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HOUSEKEEPERS' CHAT

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(FOR BROADCAST USE ONLY)

Subject: "MINERAL MATTERS." Information from the Bureau of Home Economics, United States Department of Agriculture.

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When you hear the word "mineral", it doesn't usually suggest food, does it? When you hear about calcium, for example, you may think of limestone; phosphorus may suggest old-time matches; or iron, a material strong enough to bridge rivers. These words may not appeal to your appetite, but they stand for indispensible food elements for body-building. Calcium and phosphorus you need to build bones and teeth. Iron you need for good blood. The body gets these materials in food and a shortage of any one of them very soon causes trouble.

But nobody needs to go short on minerals. All you have to do to get your quota is to choose foods that provide them in the form of "mineral salts". Plants use mineral substances that they get direct from the soil. We eat plants, or we eat animals that have eaten plants, so we get these same minerals, though in a rather roundabout way.

We need to choose food for its mineral value just as we select it for its energy and protein and other values. And here again, our different foods vary. Nearly all foods contain at least a trace of each of the important minerals and some are rich in several of them. For example, milk is most useful as a rich source of calcium and is also rich in phosphorus. But it is poor in iron. Eggs are rich in iron and phosphorus, but carry almost all their calcium in the shell.

Our bodies need more of some minerals than others. We need a lot of calcium which is <u>not</u> abundant in many foods, and we need a lot of phosphorus which <u>is</u> plentiful in many foods. We need only a little iron, but that little is hard to get because even the foods rated as "iron-rich" contain so little of it. Nutritionists help simplify the mineral problem for us by saying that if we make sure of our calcium and iron, the phosphorus will take care of itself because we can get it in so many foods.

Nutritionists say that American diets are very likely to have a shortage of calcium. Calcium is unevenly distributed in the common foods, you see. And we need a very large amount to build and keep up our bones and teeth. Children particularly need a good deal of calcium for they are in the building stage. A shortage of calcium or phosphorus in a child's diet means stunted growth. The bones either do not develop or they are so weak and fragile that the child may develop rickets. This easily prevented disease leaves crooked bones and other deformities for life. (Of course, another necessity for bone and tooth building is vitamin D.)

As milk supplies both calcium and phosphorus more easily and economically than any other food, nutritionists recommend a quart of milk a day for every child to make good strong straight bones. Since we grown-ups also need calcium to keep our bones and teeth in repair, our quota is a pint a day in some form -- either to drink or in soup, chowder, cheese, or sauce.

Milk, then, stands at the top of the list of foods rich in calcium -- and this includes skim milk, buttermilk, and whole, fresh, evaporated or dried milk and also cheese. Next to the milk products, come the greens -- beet tops, cabbage cauliflower, chard, collards, dandelions, kale, mustard and turnip tops. Some of the sirups, too, are good for their calcium -- sorghum sirup, sugarcane sirup and molasses.

Iron is not so easy to supply. No one food will furnish the day's quota of iron. The best sources of iron among foods from animals are: egg yolk; meat, particularly liver, kidney, brain and heart; also lean muscle of beef, veal, pork and lamb, the dark meat of poultry, and oysters and shrimp. In the vegetable kingdom, the best iron foods are the green leaves, particularly turnip and beet tops, dandelion and mustard greens, watercress and spinach, kale and broccoli leaves. Dried fruits rate for their iron. So do whole-grain flours or cereals; and molasses, sorghum sirup and sugarcame sirup. So do beans and peas of all kinds, and nuts, particularly almonds and hazelnuts, walnuts, pecans and hickory nuts. Each of these various types of food contains a little iron, but it takes several iron-rich items to furnish a day's supply.

As we were saying, you can find phosphorus in many foods. Particularly rich in this mineral are milk and cheese, eggs, meat, fish, oysters, lobster, shrimp, clams, beans and peas, whole grains, cornmeal, and some of the greens.

And as we were saying, most foods contain at least a trace of all the food minerals, but foods rich in all 3 of the essential minerals are rare. Two sea-foods -- oysters and shrimps, are rich in all 3 -- calcium, phosphorus, and iron. Milk is rich in 2 -- calcium and phosphorus. So are clams and lobsters. Only the greens and the sirups mentioned -- molasses, sorghum and sugarcane -- are rich in calcium and iron both. A good many foods are rich in phosphorus and iron but this combination is less important.

So when you come to planning meals, foods rich in bone and blood-building materials will be among your first consideration naturally. You'll think of your minerals as much as your carbohydrates and fats for energy, and your protein-rich foods for muscle-building. The Bureau of Home Economics suggests mineral-rich foods to include in a day's menu at very moderate cost. On this menu, breakfast includes dried apricots or peaches; cereal and milk; and whole-wheat toast to provide a good supply of calcium, phosphorus and iron to start the day. A lunch might include an oyster-milk stew, or an egg salad with a glass of milk and gingerbread. Dinner might include a milk soup, lean meat or liver, and greens of some kind. If it happens to be a meatless meal, you might serve baked beans, brown bread and greens or a green salad.

And that finishes the mineral news I have for you today.

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