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Life & Health

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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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Is the United States Menu Adequate?

L. A. Hansen

THE United States Food Administration bill of fare strikes people in various ways. To many it is O. K. simply because it is for the sake of the country and will help to win the war. To some it is all right for the other fellow, but for themselves it is rather inconvenient and in some ways and at some times asks too much — it interferes with their appetites. Others take it the best they can, desiring to do what is asked of them, but not wishing to do it if it is not necessary.

Lifelong culinary practices and eating habits are a bit hard for some people to yield at once, even to the demands of the United States food controller. With some it is no small thing to give up articles of food to which they have been accustomed nearly all their lives, and use things they have thought they never liked, or at least have not learned to use. Some people are troubled with the fear that they will suffer seriously by making changes in their food.

Naturally some people have fears that our war-time menu may be inadequate, or at least that it must be handled with great care or it may do harm. They have heard of the danger arising from the use of food substitutes in other countries and of the privations of those who are on rations. Honest doubt may arise as to whether our Food Administration people have, in the emergency situation, gone into the food problem sufficiently to be sure we will not suffer by adopting the measures recommended.

Food values have been under investigation for some time, and long before the war our Government had secured authentic data as to the nutritional value of various foods. It may be assuring to some people to see figures on this, and it should be a satisfaction to all who are following the United States Food Ad-

TABLE I — COMPARATIVE FOOD VALUES OF CEREALS

Flour, meal, etc.	Water	Protein	Fat	Carbohydrates	Ash	Fuel value per pound
Entire wheat flour	11.4	13.8	1.9	71.9	1.0	1,650
Graham flour	11.3	13.3	2.2	71.4	1.8	1,645
Wheat flour, patent roller process						
High grade and medium	12.0	11.4	1.0	75.1	.5	1,635
Low grade	12.0	14.0	1.9	71.2	.9	1,640
Macaroni, vermicelli, etc.	10.3	13.4	.9	74.1	1.3	1,645
Wheat breakfast food	9.6	12.1	1.8	75.2	1.3	1,680
Buckwheat flour	13.6	6.4	1.2	77.9	.9	1,605
Rye flour	12.9	6.8	.9	78.7	.7	1,620
Cornmeal	12.5	9.2	1.9	75.4	1.0	1,635
Oat breakfast food	7.7	16.7	7.3	66.2	2.1	1,800
Rice	12.3	8.0	.3	79.0	.4	1,620
Barley meal and flour	11.9	10.5	2.2	72.8	2.6	1,640
Barley, pearled	11.5	8.5	1.1	77.8	1.1	1,650
Oatmeal	7.3	16.1	7.2	67.5	1.9	1,860
Tapioca	11.4	.4	.1	88.0	.1	1,650
Starch	.....	.....	....	90.0	....	1,675
White bread	35.3	9.2	1.3	53.1	1.1	1,200
Brown bread	43.6	5.4	1.8	47.1	2.1	1,040
Graham bread	35.7	8.9	1.8	52.1	1.5	1,195
Whole-wheat bread	38.4	9.7	.9	49.7	1.3	1,130
Rye bread	35.7	9.0	.6	53.2	1.5	1,170
Corn bread	38.9	7.9	4.7	46.3	2.2	1,205

ministration conservation program to know that as yet we are well on the safe side of eating. The bill of fare allowed us thus far, as will be seen by reference to Table I, is ample for all ordinary needs of nutrition.

From the standpoint of nutrition the substitution of other cereals for wheat does not look so bad, does it? Wheatless meals should not mean a hardship, and do not so far as food value is concerned. It may be true that some people may not like the other cereals so well as they do wheat, or may think they do not. Many people do not know whether they like them or not, they have used them so little.

Really, a variety of cereal foods should be attractive, affording, as it does, various dishes and flavors, any of which might become as well liked as wheat. A good many people are finding out that there is a decided advantage in the wheatless program. New breads are being made that are most excellent in taste and the equal of any in nutrition. Tasty cereal dishes are becoming more plentiful.

When it comes to the meat question we also find a liberal menu of nonflesh foods that in nutritional elements are not only equal to, but excel the meats. Many people have known a long time from experience that meat is not absolutely essential to a complete dietary, if proper substitutions are made. The present food situation has stimulated menu making without meat, and people find satisfaction in new dishes that are palatable and as nourishing as meats. We give a few figures in Table II.

The figures given are from the table found in "Principles of Nutrition and Nutritive Value of Food," by W. O. Atwater, Ph. D., printed by the United States Department of Agriculture. We have selected only such items as will help to show that certain substitutes are possible and safe. The high fuel value of pork is due to the percentage of fat. For ordinary uses such a proportioned food would not be desirable.

We are asked to save animal fats. This can be done by using the vegetable oils, such as cottonseed, peanut, corn, and coconut oils. These are procurable in the best of condition for cooking purposes. Good grades of nut margarine may be had, both palatable and satisfying substitutes for butter.

There is little danger of our suffering by cutting down on the amount of sugar used. Besides it being possible to spare some from our liberal ration, we can make use of honey, molasses, sirup, and sweet fruits. Sugar is a needed food element, but is found in more forms than the granulated kind.

TABLE II — COMPARATIVE FOOD VALUES OF MEATS

	Waste	Water	Protein	Fat	Carbohydrates	Ash	Fuel value per pound
Beef							
Porterhouse steak	12.7	52.4	19.1	17.9	....	.8	1,100
Sirloin steak	12.8	54.0	16.5	16.1	....	.9	975
Veal							
Breast	21.3	52.0	15.4	11.0	....	.8	745
Leg	14.2	60.1	15.5	7.9	....	.9	625
Cutlets	3.4	68.3	20.1	7.5	....	1.0	695
Mutton							
Flank	9.9	39.0	13.8	36.9	....	.6	1,770
Leg, hind	18.4	51.2	15.1	14.7	....	.8	890
Loin chops	16.0	42.0	13.5	28.3	....	.7	1,415
Lamb							
Breast	19.1	45.5	15.4	19.1	....	.8	1,075
Leg, hind	17.4	52.9	15.9	13.6	....	.9	860
Pork							
Ham	10.7	48.0	13.5	25.9	....	.8	1,320
Loin chops	19.7	41.8	13.4	24.2	....	.8	1,245
Tenderloin	.....	66.5	18.9	13.0	....	1.0	895
Ham, smoked	13.6	34.8	14.2	33.4	....	4.2	1,635
Shoulder, smoked	18.2	36.8	13.0	26.6	....	5.5	1,335
Salt pork	.....	7.9	1.9	86.2	....	3.9	3,555
Bacon, smoked	7.7	17.4	9.1	62.2	....	4.1	2,715
Poultry							
Chicken, broilers	41.6	43.7	12.8	1.4	....	.7	305
Fowls	25.9	47.1	13.7	12.3	....	.7	765
Goose	17.6	38.5	13.4	29.8	....	.7	1,475
Turkey	22.7	42.4	16.1	18.4	....	.8	1,060
Fish							
Halibut, steak or section	17.7	61.9	15.3	4.4	....	.9	475
Mackerel, whole	44.7	40.4	10.2	4.2	....	.7	370
Shad, whole	50.1	35.2	9.4	4.8	....	.7	380
Shad, roe	.....	71.2	20.9	3.8	2.6	1.5	600
Cod, salt	24.9	40.2	16.0	.4	....	18.5	325
Herring, smoked	44.4	19.2	20.5	8.8	....	7.4	755
Salmon, canned	.....	63.5	21.8	12.1	....	2.6	915
Sardines	5.0[a]	53.6	23.7	12.1	....	5.3	950

[a] Refuse, oil.

TABLE III — COMPARATIVE VALUES OF MEAT SUBSTITUTES

	Waste	Water	Protein	Fat	Carbohydrates	Ash	Fuel value per pound
Eggs, hens' eggs	11.2[b]	65.5	13.1	9.3	....	.9	635
Dairy products, etc.							
Butter	.....	11.0	1.0	85.0	....	3.0	3,410
Whole milk	.....	87.0	3.3	4.0	5.0	.7	310
Skim milk	.....	90.5	3.4	.3	5.1	.7	165
Buttermilk	.....	91.0	3.0	.5	4.8	.7	160
Condensed milk	.....	26.9	8.8	8.3	54.1	1.9	1,430
Cream	.....	74.0	2.5	18.5	4.5	.5	865
Cheese, cheddar	.....	27.4	27.7	36.8	4.1	4.0	2,075
Cheese, füll cream	.....	34.2	25.9	33.7	2.4	3.8	1,885
Vegetables							
Beans, dried	.....	12.6	22.5	1.8	59.6	3.5	1,520
Lima, shelled, fresh	.....	68.5	7.1	.7	22.0	1.7	540
Peas, dried	.....	9.5	24.6	1.0	62.0	2.9	1,565
Cowpeas, dried	.....	13.0	21.4	1.4	60.8	3.4	1,505
Nuts							
Almonds	.....	2.7	11.5	30.2	9.5	1.1	1,515
Brazil nuts	.....	2.6	8.6	33.7	3.5	2.0	1,485
Chestnuts, dried	.....	4.5	8.1	5.3	56.4	1.7	1,385
Coconuts	.....	7.2	2.9	25.9	14.3	.9	1,295
Coconut, prepared	.....	3.5	6.3	57.4	31.5	1.3	2,865
Filberts	.....	1.8	7.5	31.3	6.2	1.1	1,430
Hickory nuts	.....	1.4	5.8	25.5	4.3	.8	1,145
Pecans, polished	.....	1.4	5.2	33.3	6.2	.7	1,465
Peanuts	.....	6.9	19.5	29.1	18.5	1.5	1,775
Pine nuts	.....	2.0	8.7	36.8	10.2	1.7	1,730
Walnuts, black	.....	.6	7.2	14.6	3.0	.5	730
Walnuts, English	.....	1.0	6.9	26.6	6.8	.6	1,250

[b] Refuse, shell.

We hear quite a bit about the large number of food substitutes in some countries resulting from war conditions. We are told that many of these are not only lacking in proper food elements, but are harmful, and that much sickness results. No such thing has yet come to us.

But we are given a solemn warning by men who should know, that if the war should be greatly prolonged, many of our foods will become very scarce, probably disappearing altogether for a time.

We should do well to be in dead earnest now in adjusting ourselves to conditions as we find them. It will stand us well in hand to learn how to prepare and use foods that are in themselves perfectly good, but the use of which we have not known because of our ignorance of their values or our disinclination to try new things.

The foods offered us in the United States Food Administration bill of fare are not to be regarded with prejudice because they are spoken of as substitutes. Substitution is not necessarily a bad thing. These foods are not inferior ones. By actual food standards they measure up as among the best. Their use does not impoverish our diet. They are an addition to our dietary. It is not hardship to us to make use of them. Wheatless and meatless days should not be regarded as a misfortune.

There is no telling what we may come to in the scarcity of food substitutes and the necessity of making the very best use of whatever may be available. Experience gained now in times of comparative plenty and under favorable conditions will help us to meet whatever may be in store in the way of real deprivation.

CONSERVATION RECIPES

How to Save Butter and Other Expensive Fats

George E. Cornforth

NEXT below milk in economy stand nuts. We think of nuts as expensive food, but they are not when we consider how much nourishment they afford for a given sum, for nuts are the most nutritious of all foods except clear fats.

Nuts and fruits have not risen in price proportionately with meats, and therefore, while nuts have always compared favorably with meats in economy, the comparison is still more in favor of nuts at present. This is certainly a favorable time to adopt a fruit and nut or a vegetarian diet. Nuts have been said to be perfect meat substitutes, but they are more than that: they are meat and butter in one food, because they contain such a high percentage of fat. The pecan is almost three quarters fat. The pine nut is most like meat in its food content, containing more protein than any other nut.

Nuts are too concentrated to be used in more than small quantities in the diet. For example, three or four Brazil nuts, or three or four walnuts, six or seven pecans, or six or eight almond meats will supply a sufficient quantity of protein and fat when combined with other plant foods. The rest of the meal should be made up of more bulky foods, such as fruits and vegetables and bread.

But nuts can be combined with other foods to make substantial dishes that will be found to replace meat in a very satisfactory way. Just try the following:

NUT LOAF

¾ cup chopped nut meats (walnuts or different kinds of nuts).
2 large potatoes, boiled with their skins, then peeled and mashed.
1 hard-boiled egg, chopped.
1 medium-sized onion, chopped.
½ piece celery, chopped fine.
1 tablespoon oil.
¾ cup cracker crumbs.
½ teaspoon sage.
Salt to taste.
1 raw egg white.

Mix all together. Form into a loaf, put into a pan, pour 1 cup water and 2 tablespoons oil into the pan. Roast one-half to three-fourths hour, dipping the water up over the loaf occasionally. Serve with gravy or jelly. This seems to have more of a meaty taste served cold, sliced thin.

WALNUT TIMBALES

1 cup milk.
1 tablespoon oil.
¾ teaspoon salt.
¾ teaspoon celery salt.
¼ cup chopped walnut meats.
1 egg.
1 cup crumbs of stale bread.

Separate the white from the yolk of the egg. Combine all the ingredients except the white of the egg; fold the stiffly beaten white in last. Put into oiled timbale cups. Set the cups in a pan of water, and bake till set. Turn from the molds and serve with white sauce to which a few chopped nuts have been added.

CORN AND PINE-NUT LOAF

1 cup milk.
1 tablespoon oil.
¾ cup zwieback crumbs, or thoroughly dried bread crumbs.
¼ cup canned corn.
¼ cup chopped pine nuts.
1 egg, beaten.
¼ teaspoon salt.

Mix ingredients. Pour into an oiled bread tin, and bake till set. Turn from tin. Slice and serve with white sauce to which a little chopped pine nuts or a few canned peas have been added.

SQUASH AND WALNUT TIMBALES

2 cups very dry mashed squash.
1 egg, beaten.
2 tablespoons oil.
1 tablespoon sugar.
2 teaspoons salt.
¼ cup fine cracker crumbs.
½ cup chopped walnuts.

Mix ingredients well. Put into oiled timbale cups. Set cups into a pan of hot water, and bake till set. Turn from molds and serve with white sauce or milk gravy.

Chestnuts as a valuable addition to the diet have not been appreciated as they deserve. Chestnuts differ from other nuts in containing starch in place of the fat that is found in such large quantities in other nuts. For this reason chestnuts require cooking to prepare them for eating.

TO PEEL CHESTNUTS

Wash the nuts, then boil them for two minutes. Drain off the water, and pour cold water over them. The shells and the tough skin which covers the kernel can then be easily peeled off.

CREAMED CHESTNUTS

Boil the peeled chestnuts in as small a quantity of water as will cook them without scorching. Then mix them with cream sauce or milk gravy.

CHESTNUTS AU GRATIN

Add a little cottage cheese to the creamed chestnuts. Spread them in a pan, sprinkle with crumbs, and brown in the oven.

If the diet suggested in this article, and the one in the preceding number of LIFE AND HEALTH, are adopted, no butter or other animal fats will be required in the diet, because the milk and nuts not only replace the meat part of the diet,

but also supply a sufficient amount of fat. Peanut butter may be used occasionally as a spread for bread, but should not be used in larger quantities than one would use of dairy butter. Try diluting the peanut butter with water to such a consistency that it spreads easily, adding salt to taste; or perhaps you would like it thinned with sufficient vegetable oil to make it soft enough to spread readily.

Ripe olives are a valuable food, and contain so much fat that they can be used to replace butter or other expensive fat in the diet.

I am speaking in this article of dietetic *needs*. Readers may not care to dispense with butter as a spread for bread, but these suggestions point the way to as great a reduction in the use of fats as one may care to make.

Can Diet Influence Mother's Milk?

[We have been asked to publish the following article, taken from "American Motherhood." In general, the position of the article is sound, but evidently the author and his associates were not in touch with some of the more recent nutrition studies. For this reason we have inserted a number of footnotes.— ED.]

CAN mother's milk be influenced by her diet? Is there any diet which will help to increase not only the quality but the quantity of mother's milk? are perhaps the questions most frequently asked by those who are trying to nurse their own babies.

Nine times out of ten the breast-fed baby has such a tremendous handicap over his little artificially fed brother, that at times the race in the beginning seems most unfair, and perhaps no question has had more written about it and said about it than this one of dieting.

It has long been maintained that diet has little or practically no influence in helping to increase either the quantity or quality of mother's milk. The anxious mother was told that lots of liquids in the shape of milk and cream and cocoa, and such foods as cereals and red meats, might help, but this was very doubtful. To any mother such advice is most discouraging, and it is to be easily understood why so many mothers, after one or two unsuccessful attempts at nursing their babies, easily become discouraged.

With the dominant idea in mind that far too many babies are being seriously handicapped by being deprived of mother's milk, one of the largest hospitals began a long, systematic, and necessarily tedious study of the effect of different foods or combinations of foods on the nursing mother, with the hope of determining whether there might be something which would increase not only the quality but quantity of the milk.

The mother who was supplying a sufficient amount for her baby was in no way used in these experiments. On only the mother whose milk had begun to fail, and whose baby was from all appearances not getting a sufficient amount of food, was the study of the influence of different foods on the supply of milk actually carried out.

The results are interesting and most instructive, and while the work has not been carried to completion, enough has been learned to be of much interest to the readers of *Mother's Magazine*.

It was at a recent meeting of prominent specialists on infant feeding that one of them, in a discussion on this subject, made this important statement: "The mothers of the country are becoming so well informed on this most vital question through the splendid educational efforts of popular magazines, and the bureau established in Washington, that they are beginning to grasp the situation. They are demanding a more careful supervision of their babies."

The most common, discouraging experience so many mothers have to go through is during the first few weeks of the babies' lives. They will always tell you that for the first three or four weeks everything seemed to go nicely, the baby was gaining, sleeping well, and seemed contented. Then for no apparent reason things began going badly. The baby began spitting up the milk, crying day and night from colic.

I mention this to show you there are many other influences besides diet which may seriously affect your milk. The most prominent one of all, perhaps, is your mental condition — the state of your nervous system.

After confinement, when you are able to be about the house, one of the first duties you assume is the care of your own baby. The young mother, always watchful of every little change in the baby, becomes anxious and easily starts to worry. Added to this, as is so often the case, is the care of the home, unfortunately, ofttimes long before any physical exertion should be undertaken, not only for her own sake but also that of the baby.

It is indeed little wonder that there are so many failures in maternal nursing. If you become disturbed, mentally upset, nervous, and overtired, it will not matter what diet you may follow. Your milk will never be sufficient in quality or quantity. I hardly think you realize the full importance of this.

Strange as it may seem, this subject is scarcely ever mentioned in any of the writings. Ofttimes your success or failure to nurse your own baby will depend upon the mental poise — the nervous control cultivated during the months before confinement. This will be greatly aided by the most vitally essential, absolute rest which you should take after confinement for a sufficient length of time. There are thousands of chronic invalids among the women of this nation who have been made invalids by improper care and insufficient rest at that most important, trying time in their lives.

There is one thing more I want to tell you before we speak of the influence of diet, and this point I cannot emphasize too much. It is the importance of weighing the baby every week, keeping accurate track of any gain or loss in weight. To find, weeks after the baby's birth, on weighing it, that it has gained little, or, what is even worse, has lost in weight, will so frighten any mother that almost invariably her milk supply becomes hopelessly deranged and grows steadily less and less from week to week.

The time has arrived when we must wake up to the fact that many breast-fed babies are being starved because the mothers do not receive the proper diet.

In a recent number of *Mother's Magazine*, in discussing the protein in the baby's milk, you will remember I tried to point out to you that there are many different kinds of proteins, depending on the different amino acids found in them. You will recall I told you that there were some amino acids which were absolutely necessary for growth, the principal one being known as lysin. I further told you that lysin was much more abundant in the protein of mother's milk than in cow's milk, but what is of even greater interest, while these vitally important amino acids necessary for growth are also found in the proteins of meat and eggs, they are almost entirely lacking in vegetable proteins.[1]

[1] This statement does not represent the most recent views of nutrition experts. A little thought ought to suggest that the cow gets from its vegetable feed everything necessary for the growth of the calf. A ration of grains without greens would be insufficient for this purpose. Mothers who have an abundance of green food in addition to their cereals, are enabled to furnish a milk rich in the growth determinants — the food substances or accessories that stimulate and promote growth. Cow's milk added to the mother's ration will be more valuable than meat. Egg yolk is also rich in the growth determinant.

With these important facts in mind, those carrying out the studies of the effect of different foods on the production of milk, reached the conclusion that if growth depends largely on the kind and amount of proteins fed to the child, the same principle might be applied to the production of milk, especially in producing a milk rich in the elements necessary for growth and development.

There were two facts of far-reaching importance brought out by the systematic study of mother's milk, which was carried out over a period of time. It was found, in the first place, that at the end of the third or fourth week many mothers were producing only about ten ounces of milk daily, with the result that the baby's weight was at a standstill.

Secondly, a study of the diet of these mothers was undertaken, and it was found that with some modification of the diet nearly all of them would be able to supply all the milk necessary to keep their babies gaining the usual weekly amount.

In these experiments many different combinations of food were tried. The principal object of the experiment was to determine which type of protein is best suited for the production of human milk. Of course fats and carbohydrates were combined with the protein so that the diet might be well balanced.

The study of the different diets brought out these interesting facts: First, that a diet made up largely of vegetables, cereals, and fruits is both insufficient and inefficient for the maximum production of milk protein.[2] While it may be suitable for building up human milk protein, it is difficult to eat enough fruits and vegetables in such a diet to keep up the normal milk supply.

It was further found that when a diet was given composed of corn and gelatin, both of which are very deficient in the essential amino acids necessary for growth, that the quantity, but not the quality, of the milk was maintained.

Perhaps one of the most interesting discoveries was the fact that nut proteins proved to be one of the most valuable foods that could be fed the nursing mother to supply not only an increased quantity but quality of milk. The other forms best adapted for milk production were derived from animal proteins such as meats of all kinds, milk and eggs with an added quantity of cereals and vegetables, composing about one third of the diet.

Concerning the question which came up as to the best form of animal protein suited for milk production, it would appear after the experiments carried out that cow's milk is particularly valuable in this regard.[3]

To Keep the Baby Well

1. Give the baby no food but *mother's milk.*
2. If you *cannot* nurse your baby, follow the advice of your doctor as to *feeding.*
3. Give the baby *fresh air* day and night.
4. Do *not* nurse or feed the baby whenever it cries, but give *cool boiled water.*
5. Nurse or feed the baby only at *regular hours.*
6. Be sure the baby has *enough sleep;* a baby should sleep at least sixteen hours out of twenty-four.
7. Do *not* put too much *clothing* on the baby.
8. Do *not* give the baby *soothing sirups* or *patent medicines.*
9. Keep the baby's bottle *clean.*
10. *Bathe* the baby *every day* in a tub.
11. *Don't* put a *veil* or *napkin* over the baby's face at any time.

SAVE THE BABIES

—W. H. Addis.

[2] It is suggested that those who made this wonderful discovery should feed their cows on meat! The statements in this paragraph are not in accordance with the facts, and could not have been made except as a result of biased observations.

[3] Very true.

The diet which gave the greatest supply of milk was made up of nuts supplemented by vegetable proteins. The actual diet which produced the best results was made up of —

	GRAMS
Malted nuts	100
Protose (nut product)	150
Pecans	25
Almonds	25
Walnuts	25
Peanut butter	50
Cocoa	8
Chocolate	8
Bread	200
Potatoes	200
Lima beans	100
Peas	200
Bananas	100
Apple sauce	50

It was found helpful to weigh the food accurately, because overfeeding is as unsuccessful in producing an increased milk supply as underfeeding.

It is the belief of those who carried out these experiments, that one of the great mistakes made is that during the first three or four weeks after confinement, the average mother is fed too much on what might be called a sickroom diet, simply broths, and gruels, and delicacies of one kind or another which are not sufficient to support an increasing production of milk.

It would seem rather that the mother should be considered as a normal individual, whose diet must include sufficient for two. It is a fact that the mother's tissue will give up its own protein and fat and sugar to supply the constituents necessary for the baby's food, but that is done at the expense of the mother's health, and these constituents should be supplied in her diet.

The protein proportions of the diet are best supplied by animal proteins, and the least satisfactory by vegetable proteins, with the exception of nut protein, which seems in every way as suitable for elaborating milk protein as does the animal protein. There seems to be considerable evidence that at least a certain amount of milk protein should be an important ingredient of the diet.

In general, one may say that a generously mixed diet including nuts, milk, meats, eggs, with cereals, vegetables, and fruits, constitutes a diet containing the potential factors for a maximum milk production.

Next to the diet which produced the maximum supply of milk, which you will recall was made up largely of nut proteins, the one giving the next best result was made up of —

	GRAMS
Oatmeal	150
Bread	200
Butter	25
Round steak	150
Eggs	100
Potatoes	200
Milk	500
Rice	100
Cocoa	4
Apple sauce	50
Lima beans	100
Sugar	50
Cream	100
Spinach or carrots	100

The idea in quoting these diets is to show you the foods which are most essential in producing a maximum milk production. The amounts given are, of course, the diet for one day.

While it would be difficult for you accurately to weigh your food, you could very closely approximate these diets with, in many cases, very brilliant results.

Cold and Pneumonia

Dr. E. Valentine, in the *Journal of Experimental Medicine*, January, 1918, cites two instances of common colds, in which, so far as known, the patients had not been exposed to pneumonia. In these cases the predominating organism was a pneumococcus Type I, that is, a pneumonia germ. This gives rise to the suspicion that this pneumococcus organism is in these cases the cause of the cold; and if this be so, it follows that certain cases of common cold may be a means of transmitting pneumonia. In other words, the germs may in some patients produce a condition not distinguishable from a common cold, and others exposed to these patients may develop a form of pneumonia. It should be remembered that these conclusions are inferential, and lack much of being proved.

The Bringing Up of Children, and Nervous Diseases

Adolph Stern, M. D.

[The following paper, read at a mothers' meeting in one of the public schools of New York City, May, 1916, and published in the *New York Medical Journal* of May 27, 1917, is here reprinted, with a few abbreviations and modifications, for the benefit of mothers the country over, who read LIFE AND HEALTH.]

IT is unfair to say that a child learns bad things away from home. He could not pick up bad traits unless the soil were prepared to receive the seeds and allow growth of evil. In my work with nervous people, in their symptoms, and their attitude toward life in general I see displayed typical infantile and childlike characteristics; in many ways they live as adults the life they lived in very early childhood, and not always to their advantage.

We must remember that the mind, or psyche, of the child is like an exceedingly sensitive or sensitized plate which is ready to record the most subtle impression very frequently as a permanent record, determining his conduct and character in the future. Whether in later life he is to turn out a good, normal human being, with kind, healthy, generous impulses, depends entirely upon the nature of these impressions, on the frequency of their repetition, and on the force with which they are made. Though these impressions may in the course of time be weakened, they are in reality never effaced; they are never completely wiped out.

How important, then, is it to surround a child in his tender years with scenes, experiences, examples, and impressions that will later give a pleasant and healthy retrospect. By a healthy retrospect I mean one which enables the child to look back on his early life without any feeling of hate or anger toward his guides or guardians. You have no conception what hate most patients manifest for their parents or guardians, a feeling impossible to exist if the child is brought up as he should be. Small and mean traits, such as envy and jealousy, the tendency to tell lies, all very characteristic in the neurotic and also in the child, do not exist in adults who have been properly brought up.

I am convinced that instead of being inherited, the disease [nervousness], so to speak, is directly given by the parent to the child. Children are great imitators, especially when they can derive some benefit from imitating. They frequently observe that the mother stays in bed or rests on account of a headache or some minor ill, so the observant child uses the same pretext to get out of an unpleasant task or to take a day off from school or to receive additional attention. This is but one of the many ways that a nervous disease may be transmitted, and it is but one of the many symptoms of a nervous trouble which the child learns or imitates. The average nervous parent has many so-called small traits, that is, lying, envy, desire for revenge, jealousy, etc., and he displays these traits on occasion. The child has opportunity to imitate the parents in these characteristics, and since the use of these traits and symptoms brings the child some indulgence, instinctively in later life he does the same without knowing it or consciously intending it.

I wish to present what I consider the chief points to keep in mind in the bringing up of children. Their importance has been impressed upon me in my work among nervous people, who in many respects, especially in their lack of emotional control, show evident infantile or childish traits.

An important single factor for the future mental health of the adult is his po-

sition as a child in the family, in so far as he is merely one of the other children, the only child, or the favorite child. A few days ago I came across an interview between a well-known statesman and a mother. She had asked the gentleman some advice concerning the marriage of her son, and received in reply, among other suggestions, that the boy should select a girl from a family in which there was a goodly number of children. His basis for the advice was that in a family of many children each one learns to give up something for the other, to do something for the other. Such children are less apt to be selfish than in the case of the only child, and selfishness is an important characteristic of a nervous patient. Let us take a family in which is a favorite child. The family consists of three boys and their parents. The middle boy, fourteen years of age, is the favorite of the mother. This child was sick with pneumonia when about six years of age and was looked after at that time by his mother. Though at present he is a healthy-looking boy, the mother insists he does not look well, that he does not eat well, and on that account needs more attention than the other two, and for the same reason is exempt from tasks that the other two are required to perform. To preserve his health he has the best room in the house in which to sleep, the other two boys sleeping in one room. The mother worries unnecessarily about his condition.

A HAPPY HOME

Children can almost always see through such a condition, and in this instance they [the healthy boys] did, and resented the favoritism shown their brother. They would twit him with being mother's pet; they would not take him into their confidences, share their possessions with him, nor have him in their games. Some feeling of resentment was also shown toward the mother, the two brothers frequently complaining to her of her unfair treatment. What happens to the favorite boy? Too much mothering prevents him from doing things for himself. It makes of him an intensely self-centered, selfish individual. In addition, his isolation by his brothers throws him more and more into his own company which gives him more time to think than is healthful. He does not have the opportunity to throw off what is on his mind, nor can he obtain perfect relaxation in play with his fellows. He often sits and broods and imagines himself illtreated by his brothers and others. He sees them enjoying themselves without him. All this gives birth in him to desires for revenge and envy which are kept alive in later years, and may serve as the cause of a nervous attack.

Another picture is one in which the favorite child, perhaps a little bit weaker than his brothers, has the apparent good fortune of having an older brother or sister similarly inclined toward him as the parent or parents. The result in this instance is almost as disastrous as in the first child I mentioned, for the favorite is almost certain to develop into a clinging, weak, undetermined individual, accustomed to have some stronger one do his work, completely lost when forced to rely on his own initiative. He is a misfit, for in reality, though grown up in years, he is but a child. Such individuals often get along well enough if their way is smooth, but they are very easily thrown into a

nervous state when brought face to face with some sudden shock or forced to decide a vital question.

The only child presents a very big problem. I like to see big families, even when the financial conditions are not the best. The children seem to get along well, and they frequently grow into wonderful men and women. When we examine closely the history of the family with an only child, we find that perhaps both father and mother are worriers, constantly anxious, afraid they cannot make ends meet if more children come. They seem to be blessed with the unhappy faculty of having something to worry about, and unfortunately, most frequently the poor only child is the object of worry. Everything is done with the object in view of providing for that child. Since he or she is the sole object of their solicitude, that child receives more love, care, anxiety, and attention than would be healthful for a half-dozen children. What is the result when such a child reaches manhood or womanhood? There has been in this instance no exchange. In so far as the child is concerned, it has been all take and very little give. When in the company of strangers he wishes to act as he does at home. That only child is mother's pet! he is not a good mixer, he does not make friends readily. These children have been used to receiving, but have had no training in giving. Their marriage, as far as love and care are concerned, is a one-sided affair, and they always yearn for their old home or their "old times" when things were better for them. Such marriages as a rule are very unhappy and the children of such a union are liable to be nervous individuals.

Do not seek to keep children always children and dependents, but seek in every way to make them self-reliant. Give them things to do which will make them feel they are growing up. I have often found that nervous children were bathed and dressed by the mother even up to twelve or fourteen years of age. These duties should be performed by children very much younger. Doing such things for older children keeps them far behind their years in their ability to help themselves, and renders them more dependent and helpless.

It seems a truism that children should be more in the company of children than in that of adults. Yet how often is the opposite the case! Children are not as care-free nor as spontaneous when with adults as when among themselves. With most of them a sense of restraint and a feeling of self-consciousness are present when with adults. Many parents for one reason or another do not see to it that their little ones mingle freely with older children, but for a good part of the day keep them in their, the parents', company. In such instances so strong an attachment may grow up between parent and child that separation even for a short while brings about a nervous breakdown, and in many instances a permanent separation, like a marriage, is impossible, or if it takes place, it results in failure, the grown-up child always yearning to go back to mother or father. As a rule, the mother is the offender in these instances.

Threatening children with punishment is a very fruitful field for nervous disease. Never make a threat of punishment you would not carry into effect. For that matter never make a promise that you cannot fulfil. Parents are in the habit of telling naughty children that if they are bad the policeman or the bogy man will get them, or that their tongues will be cut out if they tell lies, or that they are no longer the mother's children, that they must leave home, that

the parent must leave home if they are naughty. These threats serve as sources of worry and anxiety to children, who always magnify the importance of the unknown, investing it with terror. During the nervous attack patients frequently live through these early experiences which now in their attack serve as sources of fear and dread.

Many parents obtain obedience by instilling into their children the feeling of fear and awe. Often they term it respect. Most of my patients have feared one or the other of their parents, and these patients, even in their healthy state, fear strangers with whom they come in contact. Fear sets up a barrier between child and parent, and prevents that intimacy which is so valuable to a child. Fear brings about a desire to protect or defend oneself, and the child does it by shrinking away when approached. It is easy to tell, especially when a child is nervous, whether his parents or guardians are kind and gentle or harsh and stern. The shrinking child with his anxious look, the drawing away from the approach of anybody, denote a harsh and too strict bringing up. Such children even in a healthy state are of an extremely modest and retiring disposition, easily frightened by trivial causes. They do not mingle readily with their playmates nor do they assert themselves sufficiently to forge ahead in the struggle for existence. They seem to live in a world of fear in some form or other, most pronounced when they are going through a nervous illness.

By far the most important cause of nervous disease, both in the young and in the adult, is our conception of the very young child — before the age of three to five years — as one who looks but does not see, or hears but does not understand. They see and hear, and if they do not understand they ask questions. If the answers are not satisfactory, they supply their own answers. They make up something to explain the incident more clearly than does the answer of the parent. That brings me for a moment to the great importance of being absolutely honest and frank with children. If we cannot answer a question, for instance, "Where does the baby come from?" without embarrassment, or if we feel that the child will not understand, do not put it off by saying, "Don't ask me, you must not know." Give an answer that you think will satisfy, but let it be the truth as far as you can tell it. If you give that child a wrong answer, or if you say, "Don't ask me, it is not nice for you to know," that child will get his answer somewhere else, and he will learn that his parent has not told the truth. It shakes the child's implicit faith in his parent. More important yet, he gets his knowledge without the parent's knowing about it, that is, from questionable sources.

If, however, you answer the question to the best of your ability so that the child will understand, you put the stamp of authority on the information, and if you have answered the question to the child's satisfaction, that child will pit what you told him against any knowledge he receives anywhere else, and will believe you. He cannot thereafter get wrong information. He will say to himself, "My mother told me, it must be right. There cannot be anything indecent or bad or wrong about it." But what you tell the child must be the truth.

If the child asks you a question an answer to which would embarrass you or make you blush or hesitate or stammer, leave the question unanswered, but tell the child to ask you that question at some other time and you will attempt to answer it, or if you later feel capable of answering the question without any show

Nursing wounded soldiers in the new standardized hospital train Similar trains are held in readiness for wounded Sammies, thus assuring maximum comfort to the injured while traveling. When the tongue is hushed, there is a language of the eyes.

Below: British stretcher bearers at the battle of Menin Road, going forward to rescue the wounded. (British official photograph.)

Below: Cars of the American Ambulance Field Service speeding to a base on the Marne front, France, going through a rain of shrapnel and shell to bring back the wounded. (French official photograph.)

Oval: French *broucardier* hurrying a rather seriously wounded man to a dressing station on the front, to receive first aid before being removed to the base hospital.

of emotion, do so. Never let a question go without a satisfactory answer. For by questions the child shows that his quest for knowledge has been aroused, and he will satisfy that desire somehow. The parent should supply that knowledge and thus indorse it.

Children who are too much in the company of their elders, hear and see things not meant for them. Many things are said and done with no thought of effect upon the child. Many parents allow their children up to the age of five or six, and some unfortunately even up to the age of twelve or fourteen, to sleep in the bedroom of the parents, and worse yet, in their bed. What untold harm this brings the child in later life can hardly be imagined. It is during these hours that the child hears and sees things that make an indelible impression on his mind. Parents imagining that the little ones are asleep act and talk without restraint. Many of my patients, now adults, have told me what they as children had seen and heard; how they frequently merely pretended to be asleep or purposely stayed awake so as to see and hear, and that the recollection of these early experiences came back to them in later life in the form of dreams and fancies to torture them and to cause them feelings of intense remorse and shame and self-reproach. All this can be prevented by arranging separate sleeping-rooms for parents and children from the very beginning.

In many instances, children, even while very young, are in the habit of taking part in the family council. I recall what a boy of seven who came to me because of nervous trouble, told me. To test the child's power of observation one of the questions I asked him was, "Where is your father?" In answering he said, all in one breath, "My father is home baking bread. We are now selling a seven-cent loaf for five cents." In answer to my question "Why?" he said, "My father just opened the bakery. He had business in Newark, but failed. He got money from my uncle, and just now opened the store. By selling bread cheap now he will get the people coming, and later he will raise the price." All this from a child of seven. Where is the boy's

Painted by Harvey Sheldon

GRANDMOTHER'S BIRTHDAY

childhood, his care-free laughter and play? At seven years of age men's problems occupy his mind and rob him of the heritage of every child,—slow growth into manhood with all that that implies. It is no wonder that this boy of seven, hearing and seeing things meant only for grown-ups, is already nervous.

In this brief paper I cannot give definite instructions to follow, but I wish to impress the fact that a child's bringing up has a very important bearing on his future, not only as to his character, but also in deciding whether he is to be a normal-minded man; that is, a healthy-minded, or a nervous, sickly-minded individual. I want to give parents something to think about, and to make them feel that in their hands, and in theirs exclusively, lies the future of their children; that not what the child learns away from home, but what he learns or does not learn in the home, decides his entire future.

MOUTH HYGIENE

Proper Care of Children's Teeth

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

IF the child's teeth are well taken care of, it bids well to start life rightly equipped for the struggle. If the child's teeth are neglected it will, of course, be compelled to take up life's burdens more or less handicapped, a condition for which the parents without doubt are to be held responsible.

It is a true saying that one of the first prerequisites for the continuance of a sound mind and a sound body is a good healthy set of teeth.

Good digestion is dependent upon a good set of masticatory organs. Without these, poor digestion follows, and with poor digestion, what is life?

As the welfare of the child's future is dependent upon a normal function of the first set of teeth, and as the child is continually surrounded by adverse conditions that so easily and rapidly bring injurious results when neglected, it must be seen that it becomes the parents' duty to control these conditions. As one means to this end, train the child diligently in the habit of oral cleanliness.

Begin this training early. Swab out the child's mouth before it has any teeth. Don't forget that the mouth is a breeding place for germs — a natural incubator.

Be watchful of the child's food. Do not let anything enter the mouth, in the way of food (and those last five words might just as well be left out), that it is not able to retain and digest.

If the baby has been getting along well, sometime about the end of the sixth month the first baby teeth appear, usually the lower front teeth. These will be followed more or less regularly by the upper central teeth (incisors), then the back teeth appear, and finally, the cuspid teeth. These last are sometimes called "stomach," or "eye," teeth. The following table shows about when these baby teeth should appear:

Two lower front teeth, 5-7 months.

Two upper front teeth, 6-8 months.

Two more lower front teeth, at 7-9 months.

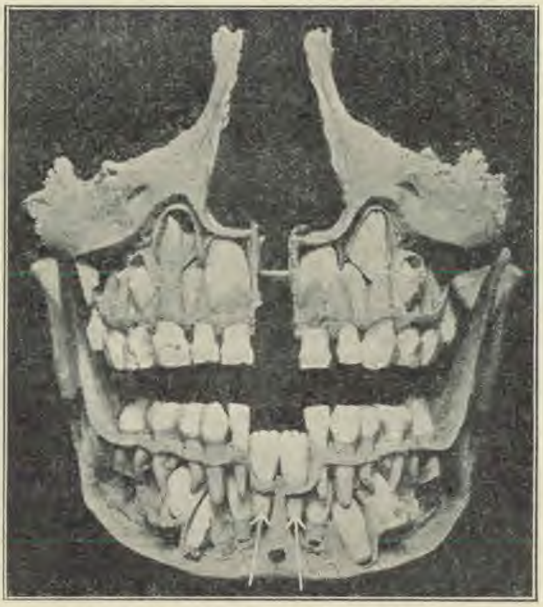
Two more upper front teeth, at 8-10 months.

Four back teeth (molars), one on each side, both upper and lower jaws, 10-14 months.

Four more back (molars) teeth, still back of the other molars, 24 months.

Four cuspids, or "eye" teeth, at 2-2½ years.

For a healthy child teething is normal. When associated with other disturbances, however, it becomes a source of trouble, sometimes serious trouble, too. Disturbances like indigestion, or when the teeth grow faster than the overlying tissues allow in absorbing to make room for the teeth, undue pressure of the tense and swollen gums takes place, and pain is present, making the child cross and feverish. This pressure should be relieved by lancing the gums.



Front view of the skull of a child about six years of age. Front plate of bone removed to show the developing permanent teeth. Notice how the roots of the baby teeth hold in position the on-coming permanent teeth.

Each tooth as it presents itself is a milestone in the development of the child. Not until all of these teeth are in place should the mother feel at liberty to wean the child entirely and give it food solid enough to be thoroughly masticated.

Another thing that is very important is this: When these little grinders are all in place, do not get the idea that because these teeth are only "temporary" they are of little consequence. *They are of supreme importance.* It is absolutely essential that these temporary teeth be retained up to the very moment the permanent teeth are ready to take their place. Their premature loss may be followed by all sorts of evils in the masticating machinery, such as enfeebled digestion, teeth irregularities, distorted features, impaired mastication, and frequently severe toothache and sleepless nights, which may actually be followed by permanent nervous affections. Nature so designed the *roots* of the temporary teeth that they (the roots) hold in their proper positions the permanent teeth while they are coming through.

Decay can and should be prevented in the temporary teeth. Besides brushing the teeth well after every meal, the child should be taught the "habit" of going to the dentist frequently for examination. Examination should be made more frequently than for permanent teeth. The material in a temporary set of teeth is not so good as in a permanent set. The temporary teeth do not have the years for hardening that the permanent teeth have. These temporary teeth should be filled, if necessary, and a strict watch should be kept over them until they are ready to come out and be replaced by the permanent set of teeth.

"GREEN STAIN"

There is a deposit often found upon children's teeth called "green stain" that is most detrimental. This deposit is really dangerous. It is not only unsightly, but if left upon the teeth any length of time will eat through the enamel, break down the tooth structure, and render permanent injury. This stain is hard to get off. If it cannot be gotten off with a soft pine stick and prepared chalk, take the child to the dentist, and under no circumstances allow the stain to remain if it reappears.

(Continued on page 158)

Parents, Don't Lie to Your Children

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

A MORE polite way of expressing it, I presume, would be, Don't tell them "stories." I don't like the word "lie," because it is such a plain, strong word; but for my purpose I want the heading to remain as it reads. This word better expresses my feelings, for I am "about all in," having just finished a "round" with a little patient, or rather, I might say, with the patient's parents.

Few people realize the nervous force expended upon some individuals, even in a ten-minute operation. Of course, the dentist must always be serene and sweet. His inward feelings and thoughts must never be expressed or seen upon the surface.

My first patient this morning was a little girl eight years old. She was brought in by her father, mother, and aunt. They were waiting for me when I opened my office.

I bade them all be seated; but the father followed me through the operating-room into my laboratory, to tell me that the child was very excitable, and that she always had hysterical fits every time they wanted her to do anything she did not like to do; that she was their only child, and they had always let her do as she pleased, because she was of such an excitable nature, etc. This was poured into my ear for fear I would not understand the situation. I patiently heard him through, but began to see light at once upon the "situation." It is needless to say that the child was badly spoiled.

Of course, I naturally anticipated trouble, but not from the little girl especially. "All right," I said to the father, "we will see what can be done. I have many little patients, and we get along all right together. Let me examine the child."

By this time they had all come in beside the operating chair, and were hovering around the child (she was screaming all the time), assuring her: "It will not hurt;" "This man'll not hurt like that other dentist;" "Now be a nice little girl, honey;" "He won't hurt you one bit," etc. All were talking at one time. They were doing more harm than good, and making the situation more difficult every minute. That child knew they were all lying to her.

I leaned against the chair for a minute, and watched the bedlam scene, then clapped my hands together, crying, "Listen! listen!" For a brief moment all looked at me, but only for a moment. The child centered her eyes upon me, and began to scream again as loud as she could. I raised myself to my full height, and pointing sternly at the child, said, "Stop! stop this instant!" She opened her big round eyes in astonishment, wondering what was coming next; for to have her feelings crossed by any one was undoubtedly a new experience to her.

I then addressed myself to the mother, as she had been taking, it seemed to me, the initiative in the scene just enacted, although my words were intended for all. I said as kindly as I could: "My dear madam, don't lie to your child — don't tell her stories." (I tried to modify the term, but she needed a lecture upon the subject. Neither was my lecture to be free, for I added the time to the rendered bill.) "That child knows you are not telling the truth," I continued. I held up my right hand while I was talking, to make it more impressive if possible.

The child looked on in wonderment. So did all the rest. Too bad, I thought, to say this before the child, but I must vent my feelings somehow. "You certainly know that there must necessarily

be at least some pain accompanying this work upon this child." And for the next few minutes, in no uncertain way, I tried to show them the awfulness of trying to deceive children. I explained that just those things make it hard for the dentist; that the child would not forget the falsehoods told her; that I depended upon a growing patronage for my living; that the child could not be induced to return in the future, and I would be in her mind and in their minds as the "other dentist" referred to; also, that the operation was bound to hurt some. Why should they not tell the child the truth about it?

When I had exhausted myself upon the subject, I said to them: "Now, if you will keep quiet, we will get along all right with this little lady." I invited her to take the chair. She, of course, did not want to; but I took hold of her gently but firmly, and in a way which told her nothing would do me but strict obedience, and she got into the chair. Never tell a child to do anything unless you expect to have the command carried out. She immediately set up another of her characteristic howls. But a snap of my fingers and a command, "Stop!" quieted her.

I began to talk to her thus: "Now, my little girl, you have come to have some work done in your mouth. You need it badly, I am sure. We are going to do that work. I am going to be just as kind and tender with you as I can be. It may hurt a little bit to do this work, but—" I did not finish; she had begun to fuss again.

Then her relatives, with one accord, began to declare: "Now, honey, it'll not hurt;" "This man won't hurt;" "This is a good dentist [Thanks], honey."

I held up my hand and commanded, "Stop!" I wondered what good my excellent (?) lecture had done. "Now," I said, "let me attend to this child; I will manage her all right without help. Please keep quiet."

"I was about to say, my little girl, that I wanted to make a bargain with you," looking her earnestly in the face, and pointing my finger close to her mouth. "It is this: if you will be good and nice, I'll be —" I did not finish. I did not want to make any rash promises. But she understood. "Now, let me look in your mouth. I know looking won't hurt, anyway."

She opened her mouth nicely. A most awful sight presented itself to me. Why that child was in my office, and not home in bed, is still a mystery to me.

I went at the case gently, though without hesitating, for I knew if I hesitated the battle was lost. I did not allow her to read my thoughts. Children are wonderful mind readers. My face was as immobile as a statue's. She gave me some trouble, it is true; but I paid little attention to it. All the time my whole object was to accomplish as much work with as little maneuvering as possible. The work was difficult, of course. Upon each phase of the work, if she behaved herself, I commended her. When she did not behave, I said little.

By this time her people saw they were helping best by keeping still. I have not the time to tell in detail all that was done for that child; but among other things, six teeth were extracted. She gave trouble when I was preparing the gums with the hypodermic, and begged that her mamma be allowed to hold her hands while I extracted the teeth. I complied. The child did not make any trouble then, nor did she make a sound when the teeth were being extracted. I commended her highly for this.

When the work was over, they all seemed to be well satisfied. I believe they will return. At least, I don't believe I made an enemy of the little patient. Neither was my lecture free.

AS WE SEE IT

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

THE RELATION OF HUNGER TO APPETITE

LABORATORY experiment has clearly shown that hunger is caused by contraction of the empty stomach. It is the physiological call for food — the instinctive provision against self-starvation. One is never hungry unless the body demands food and is ready to assimilate it.

Appetite, on the other hand, has nothing to do with the need of the body. One can have an appetite for beer or whisky, or ice cream, or candy. Appetite is really a call for the repetition of a pleasant sensation. It is not physiological, and its indulgence may lead to a condition decidedly pathological.

One of the simplest directions for good nutrition — one of the simplest to give, but hardest to follow — is to eat only when hungry. The vast majority of people so minister to their appetite that they never experience actual hunger. When the stomach is not actually full, so long as there is any room for more food, one will experience an appetite for certain favorite foods. After one has eaten sufficiently of plain foods, there is still an appetite for desserts, particularly for some favorite dessert, and this notwithstanding the fact that this dessert may be entirely in excess of the needs of the body.

The logic of the dessert at the end of the meal, is to furnish a food which will still appeal to a failing appetite.

Then long before the time nature would set for another meal, appetite calls for candy, or an ice-cream cone, or some dainty not needed by the body economy, thus adding to the burdens of the digestive and eliminative organs.

A few simple rules, which to follow will require courage, but which when followed will add to the health, physical efficiency, and life expectancy, are the following:

Do not eat until you are hungry.

Eat slowly, masticating the food carefully.

Do not eat of foods prepared to tempt a jaded appetite. In other words, eat plain food.

Follow these rules conscientiously for even a few weeks, and you will be convinced of the wisdom of the advice.

SAVE MORE FOOD AND IMPROVE YOUR HEALTH

THERE has been a gratifying response to Mr. Hoover's earnest food conservation appeals. Many who signed the food pledge are doing what they can to carry out its provisions in their homes. Many more who did not pledge are trying to do their bit in food salvage. Many of the hotels, restaurants, and other food establishments are co-operating heartily with the food-saving program.

But the present rate of saving is insufficient. Many have not yet seen the necessity for food conservation, and recent authoritative reports on the food situation in Europe indicate a much graver state of affairs than was at first

Hang this in Your Kitchen

UNITED STATES FOOD ADMINISTRATION
HOME CARD, 1918

Trade Where You See This Emblem.

Eat Where You See This Emblem.

WHAT YOU CAN DO TO HELP WIN THIS WAR

See other side showing WHY you should do it.

Our Problem is to feed the Allies and our own soldiers abroad by sending them as much food as we can of the most concentrated nutritive value in the least shipping space. These foods are wheat, beef, pork, butter, and sugar.

Our Solution is to eat less of these and as little of all foods as will support health and strength. All saving counts for victory.

The Food Administration asks every loyal American to help win the war by maintaining rigidly, *as a minimum of saving*, the following program:

Have **TWO WHEATLESS DAYS** (Monday and Wednesday) in every week, and **ONE WHEATLESS MEAL** in every day.

EXPLANATION.— On "Wheatless" days and in "Wheatless" meals of other days use no crackers, pastry, macaroni, breakfast food, or other cereal food containing wheat, and use no wheat flour in any form except the small amount that may be needed for thickening soups or gravies, or for a binder in corn bread and other cereal breads. As to *bread*, if you bake it at home, use other cereals than wheat, and if you buy it, buy only *war bread*. Our object is, that we should buy and consume one third less wheat products than we did last year.

Have **ONE MEATLESS DAY** (Tuesday) in every week and **ONE MEATLESS MEAL** in every day. Have **TWO PORKLESS DAYS** (Tuesday and Saturday) in every week.

EXPLANATION.—"Meatless" means without any cattle, hog, or sheep products. On other days use mutton and lamb in preference to beef or pork. "Porkless" means without pork, bacon, ham, lard, or pork products, fresh or preserved. Use fish, poultry, and eggs. As a nation we eat and waste nearly twice as much meat as we need.

Make every day a **FAT-SAVING DAY** (butter, lard, lard substitutes, etc.)

EXPLANATION.— Fry less; bake, broil, boil, or stew foods instead. Save meat drippings; use these and vegetable oils for cooking instead of butter. Butter has food values vital to children; therefore, give it to them. Use it only on the table. Waste no soap; it is made from fat. Be careful of all fats. We use and waste two and a half times as much fat as we need.

Make every day a **SUGAR-SAVING DAY.**

EXPLANATION.— Use less sugar. Less sweet drinks and candy containing sugar should be used in war time. As a nation we have used twice as much sugar as we need.

Use **FRUITS, VEGETABLES, and POTATOES** abundantly.

EXPLANATION.— These foods are healthful and plentiful, and at the same time partly take the place of other foods which we must save. Raise all you can for home use.

Use **MILK** wisely.

EXPLANATION.— Use all of the milk; waste no part of it. The children must have whole milk. Use sour and skim milk in cooking and for cottage cheese.

HOARDING FOOD. Any one buying and holding a larger supply of food now than in peace time, except foods canned, dried, or preserved in the home, is helping to defeat the Food Administration in its attempt to secure a just distribution of food and the establishment of fair prices. The food hoarder is working against the common good, and even against the very safety of the country. Hoarding food in households is both selfish and unnecessary; the Government is protecting the food supply of its people.

Loyalty in little things is the foundation of the national strength. DISLOYALTY IN LITTLE THINGS GIVES AID TO THE ENEMY. *KEEP THE PLEDGE.*

Do not limit the food of growing children.
Eat sufficient food to maintain health; the nation needs strong people.
Co-operate with your local and Federal food administrators. Take their advice.
Preach and practice the "gospel of the clean plate."
Housekeepers should help the stores to cut down deliveries.
Use local supplies; this saves railroad transportation.

Report to the nearest food administration officer the name and address of any person discouraging the production or saving of food.

suspected, and one that appeals to every loyal American, whatever his station, to do his utmost to conserve the staple foods required for shipment.

In the food-saving campaign of last year a home card was issued, which indicated what saving the Food Administration hoped each individual family would make. It has been shown that this standard of saving and of substitution is insufficient to meet the situation, and a new 1918 home card has been prepared and distributed, which sets more heroic conservation standards, but nothing that involves any danger of undernutrition. Nutrition experts have testified that the substitutions suggested will in no wise affect the nutrition of the American people.

The new standard calls for two wheatless days a week, Monday and Wednesday, and one wheatless meal every day — a total of eleven wheatless meals a week; one meatless day every week (Tuesday), and one meatless meal every day — a total of nine meatless meals a week; two porkless days every week (Tuesday and Saturday); and every day a fat-saving and sugar-saving day.

"Meatless," according to the food-conservation definition, means without any beef, pork, or mutton products, fish and fowl being allowed. But many LIFE AND HEALTH readers by custom have twenty-one absolutely meatless meals a week, so that the "meatless" requirement involves no sacrifice to them. This being the case, the only way they can make a sacrifice comparable with that of those who forego their accustomed meat allowance, is to do even more than the food card suggests in saving wheat, sugar, and fats.

WHEN EDUCATION IS TOO ONE-SIDED

GRADUATES come from our educational institutions with diplomas bearing witness to their mental acquirements. Many of these are wanting in one great essential. They may be plus in mental knowledge, but are minus in physical education.

Students may learn physiology perfectly as far as the textbook instruction goes, but be ignorant of its value from the standpoint of health needs. They may know all about biology, but be ignorant of the true secret of life. They may have gone into chemistry, but can make no practical application of it in the selection and preparation of foods. They may know a lot about stars, but very little about their own bodies. They may know a great deal about men of history, but very little about themselves.

Of late years popular acceptance of physical culture and gymnastic work has led many to engage in sports and in physical training. Considerable benefit has been derived from this, but the majority of students in the average school are lacking in physical development.

Sometimes the curriculum is so planned that physical development is impossible. Health training is crowded out by the very nature of the school program. There may even be cases in which school life is detrimental to health. Who will dispute the fact that physical training is really a part of the education, and that it should not be left until the literary work has been finished? The proper foundation of health should be laid in the elementary school, and should go clear through the school life to the close of the college course. The

years thus devoted will give good returns in the after-life and work, besides making the actual school life far more valuable in itself.

The real life and work comes at the close of the school period. The preparation for that life and work should not be left until it is entered upon. The health should be a part of the fundamental preparation. Habits of personal hygiene cultivated then add much to after-years.

Good health is essential in any calling or activity in life. There is no place where good health is not needed. There is no place where ill health would not be out of place, except it be as the subject of a "before-using" patent medicine advertisement. Even with this there is always shown a picture of full health "after using."

The lack of physical strength is a handicap that can hardly be made up by any amount of mental attainment. Health is required in order to give a proper balance to the education. Both the mind and the body must be properly educated and trained.

The matter becomes one of individual need and consideration. No one can realize our own need as we do. No one can make us healthy. No one can keep us from having health if we are determined to have it. The student who finds himself a part of the educational system that lacks in provision for the health, must do what he can to make his own provision for his own health.

L. A. H.

WHY IS BLUE MONDAY?
WHAT MAKES IT BLUE?

MOST people know what it is — that day which starts the week's work and which seems the hardest of all the week. For some it may be Blue Sunday. From the time we get out of bed, apparently wrong side up, or with something the matter with us, till the atmosphere clears up, we strike annoying things that seem always to come only on that particular morning.

It is generally considered that Blue Monday is a regular thing, as regular as the calendar. Salesmen who know the secrets of getting orders, do not count much on the first hours of Monday morning. They know it is a good time not to call on a man who is inclined to be "grouchy." They wait until he has had lunch and gotten into the swing of the day, before approaching him for orders.

Not only in the office and shop, but in the home, in the school, almost everywhere, it is usually known that the start of the week's work is with more or less friction. Folks get out of patience easier, things don't gee just right; something seems out of gear.

Why is Blue Monday? Are the everyday duties actually harder on that day than on any other day of the week? Are people meaner to us than usual? Do all the nagging things happen along just then? Is it in the day that we must look for the blue, or is it elsewhere?

When you come to think of it, a day's rest ought to put one in better shape than ever for tackling a big job. The week should start off with a vim and vigor not seen on the other days. But it usually doesn't. Why not?

The real reason will probably be found in the way the day before has been spent. With some the week-end is looked forward to for having a good time. They put so much into the week-end that it gives little time for real rest. The program may include things that are a change and diversion and intended for

recreation, but which, because of their tax on the physical strength, actually leave one more tired.

Then there are people who do not believe in overdoing on the day of rest. They stay at home, just "lying around" the most of the day. The principal thing in their program is a big dinner. Inactivity and overeating naturally leave them in poor shape for beginning another week's work.

So there you are. Blue Monday is not to blame. It is only the day after the day before. Take care of the day before, and Monday will start off as well as any other day of the week. L. A. H.

NEW LIGHT ON LOBAR PNEUMONIA

OWING to the fact that germs not distinguishable from pneumonia germs are found in the mouths of many healthy persons, it has until recently been thought practically impossible to prevent the spread of the disease. It is now known, however, that there are a number of types of pneumonia germs; some of them, found frequently in normal mouths, are of little significance in the transmission of the disease. Others, according to the type, may produce a pneumonia that will run a mild or a severe course. One type of germ, when present, is frequently fatal.

These dangerous types of germs are not found in the throats of well persons unless such persons have been exposed to a pneumonia patient. According to announcement from the Rockefeller Institute for Medical Research,

> "those pneumococci most commonly found in the mouth secretions of normal individuals give rise to a minority of the cases of lobar pneumonia. Certain other types cause a majority of cases of lobar pneumonia, and are of high virulence for human beings, and are seldom found in the mouth secretions of normal individuals who have not been in intimate association with cases of lobar pneumonia. This seems to indicate that lobar pneumonia, due to these other types, does not arise from infection with a pneumococcus which is habitually carried in the mouth, but that infection with these organisms occurs from without."

SOME BOOKS

Food in War Time

by Graham Lusk, Ph. D., Professor of Physiology, Cornell University Medical College, New York City. 46 pages, cloth, 50 cents. W. B. Saunders Company, Philadelphia and London.

This book, by one who is recognized as the greatest authority on food values in this country, covers a problem which is taxing the wits of rich and poor. The people are awake to the seriousness of the food situation caused by the war, and are willing, to the best of their knowledge, to do their bit. Dr. Lusk's book tells how. It tells the right foods to buy, their caloric value, and what combinations will produce the greatest efficiency at the least cost.

Many who attended the school for food conservation workers held last fall in the National Museum, Washington, D. C., and heard Dr. Lusk's lecture, "What to Eat in War Time," expressed the desire that the lecture might be given wider circulation than it would get through the instrumentality of the school. The present book is a revision of that lecture, with some changes and additions. The first chapter, "A Balanced Diet," has been published in the *Scientific Monthly*, and the second chapter, "Calories in Common Life," in *Medical Clinics of North America*. The third chapter, "Rules of Saving and Safety," gives the cream of the entire subject in a few sentences. For instance:

"1. Let no family (of five persons) buy meat until it has bought three quarts of milk, the cheapest protein food. Farmers should be urged to meet this demand."

"3. Eat meat sparingly, rich and poor, laborer and indolent alike. Meat does not increase the muscular power."

"5. Drink no alcohol. In many families ten per cent of the income is spent for drink, or a sum which, if spent for real food, would greatly improve the welfare of the family."

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.

Advantages of Sanitarium Treatment

"What are the advantages of sanitarium treatments, and where can they be secured?"

Sanitarium treatments, including the rational use of hydrotherapy, massage, electricity, and the proper diet are, without doubt much superior to the use of medicine in the cure of disease. Most medicines act by causing a reaction to their poisonous principles. These poisons must later be eliminated in addition to the body wastes and toxins, thus burdening the eliminating organs, and often directly injuring the tissues.

Another great advantage of a visit to a sanitarium is the teaching and education which tell the patient how to recognize and avoid the beginnings of disease. There are equipped sanitariums within easy access of most parts of this country.

Composition of Tomatoes

"What is the per cent of protein in ripe tomatoes? What other food value have they? What is the food value of condiments?"

Ripe fresh tomatoes have eight tenths of one per cent protein. Canned tomatoes average one and two tenths per cent. The carbohydrate contained is about four per cent, and there is about one third of one per cent of fat in them. They have a certain value as food, which is indicated above, and are therefore used to give bulk and variety to the diet. The per cent of protein found in the legumes, eggs, and many of the cereals, can be brought to the right proportion by the use of some article, as tomatoes, in the diet. They are also very valuable for the mineral matters which they contain, being an important source of iron, calcium, and phosphorus. Tomatoes, in common with oranges, limes, lemons, and grape fruit, contain citric acid. For this reason they are excellent in the treatment of rheumatic and uric-acid conditions. The fruit acids are oxidized in the body and become carbonates. These alkaline salts unite with the waste matters, and help to carry them off.

Condiments, of themselves, have no food value. Mustard, pepper, spices, have no place as foods, and are used simply to stimulate the appetite and the digestive tract. The harm which they do greatly overbalances any possible benefit derived from their use. The appetite and the secretion of the digestive juices can be stimulated by other means, as proper exercise and hydrotherapeutic treatments. The correct arranging of the daily program, with a little rest before meals, will give a normal appetite in many cases.

Condiments irritate the mucous membrane of the digestive tract. They also irritate and injure the liver, kidneys, and blood vessels, and are among the causes of high blood pressure. The use of spices and condiments quickly tires the stomach, and finally produces a loss of appetite and decreases the amount of gastric juice. Their use leads to the alcohol and tobacco habits, and stimulates the appetite for these poisons as well as for tea and coffee. Pepper is the most commonly used condiment. Applications of pepper, mustard, and horse radish often cover a food which is unfit to eat, being spoiled or poorly cooked. With the exception of a small amount of salt, condiments and spices should be withheld from the food of children, and should not under any consideration be given to invalids.

Vitamines

"What parts of the body have use for vitamines, and what foods contain them?"

Vitamines are necessary for the healthful growth and activity of all parts of the body. They influence the body activities which control the change of foodstuffs and their assimilation in the tissues, and cure certain diseases, as scurvy and beriberi. Vitamines are found in all kinds of fruits, and in fresh meat, milk, cereals, and green vegetables especially. They are contained in the outer or branny layer and in the germ of cereals. In vegetables they are directly under the skin. They are destroyed by high temperature, by parboiling, and by sodium bicarbonate; therefore they are not found to any great extent in breads which have been made by the use of soda or baking powder.

Epilepsy

"Give the diet and treatment for epilepsy."

In epilepsy it is better to limit the amount of food, especially of proteins, and avoid animal food of all kinds. The patient should not use tobacco, tea, coffee, or alcoholic drinks. There should be very little salt used either in cooking or on the food afterward. Vegetables, as string beans, carrots, potatoes, and celery, are good, but the coarser particles should be rejected. It will be all right to use a little white flour in making the Graham bread. Corn

breads are good, and may be often used for a change in diet. Chicken and fish are both harmful, particularly the latter. Chicken is no better than beefsteak. You will find the hot and cold fomentations to the spine of great benefit, and also fomentations to the abdomen. Measures to increase the activity of the bowels and other eliminating organs are indicated, as electric-light baths to moderate perspiration.

Flatulence and Biliousness

"What are the cause and treatment of flatulence and biliousness."

Flatulence is a condition in which gases are formed in the intestine, especially in the colon. Some gases are eliminated into the small intestine and colon from the blood, others are swallowed with the food: but by far the larger amount is formed by the action of the great numbers of bacteria in the colon upon the cellulose and other residue found in the intestinal contents. This is particularly true when the movement of the intestines is delayed and tardy. Foods rich in cellulose, as the legumes and cabbage, are particularly active in producing the gas. Impure water or milk, and oftentimes a large quantity of good milk, will cause flatulence. A small amount of gas in the intestines is a normal condition, and aids peristalsis. Constipation is a great factor in producing flatulence; on account of the delay in the onward movement of the contents of the colon, putrefaction takes place. A meat diet especially predisposes to flatulence. It is impossible to grind the flesh thoroughly, and coarse particles and residue are carried into the colon, and being attacked by the bacteria, putrefaction takes place. Aged people suffer more because of the relaxed and dilated condition of the intestine.

In the treatment of this condition it is important to secure regular action of the bowels. The enema is good, but must not be taken too often. The warm enema should be taken, and followed by a small enema of cool water. Small doses of parrafin oil taken regularly on the empty stomach, with the use of bran, will often cure the most obstinate cases of constipation. The residue in other laxative foods is very satisfactory, but it must be finely divided. Cabbage should not be eaten, because it cannot be masticated thoroughly enough, particularly the coarse, tough particles. Tender young cabbage is all right. Legumes should be put through the colander before being served. It is better to use no fermented foods. Zwieback is better than fresh bread, because the yeast germs have been killed, and zwieback requires more mastication. Fruits are excellent, as the acids which they contain act as germicides in the intestinal canal and discourage the growth of germs. If nuts are used, they should be masticated until milky.

A small variety of foods, as three or four articles, must be used. These must be such as will allow perfect mastication. Fomentations to the spine, abdomen, and liver may be used every day, or alternate hot and cold applications may be found to be better. Tonic applications to the whole body, as a wet-sheet pack, cold mitten friction, salt glow, and shower bath are excellent in building up the general tone and thus relieving this condition. Exercise is important, and should be taken as indicated by each individual case. The cause and treatment of biliousness is the same as that of flatulence.

Itching Ears

"Please give the treatment for intolerable itching of the ears."

You should use a mild soap for cleansing, as the ordinary toilet soap is apt to be too strong and irritating. Green soap, or a good Castile soap, may be used once daily and washed off with warm water. Apply zinc-oxide ointment on cotton wisps behind the ears and in the auditory canal. Boric acid powder may be dusted on the ear and in the canal in small amounts.

Pregnancy

"Please give the treatment for albumen in the urine during pregnancy. Is any danger likely to result from menstruation after pregnancy begins?"

A pregnant woman who has had albumen in the urine at a previous pregnancy, should have the urine examined every two to four weeks. This examination should be carefully done, and the physician should be certain about the presence of albumen or casts. If he keeps watch of the condition in this way, he will know how to control it, and keep you in good shape. You should keep your bowels free, securing one or two movements every day. For this purpose you can use the enema occasionally, and also small doses of Epsom salts or other saline laxative. Cascara is good, either in half-teaspoonful doses of fluid extract or in three- to five-grain doses of the extract at night. A laxative diet is of primary importance.

You should avoid all meats, including fish and chicken, as they increase the amount of waste matter which is thrown off by the kidneys. Your eliminating organs have as much work as they can possibly do in taking care of your own waste matter, and an excess taken in with the food is dangerous, especially in your condition. You must not use coffee or tea, as the caffeine found in them is excreted as uric acid by the kidneys, and clogs them. Drink plenty of fruit juices, water, milk, and buttermilk at the proper times. Have your teeth, nose, and throat kept in proper condition. You must have plenty of healthful, nourishing food to take place of the meat, and masticate it well. You should be able to use eggs.

In regard to your menstruation: this generally stops at first, but may continue until the third or fourth month, when the placenta becomes developed as a distinct structure. The occurrence of this function after pregnancy sets in, should lead the physician to observe the patient carefully for diseases of the mucous membrane of the uterus or cervix.

Cancer

"Give the treatment for cancer."

Cancer cures are not reliable. The better way to treat cancer is to remove it with the knife at its first appearance, and then to follow up this surgical work by the use of radium or X-ray applications.

NEWS NOTES

Mental Tests for All Soldiers

In order to weed out the mentally and emotionally incompetent, and to classify men according to their mental capacity, and assist in selecting competent men for responsible positions, the War Department has decided to extend its psychological examinations to all enlisted men and all newly appointed officers of the army.

Frozen Feet

The following was sent in by a contributor of the *Journal A. M. A.*: "I have found from personal experience that coal oil (kerosene) applied night and morning to old, painful, itching frostbites of the feet gives almost immediate relief. It should be applied with a cloth and cotton soaked in the kerosene and allowed to evaporate, which it will do in a few minutes. If the sock is put on or the person goes to bed with the foot still wet with the oil, it may burn the skin."

Proper Care of Children's Teeth

(*Continued from page 148*)

When the first teeth are all in place, teach the child to use them; that is what they are for. This develops the jaws, and besides giving them development as to size, it allows of more room for the second set, which are larger teeth, and of course need more space.

Then try to make thorough chewing of solid food a real habit; not only because the solid food demands it, but because the jaws are thereby developed.

Do not allow a too early removal of the temporary teeth. The first evidence of the approach of the second teeth is the loosening of the first teeth. This "loosening" is caused by the absorption of the roots of the temporary teeth. The roots will finally be absorbed to such an extent that only the crown will be left. At this stage the teeth should be watched lest the permanent teeth be shifted out of line. If the permanent tooth should try to emerge at the side of the temporary tooth, pull out the temporary tooth immediately. While these transition changes are taking place, the child should especially have the care of the dentist.

Conservation of Tomato Waste

According to a Department of Agriculture bulletin, the large quantities of tomato refuse which accumulate yearly at tomato pulping establishments can be profitably converted into two commercially valuable products — an oil from the seed, and a meal. The oil may be used as are other vegetable oils, as a human food, or a soap oil, or by proper treatment as a drying oil for paint and varnish. The meal will be valuable as a stock feed.

Communicable Diseases in the Schools

According to the *Ohio Public Health Journal*, "the closing of schools on account of the appearance of one or two cases of a communicable disease among the pupils is, as a rule, a most unwise procedure." The fact is that there is more danger of spreading disease when children are permitted to run the streets without supervision, than when they are in school, where the existence of abnormal symptoms will at once suggest to the teacher the importance of caution. Especially where there is medical inspection of school children, the safest place for children to be during an epidemic, may be in the schoolroom.

To Remove Stains

Full directions for removing stains from clothing and other textiles are given in Farmers' Bulletin No. 861, which can be had free of cost, by sending request to the U. S. Department of Agriculture, Washington, D. C.

Malaria and War

Barnard, in *Le Progrès Médical* for December 8, states that malaria is second to none of the war plagues. Not only was it of the highest significance in the warfare at the Dardanelles, Saloniki, and Macedonia, but from these foci it has been transplanted through the whole of France.

Poisonous Cosmetics

According to a warning issued by the Bureau of Standards, Washington, D. C., many hair dyes, rouges, hair removers, and similar cosmetics contain poisonous ingredients. Hair removers, particularly, are in general quite corrosive, and sometimes are poisonous. Dyes for blackening gray hair contain salts of lead, copper, iron, or bismuth, and if taken internally can cause serious poisoning.

Alcohol and Wage Loss

According to *Safety Engineering*, the United States Cast Iron Pipe and Foundry Company recently protested against the relicensing of Burlington, N. Y., saloons on the ground that the average loss of wages on account of drinking has been $180 per man during the last eleven months, and that the total wage loss for the city of Burlington could be conservatively estimated at $100,000 per year at least. The management arrived at those figures through a study of the record of one hundred men, fifty of whom were average drinkers and the other fifty total abstainers. Injuries were more frequent among the drinking class.

Whale Beef

The University of California, the Bureau of Fisheries, and other institutions are proclaiming the gospel of cheap whale steak at twelve and one-half cents a pound. And they say whale is good — no bones — nothing against it, only prejudice. Well, I should like to recommend a better and cheaper meat, with no bones, made from peanuts or soy beans, and were it not for prejudice it would be one of the most popular of foods.

Preservation of Potatoes

According to instruction sent out by the French Department of Agriculture, potatoes may be prevented from decaying by the use of lime, to absorb the moisture given off by the potatoes. When potatoes are stored, they naturally give off moisture, which favors decay. The potatoes should be well cleaned, the storage place sprinkled with quicklime, and each layer of three or four inches of well-dried potatoes similarly sprinkled, and the pile as a whole sprinkled. About ten pounds of lime are needed for one thousand pounds of potatoes.

Pencils and Germs

Pencils used in common in schools may be as efficient a means of spreading disease as the common drinking cup, for the reason that children are born with a habit of putting everything into the mouth, and it takes a number of years to break the habit. A common pencil, or anything used in common, is therefore a ready means of exchanging saliva, which means exchanging disease germs.

Is a Drinking Fountain Really Sanitary?

Bacteriological examination of a considerable number of drinking fountains of different types, in which the flow of water was vertical, showed that practically all of them may be the means of transmitting disease germs. The investigators recommend a type of fountain in which the water flows out obliquely, so that it cannot return to the point of exit, and so arranged that the drinker cannot approach the orifice with his lips.

Tabloid War Ration

According to the *Medical Record*, food experts have worked out a war ration containing 2,400 calories, which is compressed to about the size of a dog biscuit, sealed and waterproof, so that it can be carried in the soldier's pocket ready for emergency. This ration contains wheat flour, meat, and dried milk. With the ration goes a paraffined package of peanut butter. The weight of the ration is four ounces. It will be made a part of each man's equipment.

Milk for Babies and Invalids First

According to an order issued by the British Ministry of Food, local committees are required in the apportionment of milk to give priority to the needs of infants and invalids.

Electrical Purifying of Water

An appliance for sterilizing water by means of an electric current is now on the market. A large glass jar is provided with a faucet and with electrodes which can be connected with the lighting current. The jar is filled with water and the current turned on. From ten to thirty minutes is required to sterilize a gallon of water, depending on the amount of electrolytic salts in the water.

Perspiring Feet

Dr. V. M. Reichard, of Maryland, writes the following to the *Journal A. M. A.*: "I desire to add my experience, which has proved, by more than thirty years' trial, that ordinary powdered alum is a specific for sweating of the feet. For one who has suffered subjectively or objectively from perspiring or odorous feet, any decided relief is a great boon. Such relief does not come from bathing. It is not a matter of cleanliness alone. If the patient will simply dust the feet with powdered alum, also dusting some of it into stocking or sock before putting the stocking or sock on the foot, and will then dust some more of the powder into the shoe before putting it on, and will keep water off the feet, the relief will be prompt and most gratifying."

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.

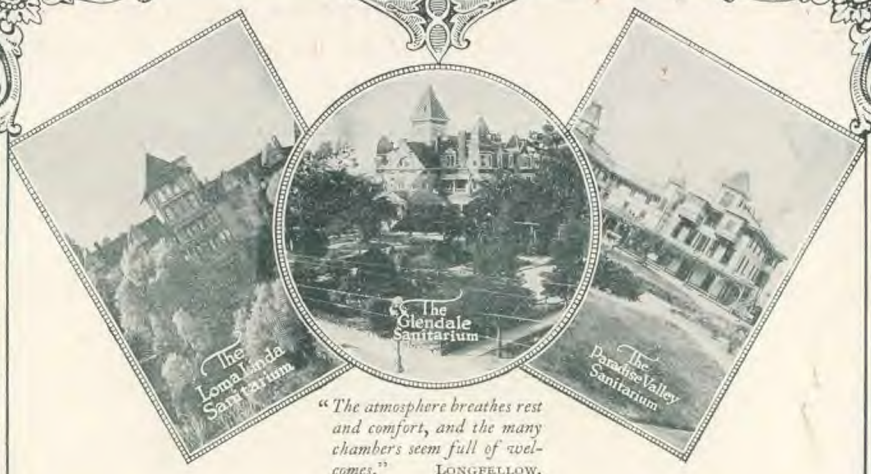
EVERY modern facility favorably known to medical science in the treatment of curable conditions, has been incorporated into the institutional régime. Thus nature and science have combined to make the St. Helena Sanitarium all that can be desired by the diseased body or the weary mind.

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



"*The atmosphere breathes rest and comfort, and the many chambers seem full of welcomes.*" LONGFELLOW.

Come!

COME out to California—out where the skies are a trifle bluer—out where the sun is a little brighter—out where a fresher breeze is blowing—out where you can rub elbows with Nature and revel in the great outdoors.

Come!—break up the monotony—get away from the toil and moil of city life—cut loose from the daily grind—leave workaday responsibilities far behind—and dedicate a few weeks to health-building. *It pays!*

Once a year, at least, the body should be given a chance to catch up—to recuperate. Tired muscles and fagged-out nerves should be relaxed. Pleasant recreation should take the place of nervous tension.

And this rest period should be more than an aimless absence from daily routine. It should be a period of actual body-building.

The value of several weeks of healthful living under such ideal conditions can hardly be overestimated. The natural results are sound, refreshing sleep—good digestion—a clear head—increased energy—and a sense of zest and buoyancy that makes life worth while.

It is a treat to see the outdoor life work its charm. Men and women with the pallor that comes with fatigue and indoor air, become ruddy, clear-skinned and healthy.

Come to one of these places, then, for your "rest-vacation". For here a quiet, restful atmosphere prevails. Here you get all the pleasant diversion of a resort, with none of the health-defeating distractions.

WHY spend your "rest-vacation" in California? A natural question and an ample answer—if you'll send for our illustrated literature. Today is the day to do it.

The Loma Linda Sanitarium
305 Pepper Drive, Loma Linda, Cal.

The Glendale Sanitarium
205 Broadway, Glendale, Cal.

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