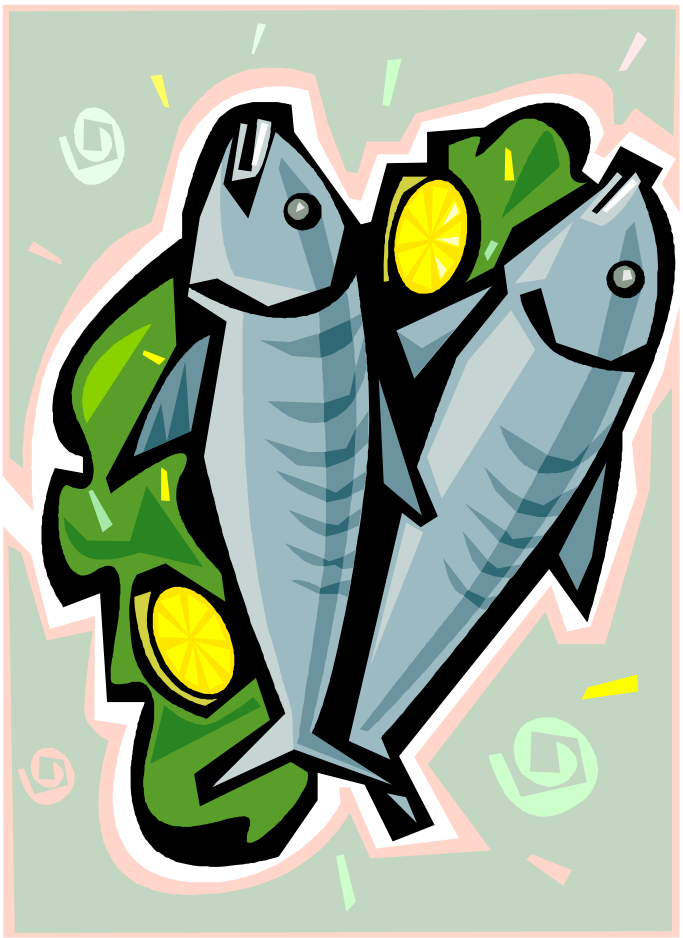
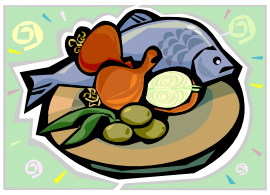
Seafood and Health

Seafood advice for consumers



- Health benefits of seafood
- Tips for reducing risks
- Guidelines for consumers

Seafood



Seafood is a healthy food choice for people of all ages. It provides key nutrients for infants and is a healthy protein source for adults.

Nutritional benefits of seafood:

- Good source of high-quality protein
- Low in saturated fat
- Rich in vitamins and minerals
- High in heart-healthy omega-3 fatty acids (DHA and EPA)

Omega-3 fatty acids:

Seafood is the main food source for the omega-3 fatty acids DHA and EPA. These nutrients promote healthy brain and vision development in children and reduce the risk of heart disease in adults.

U.S. health organizations recommend a daily EPA+DHA intake of 250 milligrams (mg) for most people and 1000 mg for those with cardiovascular disease.

Pregnant and nursing women and their children also need a regular source of EPA and DHA.

Oily ocean fish, like salmon, herring, mackerel and sardines, are good sources of EPA and DHA. Plant-based omega-3 fatty acids, such as ALA, do not have the same health benefits.

For good health eat a variety of seafood twice a week

Guidelines for Consumers

Serving size = 3 ounces of cooked fish or shellfish (about the size of a deck of cards)

Healthy teenage and adult males and females (who will not become pregnant)

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

Females who are or may become pregnant or who are breast-feeding

- Mothers and their infants can benefit from seafood, especially types high in EPA and DHA
- Should eat up to four servings of lower-mercury seafood per week
- Can eat up to two servings 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

Children 12 years and under

- May benefit from eating seafood, especially types high in EPA and DHA
- Should eat up to four age-appropriate (≤ 3-ounce) servings of lower-mercury seafood per week
- Can eat up to two age-appropriate (≤ 3-ounce) servings 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

Immuno-compromised individuals and older adults

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

Sources: the U.S. Food and Drug Administration (FDA), U.S. Environmental Protection Agency (EPA), American Heart Association, Institute of Medicine of the National Academy of Sciences, and Dietary Guidelines Advisory Committee.

Balancing Benefits and Risks

With the many varieties of seafood available, it can be confusing to understand the range of benefits and risks associated with different seafood Here are some facts that will help you make choices about including seafood in your diet:

- Many scientific studies and risk assessments have found that the benefits of eating seafood greatly outweigh the risks and that removing seafood from the diet can have negative effects on human health.
- The 11 most commonly consumed seafood in the United States present very little risk while offering many health and nutritional benefits.
- The main health risk from eating seafood is exposure to harmful microorganisms, which can be prevented through proper handling, storing, and cooking (see tips under Seafood Safety inset).
- All people are encouraged to eat seafood twice a week, with special guidelines for some groups (see Guidelines for Consumers inset).

United States Seafood Consumption

Top 11 Commonly Consumed Seafood

Based on U.S. per capita consumption, 2006-2008

1	Shrimp
2	Canned Tuna
3	Salmon
4	Pollock
5	Tilapia
6	Catfish
7	Crab
8	Cod
9-11	Flatfish/Clams/Scallops

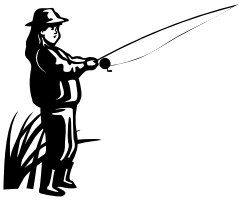
Source: National Marine Fisheries Service (2009)

- The top 11 commonly consumed seafood represent about 90% of U.S. seafood consumption.
- Seafood eaten in the U.S. includes over 350 species of fish and shellfish from many sources.
- Most of our seafood comes from marine waters and over 80% is imported.
- Both marine and freshwater aquaculture have grown rapidly; about half of our seafood is from farmed sources.
- All retailers must list the country of origin on their fresh or frozen seafood products and whether the item is wild or farm-raised.

Seafood Safety

To reduce your risk of food-borne illness:

- Keep fish refrigerated below 40°F until ready to use.
- Separate cooked and raw seafood. Wash utensils before re-using.
- Wash hands before and after handling raw or cooked food.
- Cook seafood thoroughly to an internal temperature of 145°F for at least 15 seconds. Properly cooked seafood should be moist and opaque throughout.
- Keep hot foods hot and cold foods cold. Avoid holding temperatures of 40-140°F.
- Purchase seafood from retailers that have high standards for quality and sanitation.



To reduce your risk from contaminants:

- The greatest risk of exposure to contaminants is from seafood caught by family and friends in polluted lakes and rivers.
- Before eating recreationally-caught seafood, check with your state health department or go to http://epa.gov/waterscience/fish/states.htm.
- Reduce exposure to PCBs by removing the skin from fish and trimming the fat.
- Follow the guidelines for consumers inside this brochure to limit mercury exposure.

Resources

American Heart Association
http://www.americanheart.org/presenter.jhtml?identifier=3071550

FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption
ftp://ftp.fao.org/FI/DOCUMENT/risk consumption /executive_summary.pdf

Fight BAC!™ Education Campaign
http://www.fightbac.org

Food and Drug Administration Seafood Information
http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/Seafood/default.htm

NOAA FishWatch U.S. Seafood Facts
http://www.nmfs.noaa.gov/fishwatch/

Omega-3 Learning for Health and Medicine
http://www.omega3learning.purdue.edu/

Raw shellfish safety
http://safeoysters.org

Seafood 4 Health
http://www.seafood4health.com

State advisories on locally caught fish:
http://epa.gov/waterscience/fish/states.htm

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Seafood 4 Health

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For more information, visit our website:

www.seafood4health.com

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