

## HEALTH EDUCATION

BY DR. J. J. MIDDLETON  
Provincial Board of Health, Ontario

Dr. Middleton will be glad to answer questions on Public Health matters through this column. Address him at the Parliament Bldgs., Toronto.

Ill-health in various forms, and certain definite diseases can be prevented if more attention is paid to the kinds of food we eat. This is becoming more and more clearly understood and appreciated as a result of recent studies on what are known as accessory food-products or "vitamins."

On account of the absence of these substances many so-called deficiency diseases, such as rickets in this country, and beri-beri in the East, result. As long as there is a sufficient variety of foods, and the food in its natural state there is little danger of any such disease developing. But when the variety is limited, or the natural qualities have been impaired or changed through boiling, heating or preserving, as in canned foods, then it is that deficiency diseases may make their appearance.

Errors in diet often result in stomach troubles, due to over-eating or the use of too many meats and starchy foods such as potatoes, bread, etc. Other errors of diet include a too free use of foods fried in gravy, or of sauces, candies, etc., which often produce indigestion.

It is not, however, with over-eating or with indigestion in diet that this article deals. It is rather with the nature and ingredients of the food used as regards the presence or absence of vitamins in its composition.

The question is:—What are vitamins? I will answer in a somewhat round-about way:

Science for a long time has believed that the essential composition of food that maintains life consists of carbohydrates, fats and proteins in certain proportions, with due admixture of salts and water. Though this is theoretically correct, modern research on metabolism has shown that a pure diet of carbohydrates, fats, proteins, salts and water is not sufficient to maintain health. Something else must be present, although by comparison it is infinitesimal in amount, and this something is described as a vitamin.

A professor at Cambridge who has done much work on this subject, recently fed a number of rats and puppy dogs on an artificial diet of protein, fat, starch and sugar; and by carefully watching the animals he found that they ceased to grow, although the amount of food they consumed was actually more than what was necessary to maintain normal growth. On adding a small quantity of raw, fresh milk to this diet a marvellous improvement in the health and growth of the animals became evident. The improvement was not due to the lactalbumin or salts in the milk, as an equal rate of growth was obtained from protein and ash-free extracts of the milk solids, and from yeast, in exceedingly small quantities. This Cambridge professor therefore came to the conclusion that there was some other essential factor in food, in addition to the protein, fat and sugar, that is essential to growth.

The next question is "Are there more vitamins than one?" Yes, up to the present there are three kinds described, viz:—

(1) The Fat Soluble A, or anti-beri-beri vitamin.

(2) The Water Soluble B, or anti-beri-beri vitamin.

(3) The Water Soluble C, or anti-scurvy vitamin present in fresh fruits, vegetables, etc.

Nor are those carrying on the researches by any means certain that these three are the only ones.

### Baths by Order.

In the near future baths on board ship may become compulsory for all steerage passengers. This knowledge has struck terror in the hearts of some of those emigrants who prefer to be warm in the winter time!

This sudden attack of cleanliness is due to the fact that a steamship of the Holland-American line possesses a very particular physician who used to be with the United States Public Health Service. After inspecting the immigrants in his boat he immediately

made daily baths compulsory, much to the surprise and indignation of many of the passengers, some of whom had not been out of their clothes for months!

Every day during a recent voyage the steerage passengers were invited to bathe. If they protested they were seized and scrubbed, free of charge, by the doctor's bathing battalion, which consisted of stewards, sergeants-at-arms, and a few of the more intelligent immigrants.

The fact that no diseases broke out during this voyage speaks for itself.

That there are different vitamins is shown by the different diseases that result when certain foods are lacking in certain essentials. Take for instance the case of beri-beri, a disease that is very common in certain eastern countries where rice forms the chief article of diet, and where polished rice is used. Polished rice consists of the kernel of the grain with the husks removed, and this process involves not only the removal of the husk but also the outer lining of the kernel known as the "silver skin," which contains the vitamin.

A type of disease more heard of in this country is infantile scurvy, believed to be due to the absence from or deficiency in a diet, of a vitamin with well-defined antiscorbutic properties. Infants, fed for long periods exclusively on condensed milk or preserved foods, have been shown to sometimes suffer from a form of scurvy, with hemorrhages under the outer layer of the long bones. Where an infant is brought up entirely on boiled or sterilized milk, a small quantity of grape, orange or lemon juice should be administered daily. In this country scurvy is seldom seen nowadays except during times of want or among crews of ships on long voyages where the diet is of the tinned or canned variety almost exclusively. It has also occurred in construction camps in this country where canned goods form the chief articles of diet, and where fresh meat, milk and vegetables are not easily procured. This vitamin is also deficient in fresh vegetables that have been dried, or even kept for long periods without drying.

When vegetables are boiled the process should be short, and the vegetables not allowed to soak long. The sooner the boiling is finished and the vegetables removed the more nutritious they will be.

The fear of destroying the vitamin in fresh milk has been one of the chief objections to the wholesale pasteurization of milk. However, by exposing milk that has been previously cleaned by filtration to a temperature not exceeding 168 deg. F. for a short period, the vitamin in the milk is not destroyed but only slightly impaired. This cannot be avoided, however, and the deficiency is more than counterbalanced by the greatly increased purity of the milk after pasteurization, and the destruction of practically all the harmful bacteria that the milk might have contained.

The more this subject of vitamins is investigated, the more apparent it becomes that their absence or deficiency is associated with many of the diseases of metabolism which are so obscure, and which hitherto have been difficult to account for in human beings.

Mortar is comparatively an extremely small fraction in the materials that make up a house, but it is a very necessary part. Vitamins, similarly, are an infinitesimal part of the amount of food necessary for the maintenance of health and growth in the individual, but without these accessory food products the body will not thrive. The small fraction of vitamins usually yielded by articles that contain them is a serious difficulty in the way of finding out their exact nature and composition. It is improbable that vitamins are in themselves nutritive, but they produce co-ordination of metabolism. By this means the body is able to adjust itself to carry on life and maintain health under varied conditions and surroundings.

## Let This Food Help You to Health

Sound nourishment for body and brain with no overloading and no tax upon the digestion, is secured from

## Grape-Nuts

It embodies the nutrition of the field grains, and it makes for better health and bodily efficiency.

Ready to serve—an ideal breakfast or lunch. "There's a Reason"

### With the Boy Scouts.

"Gee! I wish I could belong to that troop," said a young Toronto Scout the other day when he heard of the plans the First Penetanguishene Troop is making for its summer outing. It is one of the most interesting enterprises yet attempted by Ontario Scouts and takes the form of an expedition from Penetanguishene down to Ottawa and perhaps Montreal by the route followed by Champlain and his fleet of two hundred war canoes in 1615. The boys will make the trip in canoes by way of the Georgian Bay and French River, across Lake Nipissing, down the Mattawa and the Ottawa, and if they go to Montreal, down the St. Lawrence too. The Hudson's Bay Company officers in North Bay and Mattawa are endeavoring to secure the old-time large voyageur birch-bark canoe of the Chasse-Galerie type, in order that the trip may be made as realistically historical as possible.

At the Victoria County Boy Scout Rally held in Fenelon Falls on Victoria Day the 1st Fenelon Falls Troop captured the George Beale 800 yard patrol relay race trophy which is one of the big incentives to Scout athletic work in that part of the province. In the other field day events, Fenelon Falls captured five first prizes and three seconds, while Lindsay took home four seconds.

The Scout Movement "keeps moving." Grimsby had one troop last fall. Since then it has grown so large that it has been found necessary to reorganize it as three separate troops under a District Scoutmaster, Mr. J. A. M. Livingston. And that is not all, because two whole patrols of boys who came from Beamsville have become the nucleus of a new troop with headquarters in their own town. Renfrew, too, has experienced a similar growth in Scout interest, and Kincardine has a troop which is also suffering from growing pains and plans are being made to divide it into two.

Preparations for the summer camps are proceeding wherever there are Scouts, according to Provincial Headquarters in Toronto. A recent double number of "The Trail," the Ontario Scout officers' paper, was devoted entirely to the subject of Camping and Camp Management.

## WHEN BABY IS ILL

When baby is ill: when he cries a great deal and no amount of attention or petting makes him happy, Baby's Own Tablets should be given him without delay. The Tablets are a mild but thorough laxative which regulate the bowels and sweeten the stomach and thus drive out constipation and indigestion; break up colds and simple fevers and make teething easy. Concerning them Mrs. Desre, Theberge, Trois Pistols, Que., writes: "I am well satisfied with my use of Baby's Own Tablets. I have found them of great benefit to my baby when he was suffering from constipation and I can strongly recommend them to other mothers." The Tablets are sold by all medicine dealers or by mail at 25 cents a box from The Dr. Williams' Medicine Co., Brockville, Ont.

### Miser.

I have seen many things,  
Too beautiful for words;  
Twilights tremulous with mist—  
Birds.

I have heard music  
That was to me—  
Soft as the clinging fingers  
Of the sea.

I have known many things;  
Now I am old—  
I am a miser  
Counting my gold.

### MONEY ORDERS.

It is always safe to send a Dominion Express Money Order. Five dollars costs three cents.

### Allowing Plenty of Time.

Parcel Post Clerk—"On that live turkey the postage will be a dollar and thirty cents."

The Poultryman—"Guess I'll start him on four bits' worth of stamps. I expect he'll lose enough weight on the way to make that about right before he's delivered."

Ask for Minard's and take no other.

### Dressed Like Adam.

In the wilds of the Chichibu district of Japan live a group of mountaineers clad only in the costume of Adam. Their existence was unknown until the taking of a recent census revealed their whereabouts.

Passing through the Crystal Valley, census officials were amazed to meet human beings, wearing long hair, whose only covering was leaves. They made no response when spoken to. Their chief occupation seems to be hunting with the bow and arrow and the making of charcoal, which they exchange in the neighboring districts for necessities.

It is thought that the ancestors of these weird folk were refugees of the Samurai class, who, defeated in battle hundreds of years ago, fled for safety to the lonely heights which surround the Crystal Valley.

Uruguay has about 1,600 miles of railroads, but only one tunnel.

Sufferers from rheumatism should eat celery; while bananas are useful in the case of those suffering from chest complaints.

## PALE AND NERVOUS SCHOOL CHILDREN

Need Rich, Red Blood to Regain Health and Strength.

Many children start school in excellent health, but after a short time home work, examinations, hurried meals and crowded school rooms cause their blood to become weak, their nerves over-wrought and their color and spirits lost. It is a mistake to let matters drift when boys and girls show symptoms of nervousness or weak blood. They are almost sure to fall victims of St. Vitus dance, or drift into debility that leads to other troubles. Regular meals, outdoor exercise and plenty of sleep are necessary to combat the nervous wear of school life. But it is still more important that parents should pay attention to the school child's blood supply. Keep this rich and red by giving Dr. Williams' Pink Pills and the boy or girl will be sturdy and fit for school. The value of Dr. Williams' Pink Pills in cases of this kind is shown by the statement of Mrs. Watson, Grand Falls, N.B., who says: "In the spring of 1919 my daughter Thistle, then 12 years of age, began to show symptoms of nervousness which developed into St. Vitus dance. She seemed to lose control of her limbs and at times every muscle in her body seemed to be twitching and jerking, and the trouble seemed to be growing worse. We finally decided to give Dr. Williams' Pink Pills, and the result was better even than we had hoped for, and she is now enjoying the best of health."

You can get Dr. Williams' Pink Pills through any dealer in medicine or by mail at 50 cents a box or six boxes for \$2.50 from The Dr. Williams' Medicine Co., Brockville, Ont.

### Truth.

When I must die I shall not fear the going;  
There will be daybreak somewhere,  
A new dawn  
Spreading before me and new strength bestowing,  
And I shall be no more an earth-bound pawn.

There will be life enriching, pulses leaping,  
Vision unveiled before my eager eyes;  
And I shall still be loving, learning, keeping  
The zest of life in some fair paradise.

I have no fear that I shall be but blended  
With Being infinite and undefined;  
Only the service of the body's ended,  
I shall not lose my eager soul, my mind;

I shall not lose my love, and you, O dearest,  
Seeking your way, will meet once more my own  
And when you fear me farthest find me nearest;  
All that is true, though each must go alone.

All that is true—but truth does not deceive me;  
These poor wise words no shield of comfort make;  
If it were you, and death did thus bereave me,  
If it were you—were you—my heart would break.

### Minard's Liniment Relieves Neuralgia

### How Tall Are You?

Most men are quite positive as to their exact height and would become indignant if you questioned the accuracy of their statements in that respect, but, as a matter of fact, no man can say, unless he has just then been measured, exactly how tall he is at any particular time. If the original measurement on which he bases his statement was made early in the morning, he has been crediting himself with too much height most of the time, while he has not given himself all the height to which he is entitled if the measurement was made in the evening. This for the reason that all persons are taller in the morning.

The disks of cartilage between the twenty-four vertebrae of the backbone yield considerably to the pressure due to the weight of the body when it is erect, and expand themselves while the body is in a recumbent position. The effect in the case of a fairly heavy man of average height may amount to a half inch, and in the case of a policeman or postman who walks upon pavements all day, the difference in height at morning and night might amount to three-quarters of an inch.

These are facts worth keeping in mind if you contemplate a physical examination for some appointment requiring a certain height, and you are very near the minimum. Do not stand or walk much before the examination—and take it in the early morning.

In Germany there are now only 813 men between the ages of twenty and thirty to every 1,000 women.

### AUTO REPAIR PARTS

For most makes and models of cars. Your old, broken or worn-out parts replaced. Write or wire us describing what you want. We carry the largest and most complete stock in Canada of slightly used or new parts and automobile equipment. We ship C.O.D. anywhere in Canada. Satisfaction or refund in full our motto. Shaw's Auto Salvage Part Supply, 923-931 Dufferin St., Toronto, Ont.

## BITS OF HUMOR FROM HERE & THERE

**Right Description.**  
Tenderfoot—"Gee, that dog has a long tail. It must be about three feet."  
First Class Scout—"Yes, that's his back yard."

**Habit.**  
Maid (reporting)—"There's a man at the door with a wooden leg, mum."  
"Thank you, Maggie; we don't need any."

**Right Description.**  
Poor Sutor—"Is it true that your father has lost his fortune?"  
His Lady Love (sighing)—"Yes, all is swept away, but you are left, dear!"  
"Great Scott! I should say I am left!"

**Dividing It.**  
A case came before a court involving the ownership of an eight-day clock. After listening to both sides, the judge turned to the plaintiff: "You get the clock."  
"And what do I get?" complained the defendant.  
"You get the eight days," replied the judge.

**Adding Class.**  
A family named Stubbs, which became very rich during the war, purchased a stately home.

It happened that someone who had known them in less prosperous days was in the neighborhood, and thought he would call. He did so, and asked for "Mr. Stubbs."

The butler regarded him with a perfectly straight face. "There must be some mistake, sir," he said. "This is the house of Mr. St. Ubbs."

**Quite True.**  
A pompous manufacturer of machinery was showing a stranger over his factory.

"Fine piece of work, isn't it?" he said, when they were looking at a very ingenious machine.

"Yes," said the visitor, "but you cannot hold a candle to the goods we turn out."  
"Indeed!" said the chagrined manufacturer. "What is your line?"  
"Gunpowder," was the reply.

### His Title.

The nine-year-old son of a New York doctor recently sought out his father and put to him this question:

"Dad, do you know what nickname they gave to Napoleon Bonaparte?"

Now the father desired that his son should have the pleasure of bestowing this information; so he evaded the reply by an interrogatory on his own part:

"What was it, my son?"

Whereupon, to the great astonishment of the physician, the lad replied very proudly:

"The Little Corpuscule."

### His Hearing Restored.

The invisible ear drum invented by Magaphone, fitting inside the ear entirely out of sight, is restoring the hearing of hundreds of people in New York City. Mr. Leonard invented this drum to relieve himself of deafness and head noises, and it does this so successfully that no one could tell he is a deaf man. It is effective when deafness is caused by catarrh or by perforated, or wholly destroyed natural drums. A request for information to A. O. Leonard, Suite 437, 70 Fifth Avenue, New York City, will be given a prompt reply.

Magie! Drop a little "Freezone" on an aching corn. Instantly that corn stops hurting, then shortly you lift it right off with fingers. Doesn't hurt a bit.

Your druggist sells a tiny bottle of "Freezone" for a few cents, sufficient to remove every hard corn, soft corn, or corn between the toes, and calluses.

Salt mixed with starch will prevent it from sticking.

Forest fires benefit no one and they rob the workingman, the merchant, the farmer, and indirectly every citizen. Forest fires are fought not only in the bush, but in towns and cities. When Canadians of town and farm and forest are all determined to stop forest fires, then our forests will be freed from the ravages of this fiend.

## ASPIRIN

"Bayer" only is Genuine



Warning! Take no chances with substitutes for genuine "Bayer Tablets of Aspirin." Unless you see the name "Bayer" on package or on tablets you are not getting Aspirin at all. In every Bayer package are directions for Colds, Headache, Neuralgia, Rheumatism, Earache, Toothache, Lumbago and for Pain: Handy tin boxes of twelve tablets cost few cents. Druggists also sell larger packages. Made in Canada. Aspirin is the trade mark (registered in Canada), of Bayer Manufacturing of Monoaceticacidester of Salicylicacid.

JOSEPH DROUIN, of Montreal, declares he suffered six years with dyspepsia but six bottles of Tanlac made a new man of him—Gained 35 pounds.



"I could hardly believe my eyes when I stepped on the scales after taking six bottles of Tanlac and found that I had actually gained thirty-five pounds in weight," said Joseph Drouin, 2194 St. Denis St., Montreal, who, for the past twenty-six years, has been passenger conductor on the Canadian Pacific Railway and is well and favorably known along the line of his run between Montreal and Mount Laurier.

"Before I started on this medicine I was in a bad way. For years I'd had to take my meals here, there and everywhere and, as the result of this irregular eating, my internal machinery got all out of working order. I lost all desire for food and what little I ate would form gas and bloat me up until I could hardly breathe. I became so nervous I couldn't sleep at all well at night and was often so tired in the mornings I didn't care whether I took my train out or not. I fell off twenty-five pounds in weight and became alarmed about my condition, for I had tried all sorts of medicine without getting any relief.

"Then, one day I read a statement in the paper that decided me to give Tanlac a thorough trial. Well, I never would have believed any medicine could do a man so much good in such a short time. It quickly settled my stomach and gave me such an appetite that I could eat three good square meals a day and no longer have any trouble with indigestion or gas and I sleep so well at night, even when on the road, that I think it would take a collision to wake me up. I now turn the scales at two hundred and ten pounds, which is ten pounds more than I ever weighed in my life and feel better in every way than I have for a very long time. Tanlac is the best medicine I ever tried."

Tanlac is sold by leading druggists everywhere. Adv.

### An Easy Thing.

Next to making his own mistakes the easiest thing in the world is to criticize the mistakes of others.

To clean a photograph wipe with a soft cloth wrung out in warm water and a little ammonia. Dry with another cloth.

## NOTHING TO EQUAL



### For Sprains and Bruises

The first thing to do when you have an injury is to apply Minard's famous Liniment. It is antiseptic, soothing, healing, and gives quick relief.

### America's Pioneer Dog Remedies

Book on DOG DISEASES and How to Feed Mailed Free to any Address by the Author. E. Clay Glover Co., Inc., 115 West 31st Street, New York, U.S.A.



## CUTICURA FOR THE DAILY TOILET

Use Cuticura Soap daily for the toilet and have a healthy clear complexion, soft white hands and good hair. Assist when necessary by touches of Cuticura Ointment. The Cuticura Talcum is also ideal for the skin.

Soap 25c. Ointment 25c and 50c. Talcum 25c. Sold throughout the Dominion. Canadian Depot: Lyness, Limited, 244 St. Paul St., W., Montreal. © Cuticura Soap shaves without stung.