

Seafood for Health

Summary for Healthcare Providers



A joint project of Oregon State University, Cornell University, and the Universities of California, Delaware, Florida, and Rhode Island

Seafood Health Benefits

- ◆ Seafood is the main dietary source of heart-healthy long-chain omega-3 fatty acids, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA).
- ◆ EPA/DHA intake can improve coronary health in adults by decreasing the risk of heart attack, stroke, and hypertension. The American Heart Association recommends 1000 mg per day of EPA/DHA for people with heart disease.
- ◆ DHA contributes to cognitive and visual development in infants and children. Experts recommend a daily intake of 200 mg per day for pregnant and breastfeeding women.
- ◆ Health organizations and authorities recommend that women who are pregnant or nursing have DHA account for at least 200 mg per day of their omega-3 intake, *see reverse page*.
- ◆ Seafood is low in total fat and saturated fat. Most fish and shellfish contain less than 5% fat, and even the fattier fish, such as mackerel and king salmon, have no more than 15% fat.
- ◆ Almost all fish and shellfish contain well under 100 mg of cholesterol per serving, and many of the leaner types of fish have less than 60 mg.
- ◆ Selenium is a potent antioxidant found in fish that protects against cell damage and may help to counter any negative effects of mercury.

Seafood in Perspective

- ◆ The *2010 Dietary Guidelines for Americans* recommend consuming 8 or more ounces of a variety of seafood per week, which provides an average of about 250 mg per day of EPA/DHA.
- ◆ Eliminating seafood from the diet can have negative effects on human health.
- ◆ Studies have shown that the health benefits of seafood outweigh the risks from contaminants such as traces of mercury or PCBs.
- ◆ Most commonly consumed seafoods in the United States are low in mercury.

Health Benefits Linked to Seafood and EPA/DHA*

Heart

- ◇ Reduces the risk of heart disease
- ◇ Helps protect against heart attack and sudden death
- ◇ Decreases blood triglyceride levels

Eyes

- ◇ Contributes to visual acuity

Brain

- ◇ Contributes to neurological development in infants and children

Pregnancy

- ◇ Increases duration of gestation

Muscles

- ◇ Helps build muscles and tissues

**Seafood Choices: Balancing benefits and risks, Institute of Medicine of the National Academies (2007)*

Seafood Safety

- ◆ The main health risk from seafood is exposure to pathogens. To ensure seafood safety, consumers should focus on limiting exposure to bacteria when seafood isn't stored or cooked properly.
- ◆ Cook seafood to an internal temperature of 145°F for at least 15 seconds.
- ◆ Seafood can cause an allergic reaction in some people, although patients are often only allergic to a certain species and can safely eat other types of seafood.
- ◆ Some consumers should not eat raw or partially-cooked seafood because of the risk for exposure to pathogens, *see reverse page*.
- ◆ Lightly smoked seafood such as lox, is only partially cooked and may still contain pathogens.
- ◆ Shellfish toxins are produced during algae blooms. They can cause gastrointestinal and/or neurological problems. Recreational harvesters should check local advisories for warnings.

Guidelines for Consumers

- ◆ The chart on the reverse side will help guide consumers to maximize the health benefits of seafood, while minimizing risks for special populations.

Guidelines for Consumers

One serving= 4 ounces of cooked fish or shellfish (about the size of the palm of your hand)

Healthy teenagers and adults



- ◇ Should eat 8 or more ounces of a variety of seafood per week
- ◇ Can reduce their risk for cardiovascular disease by eating seafood regularly
- ◇ Can have added benefits from seafood high in EPA and DHA
- ◇ May eat raw or partially cooked seafood at their own risk

Women who are or may become pregnant or who are breastfeeding



- ◇ Should eat *at least* 8 ounces and up to 12 ounces of a variety of seafood per week, which includes canned light tuna, salmon, shrimp, pollock, and catfish
- ◇ Mothers and their infants can benefit from seafood, especially types high in EPA and DHA
- ◇ Can eat up to 6 ounces of albacore (white) tuna per week
- ◇ Should avoid large predatory fish such as shark, swordfish, tilefish, or king mackerel due to higher mercury levels
- ◇ Should not eat raw or partially cooked seafood

Children 12 years and under



- ◇ Should eat about 8 ounces of a variety of seafood per week
- ◇ May benefit from eating seafood, especially types high in EPA and DHA
- ◇ Can eat up to 6 ounces of albacore (white) tuna per week, as part of the total weekly seafood intake
- ◇ Should avoid large predatory fish, such as shark, swordfish, tilefish, or king mackerel due to higher mercury levels
- ◇ Young children should not eat raw or partially cooked seafood

Immuno-compromised individuals and older adults



- ◇ Should eat a variety of seafood at least twice per week
- ◇ Can reduce their risk for cardiovascular disease by eating seafood regularly
- ◇ Can have added benefits from seafood high in EPA and DHA
- ◇ Should not eat raw or partially cooked seafood

All individuals who eat recreationally-caught fish or shellfish



- ◇ Some local river systems and inland lakes may contain higher levels of contaminants
- ◇ These contaminants can accumulate in the local fish and shellfish populations
- ◇ State and tribal environmental programs and the department of health test local waters and issue fish and shellfish consumption advisories
- ◇ Before eating recreationally-caught seafood, check with the State Health Department for advisories or visit <http://epa.gov/waterscience/fish/states.htm>

Sources: 2010 Dietary Guidelines for Americans; U.S. Environmental Protection Agency (EPA), American Heart Association (AHA), and Institute of Medicine of the National Academy of Sciences (NAS).

For more information, visit our website:

<http://seafoodhealthfacts.org>