Life & Health

WASHINGTON, D. C. FIFTEEN CENTS A COPY

"A Friend in the Kitchen"

If you cook, you will be interested in a little book that will show you how to cook healthfully and economically. These are two great essentials in these days of the High Cost of Living. The recipes are simple, practical, and satisfying, and the book is popular on this account.

It is divided into departments, so that recipes for certain dishes are readily found, and it is not heavy and cumbersome, but light and handy, and yet it contains 400 carefully tested recipes, as well as tables of food combinations, nutritive value of foods, rules for dyspeptics, household hints, etc.

The departments are as follows:

Soups
Cereals
Breads
Fruits
Vegetables
Substitutes for Meats
Omelets
Puddings
Custards and Creams
Pies
Cakes
Wholesome Drinks
Specially Prepared Health Foods
Simple Dishes for the Sick
Food for Infants
Miscellaneous

It is not easily mislaid, as its bright red covers insure quick discovery

Cloth Binding, 112 pages - - 60 Cents

REVIEW AND HERALD PUBLISHING ASSN.

New York, N. Y. **Takoma Park, D. C.** **South Bend, Ind.**

CANADIAN PUBLISHING ASSN.
Oshawa, Ontario, Canada

Life & Health

PUBLISHED MONTHLY BY THE

REVIEW AND HERALD PUBLISHING ASSN., TAKOMA PARK, WASHINGTON, D. C.

Entered as second-class matter June 24, 1904, at the Post Office at Washington, D. C., under the Act of Congress of March 3, 1879

Acceptance for mailing at special rate of postage provided for in Sec. 1103, Act of Oct. 3, 1917, authorized on June 22, 1918.

VOL. 35 SEPTEMBER, 1920 No. 9

CONTENTS OF THIS ISSUE

SUBSCRIPTION RATES.— One year, $1; six months, 60 cents. Remit by Post Office Money Order (payable at Washington, D. C., post office), Express Order, or Draft on New York. Cash should be sent in Registered Letter. When a change of address is desired, both old and new addresses must be given. No extra charge to foreign countries.

PICTURESQUE AMERICA

Life & Health

HOW TO LIVE

EDITORS

L. A. HANSEN G. H. HEALD, M. D.

VOL. 35 SEPTEMBER, 1920 No. 9

EDITORIAL

The Home and the School Child's Health

FIRST among the questions which arise with the return of the school year should be that of safeguarding the health of the school child. The school, the teacher, the studies, are all important items, but none is more important or more deserving of careful thought than that of keeping the school child well. The whole value of education turns upon the health of the child.

The normal school age is limited to certain years. Any failure for whatever reason, to obtain the regular education within the recognized and allotted school period, means a loss in after-years. It means securing an education in adult years, with added expense, inconvenience, and difficulty, or else going through life handicapped for want of it. From the viewpoint of economy alone no part of the regular schooling should be lost, if possible to avoid it, through sickness.

But loss of education and its handicap in after-life are of small importance compared with the loss of health and its handicap. The value of an education at the cost of health is small; it is of little use without health. It is the education that can be used that counts.

Not only is early life the best time in which to secure an education, but it is the most favorable time for learning health principles and training in health habits. The whole adult life is largely determined for good or ill by the mold of childhood and youth. The difference between a life of semi-invalidism, or possibly of much suffering, and one of robust health and well-being, may be mostly the difference between wrong and right habits of living in early life.

Education and instruction in health principles are not two different things. Education is not education if it does not include instruction in health. A child cannot be truly educated in parts,— in head or hand; he is a whole, and

must be dealt with as such. No scheme of education can alter the relation of one part of the body to another. The heart and circulation, the lungs and respiration, the stomach and digestion, are all intimately related to the brain. The healthy action of the mind and its faculties is dependent upon the normal working of all the body's organs and their functions.

THE HOME RESPONSIBILITY

Today the health of the school child is largely a responsibility of the home. School sanitation is receiving considerable attention. School inspectors, school nurses, and nearly all teachers are taking part in a campaign for school health. Classroom hygiene, medical inspection, and other good features of the school health program will, in themselves, accomplish something, but to be really effective they must be supported by a good home health program.

The home provisions for the health of the school child should not be regarded as supplementary to the school health program. Home health should be primary; it should underlie all other health measures. The most effective, the most direct, the most constant, the most systematic health work can be done in the home.

The co-operation of parents with school and health authorities in the prevention of contagious diseases might almost wholly stamp out the diseases that are killing many little ones and seriously injuring many more. It has been suggested that the proper quarantining of children with measles would in three months stamp out that disease. Scarlet fever, diphtheria, whooping cough, and other contagious diseases run their course because they are communicated from one person to another. If the means of communication is broken, the further spread of the disease is stayed.

Much time is lost by the closing of schools because of epidemics of children's diseases, resulting from careless and unnecessary exposure. Not only school children suffer from the diseases, but they communicate them to younger children not in school. About 90 per cent of all contagious diseases occur in children under fifteen years of age, and 80 per cent of all these diseases occur in children under five years of age. This stresses the importance of proper precautions in the home. It is here that the actual work that will stop these diseases must be done. In saying this we do not overlook the value of municipal health measures, which make provision for a pure water supply, protection of milk and other food stuffs, and the fight in general against disease conditions.

TEACH THE CHILD HEALTH

Why not take advantage of the child's ability to learn and teach him disease prevention and health development? The normal child is bound to learn something; he may as well learn right as wrong. It is just as easy for him to grasp truth as error; just as easy to acquire right habits as wrong ones. True, there may be more error than truth available to the child, and he may have a stronger tendency toward the wrong than the right; but truth is mightier than error, and there is more power in the good than in the bad. It is the part of older ones to teach the truth and to train in the right direction.

It is a simple matter to teach children many of the more important measures of disease prevention. They can understand that the nose and mouth are entrances to the body of nearly all diseases, and that these are also outlets from a diseased body of disease germs. They can be taught to guard these openings against receiving or transmitting disease. They can be told about the tiny germs of disease, so small that they cannot be seen with the naked eye, and of the serious harm they can do. They do not need to understand bacteriology in order to grasp the meaning of cleanliness in its relation to disease prevention, or to know that impurities may cause disease.

Among the more simple but most effective precautions that children can understand and practise, and which they should be taught at home, are the following:

Not to put into the mouth anything that may carry impurities.

Not to eat food another child has eaten of, and to avoid putting into the mouth pencils, second-hand chewing gum, money, etc.

Not to eat with a spoon or fork that has been used by another person, without first washing it.

Not to eat from the same dish with another person.

To brush the teeth on arising in the morning and after each meal.

To use only one's own handkerchief at any time, and to cover the nose and mouth when coughing or sneezing.

To stay at a proper distance from any one with a cold or cough, and to keep at a safe distance from others when having a cold or cough.

To use an individual drinking cup, and not to lend it.

That five dirty fingers are five things that may carry disease germs, and that the hands should always be washed before meals; also that the finger nails should be kept clean.

To these may be added the following simple measures of health preservation:

Eat regularly, and take no food between meals.

Eat slowly, and chew the food well.

Eat some cereal food, some vegetables, and some fruit every day, if possible.

Avoid tea and coffee.

Drink some milk every day.

Drink plenty of water.

Give prompt heed to the bowel call.

Secure sufficient sleep.

Take at least one full bath every week.

Make friends with the sunlight.

The observance of these few simple measures may become quite natural to the child. The development of the health habit will prove of great advantage in meeting disease conditions now, and will show big returns in the future.

L. A. H.

AS WE SEE IT

Conducted by
George H. Heald, M. D.

THE PHYSICIAN TO THE PRESIDENT

DESCRIBING President Wilson's physical condition, Ray Stannard Baker, in *Collier's*, March 13, 1920, says that the President "has a 600-horsepower motor in a frail, light, delicate chassis. A powerful will driven by an intellect so eager to arrive and to achieve — no physical body could bear the strain for long at a time."

The problem that devolved on Admiral Grayson, who became the President's physician when Mr. Wilson entered the White House, was to keep Mr. Wilson physically fit through all the arduous duties of the most arduous of all the Presidential administrations. Until last fall he succeeded admirably in his task. And he was probably in no way to blame for the President's breakdown then, for he would have held the President back from the work of that last exhausting circuit.

Dr. Grayson is very sparing in the use of medicine, but is a great believer in the free use of water, inside and out. He believes in "proper bathing at proper times — and the drinking of plenty of water at all times."

Among the principal items in Dr. Grayson's program for Mr. Wilson are: (1) Regularity in meals, retiring, rising, and exercise; (2) moderate open-air exercise — Mr. Wilson, like many others, thought he had no time to take exercise; (3) careful attention to diet, being particular not to overeat; (4) a proper mental attitude.

Men have reached the century mark on such a program as that, and yet it is simple — nothing more simple. But it is so at variance with the habits of most of us, and it is so hard to change habits, that most of us never adopt a simple rational method of right living. We need an Admiral Grayson back of us to compel us to do what we know we ought to do.

A REMARKABLE STUDY IN INDUSTRIAL EFFICIENCY

THAT the eight-hour day in industrial plants is more economical and productive of greater efficiency than the ten-hour day, is the conclusion of United States Public Health Service investigators who since 1917 have been giving careful study to conditions and production in standard factories of both classes.

Care was taken to select modern factories as much alike as possible, in size, equipment, etc.,— in fact, in everything except that one series of factories was on an eight-hour schedule and the other on a ten-hour schedule.

The result of the study shows to the advantage of the eight-hour plants in a number of important features. For instance, in the eight-hour plants there is a steady maintenance of output; in the ten-hour plants, a decline in output. In the eight-hour plants, full work begins and ends very closely on

schedule, and lost time is reduced to a minimum. In the ten-hour plants, work ceases regularly before "quitting time," and thus there is a loss of time. In the eight-hour plants the output varies with the skill and capacity of the individual worker; in the ten-hour plants, the more capable workmen seem to limit their output to that of the less efficient workers. That is, in the eight-hour plants each one seems to do his best; in the ten-hour plants the tendency is to standardize on an average day's work, regulated by that of the least skilful.

But more noteworthy than these differences is the difference in the number of industrial accidents in the eight-hour and the ten-hour schedules. Notwithstanding the eight-hour workers, on the average, are working more rapidly than the ten-hour workers, and for that reason we might expect more accidents among them, the opposite is what actually occurs. The ten-hour day favors a condition of chronic fatigue with loss of nerve tone, producing a condition favorable to accidents. In the last two hours of a ten-hour day, notwithstanding the workers slacken up in their work, more accidents occur. If there is any "speeding up" during these last hours, the accident rate is so greatly increased as to leave no doubt that the higher accident rate is a direct result of fatigue state caused by the long hours.

Public Health Bulletin No. 106, issued by the U. S. Public Health Service, 200 pages, contains the entire report. The facts disclosed here should be known by every person engaged in handling labor.

WORK OF JAPANESE ON BERIBERI

RECENTLY there died in Tokio, Baron Takaki, the man who rid the Japanese navy of beriberi. In the seventies of the last century, beriberi made severe inroads on the Japanese navy. At times as many as three fourths of the inmates of certain of the Japanese naval hospitals were there for this disease. Studying the problem in Europe, Takaki became infected with the high protein theory that was then in vogue, and he went back satisfied that the cause of the beriberi was the diet of the sailors, and that they were receiving too much carbohydrate and too little protein. His proposition to put the men on a high protein diet met with strong opposition. It was too revolutionary. It meant too much outlay for food for the sailors.

But a study of the 272-day cruise of the "Ruijo," in which, out of 276 men, there were 169 cases of beriberi with twenty-five deaths, resulted in Takaki's obtaining permission to make a trial of his suggested diet on another cruise over the same route. In this cruise, which occupied 287 days, the four cadets and ten men attacked with beriberi were found to have refused part of the new ration, particularly the condensed milk and the meat. News of the results of this experiment removed all opposition to Takaki's program, and as a result, the Japanese navy was rid of beriberi; and for a time at least, it was supposed to be proved that beriberi was due to an excess of carbohydrate and a deficiency of protein in the diet. In other words, beriberi was the horrible example held up to vegetarians.

Later investigation of the disease has shown conclusively that it is in no way connected with the presence or absence of protein or animal food in the

diet, but is due to the absence of a certain vitamine. Had the Japanese been given brown (unmilled) rice in place of white rice in their diet, they would have had no beriberi. In furnishing meat and milk, Takaki had given foods containing the vitamines which had been removed with the hulls of the rice. This vitamine is abundant in the plant kingdom, but is removed from such foods as white rice, white flour, white sugar, which some one has named "denatured foods."

For a time the Japanese experiment appeared to give support to the old theory that man requires large amounts of protein in his food. But little by little, additions to our knowledge of nutrition have made plain that the diet, even if not containing animal foods, is not likely to be lacking in protein. The lack is more likely to be in some other constituent — some of the minerals, or one or more of the vitamines. And this is best avoided by taking foods as nature gave them to us, and not after they have been put through some of the modern milling processes that deprive them of some of their most valuable constituents.

TEXTBOOK ON MEAT HYGIENE
THE "JOURNAL'S" COMMENTS

THE *Journal A. M. A.* of May 15, 1920, commenting on the book, "Textbook of Meat Hygiene with Special Consideration of Ante-mortem and Post-mortem Inspection of Food-Producing Animals," makes the following very significant statement which ought to be "mighty interesting reading" for the lover of the "juicy beefsteak:"

> "When we consider that meat and meat products constitute a large part of the diet of the American people, physicians in this country cannot very well escape the obligation of possessing at least a general knowledge of the subject of meat inspection and meat hygiene in general. . . . There is still some meat and game on the market that is not inspected; and even as regards that which is inspected, with the immense mass of material passing through the hands of the inspectors, it can scarcely be expected that no diseased carcasses and no faulty meat products will be overlooked. Some knowledge of the problems with which meat inspectors have to deal, and more especially of the abnormal conditions and diseases found in food-producing animals, will facilitate the diagnosis of pathologic conditions that arise from the consumption of meat or meat products which were not quite up to standard, but which escaped the watchful eye of the inspector or which deteriorated in quality in the interval that elapsed between the time when the stamp 'U. S. Inspected and Passed' was affixed and the date of consumption.
>
> "The book contains fifteen chapters, of which chapters VII-XI will prove most interesting, as they cover such topics as the abnormal conditions and diseases of food-producing animals, post-mortem changes of meat, the examination of preserved meats, chickens, game, fish, amphibia and crustaceans, and meat poisonings."

In other words, the doctor who has read this book carefully will know what ails some of his patients when they come to him with some obscure disease.

The School Child

Belle Wood-Comstock, M. D

OUR child is starting to school; he is a baby no longer, and a new world is about to open before him. Others than ourselves are to be his teachers, and life for him will now begin to assume larger and different aspects. But though he daily sits under the instruction of able teachers in the best of schools, our responsibility is not in any respect lessened, and we must not relax our vigilance because of our confidence in what his school training may do for him.

A sound physical basis is still his safeguard and surety for intellectual successes. In the public school he will learn much in the way of theory as to a healthy body and the harm of wrong physical habits, but it lies with us, as parents, to make the lessons practical and so to plan for him from day to day that he may be kept well and be protected from the danger, all too common in childhood, of laying the foundation for ill health in later years.

And mentally as well, we are to keep pace with him. As his field of vision widens, we are to see with his eyes, with keen insight continually to get and keep his point of view, that his mental processes and awakening thoughts may day by day be opened before us. Thus we may watch and study in detail the delicate processes of his mental as well as of his physical growth. Every mother should "check up" constantly as to what her boy or girl is doing,— not in a curious inquisitive way, but as her child's "chum," who is interested and enjoys talking things over.

"Well, son, what kind of time did you have in school today? Tell mother about it." "What did your teacher tell you about today?" And, "Did you enjoy your playtime at recess? What new games did you learn?"

And his eyes will sparkle as he relates the happenings of the day. In this way confidence between parent and child will continue to thrive, and mother, and father as well, may follow him step by step through the various vicissitudes of his daily life apart from them. Thus they may not only co-operate with his teacher in a positive way, but also protect him from subtle, unwholesome influences with which he is bound to come in contact as he leaves the home nest.

This is the time when parents should be alert; for the responsibility of the child's welfare just at this period in his life is a great one, and vigilance must ever be increased. A relaxation of effort at this time is a mistake which many a parent unconsciously makes. The paths of parent and child separate; there is a parting of the ways. The boy or girl grows away from father and mother, and home influence, upon which so much depends, is in a great measure lost.

Visit the school often; talk things over with the teacher; let her tell you of the child's weak points as well as of his strong ones, and plan with her for him. Take occasion to walk to school with him. Know whom he meets on the street, what children are his companions on the way to and from school. Get acquainted with his friends; show an interest in what he is doing, and with confidence established, there will be no lack of spontaneous information to supply all missing links.

The child now is learning to study, to hold himself to regular habits, and in this way the discipline of school life is excellent. However, it is for his parents to know that his physical powers are being developed in keeping with his mental powers, and great care should be exercised in planning certain things for his daily program. Is he getting enough sleep? As he reaches the higher grades, is he spending too much time in study? Does he bring his books home at night and study when perhaps he is in need

of physical exercise? Is he properly clothed? Is he eating the right kind of food? While for the child of either sex these questions are of great importance, it is the daughter, perhaps, who will suffer more if mistakes are made. However, for both boy and girl, it means much that these things be carefully considered and planned for from time to time.

Sufficient sleep is all-important. An early bedtime should be *insisted upon*, not later than eight o'clock up to the tenth or twelfth year; then eight-thirty, and perhaps by the age of fifteen the retiring hour may be postponed to nine o'clock. It should be impressed upon the child's mind that no more practical truth was ever uttered than,

> "Early to bed, early to rise,
> Makes a man healthy, wealthy, and wise."

This will insure the child's being ready to get up in the morning at six-thirty or seven o'clock, and give time for proper breakfast and preparation for school without the hurry and nerve strain so common. The wear and tear on mother's nerves occasioned by "getting the children off to school" will to a great extent be obviated by an early bedtime.

Regularity in program should be maintained even out of school hours. The parents should not feel that because a child is in school all day he should be allowed to throw off all restraint when he reaches home. In this way the good effect and the discipline may be counteracted and the parents' influence as against the teachers' be materially lessened. There should be a regular time for work, a time for play, and, if necessary, a regular time for study. The allotted time for work is very important. It may be but a half hour daily, but it should be insisted upon and carried out with unremitting regularity. Give the boy and girl some definite work which is theirs to do. For the girl it may be wiping dishes or helping mother before time for school, or a definite hour or half hour of work after school. It may be the responsibility of the baby while mother gets the evening meal, or it may be washing the dishes afterward.

The boy may have the responsibility of keeping the lawn or garden watered or the walks clean, or other chores. Or he may help mother in the house, thus saving her many steps. He will enjoy setting the table for the evening meal, and at a very early age can do it quite as well as his sister. Let the children feel that the proper working of the home program is to an extent dependent upon the part which is theirs to do. Then it is quite as important that there be a regular time for play. Except in emergencies,— and he should understand that emergencies may arise,— the child should during this time be allowed to feel that he may be undisturbed at his play. Who can blame Johnnie and Mary for whining and almost rebelling if every five or ten minutes, while enthusiastically engaged in play, they are called to "come and do this," or "go on this errand"? A continual nagging it may seem, until at times even mother's voice comes to be a very disturbing element.

It is much better if all studying can be done in school. If occasionally a little home work seems necessary, let it be a half hour perhaps just before bedtime, and let the parent interest himself in the lesson at hand and acquaint himself with the child's problems. Here may be forged a link in the chain of confidence which binds parent and child, and opportunity may be found for father and mother to follow day by day the child's mental progress. A word of encouragement, a little explanation, may mean much, and the boy's respect and admiration for father will grow as he finds father to be "as good a teacher as Miss A."

The following program is suggestive, and may be modified to meet the needs of the individual child and home:

6:30	Arise.
7 to 7:30	Work. With older children this may be a good time for morning study and devotion.

7:30	Breakfast.
8 or 8:15	Prepare for school.
8:30	Start to school.
3:30 (or sooner)	Home from school.
3:30 to 4:30	Work } These may be trans-
4:30 to 5:30	Play } posed.
5:30	Supper.
6:30 to 7:30	Play — one-half hour for study if necessary.
7:30 to 8:00	Talk with mother or father.
8:00	Bedtime.

Never should the child be allowed to go away from the house for play after the evening meal. Evening play should be at home, in the home circle and about the home fireside. Usually preparation for retiring should begin somewhat before eight so that eight o'clock may find the little folks safe in bed. A daily bath, when practical, is of great value. This may be in the morning, but often is well taken in the evening just at bedtime. Even a cool or cold bath at this time (carefully given) may be quite as beneficial as if taken in the morning, and will not prevent sound sleep.

The child should be properly clothed, — all garments being suspended from the shoulders. The underclothing and stockings should be changed twice a week, more often if necessary. It should be remembered that the child may need more clothing during the long periods of sitting in the schoolroom than when actively exercising during the playtime. So a sweater or a light coat is often necessary, unless the schoolroom is well heated. Harm may often be done as the result of the child's sitting for an hour or two in a cold schoolroom, improperly clothed and perhaps with damp feet. A cool, well-ventilated schoolroom is much to be preferred to one that is overheated, but the child at study and physically inactive should be sufficiently clad.

In cool weather a child should not be allowed to sit in a schoolroom with bare knees, socks reaching only halfway to the knee. This unequal distribution of clothing is much worse than if the child were entirely barefooted.

The question of feeding is all-important and is often a problem. During the period of active growth the child needs an ample amount of food, but this food should be of the right kind. The daily ration should supply sufficient, (1) Tissue, or building food, which includes proteins and mineral salts; (2) vitamines, or vital elements, upon which proper growth and development depend; and (3) energy food, the amount of this depending upon the activity of the child. Most children, however, eat an excess of energy food, as fats, sweets, and starches, and often not enough of the proteins, vitamines, and mineral salts. For example, breakfast may consist of cereal with milk and sugar, or perhaps griddle cakes with sirup, bread and butter, and potatoes warmed in fat. Lunch (taken to school) often is about as follows: Bread and jam or marmalade; cake, or cooky, or doughnut; perhaps a banana or an apple; and sometimes a nickel for an ice cream cone or candy. For supper: bread and butter, potato or macaroni or both; pie or cake.

The above ration cannot keep the child in health no matter how much of it he may eat. In fact, it will clog his system with energy food, at the same time depriving him of essential protein, mineral salts, and vitamines. As a result he will suffer in various ways, and this sooner or later, depending on his inherent vitality. He may be anemic, underweight, may have frequent colds, tonsillitis, bronchitis, bilious attacks, recurrent vomiting, or may show other evidences of being below par physically. Just to the extent that these mistakes in feeding are made will the child show evidence in some way that he is not in a state of perfect health and nutrition.

He should have more fresh fruits with their vitamines and alkalinizing salts, a greater variety of vegetables also furnishing vitamines and mineral salts, with their complete proteins as well. A greater quantity of milk will insure sufficient proteins without which the child cannot properly build new body tissue.

His cereal, bread, potato, and banana, while good foods, give him a preponder-

ance of starch; the cake, cooky, jam, ice cream, pie and candy, an excess of sweets. With potato, bread, and griddle cakes he often has more butter than he needs, and his ration is decidedly deficient in the important elements mentioned above.

The following ration as outlined suggests a better plan:

Breakfast: One glass orange juice or one or two oranges taken first. Cereal with milk (no sugar), or milk toast, or zwieback (made from dark bread) with very moderate amount of butter, or unsweetened Graham crackers. Milk to drink. If desired, raisins or dates may be cooked with the cereal and the child may have a little Meltose or honey. Raisins or dates may be eaten uncooked. Baked apple, prunes, or other stewed fruits are always good.

Lunch (if carried to school): Sandwiches (of dark bread), filling as follows: Lettuce, tomato, egg, cottage cheese, peanut butter, purée of peas, purée of beans. Occasionally a sweet sandwich, but in this case, eight or ten ounces of milk (in a thermos bottle or other container) or an egg. Fresh fruit of all kinds, raisins, dates, olives, nuts. Occasionally plain cake or cooky. Fruit crackers, unsweetened Graham crackers, and others.

At 3:30 (or when the child comes from school): Glass of fruit juice, preferably orange juice.

Evening meal, 5:30: Vegetable soup with milk. One cooked vegetable, as string beans, carrots, peas, asparagus, spinach, cauliflower, stewed tomatoes, squash, etc. Carrots, tomatoes, celery, and lettuce may well be eaten raw, and the child should be encouraged to eat some raw vegetables. Children usually like grated carrots. May have potato, rice, macaroni, or spaghetti, but only one of these at a meal. Should have potato only once a day, and potato should never be allowed to take the place of other vegetables. Milk to drink. Bread with moderate amount of butter. Dessert may well be dispensed with, but when allowed, should be very simple, as, custard, preferably sweetened with raisins or dates, or prune whip, or junket, or fruit *gelée*, or dates, or banana (very ripe or baked), or plain cooky.

When possible, it is much better for the vegetable meal to be taken in the middle of the day, with a simple supper of fruit and bread and milk or milk toast, but the school child must frequently eat more heartily at night. It is better not to mix fruit with a vegetable meal, and it is always better for fruit, except such fruits as mentioned above, when served at any meal, to be eaten first.

The above does not include all the foods that a child may have to eat, but is suggestive, and it cannot be too emphatically urged that every child needs plenty of milk, green and leafy vegetables, and fresh fruit. Of these he often does not get a sufficient amount.

Eating between meals should never be allowed, and if candy, ice cream, and sweetmeats are to be *occasionally* permitted, it should always be at *mealtime* in the place of the regular dessert. Children should be educated away from the desire for sweets, which of itself is largely a matter of wrong education. If all body needs are supplied, the satisfied and well-nourished child will easily be trained away from wrong habits of eating. Every parent by study can understand the child needs and how to supply them. The result will be healthy, happy children, and parents conscious of having done well the greatest work given them to do.

CAUSE OF PELLAGRA

A WRITER in the *Journal of Tropical Medicine and Hygiene*, London, after careful observation, concluded that faulty diet alone cannot cause pellagra; that in addition to faulty diet and lack of sunlight, there must be an infection. Otherwise, when the patient is given an adequate diet he should recover, and have no recurrences while on a liberal diet. He believes that faulty diet and other insanitary conditions make it possible for the infection to take hold in the intestinal canal. This tallies with the fact that not all by any means who are on a pellagrous diet contract the disease.

School Lunches

George E. Cornforth

THE children's food should be simple, easily digested, and nutritious. It should be natural, not artificial; by which I mean that their food should be such as is made by nature, and not deprived of important elements: whole-wheat foods, not foods made from white flour; nature-made sweets, such as dates, figs, raisins, prunes, bananas, sweet apples, sweet oranges, sweet grapes, pears, peaches; confections made from these, not man-made sweets in the form of candy, rich cakes, pies, and puddings.

I have read of a sturdy little boy who has been brought up on natural foods, and who has never eaten confectionery. He calls the sweet foods that I am recommending, "God's candy."

Children should have plenty of milk, three cups to a quart a day each. They are growing rapidly, and need an abundance of protein to build tissue, of lime to build bones and teeth, and of growth-promoting vitamines. These are all supplied by milk. Other foods that supply lime and growth-promoting vitamines that should be included in the child's diet are lettuce, celery, raw cabbage, and greens. Nuts also, in small quantities, are good, and the child should be taught to chew them thoroughly. They may be ground fine with the sweet fruits to make confections.

Children should be given a chance to cultivate a liking for a large range of wholesome foods, both for their health and for their "manners," that they may not be hard to suit, or "fussy" about their food.

And their meals should be balanced or well chosen, that they may learn by example rather than by precept, what correct meals are like, because children are quick to imitate.

And do not forget, mothers, that through the food you are providing for your children, you are feeding their morals as well as their bodies. Therefore do not give them foods that will arouse temper and passion, or any unlovely traits. "The woman who intelligently selects proper food and drink for husband, father, brother, or little ones, exerts a far-reaching influence toward clear thinking and successful achievement."

I have read of a "home for unloved boys" where the founder takes the worst boys, boys that are considered hopelessly incorrigible, to make good boys out of them, and he succeeds; and the principal thing he depends upon to help these boys be good is the diet. They have no meat, tea, coffee, pepper, vinegar, or spicy condiments, but are given wholesome meals of vegetables, fruits, nuts, cereals, and other healthful foods, and they are so well nourished that they never miss the harmful things that are omitted. And besides its good influence upon their morals, this kind of diet, along with wholesome employment on the farm, keeps the boys in vigorous health, which, of course, they "enjoy."

Now, to be a little more specific, the lunch box should be sufficiently substantial, and the food should be so packed as to keep the lunch in good order till the time of eating. If possible, a little surprise should be planned for each lunch. A child enjoys something of the nature of a "grab bag" or a Christmas stocking.

It is well always to include something fresh in the lunch. This may be fruit, lettuce, cucumbers, radishes, celery, tomato.

Sandwiches are a convenient form in which to include some of the hearty part of the meal. I might suggest the following sandwich fillings: Egg, cottage cheese, cottage cheese and egg, baked bean, nut, nut and jelly, nut and date, ripe olive, cottage cheese and ripe olive, peanut butter, peanut butter and olive, cottage cheese and walnut, cottage cheese and

chopped celery, lettuce, celery, tomato, cucumber.

When cooking eggs hard, to use in lunches or for making sandwich fillings, the eggs will be more digestible if put into hot, but not boiling, water for twenty minutes instead of boiling them.

Cottage Cheese and Egg Filling

Mix equal parts of cottage cheese and chopped hard-cooked eggs, add a very little grated onion, a bit of vegex or herbex (vegetable substitutes for beef extract), and salt to season.

Nut Filling

Mix chopped nuts to a paste with butter or peanut butter.

Ripe Olive Filling

Mix a little mayonnaise salad dressing with chopped ripe olives.

Celery and Olive Filling

1 cup finely chopped celery.
12 ripe olives chopped.
1 teaspoon chili sauce.
¼ cup mayonnaise.

Olive and Sweet Pepper Filling

½ cup chopped olives.
¼ cup chopped sweet peppers, fresh or canned.

Moisten with mayonnaise and spread between thin slices of whole-wheat bread, laying a lettuce leaf also between the slices.

Date and Nut Filling

1 cup chopped dates.
½ cup chopped nuts.
¼ cup finely grated cocoanut.

Sandwiches should be wrapped in oiled paper. Everything in the lunch should be wrapped separately to prevent each from taking the flavor of the others.

Other articles that are suitable for lunches are zwieback, crackers, unfermented rolls, sticks, date rolls, fig rolls, biscuit, yeast rolls of various kinds, dates, figs, stuffed dates, nut-and-date or fig or raisin marmalade, cracked nuts, layer raisins, ripe olives, stuffed eggs, baked apples, gelatin desserts, a small bottle of grape juice, fresh fruit in season, as a bunch of grapes, a few strawberries, a few cherries, plums, oranges, apples, bananas.

Stuffed Eggs

Cut hard-cooked eggs in two lengthwise. Remove the yolks and rub them to a smooth paste. Mix with them a little finely chopped olives and sweet pepper, a little salad oil and lemon juice to moisten, and refill the whites. Moisten the cut surfaces of the eggs with raw egg white to cause the eggs to stick together, then place the halves together.

Nut and Raisin Marmalade

Grind together twice through the food chopper, with the fine cutter, two parts of raisins, dates, or figs and one part nuts. Shape in the form of caramels, if desired. Dates and cocoanut make a good combination.

It is well to save small tin boxes to use in lunches. They are handy to put sandwiches or cake in to prevent them from drying, or they may be used to contain olives or nuts.

Small glass jars with covers are very convenient for salad, sauce, or marmalade, or any strong-flavored food.

A small bottle of lemon juice may be included, to use with lettuce, or cucumbers, or in making lemonade.

A thermos bottle is very convenient in which to carry anything hot or cold.

An individual drinking cup should be included. This may be a paper cup.

The following are a few sample lunches:

No. 1

Walnut sandwiches, ripe olives, fruit crackers, mellow and juicy fresh pears.

No. 2

Ripe olive sandwiches, pecan nuts or other nuts, cottage cheese, date rolls, fresh peaches.

No. 3

Olive and nut sandwiches with a lettuce leaf between, stuffed egg, wafers, baked apple, bunch of grapes.

No. 4

Graham bread and butter, cottage cheese, fresh tomatoes, ripe olives, a piece of maple sugar.

No. 5

Assorted crackers, nuts, layer raisins, cup custard, an orange.

No. 6

Cottage cheese and walnut sandwiches, a few dates, a few olives, fig rolls, a bottle of lemon juice and sugar for lemonade.

No. 7

Lettuce and egg sandwiches, nut and raisin caramels, whole-wheat wafers, ripe olives, orange, banana.

No. 8

Lettuce sandwiches, cottage cheese and olive sandwiches, celery and nut or celery and egg salad, stuffed dates, zwieback, an orange separated into sections and wrapped in waxed paper, nuts, ripe olives, hot cereal coffee with cream and sugar in a thermos bottle.

No. 9

Egg sandwich, baked bean and nut sandwich, zwieback, nuts, ripe olives, banana, orange, small bottle of grape juice.

The Importance of Caring for the Teeth of School Children

William Curtis Dalbey, D. D. S.

THE physical examination of school children shows that from 95 to 99 per cent are in need of immediate dental treatment, and the most conspicuous defect of the children is their insanitary mouths.

A child cannot be expected to develop into a healthy, strong-minded adult if he is deprived of efficient means of chewing his food properly, or if the food must pass through an infected and uncared-for mouth that is more like a cesspool than a receptacle for the transmission of food to the human body, every ounce of which must pass through this disease-breeding area, thereby becoming burdened with numerous colonies of bacteria. No wonder such children are sickly and lacking in strength to resist disease, or that they are not considered bright and intelligent, but figure many times as members of our mentally deficient class in school work. No child can grow in grace, mentality, or stature with a body that is not properly nourished, with organs seeking to grow and develop, but with nothing to grow or develop on, and these are the exact conditions present in many cases.

It is unfortunate that the teeth of children, just at the age when thorough mastication is of greatest importance, are allowed to decay to such an extent that it becomes a painful operation for the child to masticate food at all. It is during this age that the greatest development should take place, but most of the children are dental cripples.

Diseased teeth are usually aching teeth, and a child with toothache is not able to meet the requirements of our modern educational system. Under such circumstances, eating is a process to be avoided, and it is practically impossible for the child to sleep. Weakened by the loss of sleep and the lack of nourishment, he becomes discouraged in everything that he undertakes, is lacking in ambition, and is pessimistic. His standard of self-respect and of respect for his teachers and classmates is lowered, his judgment is clouded, and his ability to discriminate between right and wrong is greatly handicapped. His associates are in keeping with his lowered ideals, and we are permitting a child to start on the downward path through no fault of his own.

Teaching Hygiene and Preserv

A GR
NEW YOR
SCHOOL RECEI
IN HOUSEHO

(Above) CHILDREN LEARNING TO MAKE A BED UNDER SUPERVISION OF A CLASS TEACHER.

(Right) THE NEW YORK PUBLIC SCHOOLS NOW HAVE DENTAL PARLORS FOR THE CARE OF THE CHILDREN'S TEETH.

g Health in the Public Schools

N A
Y PUBLIC
INSTRUCTION
LEANLINESS

(Above) INSTRUCTING SCHOOL CHILDREN IN THE RIGHT WAY OF BRUSHING TEETH. THIS WAS ONE FEATURE OF ORAL HYGIENE WEEK, IN ALL THE NEW YORK CITY PUBLIC SCHOOLS.

Three upper illustrations, International.
Lower illustration, © Kadel & Herbert, N. Y.

Benefits of Hot School Lunches

Roxette L. Runk, M. D.

SOME States make the hot lunch at noon compulsory. New York has had such a law for ten years. The State of Washington makes this law compulsory. They have inculcated in the curriculum of their State normal schools, an outlined course for teachers on dietetics and the management of the school lunch at noon. Michigan is aiming to have this law put on her statute books this year. New York State has appointed a woman to look after the nutrition of school children.

We would be surprised to know of the ignorance that prevails on the subject of dietetics. It is not only the children of the poor, but of the rich also, who suffer from malnutrition and retarded development, due to deficiency of food elements in the dietary. For instance, some serve oysters, thinking they are a highly nutritious food, when the fact is, it takes about one pound to yield 222 calories; bread yields 1,200 calories a pound.

Food must be relished in order that it may afford the maximum assimilation and digest properly. A warm lunch, especially in cold weather, appeals to the appetite and stimulates the digestive juices. In preparing this lunch, the child is taught cleanliness, moderation in eating, simplicity in cooking, and regularity of meals, also the importance of the food elements the body requires for growth and health,— in other words, a balanced bill of fare. There are numerous things which may be woven into the child's education while he is partaking of this lunch, such as table manners, service, etc. When the child is fed properly, has all the elements the body requires, his body develops physically, and he feels more like working and playing. His food digests better; in fact, all his bodily functions are accelerated when he is physically fit, so to speak.

In following up some of the schools where the lunch is served, we found that children who had suffered from malnutrition were greatly improved healthwise, some recovering altogether. The noon lunch has increased the attendance. In Battle Creek, the students in the School of Home Economics have handled schools No. 4 and No. 8. They have furnished lunches at a cost of from 10 to 13 cents a child. The children have made better grades since the serving of the lunch. It puts the child in a better frame of mind, and his response to social customs will be enhanced. The children may take turns in preparing and serving the lunch. Work up enough rivalry to stimulate interest.

Below are some menus that have been served in the Battle Creek schools. Milk forms a large part of the lunch. Dr. E. V. McCollum, of Johns Hopkins University, says children under seven years of age should have at least one and one-half pints of milk a day; children from seven to eleven years of age, one pint. They will get fat-soluble vitamines from the milk, also calcium. The fresher the milk the more effective the vitamines. Heating destroys these to a certain extent.

For further study on this subject, I would refer you to Rose's "Feeding the Family," published by Macmillan & Co., New York; Dr. McCollum's book, "The Newer Knowledge of Nutrition," published by the same company; Lusk's "Fundamental Basis of Nutrition;" Lenna Cooper's book, "The New Cookery:" also George E. Cornforth's book, "Lessons in Healt ful Cookery."

Results: (1) Better attendance; (2) better health; (3) better grades; (4) a knowledge of a balanced bill of fare; (5) etiquette; (6) service; (7) neatness, regularity, and order; (8) mental and physical improvement; (9) cultivation of appetite for normal foods.

MENUS

Monday

Scalloped Potatoes
Fruit Salad Milk
Plain and Jelly Sandwiches

Tuesday

Cream of Pea Soup
Cottage Pudding Milk
Plain and Peanut Butter Sandwiches

Wednesday

Baked Beans
Plain and Graham Bread
Apples Milk
Cottage Cheese Sandwiches

Thursday

Macaroni and Cheese
Jello with Fruit Milk
Plain and Jelly Sandwiches

Friday

Scalloped Corn Brown Betty
Plain and Raisin Bread Sandwiches
Milk

Monday

Scalloped Corn Milk
Bread and Butter Sandwiches
Graham Crackers with Frosting

Tuesday

Spanish Rice
Bread and Jam Sandwiches
Milk
Oranges and Bananas sliced

Wednesday

Bread and Jelly Sandwiches
Spaghetti and Cheese Milk
Dried Peaches and Apricots

Thursday

Vegetable Stew Milk
Bread and Butter Apple Sauce

Friday

Baked Beans
Bread and Jelly Milk
Oranges, Apples, Bananas, sliced, with Marshmallows

Monday

Cream Vegetable Soup Croutons
Waldorf Salad Milk Cookies
Bread and Butter Sandwiches

Tuesday

Rice Croquettes
Bread and Butter Sandwiches
Jelly Sandwiches
French Floating Island
Milk

Wednesday

Scalloped Potatoes
Peanut Butter Sandwiches
Chocolate Tapioca Pudding Milk
Bread and Butter Sandwiches

Thursday

Scalloped Corn
Banana, Pineapple, Apple, and Cocoanut Salad
Bread and Butter Sandwiches
Milk

Friday

Baked Beans Tomato Sauce
Bread and Butter Sandwiches Milk
Lettuce Sandwiches Apples

Monday

Scalloped Corn
Apples Milk
Plain and Sweet Sandwiches

Tuesday

Scalloped Potatoes
Plain and Peanut Butter Sandwiches
Stewed Dried Pears
Milk

Wednesday

Baked Beans Fruit Jello
Plain and Lettuce Sandwiches
Milk

Thursday

Macaroni and Cheese
Apples Milk
Plain and Sweet Sandwiches

Friday

Beans and Corn Milk
Bread Pudding
Plain and Peanut Butter Sandwiches

MILK

The Vital Food

¶ Milk is the most important of all foods. It is a perfect food, a complete food, and a protective food. It contains all the elements required by the body for proper nourishment.

¶ Milk is a food not fully appreciated. Because it is a liquid, many have believed it was not nourishing. On the contrary, *milk is the most nourishing of all foods — for people of all ages.*

¶ The wonderful food substances in milk are all digestible, and there is no waste. It is full of food of the highest quality.

¶ *Milk contains an additional substance lacking in nearly all other foods*, except butter, ice cream, and cheese. Without this vital substance, children cannot grow, nor can adults have perfect health. The six million undernourished and suffering children now in the United States would be healthy and strong if they used milk liberally in their diets. The milk way is the health way.

¶ *Milk is one of the cheapest of all foods.* One quart of milk contains as much digestible food as eight eggs, or three quarters of a pound of beefsteak, and in addition contains this vital food substance.

¶ Use milk liberally. Reducing the milk supply is a direct blow at the health and efficiency of the family. You cannot afford to be unreasonable.

¶ Dr. McCollum, of Johns Hopkins University, one of the leading authorities on food, says:

"*The people who have used milk and its products liberally are the people who have achieved, who have become large, strong, vigorous people, who have reduced their infant mortality, who have the best trades in the world, who have an appreciation for art, literature, and music, who are progressive in science, and in every activity of the human intellect.*"

¶ Milk is liquid life. There is no substitute for it, while it is a substitute for all other foods.

© Underwood & Underwood, N. Y.

HOLSTEIN DAIRY HERD, SAN JOAQUIN, CALIF.

The Indispensable Food

G. H. Heald, M. D.

THE display article on the opposite page was not written for this magazine — or for any other. It is copied from a leaflet which was issued by the National Dairy Council, in the effort, perhaps, to increase the sale of milk and thus build up the dairy business. It is given here in the hope that it may help to increase the consumption of milk and thus add to the general health of American children.

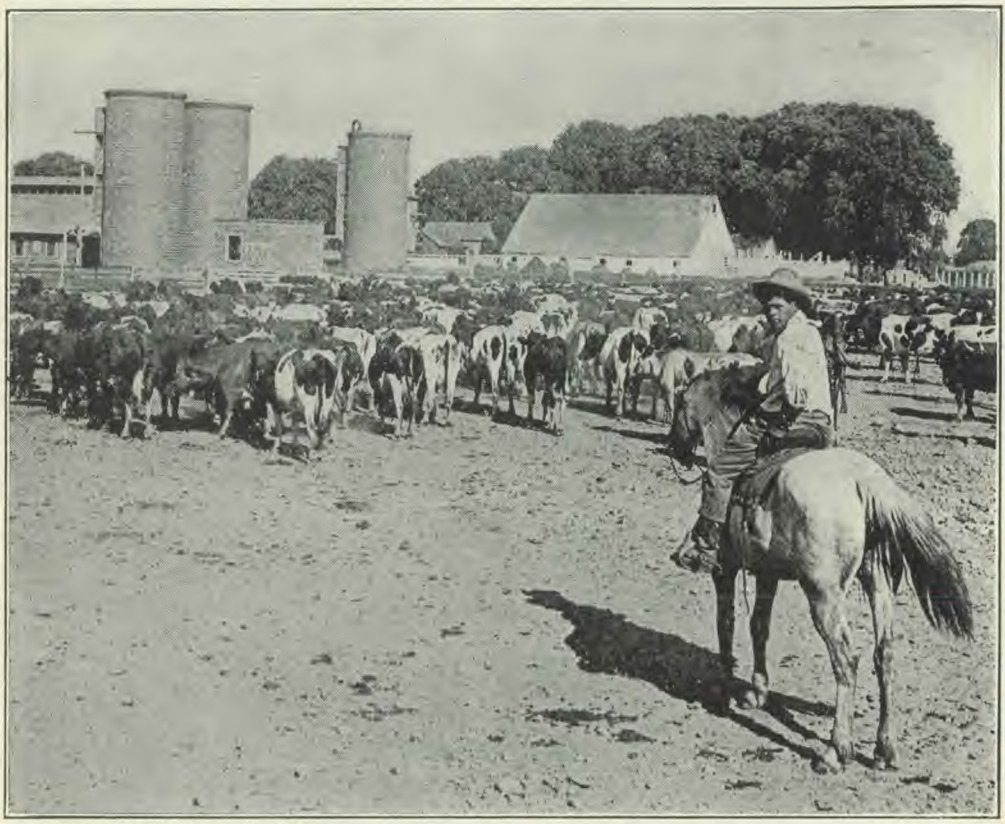
Any agency which can induce the American people to eat less meat and to increase correspondingly the consumption of milk, is a public benefactor. For this reason, the campaign of the National Dairy Council, to induce a larger and more general consumption of milk, is a worthy one. This magazine heartily indorses the statement that more milk should be used, especially by children.

There are perhaps two reasons for the comparatively small consumption of milk: (1) Fear of disease, as tuberculosis, typhoid; (2) the increased cost of milk.

Neither of these reasons is valid, as this article will demonstrate.

There has been such a campaign of education regarding the dangers incident to dirty and diseased milk, that many persons are afraid to use milk. In its earlier years, the antituberculosis crusade laid emphasis upon milk as an important means of tuberculosis transmission. Now it is known that pulmonary tuberculosis, the type which we most dread, is not caused by tuberculosis germs from cattle. It is a human disease. In about 10 per cent of the cases of joint and bone tuberculosis and of scrofula, the cause was found to be a tuberculosis germ of cattle origin which probably reached the child through the milk. But a persistent campaign of education on this point has established in most States the tuberculosis testing of dairy herds, and the removal of tuberculous cattle, so that this danger is greatly reduced.

Another danger incident to the use of milk was that of contracting typhoid fever, where one of the employees who handles the milk or the utensils happens to be a typhoid carrier, or where the milk was diluted, or the utensils washed with water containing typhoid germs. Other



MODEL DAIRY RANCH, MERCED, CALIF.

diseases which in the past have been traced to the milk supply, were scarlet fever, diphtheria, and septic sore throat.

But as a fact, the infections of this kind are insignificant. Compared with the total number of persons who use milk, they are in no greater proportion than railway accidents to the number of persons who travel; and no sane person foregoes railway travel because there is an occasional train wreck with loss of life. Effort is made to fix the blame and to reduce the number of accidents to the minimum; but we continue to travel just the same. Such a sane attitude we should take toward the use of milk.

Moreover, *all danger from this source can be absolutely prevented by the simple expedient of Pasteurizing the milk;* or if one does not want to go to that trouble, by bringing it to the boiling point. Either of these procedures, followed by chilling the milk and keeping it closely sealed until used, will render it free from danger of disease.

As to the cost of milk: Even at eighteen or twenty cents a quart, milk is *much* cheaper than meat or eggs at present prices. Let the reader do a little figuring for himself. A quart of milk is fully equal, in fact *more than* equal, to three fourths of a pound of beefsteak, or to eight eggs. Meat and eggs are never so cheap as milk, when rated at their actual food value. If people were to purchase according to actual food value, as compared with price, they would use much more milk and less meat and eggs.

But that is not what is done. The people say, "Milk is only a drink; it has become a luxury, beyond the means of the poor; so we'll give the children tea (or coffee, or cocoa) instead. It is much cheaper." In place of one of the most

valuable of foods, they give a substitute which has no food value. True, cocoa has a little nutriment, but it is in no way a substitute for milk.

It is a curious fact that when people find it necessary to practise extraordinary economy, they do not begin by dropping the stimulants and narcotics — the harmful things, such as alcohol, tobacco, tea, and coffee. They feel that they *must use these*, no matter what the price; and if economy is necessary, they cut down on such an article of food as milk, especially as that does not involve any sacrifice on the part of the older folks. In other words, high prices tend to increase the ratio of drug consumption to food consumption. For a similar reason there may be no material diminution in the amount of meat consumed, no matter how high the price, though the milk may be cut down to almost nothing, for meat is also a stimulant as well as a food. In the interest of true economy as well as of health, the meat should be entirely eliminated and its place taken by milk.

That milk is an essential food for children is shown in the fact, repeatedly observed, that children on the ordinary meat-bread-potato diet are undernourished, underweight, and inefficient in their school work, and are more susceptible to disease than are those who receive a liberal supply of milk. Repeatedly, in different parts of the country where children gave evidence of marked undernourishment, a pint or a quart of milk added to each child's ration has caused marked improvement in weight, general nutrition, and scholarship.

And not only for children, but for adults as well, the addition of milk to the dietary may accomplish wonders. For

A MODEL DAIRY BARN, SACRAMENTO, CALIF. — VACUUM MILKING

instance, a large yeast-manufacturing concern, finding its 800 to 1,000 employees listless and inefficient afternoons, tried the experiment of giving each em-

© U. & U., N. Y.

A TEXAS JERSEY DAIRY

ployee a pint of milk and a sandwich. The result was a 50-per-cent increase in the efficiency afternoons of the entire force. Certainly that lunch was one of the most profitable outlays ever made by that company.

There was formerly a very prevalent notion that beer and whisky could work such marvels. But careful laboratory tests showed that the seeming increase in efficiency was an illusion. After the use of alcoholics, there was invariably a decrease in efficiency, as shown by carefully controlled laboratory tests. But with the use of milk, the complete food, the results gained are not illusory. The actual output of a large factory is greater because of the special afternoon lunch.

As to why milk is such a valuable food: Not only does it contain fat, protein, and carbohydrate, all in a form readily utilized by the body, but it is rich in mineral salts; and in addition, it contains those wonderful stimulants of health, the vitamines, which are absent in many of the common foods. Milk is a nourishing food. It is a growth-stimulating food. It is pre-eminently a health food.

Wherever there is pellagra or beriberi, it is a safe guess that milk is almost an unknown article. No person using milk in anything like an adequate quantity could have either disease. Practically every case of tuberculosis is in a person who has not been using a sufficient quantity of milk.

Think of these facts and what they mean for the future of your children; and whatever deprivations may be necessary in your home, see that the children have an abundance of whole milk. A quart a day for each child is not too much.

Glance again over that page headed, "Milk the Vital Food." Remember that the statements on this page are backed up by expert scientists. And if you are not giving your children sufficient milk, remember that you are responsible for their poor nutrition. Does the milkman's

© U. & U., N. Y.

A NEW HAMPSHIRE DAIRY HERD

bill frighten you? Cut down the butcher's bill to the minimum — the less the better — and use that saving for the purchase of more milk. You will get *more* nourishment, and *better* nourishment.

The Cigarette Habit Among Schoolboys, and How to Get Rid of It

D. H. Kress, M. D

AT the close of a lecture to high school students on the evils of the cigarette, the young men crowded around me, and said: "Doctor, what you said appeals to us; but tell us, why do so many of the good doctors smoke?" I could give but one answer, and that was: "Doctors are human beings, with the same frailties others possess, and they smoke for the same reason other men smoke. They do not smoke because it is conducive to health, but they, like others, have become addicted to a habit they find difficult to give up." We have to admit there are *good* doctors who smoke. But no good doctor will ever recommend the smoking of cigarettes to his boy, much less to his wife or daughter. There are other good men who smoke, but never yet have I heard of a *good* man's advising his boy to follow his example in this respect.

A few hours after the lecture at the high school, I was introduced to a physician, who was in the act of rolling a cigarette. Evidently he felt guilty, for without a word from me, he looked up, and said, "Well, if I had a boy, I would not smoke." The interview with the boys at the high school came vividly before me, and I replied: "Yes; but, doctor, other men have boys, who are influenced by what they see doctors do. Why not for their sake set an example worthy of imitation?" So long as men — I mean *good* men — smoke, boys will smoke. They will smoke in spite of the good advice given by these good men.

The cigarette habit has a tremendous grip upon the boys of school age. Usually the habit is formed before reaching the teens. Boys want to look, and act, like men. They look upon smoking as an evidence of manhood.

Referring to the influence of men over boys, Judge Arnold, of Chicago's juvenile court, said that a boy on being asked by an officer in his court, "Why do you smoke?" hung his head and replied, "Because I want to smell like a man." It was a strange answer, but it illustrates the power of example. There can be no doubt that when men are willing, for the sake of not merely their own boys, but of their neighbors' boys, to give up this strange heathen custom, we shall find it an easy task to persuade both their own boys and their neighbors' boys to shun it.

At a meeting held in a popular church where an appeal was made at the close of a lecture for boys to sign the no-tobacco pledge, a manly boy came forward, accompanied by his father and mother. The father was a prominent business man of the city. The boy said, "I want to sign the pledge." The father looked on as the boy wrote his name. I noticed a peculiar look in his eye. When the boy had written his name, the father took the pen out of his hand and said, "For the sake of my boy, who has given up cigarettes, I will give up the smoking of cigars." He then wrote his name underneath that of his boy. That act on the part of the father will do more to keep that boy true to his pledge than a thousand sermonettes or lecturettes would have accomplished without it. One example is worth many precepts.

A few years ago a prominent minister called me up over the telephone, desiring to make an appointment with me. He said he felt concerned about the prevalence of the tobacco habit among members of his church and among the boys in the high school especially. "Even the girls are taking up with it," he said. He came at the appointed hour, but on his arrival I found that he felt more concern about himself than about these others. He said briefly, "Doctor, I am a smoker. I see the terrible havoc the cigarette is

working among our boys, but I feel I am muzzled. My advice to them is valueless, for my example neutralizes all I may say. Now what am I to do?" "Well," I said, "give it up." "Yes," said he, "but, doctor, it is easier said than done. I have made the effort more than once and have failed. I cannot sleep, and I get nervous and cross as a bear. Is it safe," he added, "to give it up at once?" I replied, "O yes, it is perfectly safe! I know of no other way to make a success of it. 'If thy right hand offend thee, cut if off, and cast it from thee,' is God's method of dealing with such habits."

About a month later, I attended a meeting of ministers in the city, and before them all this minister made a noble confession. He told me afterward that he felt his confession ought to be as widely known as his transgression. He said: "Gentlemen, you know I have been a smoker. I have smoked for twenty-five years. Several times I have tried to give it up and have failed. I then sought medical advice, and being assured it was perfectly safe to give up smoking at once, I determined to do it. Though I did not use cigarettes, I signed the anti-cigarette pledge, so that I might be able to advocate it with a clear conscience among the boys and young men who are being ruined physically, mentally, and morally by this habit." Then he turned to his associates in the ministry, and said: "I would advise you brethren who smoke, to quit. I don't know how many of you indulge, but I do know that *some* of you do. I saw the light when a father who tried to induce his boy to give up the use of cigarettes, was met with the retort, 'But, papa, the preacher smokes!' Gentlemen, cut it out," he said; "it does not pay for a preacher to smoke." It is bad for men in the ordinary walks of life, but for a preacher it is infinitely worse.

The more exalted a man's position in life, the more detrimental is his influence, if on the wrong side. Good men smoke, but they would be better men if they had never smoked. Every good man will admit this. I was going to be charitable and say *good* preachers smoke, but I cannot obtain the consent of my mind to make such an acknowledgment. There was a time when this could have been said: The time of their ignorance God winked at; but I doubt whether it can be said today with the blazing light we now possess. A man may be a good orator. He may be able to entertain well, but how a man can be a good preacher and smoke, I am unable to understand. To preach effectively it is necessary to practise what one preaches. Of Jesus we read that he "began both to do and teach." He did first, and then taught what he *did*. Those who heard him speak, said, "Never man spake like this man." Others said, "He taught them as one having authority, and not as the scribes," who "say, and do not." A good preacher is one whose preaching is backed up by a consistent life. The day of God will reveal that only such a man is regarded in heaven as a *good* preacher.

It seems almost useless to call attention to the harmful influence of the cigarette upon the boy. It is too well known, for in almost every home it has been exemplified. There are few homes where prayers are not ascending to heaven in behalf of a boy who has become an addict to the cigarette habit. In every school the evils of the cigarette are known. Inquire of principals or teachers of public schools. Without exception they will testify to the injury sustained by boys who smoke. These boys drop behind in their class work as soon as they begin to smoke, and eventually drop out of school. In fact, they drop out of everything that requires mental or nervous concentration. They later may drop into the juvenile court or the reform school. It is an undisputed fact, known by every officer of the juvenile court, and by superintendents of reform schools, that from 95 to 98 per cent of the juvenile offenders are cigarette smokers.

The evil resulting to the young from the smoking of tobacco, has long been understood.

The time is not far distant when the influence of cigarettes and tobacco on the boys and young men of America, will, of necessity, receive serious consideration. When it does, public sentiment will demand that the practice shall cease. All this is not merely possible but it is probable. It has been done before, and it is not uncommon for history to repeat itself.

In the seventeenth century, England found her people enslaved with this practice. King James I, in referring to the prevalence of the practice in his day, said, "Men cannot welcome a friend, but straight they must be in hand with tobacco. He that refuses a pipe in company is accounted peevish and unsociable. Smokers tossing pipes and puffing smoke over the dinner table forget all cleanliness and modesty." Even ministers, it seems, smoked. One writer said, "The generality of parsons can no more write a sermon without a pipe in their mouths than without a concordance in their hands."

The time came when a wave of reform swept over Great Britain. The evils resulting from smoking were clearly seen. A bill was first passed in the House of Commons forbidding members to "take tobacco into the gallery or to the tables sitting at committees." The better classes in general, we are informed, "became to regard smoking with an odium." So effective had been the effort to repress the practice that by the year 1763, one writer said: "It is most unusual in England or Scotland for a gentleman of politeness to call for a pipe." Ten years later, Dr. Johnson declared, "Smoking has gone out." A person found smoking in public was considered "irretrievably bad." For over half a century England was practically smokeless. It was considered "vulgar" to smoke, we are informed. The practice became "synonymous with blackguardism and the lowest vices." What has been accomplished once can be accomplished again. Similar causes bring about similar results. It was not until the habit was well-nigh universal that its elimination was made possible.

The chief injury from smoking results from the *inhalation* of the smoke. The smoke being brought in contact with several hundred feet of lung membrane which readily takes up the poisons, a great amount of poison is absorbed. A tribe of Indians originally inhabiting Panama, whose chiefs and other great men, we are told, had their servants blow tobacco smoke into their faces, indulged in the habit in no other way. They were smoke inhalers.

There was another tribe of savages, known as Kirghiz, who would dig a large hole in the ground and in it burn tobacco mixed with other herbs. They would lie around the burning mass, head to head, and inhale the smoke.

It is not necessary, therefore, to smoke cigarettes in order to be a smoke inhaler. There are many who do not smoke, but who, like the chiefs, are having the smoke puffed into their faces day after day. They are smoke inhalers just as certainly as were the chiefs of the Panama savages. It is no longer necessary to lie around a burning mass of tobacco to obtain the smoke. Tobacco smoke is everywhere present. How to escape it is the problem with many. Boys living in homes where the father smokes, are smoke inhalers long before they become cigarette smokers. It is not surprising that early in life they take up with the cigarette. In fact, it is the most natural thing for them to do. The child that is brought up in an atmosphere of tobacco smoke forms the smoke habit. He takes to the cigarette as naturally as the duckling takes to water. If we would help the boys, we must first help the fathers. Not until the fathers give up smoking, can we expect the boys to abstain. The test is surely coming to *good* men who smoke. We shall see whether they are good men or not. All good men who smoke will in the future give it up for the sake of saving the boys from this evil, which is at present so prevalent among them that it is threatening our national existence.

RED CROSS HOSPITAL FOR TUBERCULOSIS PATIENTS, MONTENEGRO

Saving the Balkans from Tuberculosis

N. E. G.

IF a young American woman contracts a severe cold which results in exhaustion, loss of weight, and a cough, her family and friends immediately advise her to take plenty of rest, nourishing food, and fresh air. Within a few months, solicitous care and wise treatment have accomplished their good work, and the patient has been restored to health.

How different in the less-advanced countries of the world! In many parts of the Balkan Peninsula, for instance, the people possess little knowledge of health, sanitation, and care of the sick. If a person is afflicted with a cold or the grip, the illness frequently develops into pneumonia or tuberculosis. And because of the lack of knowledge regarding its proper treatment, the latter disease usually brings death. When a person's lungs become infected with the dread tuberculosis germ, it is considered useless to try to effect a cure, and the patient soon dies.

With the advent of the American Red Cross into this infected region, better health measures were introduced. Hospitals were established, medicines distributed from dispensaries, and visiting nurses called at the stricken homes and gave helpful care and advice. Conditions began to improve at once, and as a result of the work of the Red Cross personnel, many men and women have been saved from death and restored to lives of health and usefulness.

Red Cross doctors and nurses found the greatest difficulty in overcoming the native prejudice against fresh air. The people believed that the sick patient should be kept in a warm room, if pos-

sible, with windows and doors closed; and it was with doubt and fear that some of them began to follow the foreigner's advice to "open the windows." When they saw how rapidly the sick person recovered under the fresh-air treatment, they spread the good news among their neighbors, and soon many of the sick-rooms of the village showed open windows.

Hospitals with special provision for tuberculous patients have been opened in many parts of the Balkans. The Red Cross frequently found abandoned stone buildings, and repaired them with roofs and new interiors, and placed their hospital cots for the reception of the suffering natives.

On some occasions, palaces belonging to former members of the nobility were converted into emergency hospitals. The palace of Prince Mirko of Montenegro was used for this purpose, when the Prince left the country, following the exile of King Nicholas. When the Red Cross Commission arrived, and began looking for a site on which to begin their work of relief, the people of Montenegro took the palace of the absent prince and presented it to the Red Cross. The large palace was turned into a comfortable hospital, and the conservatory was used as a sanitarium for tuberculosis patients. With the opportunities for fresh air and sunshine, and the beautiful surroundings of the gardens and grounds, these patients improved rapidly. Many recovered complete health.

A nurse from Pittsburgh, Pa., doing relief work with the Red Cross, is kneeling beside a tuberculous patient. The natives have no beds, and the sick usually lie on the floor of dark rooms with doors and windows closed. Red Cross workers find it difficult to overcome this custom. An interpreter stands at the left of the patient. A native girl, with mingled wonder and doubt, is watching proceedings.

QUESTIONS AND ANSWERS

ANSWERS BY DR. HEALD.

For personal reply, inclose two-cent stamp, and address Editors LIFE AND HEALTH, Takoma Park, D. C.
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.

Alkali in Baking Powder

"An author says that alkalies impair digestion and that this is a strong argument against the use of baking powders. Do you believe that the habitual eating of bread made with phosphate of cream of tartar baking powder impairs digestion?"

Properly made, baking powders have the alkali neutralized by the acid. When the bread is completed, there should be no free alkali. Still the resulting compound is a laxative drug, and is not what I should advise for constant use.

Soda Crackers

"1. Is the white soda cracker easy to digest? 2. Is it healthful? 3. From what ingredients is it made? 4. How does it compare in food value with the Graham cracker?"

1. Yes. 2. It is an unbalanced food. 3. White flour, shortening (probably vegetable), baking soda, etc. 4. As to calories, the white soda cracker is about equal to the Graham cracker, but it is more constipating, and lacks the mineral elements contained in the Graham cracker.

Doctors and "Flu"

"If there is so much danger of contracting the 'flu' from exposure, why are doctors not more often taken?"

They are taken, probably more often than you think. Usually the doctor is careful in certain particulars. Especially is he careful that he does not convey articles to his mouth after handling a "flu" patient, without first giving his hands a thorough cleansing. And if he is conscientious, he takes other precautions. Notwithstanding this, some physicians succumb to the "flu."

Cereals and Bread

"Are not cereals more easily digested by invalids than bread? Is this because cereals contain neither baking powder nor shortening?"

I do not know that cereals (I suppose you refer to mushes) are more digestible than well-made bread. Rather the opposite, for the bread is likely to be better masticated. If you refer to the dextrinized cereals, the so-called "breakfast foods," they have a place in the dietary of some invalids; but even then, I do not think there is anything superior to properly made zwieback — bread dried out in a slow oven, rather than browned. As a dry food, it calls for complete mastication; and eaten with milk, it is a most wholesome food.

Ultra-Violet Ray Sterilization

"When milk is sterilized by means of ultra-violet rays, is it injured in any way?"

So far as concerns the vitamines which prevent scurvy and beriberi, the use of the ultra-violet ray seems to have no effect; but an exposure sufficient to sterilize the milk destroys the fat-soluble A vitamine and effects a change in the butter fat, making it more like tallow. The writer doubts that this method of sterilization, owing to its destruction of the important fat-soluble A, and its change in the butter fat, is equal in value to Pasteurization, or even to plain boiling.

Vitamines by Sprouting

"Is it true that the quantity of vitamines in grains is increased by sprouting the grain?"

Dry peas and dry lentils (and presumably some other seeds) have some scurvy-preventing power which is increased fourfold to sixfold, by germinating or sprouting the seed — soaking it in water twenty-four hours, and allowing it to germinate at room temperature for forty-eight hours. But neither the unsprouted nor the sprouted seeds seem to have much of the vitamine which stimulates growth.

Lime Juice and Scurvy

"Is bottled lime juice a reliable preventive of scurvy?"

No. Comparatively recent investigations indicate that the lime is not nearly so valuable a scurvy preventive as the lemon, having only about one fourth the scurvy-preventing power. And preserved lime juice seems to have no power to prevent scurvy.

Scaly Eczema

"What is the cause of a rough, scaly skin? The child thus troubled is fourteen years of age and had eczema when a baby."

Scaly eczema is rather a chronic condition. For general treatment, keep the bowels free and active. For a time, go on a rice-and-butter diet, leaving off all animal proteins, even milk. Meat, tea, coffee, and tobacco, are forbidden permanently. After a time add Graham bread, green vegetables, and fruits, but not sweets and pastries.

Locally, try Hebra's soap treatment. Rub a lump of soft soap thoroughly into the scaly patches. Then rub the surface with a cloth dipped in warm water until an abundant lather is produced. This is to be rubbed off and the surface dried. Spread diachylon ointment thickly on gauze, and apply to the surface. Repeat this twice a day until the condition improves.

Drugs in Tuberculosis

"Kindly inform me what drugs are dependable in tuberculosis."

At one time or another, and by somebody or another, very nearly everything under the sun has been tried in the hope that it might cure tuberculosis. Drowning men grasp at straws. For some of these remedies there have been very enthusiastic advocates. Perhaps some temporary improvement in symptoms may have raised hopes. But the general consensus of opinion is that there is no known drug that can either arrest or cure tuberculosis. For this disease there is nothing so valuable as hygienic measures — food, rest (sometimes exercise), air, and sunshine, and perhaps hydrotherapy, intelligently administered.

There are a few drugs that seem to be beneficial. For instance, calcium seems to aid in the healing of the tuberculous sores; but perhaps the best form in which to administer calcium is as it occurs naturally in milk. Probably it is the calcium in milk that makes it so valuable as a food in this disease.

Creosote was at one time much lauded as a remedy for tuberculosis, and it is still used. For a time it seems to improve digestion and the patient gains. But after a time the drug causes indigestion, and proves to be an irritant to the kidneys, and the patient loses more than he had gained. In a mixture for inhaling, creosote is useful.

Cod-liver oil is another much-vaunted remedy for tuberculosis. It is a food rather than a drug, and probably has no advantage over good cream or butter, and the latter would be much more economical.

Iodine, if properly prescribed and carefully watched, may be beneficial. But with all these remedies, the most important factor is the intelligent physician who knows the good and bad actions of these various drugs, and who can watch for danger signals, and change the treatment when necessary. For this reason, the practice of self-drugging, and of taking so-called "consumption cures," is the worst of folly. There may be in them enough narcotic to relieve the throat irritation and dry up the perspiration, but they cause delay in the securing of efficient measures, they complicate the issue, and it is safe to say that they invariably hasten the end. *There are no tuberculosis cures. Anything claiming to be such is a fraud.*

Wants to Gain Weight

"Kindly advise me how to gain twenty or thirty pounds. I am 5 feet 6 inches tall, twenty years of age, and weigh 108 pounds. I look younger than I am. Yesterday I hoed for six and one-half hours, and was tired out."

Take at least a quart of new whole milk a day, and all the bread, preferably whole-wheat bread, that you can eat with it.

If you are underweight, you are probably not eating enough. Perhaps in the past you formed the habit of undereating, and do not really know how much you ought to eat. Weight is a matter of eating, and unless one has some wasting disease, like tuberculosis, he ought to be able to eat so as to have normal weight.

Milk, and especially cream, contains something that stimulates the growth of animals. Two baby rats of the same size and from the same litter may be fed a certain diet, with the exception that one gets milk and the other cottonseed oil or some other vegetable fat. The milk-fed animal will have a normal growth, but the other will be stunted. After it has been stunted this way for several months, it may be made to grow again by giving it the complete diet containing milk.

The green vegetables contain this same substance that is found in milk, but one must eat large quantities.

You may take freely of olive oil, and other fats, but be sure to get a sufficiency of milk. I have no doubt that you will find it difficult to eat as much as you ought to eat. Perhaps a quart of whole milk in addition to what you are now eating, together with the bread that you would eat with it, will bring your diet up to nearly what it should be.

Starchy Food and Constipation

"Does not an excess of starchy food predispose to constipation?"

Excess of starchy food does not necessarily predispose to constipation. Very much depends upon the nature of the starchy food. If it consists of white flour or cornstarch, or any other refined grains from which the outer portion has been removed, it will be constipating, but if it is made of whole grain it will not.

NEWS NOTES

Malaria Without Fever

A physician describes in a Paris medical journal, a form of malaria in which the temperature alternates between normal and subnormal. The complications and the general change in the patient are as grave as in cases of high temperature. One finding a case of this kind, without any rise in temperature, might not suspect malaria, and might treat for something else.

Bran in Bread Digestible

Microscopical examination of breads, and of the discharges of mice, dogs, and men who had eaten bread, indicate that the cell walls of the aleurone granules are broken in the bread, and that the contents of these cells are digested. It is thought that the kneading and fermentation so weakens the walls of the aleurone cells that the digestive juices are enabled to penetrate them. The aleurone cells constitute about a third of the supposedly indigestible part of the wheat.

Centenary of Medical Missions

Dr. Scudder, the first medical missionary to enter any foreign country, went to Ceylon in March, 1820. The first woman medical missionary, Dr. Clara Swain, went to India in 1870—fifty years later. The centenary of medical missions was celebrated in March, this year. It is said that forty-eight of Dr. Scudder's family have followed him to the mission field. Three members of the fourth generation of this family of missionaries recently went to India to begin their life-work. It is said that there are now about 1,100 medical missionaries, 702 missionary hospitals, and 1,156 dispensaries in heathen lands. This estimate is probably low.

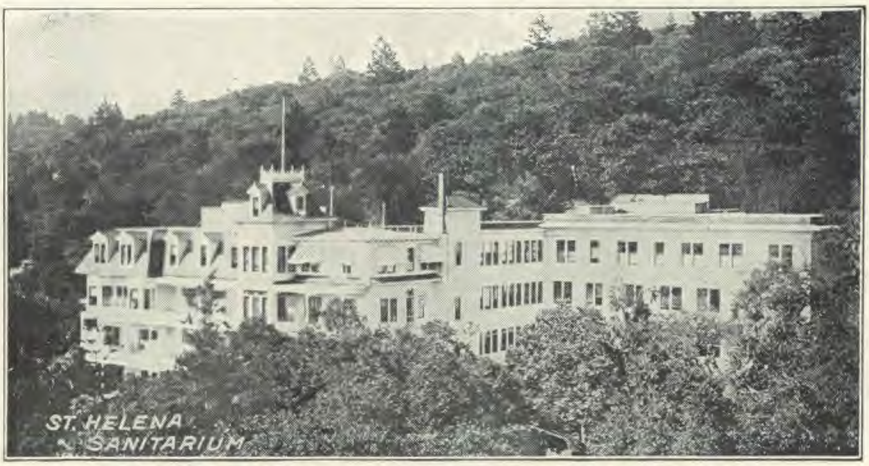
Effects of Hypnotism

In the *Journal A. M. A* of April 17, 1920, is an abstract (translated) from the *Berlin Clinical Weekly*, which speaks for itself. The writer of the article, E. Schulte, deplores the frequency of hypnotic exhibitions, as he has seen great harm come to those who have been hypnotized. He gives the case of a young woman who after being hypnotized presented marked mental disturbances. As she started for home, she insisted that she must go back, again and again, and at home she ran about with fixed eyes and outstretched hands, apparently insensible to her surroundings, though she recognized her friends. The hypnotist was finally sent for at a late hour, and succeeded in quieting her. After a restless night she went to her work, but was unable to attend to her duties and had to be sent home. She felt compelled to return to the hypnotist, and complained that she could not think clearly. After a week of this, Schulte hypnotized her in the presence of a colleague, and impressed on her that in future only Schulte and his assistant could hypnotize her, and that after this she would have no trouble. She was then very slowly and cautiously brought out of the hypnotic state, and in a few days had entirely recovered.

Correspondence School Catalogue

The Fireside Correspondence School catalogue for 1920 is now ready. Besides the usual matter, it contains a new plan for ordering books, an announcement of new studies, and pictures of faculty and board of managers. Send for a free copy. Address C. C. Lewis, Principal, Takoma Park, D. C.

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 Mountain, 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 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