonably rapid. Seventh, that the filtering medium be such as can be readily cleansed and sterilized, or else be so cheap that the removing and replenishing may not be neglected when necessary, on account of the expense.

Catarrh of the Stomach

"What diet and treatment do you suggest for catarrh of the stomach and bowels? I pass a large amount of mucus like the white of egg, and have periodic attacks of severe pain. Do you recommend hot enemas? Do you advise milk of magnesia, sodium phosphate, or castor oil?"

You should have a barium meal and an X-ray examination in addition to a thorough physical test, and tests of blood and urine. Avoid condiments and flesh foods. Use green vegetables, but masticate them thoroughly, rejecting all coarse particles which cannot be very finely divided. Carrots, parsnips, spinach, asparagus, and other vegetables should be thoroughly cooked and well masticated. Take few articles of food at a meal. Taking too many taxes the digestion and produces fermentation. A small amount of bran, as one or two dessertspoonfuls once or twice a day, is helpful. Dextrinized cereals, as toasted corn flakes, wheat flakes, shredded wheat with cream and eggs; milk or yogurt; raisins; butter and a little olive oil at times, will help you increase your weight. You should have fomentations to your abdomen at night, and wear a moist abdominal bandage from then until the next morning. The wet portion of the girdle should be dry by the next morning. Take a warm saline enema in the knee-chest position, and then turn on your back and with hips elevated, massage and work the colon gently, endeavoring to cleanse thoroughly every part of it. Castor oil or milk of magnesia may at times be beneficial, but Squibb's mineral oil is much better for general use. It should be taken in tablespoonful doses at bedtime, and one-half hour before breakfast and dinner if necessary. Get as much rest as possible, preferably in the open air. Have your physician fit an abdominal supporter to you. Some cases require surgical intervention.

Breast or Artificial Feeding?

"I have a healthy baby four months old, but on account of poor breast milk she suffers severely with colic and indigestion, with coarse curds in the bowel movements. She vomits and spits continually, and sometimes breaks out on face and neck. She weighed seven pounds four ounces at birth and now weighs twelve pounds. Do you advise artificial feeding?"

You should endeavor to regulate your own food so that you will recover from your own indigestion and constipation. Do not eat too many foods at a meal, but supply yourself with plenty of what you eat. Use freely of cereals, eggs, milk, cream, butter, and subacid fruits. Be sparing in your use of vegetables, trying them out, and if they do not agree with you or the baby, do not take them. They should be tender and well cooked. Take plenty of rest, being very particular to have at least an hour's rest in the forenoon, and another in the afternoon. Your baby's weight is right for its age. If regulating your own food does not relieve the baby's condition shortly, it will be well to put her on modified milk, using about fourteen ounces of whole milk, two tablespoonfuls of cane sugar, one-half tablespoonful of barley flour, fourteen ounces of boiled water, and one ounce of lime water, for the mixture. Give four ounces at a feeding, with seven feedings per twenty-four hours, at intervals of three hours. As she becomes used to the food, gradually increase the amount of whole milk to fifteen ounces and the sugar to three tablespoonfuls, giving five ounces at a feeding, but only six feedings in twenty-four hours, with the same intervals. As she grows older, the proportion should be changed according to formula, and at six months she can begin to take a small amount of orange juice for the feeding and a little vegetable broth at one or two meals a day.

NEWS NOTES

Eliminate Waste

The people of America are urged to eliminate waste rigidly. This advice applies to all foodstuffs, including sugar, from which the restriction has been removed.

Children's Year

The program for children's year includes a baby-saving campaign, a crusade against war-time child labor, and a nation-wide back-to-school decree. This work is backed largely by the National Child Labor Committee.

Doctors Die of Influenza

The ranks of doctors and nurses have been depleted by the influenza epidemic. The *Journal A. M. A.* of Nov. 2, 1918, contained five pages of obituaries of physicians who had died of influenza followed by pneumonia.

Influenza in France

It seems to be the general opinion among French physicians that the present epidemic of influenza in France is milder than the epidemic of 1889, but that it attacks by preference people at younger age periods than did the former epidemic.

Food Conservation Plans

Until the return of Mr. Hoover, the Food Administration will outline no definite campaign of saving on any specified commodities. The future food-saving program will depend very largely upon the supplies of food found available in the various countries in Europe, and in the arrangements which are made with the allied food council.

Infection from Bad Teeth

That abscesses at the roots of teeth or in the tonsils may be the cause of some forms of heart trouble, nerve disorders, and certain other serious or fatal diseases, is emphasized in the November number of the *Health News* issued by the New York State Department of Health. The prevention is regular brushing of the teeth and occasional visits to the dentist.

Crowding and Influenza

At the Association of Life Insurance Presidents held in New York December 5 and 6, a paper by Major-General Gorgas was read, in which he stated that the greatest war lesson has been the evil effect of crowding. Crowding, especially in large units, plays an important part in the spread of pneumonia. He believes this will be a valuable lesson to apply in civil life.

More Sweets Rationed

By order of the British Food Controller, effective November 4, sirup, honey, molasses, jam, and marmalade are rationed in Great Britain. The British people have been on the same sugar allowance as we in America, 2 pounds a month; but now the sugar restriction in America has been removed, and we are privileged to use freely of other sweets. The rationing of jam will be particularly severe, owing to the small butter ration.

Closure of Pasteur Institute

Owing to the fact that Dr. Rambaud, the head of the Institute, was ordered to France for active service, the Pasteur Institute of New York, the oldest institution of the kind in this country, was closed. Since 1910 the institute has treated more than ten thousand patients, four fifths of them without charge.

Sugar Restriction Removed

December 1, the sugar restriction requiring registration of purchasers was removed. But the Food Administration continues to emphasize the fact that this in no way modifies the request made of the general public. Consumers are still asked to observe the voluntary ration of four pounds for each person per month, and public eating places are still required to use only four pounds of sugar for each ninety meals served.

No Respecter of Climates

Influenza has been very bad in Iceland. Sixty-five per cent of the population of Reykjavik were down with the disease at one time, according to a cable message from the island. It is the severest visitation the island has seen since the black plague. Report also comes from Tahiti, in the heart of the tropics, that the influenza situation is bad there, and the authorities have sent out an appeal for help.

Pneumonia Demands Isolation

Recent experience has shown that pneumonia is not one disease, but several diseases with similar symptoms, and that it is just as important not to mix several kinds of pneumonia together in a ward so as to risk exposure of one patient by another, as it is to avoid placing patients infected with measles, meningitis, and diphtheria in the same ward, so exposed as to run the risk of having each disease complicate the others.

Soldiers as Educators

General Gorgas, in his paper read before the Association of Life Insurance Presidents, stated that the soldiers in the camps have learned so many important lessons as to the value of sanitation, that when they get home, they will be ready to back up the health officers when the latter are trying to secure appropriation for some better sanitary measures, as for instance, the getting of a better water supply for the city.

Spontaneous Cure of Shell Shock

Shell shock, as is generally known, is somewhat difficult to manage, and one cannot be certain that, after an apparent cure, the symptoms will not return. The most remarkable recorded cure of this disease was a mass cure of a large number of cases which occurred spontaneously when the news of the armistice reached the men. Probably one element that prolongs the symptoms of shell shock is the feeling that one must go back into that hell at the front and face that nerve-destroying bombardment. The armistice meant that all this was in the past. Doubtless many persistent nervous troubles could be as effectually cured if the proper mental remedy could be applied — something to remove entirely the strain of worry.

Peanut as Food

Wallace in the *Indian Journal of Medical Research* reports peanut cake as an especially valuable source of protein. The nuts are cold pressed to remove the oil, but still there is too much oil in the resulting cake to make a good flour, the bread being heavy and bitter. This cake is heated, and again pressed, and when ground up, makes an excellent flour with only five per cent of fat, and is slightly sweet to the taste. The protein of the peanut is superior, more like animal protein than that of the legumes (except soy beans), the cereals, or the nuts.

Tuberculosis in the Army

According to Colonel Bushnell, in the *Military Surgeon*, a body of four hundred examiners was organized for the detection of tuberculosis in the army. At the officers' training camps, 53,905 men were examined and 0.362 per cent found to be tuberculous. In the air corps of 38,835 men, 0.159 per cent were tuberculous. In the entire army of 1,406,498 men, 11,020 cases of tuberculosis were found, or 0.783 per cent. About ten thousand men were excluded from the army on account of tuberculosis, the majority having contracted the disease before entering the army.

Influenza in England

The epidemic, after an apparent remission, has had another flare-up, so that during the summer there were more than 1,600 influenza deaths in London. This appears very small as compared with the mortality in this country. There seems to be no doubt among the English physicians that the disease is identical with that which was epidemic in 1889, but in this the mortality is confined more largely to those under 45, whereas in the former epidemic, those above the 45-year limit were more susceptible. It is also stated that there has been a greatly increased mortality from bronchitis and pneumonia in England.

Pasteur Institute Robbed

Dr. Calmette, noted French physician in charge of the Pasteur Institute at Lille, France, who was allowed to remain at his post during the German invasion, protested to the mayor of Lille against the removal from the institution of the last three horses which had been used for the production of antidiphtheretic serum. These horses had been prepared by the usual laborious process occupying a year or more, so that their serum was valuable as a diphtheria preventive and cure. The veterinarian testified that the horses were unfit for military or any other duty, and they were very much needed as a protection against diphtheria. But the protests of the doctor were unheeded.

Bacteriology of Influenza

According to investigations reported at a recent meeting of l'Académie des Sciences, Paris, by the director of l'Institut Pasteur, influenza infection is carried, during the active stage of the disease, by the nasal and bronchial secretions of influenza patients [and carriers?]. The causative germ, according to this report, seems to be sufficiently small to pass through a Chamberland filter, and if so, it belongs to the class of "filterable viruses," which are also known as ultramicroscopic organisms, for the reason that they are invisible by ordinary microscopic technique, being very much smaller than the commonly known germs. It is more than probable that a number of the unidentified causative germs of some of the common infectious diseases belong to this class.

Saving in Sugar

According to an official report from the Food Administration, the American people saved, during the months of July, August, September, October, and November, 1918, no less than 775,000 tons of sugar. That is, during those five months, there was 1,550,000,000 pounds less sugar consumed in America than in a similar prewar period. This conservation, which includes the sugar saved by restrictions on confectionery and soft drinks, amounts to more than fifteen pounds for every man, woman, and child in the United States.

Influenza Pandemic

According to estimates of the United States Public Health Service, there were between September 15 and about December 1, 350,000 deaths from epidemic influenza in the United States among the civilian population. There were some 20,000 deaths in the camps, according to the War Department records. The death rate in New York City was less than in any of the other large cities, being 27 per 1,000 population. In Philadelphia it was 54 per thousand; in Baltimore, 47; in Boston, 41; in Buffalo, 34; in Newark, 32. This report for New York seems remarkable when we remember that in that city there was no attempt to close schools, theaters, churches, and the like, as was done in many of the other large cities.

Quinine as an Influenza Preventive

In a certain barracks when three soldiers had come down with influenza, it was proposed to experiment on the preventive action of quinine, by giving it to part of the remaining men and not to others. Part of the soldiers received 7½ grains quinine a day for four days. The others received none. The results follow:

	Number	Attacked with influenza	Per cent	Average days' duration	Fever
No quinine	53	31	58.5	7	averaged 100.4
Had quinine	45	13	28.8	3	7 reached 100.4

Tea and Coffee Substitutes

One writer in a German newspaper asserts: "To find substitutes for tea has not been considered a very difficult problem, and coffee substitutes had been largely used before the war; but cocoa has offered the greatest difficulties." One firm, however, put out a preparation, "Brancoa," made of powdered reeds mixed with milk and sugar, which was said to taste like chocolate. We in this country who have lived on wheat substitutes have scarcely realized what it means to be placed very largely on food substitutes. The Brancoa may have been a harmless substitute for a food some would not call harmless; but many of the substitutes were not substitutes at all in the sense of giving an equivalent food value.

German Tea

In an article on "German Tea" which appeared in a German newspaper, the writer stated that the previous winter he purchased a package of tea labeled "A Mixture of Twenty Different Herbs," which proved to be "nothing more than hay from a woodland meadow chopped, packed up, and sold as 'German Tea.'" Doubtless it was as wholesome as the real tea, or more so, but perhaps not so satisfying to those accustomed to tea. Substitution was reduced to a fine art in Germany during the war.

"——*that thou mayest prosper and be in health, even as thy soul prospereth.*"
JOHN 3:1-2.

"HALF-HEALTH"

—does it satisfy you?

DO you know that only one in twenty enjoys "whole-health"? The rest live on, day after day, in a state of "half-health"—not sick enough to go to bed—nor well enough to engage with zest and energy in the busy activities of the day.

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