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CONSIDER THE FISHES

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More and more we have come to realize the truth in the adage that "an ounce of prevention is worth a pound of cure," especially when health is concerned. The medical profession and others have placed particular emphasis on research to ward off disease, probably taking a cue from the Chinese who, it is understood, pay their doctors to keep them well, rather than to cure them after they have become sick.

In the researches conducted by the medical profession and others it has been found, little by little, that the food we eat plays a most important role in our well-being. For instance, calcium and phosphorus are necessary for the development, growth, and maintenance of sturdy bones and teeth; iron and copper are essential in the treatment and prevention of nutritional anemia; and iodine is required for the proper functioning of the thyroid gland.

That elusive quality or substance which we call a vitamin also is necessary in our diet. A deficiency of vitamin A predisposes to eye diseases such as xerophthalmia and night blindness; and, in severe cases of vitamin A deficiency, there is increased susceptibility to certain respiratory infections. Lack of vitamin B is evidenced by beri-beri. Insufficient vitamin D, the sunshine vitamin, in the diet brings about rickets. Pellagra results from the absence of vitamin G.

However, minerals and vitamins alone are not sufficient in the diet. The body also needs a liberal supply of proteins for the building of muscles and other body tissues; and fat and carbohydrates to provide energy.

No doubt, many reading this article can remember some of the painful toothache they had in childhood, and were probably told that it came from eating too many sweets or because the teeth were not washed twice a day. We have since learned that diet plays an important role in keeping teeth and gums healthy. The tooth brush is still recommended, but principally because clean teeth are more attractive.

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Then, too, no doubt, others remember some very young children who has difficulty in walking, and when they walked their legs became bowed. Even today on a trip through the South, numerous negro children may be seen hobbling about on pitifully deformed legs. We know now that this is a rachitic condition resulting from the lack of calcium or of vitamin D in the diet.

In connection with these statements, it is interesting to note that fish and shellfish have been found to contain minerals and vitamins in varying quantities, and also, abundant supplies of proteins and fats, depending upon the variety. In addition, some shellfish, such as oysters, contain minor quantities of carbohydrates in the form of glycogen, sometimes called animal-starch.

The people of certain nations have realized for centuries that fish and shell fish, and products derived therefrom are valuable in the diet. About the time the Puritans were landing at Plymouth Rock, in 1620, the crews of French vessels fishing for cod on the Grand Banks off Newfoundland rendered the oil from cod livers and took it home to France were they fed it to their children because it appeared to improve their health and wellbeing. Science later demonstrated that cod-liver oil, as well as other fish oils, such as halibut-liver oil, swordfish-liver oil, sardine oil, and salmon oil are some of the richest known sources of vitamin D which is so valuable for preventing and curing rickets. The oil from canned salmon is an especially good source of vitamin D and should be saved and eaten rather than poured down the drain-pipe of the sink. These oils are also rich in vitamin A.

Oysters contain considerable quantities of iron and copper. In fact, oysters rank second to liver as an important source of iron, making them a valuable food for prevention of nutritional anemia. While few realize it, an oyster stew made with milk is a nearly perfect food, for it contains about the right proportions of the various substances needed in an average serving of food.

Canned fishes are especially desirable in the diet as the bones can be eaten. These are an important source of calcium for building strong bones and teeth.

In addition to containing so many valuable substances needed in the diet, fish is an easily digested food. This makes it especially desirable for the average active person as well as for invalids. Most of us now lead a less active life than that led by our fathers and grandfathers. In their day, everyone performed some form of manual labor, at least to the extent of walking to and from work. Now we are living a more prosaic life, letting machines do our heavy work, and we ride to the office. We get exercise less regularly, if at all. As a result, when we eat heavy foods our digestive system is overtaxed and stomach disorders may result.

It is only natural that fish and shellfish should be so abundant in essential minerals needed in our diet, and also that the meat of fish should be tender. For centuries erosion of the soil has carried the minerals from the surface of the land into that hugh mixing bowl we call the sea. Here these minerals are combined by various microscopic plant and animal life,

which in turn is eaten by higher forms of aquatic life, and these forms in turn by fish. Thus, the fish in general lives in an environment which is all sufficient, and therefore has none of the deficiencies of plants and animals taken from some land sources.

Fish do not need as strong muscular tissues as land animals. The latter need relatively strong muscles, to keep erect and to walk. on the other hand, fish, being buoyant, are suspended in water and need muscular strength only to propel themselves. For this reason, fish consist mainly of tender meat and the bony structure is relatively small compared to the total weight of the body. This tender quality is borne out in the cooking and eating of fish, for fish flesh is quickly cooked and easily masticated.

As a final consideration, most persons agree that fish tastes good. It has that delectable flavor, sometimes called the "tang o' the sea," which is not available in any other food. Because of this attribute alone, many oftimes choose a seafood dinner.

The housewife has a wide variety of aquatic products from which to choose in planning the menu. In fact, some 160 varieties of fish and shellfish are harvested from our waters. About 12 of these make up 80 percent of the catch. These are salmon, sardines, herring, haddock, oysters, mackerel, cod, shrimp, crabs, tuna, flounders, and halibut. These and many others of the 160 varieties are available in your local markets from time to time in the fresh, frozen, cured, and canned conditions. Many delicious dishes can be prepared from these products, including not only fried, broiled, baked, or boiled fish, but also fish chowders, salads, and combination dishes with vegetables and fruits. If you are in doubt as to how to cook these dishes, send ten cents to the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for a copy of Conservation Bulletin 27, Wartime Fish Cookery.

NOTE.- This leaflet supersedes Special Memorandum 3232.