

U.S. Farm-Raised Fish & Shellfish for Seniors



In addition to all of the positive benefits that farm-raised seafood can provide for the general population, increased seafood consumption is even more important for seniors. Studies suggest that eating more fish and shellfish may delay

the onset and severity of Alzheimer's Disease and may play a positive role in preventing macular degeneration, a leading cause of vision loss during the aging process. U.S. farm-raised seafood is quick and easy to prepare, available in small portions, and great when preparing a healthy meal for one or two.

Current Research

Research suggests that some of the symptoms of other health problems may also be controlled or alleviated by consuming omega-3 fatty acids from fish and shellfish. These include asthma, arthritis, diabetes, multiple sclerosis, hypertension, headaches, cancer, and some kidney diseases. U.S. farm-raised seafood consumption may also play a positive role in improved cognitive function and as a mood enhancer, relieving the symptoms of depression. Some studies have shown a beneficial correlation between seafood consumption and alleviating the impact of bipolar disorder.

PCBs

The main dietary sources of PCBs in seafood are sport fish caught in contaminated rivers. A factor that tends to minimize potential risks for people who consume seafood is that they are likely to eat a variety of fish from many different locations.

Both farm-raised and wild-harvest salmon are well below the U.S. Food and Drug Administration action level for PCBs and provide a host of positive health benefits. Farm-raised salmon is one of the most available and well-accepted fish in the American market.

People who are concerned about contaminants such as PCBs in fatty fish can take steps to reduce any potential intake of these chemicals. Since contaminants accumulate slowly over a long period of time, select smaller fish. Cooking techniques that allow fats to drip away from the fish, such as grilling, broiling, or baking on a rack should be used.

U.S. Farm-Raised Fish & Shellfish is Federally Inspected

To help ensure that the farm-raised seafood you buy is safe, the U.S. Food and Drug Administration (FDA), in cooperation with state and local health departments, are responsible for the mandatory inspection of fish and shellfish products.

Seafood farm-raised in the United States is subject to rigorous safety and environmental standards. To help consumers understand the source of their seafood, the U.S. Department of Agriculture (USDA) requires large retailers to label their seafood by country of origin and method of production, either wild-caught or farm-raised. This regulation does not apply to small fish markets, butcher shops, or restaurants.



U.S. Farm-Raised Fish and Shellfish: The Healthy, Sustainable Choice

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U.S. FARM-RAISED FISH & SHELLFISH For a Healthier & Happier Life



Finfish and shellfish farmed in the United States help ensure that our freshwater and marine resources are available for future generations, and they are loaded with benefits that will help you stay in shape and enjoy a longer, healthier life. Think about a "power lunch" and seafood is your best bet. Fish and shellfish are excellent sources of high quality, easily digestible, complete proteins, many valuable minerals (including selenium, iron, and zinc), and essential B-complex, A, and D vitamins. Want to stay on your game longer? Seafood fits the bill.

In other nutritional areas, seafood scores low—and that's good! An average serving of seafood has less than 200 calories. Some of the leaner varieties like tilapia, clams, oysters, mussels, and shrimp have less than 100 calories. Just be aware how you prepare your seafood. Broiling, grilling, baking, and poaching are good choices. Both freshwater and saltwater seafood are low enough in sodium to be acceptable for low sodium diets.

Farm-raised shellfish such as shrimp, clams, oysters, and mussels are not only low in calories, but are also well below the 300 milligram daily limit for cholesterol recommended by major health organizations including the American Heart Association and the National Academy of Sciences. An average 3.5-ounce serving of clams contains 34 milligrams, mussels 28 milligrams, shrimp 139 milligrams, and oysters 55 milligrams.

Omega-3 Fatty Acids

Farm-raised fish and shellfish are generally low in saturated fats and cholesterol, but are the best source of important polyunsaturated fats that play a major role in maintaining good health. Seafood is by far the best source of two of the most important omega-3 fatty acids: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA).

Omega-3 fatty acids affect the critical balance of certain blood components called lipoproteins by reducing low-density lipoproteins (LDL) and very-low-density lipoproteins (VLDL) that deposit cholesterol along the artery walls. LDLs and VLDLs are sometimes referred to as “bad cholesterol.” Cholesterol deposits along the arterial walls can slow the flow of blood. If the blood supply to an important organ such as the heart or the brain is cut off, it can result in a heart attack or stroke, and tissue in that organ can die.

The omega-3 fatty acids may also lower the levels of blood triglycerides, another type of fat involved in heart disease. Triglycerides may contribute to hardening of the arteries (atherosclerosis). Furthermore, omega-3 fatty acids may lower the “stickiness” of red blood cells. This helps the blood to flow more smoothly and reduces the formation of clots. All of these factors make farm-raised finfish and shellfish ideal for maintaining good heart health.

One study, published in the Journal of the American Medical Association, suggests that modest consumption of fish, 1-2 servings per week, may reduce the risk of coronary death by as much as 36%. This is especially compelling since heart disease remains the leading cause of death in the United States.



U.S. Farm-Raised Fish & Shellfish versus Fish Oil Supplements

Although many people rely on fish oil supplements to provide important omega-3 fatty acids, actually consuming a fish meal at least twice a week provides a wealth of other benefits. Substituting fish or shellfish for other center of the plate choices that may be high in calories, cholesterol, and saturated fats can help you build a healthier lifestyle. In many cases, you are cutting back on calories, helping to lose excess weight, limiting cholesterol, and choosing healthier fats by making this simple, but very important, dietary choice.

U.S. Farm-Raised Fish and Shellfish for Children and Teens

The American Heart Association recommends that children aged 2 years and older enjoy a diet that relies primarily on fruits, vegetables, whole grains, low-fat and non-fat dairy products, beans, fish, and lean meat. Unfortunately, many Americans don't prepare seafood at home on a regular basis, so kids don't learn to make this critical dietary choice. Peer pressure and advertising can lead to a poor diet. Those fun fast-food meals that kids demand should be balanced with a healthy diet of fruits, vegetables, lean meats, and fish.

A healthier lifestyle begins in the home, where children learn to make dietary choices that will influence the rest of their lives. U.S. farm-raised fish is an ideal choice, since it is often mild tasting and less expensive than many other meal choices. It is also available on a consistent basis so that if your family has a favorite, you can most often find it at your local market.



Scientific research points to an important role that seafood may play in helping to control the symptoms of ADD, ADHD, autism, and depression in teens. There was even a study in Sweden in which teen-aged boys scored better on tests when they had more seafood in their diets!! Other research indicates that the build-up of cholesterol on the arterial walls (atherosclerosis) actually begins in childhood. With all those positive benefits, it just makes sense to make farm-raised seafood a regular part of your family diet.

Mercury

Mercury occurs naturally in the environment, and can also be released into the air through industrial emissions. Some large, long-lived, deepwater fish tend to accumulate more mercury than other species. For these reasons, the FDA recommends that pregnant women, nursing mothers, women who may become pregnant, and small children avoid the consumption of shark, swordfish, king mackerel, and tilefish, and limit the consumption of albacore (white) tuna to 6 ounces per week. Many of the fish and shellfish considered low-mercury, including shrimp, channel catfish, tilapia, trout, and salmon, are farm-raised.

www.cfsan.fda.gov/~dms/admehg3.html

Pregnancy

A well-balanced diet that includes a variety of fish and shellfish can contribute to heart health and children's proper growth and development. Therefore, women and young children in particular should include fish and shellfish in their diets because of the many nutritional benefits. Some studies have shown that modest fish consumption (2 meals per week) during pregnancy may actually improve motor skills, brain function, and communication in young children. Other research shows that seafood consumption may help mothers carry their babies to full term and avoid low birth weight.

Regular seafood consumption has also been implicated in mood improvement, especially in cases of post-partum depression. The key to enjoying great fish and shellfish during and after pregnancy is to eat a variety of seafood farm-raised in the USA.

High-Risk Groups and Molluscan Shellfish

Molluscan shellfish, including clams, oysters, and mussels, are filter feeders and can concentrate marine bacteria and viruses. One such type of bacteria, called *Vibrio*, is naturally occurring in the marine environment, and is found most often in waters of the southern United States during the summer months. These organisms can cause fever, chills, abdominal pain, nausea, vomiting, and other gastrointestinal symptoms.



In a few high-risk individuals, the symptoms may be more severe or even life threatening. These include: people who are immune compromised (AIDS and cancer patients), any one undergoing radiation therapy or taking immunosuppressive drugs, diabetics, those with liver diseases or iron overload disease (hemochromatosis), those affected by alcoholism, or those with stomach or intestinal disorders. These individuals should not consume raw or partially cooked shellfish or fish.

Since thoroughly cooking oysters, clams, and mussels will destroy the bacteria, these seafoods can continue to be enjoyed in many fully cooked preparations.

www.fda.gov/Food/ResourcesForYou/HealthEducators/ucm085365.htm