

**RELATIVE VALUES OF FOODS.**

Is milk, after all, the most practical and valuable of foods? In ordinary time the ordinary person would not ask the question, but it is being asked very frequently nowadays and will continue to be if the "education" of the consumer goes on as has been suggested. Flora Rose, in an article in Hoard's "Dairyman", makes a careful study of relative economy of milk, and concludes substantially as follows:

1. That no foods can bear investigation more successfully than milk; that it is not only a cheap food, but one whose values cannot be estimated in dollars and cents. Although it is not the cheapest source of energy, it is, nevertheless, an important source of energy and its energy-yielding substances, the protein, the milk sugar, and the butterfat, all have special value.
2. Milk is a cheap source of protein because the protein that it contains is of a kind particularly valuable for building tissue.
3. The fat of milk has peculiar advantages over many fats because of its growth-promoting properties.
4. Ordinarily milk is the cheapest and most valuable source of lime, unless it is discovered that lime in water can take the place of lime in milk.
5. Milk is a valuable and cheap source of phosphorus.
6. Milk is deficient in iron, but the iron that it contains is particularly well utilized.
7. Milk is the most important of the three foods, milk, eggs and meat, which are the chief sources of a factor in food that is soluble in fat, that is essential for growth and health, and that is called "fat soluble A."
8. Milk is one of the most important sources of a factor in foods soluble in water, that is essential to growth and health and that is called "water soluble B."

The proof that milk is a cheap food is not the price paid for the quart, since even at fifteen or twenty cents a quart milk is a cheap source of nutritive substances always needed by the body, but particularly needed during the growth period. The energy that a food may yield is measured in terms of the calorie. The greater the number of calories a digestible food will furnish for a given amount of money, the cheaper the food as a source of energy. If ten cents is to be spent and the particular need to be considered is the energy need, the problem is how to invest that ten cents in order to buy the most energy. Ten cents will buy the following amounts of energy in a few of our typical foods:

	Calories
Milk at 10c a quart . . . . .	672.5
Milk at 8c a quart . . . . .	840.1
Round steak at 26c a pound . . . . .	271.0
Eggs at 35c a dozen . . . . .	234.0
Eggs at 55c a dozen . . . . .	153.0
Bread at 6c a loaf . . . . .	1713.5
Oatmeal at 5c a pound . . . . .	3601.5
Cornmeal at 4c a pound . . . . .	4037.0
Cheese at 25c a pound . . . . .	798.0
Butter at 50c a pound . . . . .	698.0
Butter at 40c a pound . . . . .	872.0

These figures quickly convince one that milk is not the cheapest source of energy that can be included in the dietary, although it compares more than favorably with meat and eggs; that a combination of milk and cereal makes a cheaper energy-yielding meal than milk alone; that cereal alone is cheaper still.

Figures show that the amount of protein which various common foods will supply for the same amount of money may be seriously misleading. They should be accompanied by qualifying statements concerning the value of the protein from various sources. For example, ten cents will buy:

	Grams protein.
Milk at 8c a quart . . . . .	40.00
Milk at 10c a quart . . . . .	32.00
Cheese at 25c a pound . . . . .	52.26
Round steak at 26c a pound . . . . .	37.14
Eggs at 35c a dozen . . . . .	20.60
Eggs at 55c a dozen . . . . .	13.85
Dried lima beans at 10c a pound . . . . .	82.10
White bread at 6c a loaf . . . . .	61.50
Cornmeal at 4c a pound . . . . .	104.30
Oatmeal at 5c a pound . . . . .	151.30

Hoard gives the following table to show what percentage of various proteins eaten by pigs is used for building tissue:

	Per cent.
Oil meal proteins used for building tissue . . . . .	16-17
Wheat protein used for building tissue . . . . .	20

Oat proteins used for building tissue . . . . .	25
Wheat germs protein used for building tissue . . . . .	40
Caseln of milk used for building tissue . . . . .	45
Skim milk proteins used for building tissue . . . . .	63

In spite of the fact that these figures are not the result of experiments on human beings, it is still reasonable to conclude that they show that milk is a decidedly superior source of protein for general human consumption and that it is a particularly good source where the growth is taking place; that the amount of protein required in the daily dietary may be less if milk or cheese form a considerable part of the diet than when food such as the cereal foods are mainly depended upon; that milk is not an expensive source of protein.

**SOME OF FRANCE'S AFTER-THE-WAR PROBLEMS.**

Much thought is being given to the probable future requirements of France and Belgium, in raw materials for the rebuilding of the towns devastated by the war. Predicting an extraordinary demand, many Americans anticipate from prices for some years after peace has been declared. The question of giving long terms of credit is also being discussed.

The people of France are considering the matter, but from the viewpoint of the buyer rather than of the seller, and are already asking themselves how their country can afford to import vast quantities of products and thereby become heavily indebted to the outside world. A very interesting article upon this question which recently appeared in L'Opinion de Paris" and is translated thus. In translating we have taken the liberty of converting francs into dollars at the rate of 20 cents each.

"On every side one hears of large industrial and commercial corporations making preparations to continue business after the war on the old basis, and further to make every effort to substitute French products for German goods in the markets that have hitherto been controlled by the latter country. The foreign trade of France is attracting much attention in many neutral countries. The question so far as we are concerned is whether foreign markets are the most suitable for the development of our national wealth. It is contended, for example, that the rapid prosperity of the United States in the past was due to the fact that the greater part of the country's national production has been consumed in the domestic trade.

"On the other hand Germany may be brought up as an opposing argument. The real truth, however, is that the Germans have of late years realized that their export trade was not bringing results commensurate with the efforts expended. The German consumer was compelled to pay a premium on everything he purchased, for the sake of the nation's export trade. In other words the home market has been paying the general expenses of the industries in order that German manufacturers might sell their wares in foreign markets at lower figures than those of their American, French or British competitors. It is because Germany has realized that her export trade was not giving the results that had been expected that her ambition during the last few years, has been to extend her foreign commerce. Long experience with German commercial affairs has convinced us that this was the chief cause of the enormous development of pan-Germanism since 1907 and indeed the real determining factor in the outbreak of war.

"At the conclusion of hostilities there will be a danger that we will become fascinated with the wonderful prospects in our foreign commerce, instead of facing our economic situation with its attendant problems. Before the war, France was in a condition of industrial security, a fact amply demonstrated by the stability in the rate of foreign exchange. Our importations cost us roundly \$320,000,000, in addition to which we paid a tribute of \$100,000,000, for freight, to the foreign merchant marine. Now if we have to turn to foreign sources for the materials that we require to reconstruct wars ravages, our liabilities will exceed our assets by \$800,000,000.

"A single example will serve to show the increased costs of necessities with which we shall have to cope. In 1913 we imported in the neighbourhood of 20,000,000 tons of coal, at a value slightly exceeding \$100,000,000. The price of coal today has risen to four times the level of 1913, that is to say, in order to obtain the same quantity of coal this year, we have to spend \$400,000,000 instead of \$100,000,000.

"It is likely that these high values will continue for several years after the war. The question then arises as to how France can face an annual excess of imports over exports amounting to three or four

billion dollars? The saving clause may be found in our colonies.

"If we study the table of our imports for the year 1913, we find that from a total of \$1,680,000,000 we can deduct \$160,000,000 as representing importations from our own colonies. This gives us \$1,520,000,000 as the cost of actual purchases from foreign countries. This immense sum, however, includes \$940,000,000 for raw materials that could be supplied by our colonies.

"In the following table will be found the values of different raw materials imported yearly into France prior to the war:

Wool . . . . .	\$122,800,000
Cotton . . . . .	114,800,000
Cereals . . . . .	96,800,000
Silk . . . . .	70,800,000
Minerals . . . . .	56,000,000
Oils . . . . .	52,000,000
Hides and leather . . . . .	44,000,000
Wood . . . . .	42,000,000
Coffee . . . . .	41,000,000
Wines . . . . .	23,400,000
Rubber . . . . .	20,600,000
Vegetables . . . . .	17,000,000
Feathers . . . . .	14,800,000
Jute . . . . .	14,600,000
Pulp and paper . . . . .	13,400,000

"Why should we buy from foreign countries products that we are ourselves in a position to supply; and for which we will not be obliged to pay in gold; and on which we can realize the double profit of buying and selling?"

**THE OUTLOOK IN TEA.**

Questioned as to the alleged shortage of tea supplies local dealers and jobbers say that we will have to look to both China and Japan for the greater portion of our imports in this line until the present embargo is lifted. Asked as to whether it is likely that the substitutes will find as ready sale and favour in the eyes of the public as have the Indian and Ceylon varieties various opinions were expressed.

"It is largely a matter of personal like and dislike" said one firm. "The people have been used to the teas we are now selling and if we place a different variety on the market its newness may appeal to them and then again the change may be distasteful to them. The experiment will have to be tried before any definite answer can be given."

Another jobber expressed the opinion that the public would not take to the proposed change. "Ninety per cent of the tea-drinking public" said he "drink tea because it is pleasing to them and because they find it more pleasing than any other beverage. They have one particular brand of tea and they use it. Any attempt to make such a drastic change as is involved in that of substituting the Japan product for that from India and Ceylon will not in all probability be met very graciously."

Canada consumes about one thousand 100-pound chests of British grown teas per day, while the United States consumes about the same amount of the British grown variety. The question therefore of securing sufficient ships to bring over this quantity assumes serious proportions when we consider that in the imports up to January 31, that it for ten months since the embargo of the British Government went into effect, there has been a falling off of 2,073,597 pounds, a condition of affairs which is attributed to the tendency of buyers to hold off for a falling market. It is expected that when the figures for the fiscal year ending March 31 are published it will be seen that the decline is much more marked.

Canadian dealers are suffering materially from the effects of the British embargo in that large quantities of tea which were on their way from the East to Canada via London were held in London and about 40 per cent. of these shipments were taken by the government at a shilling a pound while the remainder of the supplies were required to be sold to the British public.

It is the general opinion that when the Oriental market is opened practically no effect will be felt on account of the fact that people have developed a taste for the Indian and Ceylon varieties of tea, a taste which will not be supplanted by the products of Japan and China. Dealers all believe that if buyers will only buy for immediate needs and not attempt to stock up that there is no danger whatever of a shortage.