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GOOD FOOD IS GOOD BUSINESS

MANY a person in Canada is suffering ill health and poor business just because he doesn't eat the right food. He does not realize that the happy-go-lucky stone-age way of eating anything that came handy is not the thing for this age of refinement.

To get the most out of life in the way of health, success and happiness, we need to live according to certain rules. Infinite opportunity is offered us for improvement in our diet. We can improve without parading behind every Pied Piper who pipes a tune to the effect that the mere taking of his pills will turn us into new men and women.

One wise man said—and we have come upon nothing to deny it—that ninety per cent of all so-called "stomach trouble" is due not to any inherent weakness of the organ itself but to a misunderstanding between the stomach and its owner.

The purpose of this article is to investigate our food needs; to tell what authorities believe is necessary for body maintenance, growth and physical effort; and to show how the expenditure of a little thought can bring about friendly understanding between a man and his stomach, without a "veto" in a year's meals.

One principle that applies to everyone is: set your standards high, even though you can't attain them. It is worth while trying sincerely, because even a little success will mean a great deal to you in increasing your resistance to disease and enhancing your joy in living.

Hunger, Seen and Hidden

An experiment in Minnesota a few years ago, involving thirty-two volunteers, revealed not only the effect of semi-starvation on behaviour, intelligence and personality, but the order in which symptoms developed. First was tiredness, followed by muscle soreness, irritability, apathy, sensitivity to noise, loss of ambition, loss of self-discipline, decrease in mental alertness and in the ability to concentrate, moodiness and dizziness.

That was a case of deliberate semi-starvation over a period of months. More to the point is the result of surveys made in Canada in 1939—1940, reported in an article in the *Canadian Public Health Journal*. Roughly speaking, only 40 per cent of the people studied were adequately nourished, 40 per cent were in a border-line state, and 20 per cent were seriously undernourished.

Still more striking is the statement by Dr. L. B. Pett, Chief of the Nutrition Division of the Department of National Health and Welfare, to the effect that more children died in the year 1944 from nutritional deficiency diseases than from infantile paralysis. To this he added: "... despite the fact that our present knowledge is sufficient to avoid malnutrition."

No one would suggest that forty per cent of the people in Canada go around in a perpetual state of hunger, in the ordinary sense of the word. There is another kind of hunger, the hidden hunger that lets people pine away, go through life sluggishly, and finally die before their time, even when they are eating plenty.

Many of us drag our way through life, suffering all kinds of ailments that could be avoided by better feeding.

We feel depressed, and blame our woes on creditors, the family or the boss, when perhaps we suffer from vitamin shortage. We feel fatigued, out of sorts and listless, due perhaps to nothing but improper food. Our tables may groan with good things, and yet we may be starving ourselves through ignorance and indifference.

We must not deceive ourselves by thinking that poor diets are confined to low-income groups. It is quite possible to spend a lot of money on food, and yet not be getting the food values that lead to health.

Nutrition in Canada

Canadian diets can be improved. An effort to better them was started in 1939 by the Canadian Council on

Nutrition, resulting in a guide called *Canada's Food Rules*. Here are the daily requirements as revised in 1950:

1. Milk — Children up to about 12 years, at least one pint; adolescents, at least 1½ pints; adults, at least ½ pint.
2. Fruit — One serving of citrus fruit or tomatoes or their juices, and one serving of other fruit.
3. Vegetables — At least one serving of potatoes, and at least two servings of other vegetables, preferably leafy, green or yellow, and frequently raw.
4. Cereals and bread — One serving of whole grain cereal and at least four slices of bread with butter or fortified margarine.
5. Meat and Fish — One serving of meat, fish, poultry or meat alternatives such as dried beans, eggs or cheese. Use liver frequently.

In addition, the rules suggest that eggs and cheese should be served at least three times a week. Vitamin D (which is obtained in cod liver oil, eggs, specially fortified foods, and concentrated in tablets) is essential for all growing persons and expectant and nursing mothers. The daily intake should add up to at least 400 International Units, equal to approximately a teaspoonful of cod liver oil.

The rules are not designed for a quick campaign, but are part of a long-term programme. They are not intended for spasmodic "drives" but for day-in, day-out observance, and the food should be spread over at least three meals a day.

One reason why we are not better than we are nutritionwise is that education has not yet found a way of teaching us so that the lessons "take". Unless we are rickety or too thin or too fat or too something else we don't think the rules of eating are meant for us. We thrust aside salads, disdain fruit, refuse whole grain cereals, and don't touch milk except in our tea or coffee.

The solution in both school and public must include these: (a) making educational efforts more interesting by giving practical evidence; (b) explaining nutrition in terms of research discoveries rather than mere lists of foods that "should be eaten"; and (c) combining educational value with direct action through school lunches or supplements.

The Right Foods

Food may be divided into three main classes: body-building foods, to make good your wear-and-tear; protective foods, to ward off disease; and energy foods, to give you power and warmth.

Good nutrition involves calories (energy), protein (growth, maintenance and repair), vitamins and minerals (protection), and "balance".

It is not necessary to carry a set of scales and a measuring glass to the dining table, but only to apply common sense to a knowledge of the qualities and attributes of foodstuffs. The amounts of individual items vary from time to time in the same person, depending on many external and internal factors such as age, sex and activity. No figure in any general table should be taken as an absolute value to assess

your dietary requirements. These general tables are only approximate. Their use calls for good sense and interpretation in keeping with your special environment and requirements.

Take calories for example. A published table may say that the average man needs 2250 calories a day. But if he is sitting at home doing nothing he may need only 2000, while if he is out chopping down trees he may need 4000. Another authority may give the amounts in calories per pound of body weight for various ages; here, again, caution is needed to interpret the figures in terms of what is being done with the body.

The business executive, by the way, will be disappointed on learning how few calories are required for brain work. Dr. G. A. Dorsey says in his interesting book *Why We Behave Like Human Beings*: "With the brain actively at work so little extra energy is consumed that the calorimeter cannot find it." On the other hand, a jazz-band drummer uses up 7200 calories daily. A nutritionist, commenting on this figure which was given in a British publication, remarked: "He must have drummed continuously day and night."

Cooking is Important

Besides making sure that the range of food is such as to provide the essentials of good diet, we need to watch the cooking to ensure that the goodness is kept there. A sensible word of advice was given by Joseph of the Savoy: "Make the good things as plain as possible. God gave a special flavour to everything. Respect it. Do not destroy it by messing."

The extent to which good food can be converted into valueless food by unintelligent preparation is not generally appreciated. It can make the difference between health and malnutrition. Everyone knows that leafy vegetables are among the essentials of a good diet, but their goodness too often goes down the drain with the cooking water. The boiled fibrous tissue we eat has lost not only its savour but much of its essential chemical matter. Mineral salts have been boiled out. Water soluble vitamins have been lost.

An investigation made at the request of the Government of Newfoundland by nine Canadian, British and United States doctors resulted in significant findings.

The first of two diet and health surveys, five years apart, revealed that the average person in Newfoundland showed no fewer than eight symptoms of deficiency diseases; malnutrition in early life resulted in three out of four dying before the age of 40; only one person in ten reached 60; the overall death rate was twenty per cent higher than in Ontario, and the death rate among children was two to three times the North American average.

The investigators were puzzled at first, because the diet, while low in eggs, milk, citrus fruit and tomatoes, was good enough in fish, potatoes, cabbage, bread and cereals to justify a higher record of health.

An article in *Saturday Night* gives the explanation: "It was not until the investigators went into the kitchens of the Islanders that they discovered that

they were almost literally committing suicide by their cooking methods." Potatoes, for example, were boiled after peeling, losing 50 per cent of their ascorbic acid; they were cooked in the morning and held until night, by which process they lost *all* their ascorbic acid. Cabbages were boiled for one to two hours, losing 90 per cent of their ascorbic acid.

The second survey showed great improvement, reported by Dr. Russell M. Wilder of the Mayo Foundation last December. The government took steps recommended by the doctors. Flour was enriched with thiamine, niacin, riboflavin, iron and calcium, and margarine was fortified with vitamin A. Canned milk was imported. Orange juice was made available to pregnant women and nursing mothers. School-children received milk and cod liver oil.

The result of these diet changes, all in forms which could not be ruined by bad cooking, was immense. The death rate fell from 12.1 to 10.5 per thousand; deaths from tuberculosis fell sharply, from 135 per 100,000 to 101; infant mortality dropped in three years from 102.3 per 1,000 to 61; and — significant this — the children who had been "like little wooden Indians" on the first visit "were now noisy, rambunctious and inquisitive, as children ought to be."

It should not be thought that Newfoundland alone is suffering malnutrition due to poor cooking. Similar findings have been made by the University of Pennsylvania, which studies hundreds of upper-income Philadelphia families.

Besides good selection of basic foods and good cooking, variety is needed. Science can analyse a pork chop, and say how much of it is protein, but science cannot fathom a man's wish for a pork chop and say how much of it is true hunger, how much fancy, and how much a love of a beautiful-looking meal.

The safest guide for the food provider is variety of diet and variety in cooking. Peanuts are good food, and there are 105 different ways of turning them into tasty dishes. Cheese is a concentrated form of the most important nutritive elements of milk, and in a recent book review of the *New York Times* there was advertised a book containing 250 unusual recipes for cheese cookery, from hors d'oeuvres to dessert.

Eat What You Need

Every age group has its own special requirements, and all are important.

Young people up to twenty years need the right kind of food to live, to grow to maturity, and to acquire education. The combined effect of strenuous athletics, school and home study, the tension of examinations, and the general upset feeling of adolescence, all combine to put stress upon the body machinery. Lunch is important, and very often an after-school snack (such as a peanut butter sandwich, and a glass of milk) would be a lifesaver.

As the years pass, and we slow down to a decorous pace, the energy of youth is not needed, and we don't exert the muscular strength of middle life. We do need reasonable amounts of protein, and we should be

satisfied with foods that our experience has taught us are easily digested. Milk, fruits and vegetables in full amounts continue to be important.

Women may lay down the nutritional law in their homes, but they are often guilty of breaking their own rules.

Men emerge from some surveys with a better record than women, except that they are deficient in vitamin C because they brush aside "rabbit foods" like salads and raw vegetables. On the whole, men eat a good lunch, while women just nibble at something. Men make up in sheer volume of food for their carelessness in selection. A survey in Philadelphia among families in the \$2,500 and more income range found that four out of five married women were undernourished.

About Eating Too Much

"More" is not necessarily "better" in nutrition. A Chinese poet remarked: "A well-filled stomach is indeed a great thing: all else is luxury." It may be also a pain.

An occasional feast matters little; it is the continual daily overloading ourselves with food that is so injurious and depressing. If you want to eat like a ditch-digger you must exercise like a ditch-digger.

Overweight is a problem of great importance. It shortens life, decreases efficiency and increases liability to many diseases. A survey in Canada, reported by Dr. Pett in 1948, revealed that "rarely have we encountered 'overweight' in less than ten per cent of the adults in a given area."

There's no use in asking a doctor "is lobster Newburg fattening?" Such a question leaves out the important factors. It does not tell the doctor how much lobster Newburg there is, how often it is eaten, the amount of exercise, or the caloric requirement of the consumer. Every food that has any food value at all is fattening if taken in large enough quantities.

Medical men are opposed to all violent attempts at weight reduction. Such methods as amount to starvation for all practical purposes often do permanent damage to the liver or heart. The use of drugs is unwise, except under the care of a physician.

The simplest way to reduce is to cut down the amount of fattening food eaten at each meal, and this may be done, under competent advice, without hardship. Don't try to get rid in three weeks of the excess poundage you spent ten years accumulating.

Protective Foods

The average diet of all classes in western countries has tended in recent years to include larger amounts of the protective foods. Cereals and other energy-bearing foods retain the important place they have always had, but modern science attaches special importance to the need for supplementing these diets with foods rich in vitamins and mineral salts.

Vitamins didn't trouble anyone up until 1906, because they had not been discovered. Then the great English physiologist, Sir Frederick Gowland Hopkins, of Cambridge, turned the attention of the world to the

subject of diet deficiencies. He found that the most carefully balanced diet of carbohydrates, fats and proteins is insufficient for health if it lacks the tiny traces of those complex chemical substances that we call vitamins.

Adequate amounts of vitamins can be obtained, for most people so far as present knowledge goes, by eating a variety of the common foods. Persons vary in the amounts of vitamins needed, and in some cases the use of concentrates and synthetic vitamins at the hands of a physician offers advantages. For example, the acute symptoms of pellagra can often be cured in 48 hours by large doses of niacin supplemented by yeast, while it might take as long as 48 days to effect a cure with an ordinary good diet. It is wise to obtain the advice of your physician to make sure you get the vitamins you need.

Cost of Good Diet

We must emphasize the possibility of obtaining a good diet for little expenditure. There are many pamphlets issued by departments of health to show how this is done.

Commodities should be judged by their intrinsic soundness and food value rather than by glamorous packaging. Inefficient and impulsive buying may prevent your family from obtaining proper food value for the money expended. Lack of interest, lack of knowledge of elementary facts about the nutrient values of individual foods, and lack of skill in cooking; all these may contribute to malnutrition.

If the household income is above the poverty level, it is possible for the housewife to lay out her food budget in a variety of ways, and by careful buying to obtain a satisfactory diet at moderate cost. Those who have gardens can plan their production with definite nutritional improvements in mind. If it comes to a choice between food and some other commodity of household use, it is ridiculous even to consider reducing the diet by skipping or cutting it.

The Montreal Diet Dispensary, under direction of Miss Nan Garvock, issues a *Minimum Adequate Weekly Food List* which gives complete food requirements for a family made up of two adults, two boys 6 and 12, and a girl 10. Since Montreal has the highest cost of living index of all Canadian cities, the cost will be no higher elsewhere. The copy we have before us, dated May, gives the total cost for a week, \$18.41, and the cost per person per day, 53 cents. Here is a skeleton of the plan: a detailed sheet will be sent by Miss Garvock on request, together with a sample family menu pattern.

Milk, 21 quarts; 1 pound cheese; 1½ dozen eggs; 3 dozen oranges; 1 tin (28 ounces) tomatoes; 2 pounds dried fruit; 5 pounds other fruit (apples, bananas, plums, pears); 20 pounds potatoes; 4½ pounds green vegetables; 13½ pounds root vegetables; 4 pounds whole grain cereals; 11 (24 ounce) loaves of bread (whole wheat or Canada approved); 2½ pounds refined cereals (flour, macaroni, rice, cornmeal); 6 pounds of meat; 1 pound fish; 1 pound liver, kidney or heart; 1 pound dried vegetables (green peas, navy

beans); 2 pounds butter; 1½ pounds other fats (lard, peanut butter); 2½ pounds sugar; 1¾ pounds other sweets (molasses, dark honey, jam); and cod liver oil (for children.)

A Personal Inventory

It is time to check up. Are you well nourished, or do you need to eat better?

There are two easy ways to find out. Ask your family doctor, who knows your health history and environment. Or write to your provincial health department for what is called a *Score Sheet for Each Day's Meals*. When you have marked this for two or three weeks you will have a good idea as to whether you are starving yourself of some needed food — and this may go far toward explaining your fatigue and other symptoms of less-than-the-best-possible health.

Eating a special diet and cultivating a relaxed attitude will no more remove troublesome gallstones than they will put back in place a dislocated joint, but they can perform helpful wonders when intelligently applied. Moderation, thoughtfulness, variety and regularity are the key notes in diet, and if they are not observed — if you eat hugely of the wrong things, or neglect to think of the necessary things, or alternate starvation (like skipping breakfast) with surfeit — then you must expect your digestive system to act up, and you may be surprised by the variety of disturbances it can cause.

Digestion, even of the best food, is interfered with by emotional stress. One should be in the best possible humour when eating. When one is angry, the stomach stops its activity. When one is afraid, the digestive functions are paralysed.

Is This Your Picture?

You got up this morning, wolfed your tiny breakfast, raced for a train or street car, scanned the alarming newspaper headlines, and arrived at your office frustrated by world events and tense with worry over your own problems. New troubles came in your morning mail and by telephone. Other people — your customers and your associates — were worried, and you had to pour enthusiasm and hope into them. By eleven o'clock you had used up a day's reserve of energy. You went to lunch. You ate too fast and too much, and never for one minute stopped thinking and talking business or worrisome politics or alarming world situations. By three o'clock you were loggy from over-eating in digestion-inhibiting circumstances. By four o'clock you were punch drunk. You staggered home, wondering whether the effort was worthwhile, and sat down to another hearty meal. Even if you loaf around all evening and go to bed early, tomorrow will be just another such day. That is, unless in reading pieces like this you decide such a life isn't worth living and that you will do something about it.

The "something" that needs doing is easy once you get started. Check your diet, get some fresh air regularly, take some exercise, and learn to relax. These are the four legs on which good health and energy rest.