

As I said before, it is very hard to tell exactly how much of these three things are necessary for health. The amount varies in different persons, and it varies also in the same person from time to time.

I know a geologist, that is, a man who studies rocks. During the summer he is out in the fields, or in the woods, walking miles and miles every day. He chips off pieces of rock here and there and comes back to his camp every night with a bag full of stones on his back, and pretty well tired out. This hard work he keeps up for months. In autumn, when the snow falls, and he can do field work no longer, he goes into a small office in a city and studies the pieces of rocks which he has gathered during the summer. This winter work is very different from that of the summer. In the office he gets little or no exercise—his muscles and nerves do very little work. But as he usually gets back to the city with a good appetite, he eats just as much as when he was out in camp. The blood sucks up most of the good of the food; but as the muscles and nerves have not been exercised, they do not need so much nourishment, and so the blood cannot get rid of all the nourishment which it has got from the food. The consequence is that the extra nourishment goes round and round the body from head to foot, doing no good, in fact doing harm. So the geologist got sick. He had headache, and was dizzy, and had pains in his stomach and liver. Being a thoughtful fellow, he soon suspected what was wrong. He reduced the amount of his food, took more exercise, and was soon all right again.

In a similar way, I have known young men, who have been working hard upon the farm, fall sick when they have given up this outdoor labor and gone to school. The change is too sudden. It should take place gradually. The amount of food should be lessened and exercise should be taken either in the form of long walks, or by taking part in such games as football, hockey, or gymnastic contests.

So you see that the amount of food which we eat should change with our occupation. It should change with the season, also. In the summer we should eat more fruits and vegetables; in the winter, more curdy matter and fats. Nansen, the famous Arctic explorer, tells us that he and his men used to get up in the middle of the night to eat fats, or drink oil. They had a strong craving for this kind of food. It was needed by the body in order to make heat. The great cold of the north made them eat great quantities of fat, which they would have loathed, when in their southern homes.

Bunge's Table, showing parts in 100 of the three kinds of real foods.

<i>Foodstuff</i>	<i>Proteid.</i>	<i>Fat.</i>	<i>Carbohydrates.</i>
Apples	0.4		13
Carrots	1.1	0.2	9
Potatoes	2.0	0.1	20
Human Milk	2.	4.	6
Cabbages	3.3	0.7	7
Cow's Milk	3.4	4.	5
Rice	8.	0.9	77