Ocean Fish The Complete Nutrient Package

You are what you eat

oods do more than supply fuel and satisfy your appetite. Every cell in your body is made from nutrients. The building blocks in food sustain the ongoing daily construction, maintenance, and repair of your body.

As a source of nutrients for the body, ocean fish are an ideal package!

The package deal: proteins, fats, vitamins, and minerals

Few foods can compare to fish for nutrition. Fish are rich in nutrients; many of them are essential—the nutrients we have to get from our diet because our bodies can't manufacture them.

The American Heart Association recommends eating two fish meals each week. **Protein.** Proteins are chains of amino acids, which are the building blocks of all our cells. Proteins are necessary for the proper functioning, growth, and repair of all tissues and systems in our bodies. Fish are a great source of lean protein, making them an ideal protein source that won't add on the pounds.

Omega-3s – **The Good Fats.** Unlike fats stored for energy, omega-3 fatty acids play very important roles in our bodies, roles that can't be performed by other fats. Long-chain polyunsaturated fats, DHA (docosahexaenoic acid) and EPA

(eicosapentaenoic acid) are two especially important essential omega-3 fatty acids involved in many physiological systems. They are known to fight cardiovascular disease and promote brain function, and they are vital for neurological development during the early years of life (beginning during pregnancy). Ocean fish and seafood are the best and almost only sources of DHA and EPA in our diets! If you are taking omega-3 supplements for their health benefits, make sure DHA and EPA are listed on the labels.

Vitamins and Minerals. Do you remember when moms used to give cod liver oil as a remedy for everything? That's because cod, like all ocean fish, are not only rich in omega-3s, they are packed with vitamins and minerals! Fish can be a great source of vitamin D for strong bones, vitamin A for eyes and skin, and vitamins C and E for a healthy immune system. Fish are also rich sources of iodine, calcium, phosphorus, selenium, and other important minerals. In fact, ocean fish are among the best sources of selenium in our diet! The presence of selenium in fish is especially important because of its role in counteracting risks from the mercury that is also present in the fish. Since fish types offer different nutrient packages, eating a variety of fish and seafood will ensure you receive these valuable nutrients as part of your healthy diet.



For more information on nutrition and fish, visit www.undeerc.org/fish.

Take the "3 for 12" challenge—eat three ocean fish meals for a minimum of 12 oz of fish a week and the nutritional benefits that come with it!

Should you worry about mercury exposure?

All fish contain some mercury because it occurs naturally in the environment. Although low mercury exposures are not associated with harm, federal advisories encourage eating ocean fish for their health benefits while protecting developing brains from the higher amounts of mercury present in a few fish.

What does the fish advisory really say?

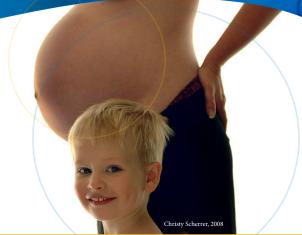
Pregnant and Nursing Moms. The U.S. Food & Drug Administration (FDA) recommends that pregnant and nursing moms eat 12 oz of fish weekly for the health of their babies but avoid the four ocean fish that are highest in mercury: swordfish, shark, tilefish, and king mackerel. The FDA also recommends checking local advisories for varieties of fish you catch yourself.

Young Children. Because brains are still developing, the FDA recommends that young children follow the same advice as for pregnant women: eat a variety of fish, but avoid swordfish, shark, tilefish, and king mackerel.

Everyone Else. Bon appétit! There are no recommendations to avoid any seafood. Dark and oily fish provide the most omega-3s, but eating a variety of ocean fish will provide balanced nutritional benefits and please your palate.

Are you eating enough fish?

In adult studies, consuming fish at least once a week provided a 30% less chance of having a stroke compared to people who ate fish less than once a month. Likewise, survivors of heart attacks who consumed as little as 1 gram of omega-3s from fish (DHA and EPA) reduced their mortality rate by half compared to those who did not consume these omega-3s.



Pregnant or breastfeeding?

When it comes to baby's developing eyes and brain, ocean fish are ideal. Ocean fish are the No. 1 source of the nerve cell-building omega-3 fatty acid DHA. DHA and the other nutrients in ocean fish are also critical for development of baby's nervous and immune systems.

For moms, the omega-3s and critical nutrients in ocean fish reduce the risk of many pregnancy-related disorders as well as heart disease. In fact, studies indicate low levels of omega-3s may increase the risk of postpartum depression.

The American Mental Health Association recommends at least 1000 mg of DHA a week for pregnant and nursing women. That's the equivalent of 16 oz of canned tuna fish or 4 oz of albacore tuna a week.

Experts say ...

Scientists studying the effects of fish consumption by pregnant women have learned that consuming more ocean fish is better than avoiding or limiting intake. Studies demonstrated that pregnant women who ate more than 12 oz of fish a week gave birth to children who performed better in school, had better social behavior, and had better fine motor skills than those who ate less than

This public awareness effort was sponsored by the National Oceanic and Atmospheric Administration Fisheries Service Pacific Islands Regional Office (Cooperative Agreement No. NA09NMF4520176), the U.S. Department of Energy's National Energy Technology Laboratory (Cooperative Agreement No. DE-FC26-08NT43291), and the Energy & Environmental Research Center's Center for Air Toxic Metals® at the University of North Dakota.

