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Seafood: Are You Reeling in the Benefits?

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Seafood: Are You Reeling in the Benefits?

Seafood includes a large group of marine animals that live in the sea, fresh water, lakes, and rivers. Fish such as salmon, tuna, trout, and tilapia and shellfish such as shrimp, crab, and oysters are included among this group.

Seafood is an important part of a balanced diet because it contains high-quality protein and good fats called omega-3 fatty acids and other nutrients. However, many of us do not include enough seafood in our diets to get the full range of benefits.

Why should we eat more seafood?

Rich in nutrients. Seafood is a good source of protein, vitamins A, D, B12, and E and minerals such as calcium, iron, iodine, selenium, and zinc (Table 1). In addition, seafood is a food source of omega-3 fatty acids and unlike fatty meat products, they are low in saturated fat and calories. For example, 3 ounces of pink salmon contains 127 calories and 4 grams of fat compared to 3 ounces of 75 percent lean ground beef that contains 235 calories and 15 grams of fat.



Table 1. Vitamins and minerals in seafood.

Vitamins and Minerals in Seafood	Benefits
B-complex vitamins	Development of nervous system
Vitamin D	Bone development and maintaining strong bones
Vitamin A	Vision and healthy skin
Selenium	Antioxidant that protects against cell damage
Zinc	Cell growth and immune system health
Iodine	Thyroid gland function
Iron	Red blood cell production
Calcium	Bone and teeth development, muscle contraction and relaxation, blood clotting

Eating fish twice a week may reduce the risk of stroke, depression, Alzheimer's disease, hypertension, and other chronic conditions.

Improves heart health. Seafood contains omega-3 fatty acids, a unique type of polyunsaturated fat that may play a role in reducing heart disease. Omega-3 fatty acids can make blood less likely to clot and block blood vessels and they also decrease triglycerides and increase HDL (good cholesterol) levels. Seafood (especially oily fish) contains two main dietary sources of omega-3 fatty acids called eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Scientific evidence shows eating 8 to 12 ounces of a variety of seafood each week provides 250 mg per day of EPA and DHA. These omega-3 fatty acids are associated with reduced cardiac deaths among individuals with pre-existing cardiovascular disease and prevent heart disease in individuals without a current heart problem.

Promotes healthy brain and eyes in children. DHA is needed to form brain and other parts of the nervous system for the fetus and until the second year of a child's life.

Improves memory. DHA is present in the nerve endings in your brain. Eating patterns that are rich in fish that contain omega-3 fatty acids (DHA) improve memory and prevent the onset of dementia.

Other possible benefits. Eating fish twice a week may reduce the risk of stroke, depression, Alzheimer's disease, hypertension, and other chronic conditions.

Recommendation

Currently, most Americans eat 3.5 ounces of seafood a week. Because of the many heart-health benefits of fish, the American Heart Association recommends at least two servings, or 8 to 12 ounces of seafood a week, particularly oily fish such as mackerel, lake trout, herring, sardines, and salmon, since they contain the highest amounts of omega-3 fatty acids.

Are there risks to consuming seafood?

Some fish, such as king mackerel, shark, and swordfish, are consistently high in mercury, which can harm the nervous system of a fetus or young child. Certain other fish, including canned light tuna, are also occasionally high in that metal.

Women who are pregnant or breastfeeding should consume 8 to 12 ounces of seafood a week. Due to their methyl mercury content, white albacore tuna should be limited. Avoid tilefish, swordfish, shark, and king mackerel.



Eating seafood could present the risk of food contamination. The best way to avoid contamination is to cook to an internal temperature of 145° F. Purchase seafood from retailers who follow safe food handling practices.

Most research shows that the benefits of including seafood in the diet far outweigh the risks. The most commonly eaten seafood in the United States present little risk while offering many healthy and nutritional benefits. Proper handling, storing, and cooking of seafood could reduce the food contamination risk.

How should I buy seafood?

- Buy from a reputable source like grocery stores and seafood markets.
- Buy only when properly cooled below 40° F.
- Buy fish when flesh looks shiny and firm, not separated from bone, odor is fresh not overly "fishy."
- Buy precooked fish when wrapped properly and separated from the fresh fish. The fresh fish can contaminate the precooked fish.
- Avoid frozen fish with ice crystals because this is a sign of thawing and refreezing.
- Pick up seafood towards the end of a shopping trip to ensure it stays at the proper temperature and is separated from other groceries.

The most commonly eaten seafood in the United States present little risk while offering many healthy and nutritional benefits.

How should I store seafood?

- Refrigerate or freeze immediately after buying.
- Store at below 40° F.
- Use airtight containers for storage.
- Frozen seafood should be stored at below 0° F.
- Always use before the expiration date or throw out.

Table 2. Seafood cold storage.

Preparation	Type or Description	Refrigerate (40°F)	Freeze (0°F)
Fresh	Fish	1-2 days	3-8 months
	Shellfish	1-2 days	3-12 months
Frozen	Fish and shellfish	3-4 days	3 months

Source: USDA Food Safety and Inspection Service

How should I prepare seafood?

- Thoroughly wash hands, utensils, plates, and cutting boards that have been exposed to raw seafood.
- Defrost frozen seafood in the refrigerator, under cold running water, or in the microwave. Never defrost at room temperature on counter top.

How should I cook seafood?

- Cook fish to 145° F or until it is opaque and flakes easily.
- Pregnant women, older people, young children, and people with a weakened immune system should not eat raw seafood such as:
 - Raw fish
 - Raw shellfish
 - Seafood ordered undercooked or “rare”

Resources

USDA 10 Tips Nutrition Education Series. Eat seafood twice a week.

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