

HEALTH MATTERS

Healthy Fish, Healthy Families

www.arhp.org/healthmatters

Fish and other seafood can play an important role in a good diet. Because fish are high in protein and low in unhealthy fats, they make a great alternative to red meat. Fish are a good source of vitamins and minerals. They also contain nutrients called omega-3 fatty acids, which can prevent heart disease and may help with healthy brain development.

Why are some fish safer than others?

Waste that reaches our lakes, streams, rivers, and oceans can end up in the fish caught there. Two common forms of waste—mercury and polychlorinated biphenyls (PCBs)—are linked to learning and memory problems in children, heart problems, and possibly cancer.

Mercury in fish comes from power plant smokestacks, mining, and other industrial activities. Fish ingest mercury that lands in bodies of water. Larger predatory fish eat smaller fish. The older and larger these fish get, the more mercury collects in them.

PCBs are industrial chemicals that are now outlawed but can still be found in water and soil. PCBs are found in fatty parts of certain fish.

Mercury and PCBs are not a reason to stop eating fish and shellfish. Although some kinds of seafood contain too much mercury and PCBs, others contain very little. By varying the kinds of fish in your diet and following the guidelines below, you can help protect your health and enjoy all the benefits of fish. The advice provided below is more cautious than U.S. guidelines because many health care professionals (doctors, nurse practitioners, physician assistants, midwives) believe more protection is needed.

Who is most at risk?

Too much mercury and PCBs can cause health problems for anyone. Because they alter the way young brains develop, they can harm babies and children most of all. Both mercury and PCBs linger in the body and build up over time. They can pass from a pregnant woman to her fetus or a nursing mother to her baby.

It's especially important for all children under 12 and women who are pregnant or women who could get pregnant to avoid eating fish that have high levels of mercury or PCBs.

What about kids?

Children are often picky eaters who ask for the same foods, meal after meal. Try to get kids hooked on a wide variety of fish and shellfish from the top section of the chart below. Children's portions should be smaller than adult portions. One serving might be 1–2 ounces for a toddler, but 2–3 ounces for an older, larger child.

Shrimp is low in PCBs. Tuna does contain mercury, but levels in canned chunk light tuna are usually low. White or albacore tuna, fresh, and frozen tuna all come from bigger fish with much higher levels of mercury, so children probably should not eat them. Fish sticks and fish sandwiches are typically made from fish that are low in chemical waste, but the fats used to prepare these products add unnecessary calories. Shrimp, sardines, tilapia and trout are examples of good choices.

What fish choices make sense?

General guidelines for women of child-bearing age and children under 12:

- Eat a variety of fish and seafood from the top section of the chart below—up to 2 servings (6 ounces = one adult serving) each week.

- If you eat fish or seafood from the '1 serving per week' section of the chart, eat only 1 serving of fish that week.
- Limit fatty fish to no more than 1–2 servings per month. Fatty fish such as salmon, herring, and sardines are low in mercury but may carry higher levels of PCBs or other pollutants. Wild salmon may be safer than farm-raised.
- Pay special attention to portion sizes when you eat sushi.
- Serve children "chunk light" canned tuna. Canned albacore and fresh tuna, like other fish in the '1 serving per week' section of the chart, may contain too much mercury for children, even if they eat kid-size portions.
- Children may eat the same number of servings of low-mercury fish as adults, but limit the size of children's portions based on their age and weight.
- Follow local and state fish advisories, found at www.epa.gov/waterscience/fish/states.htm, which tell you when to avoid eating certain fish that you or your friends and family catch.

Cooking Salmon and Other Fatty Fish

PCBs collect in the fatty parts of fish. You can take these steps to reduce PCB risks when cooking salmon, bluefish, and other fatty fish:

- Trim away fatty areas such as the belly, top of the back, and dark meat along the side.
- Remove or puncture the skin before cooking to allow fat to drain off.
- Broil, grill, roast or steam the fish on a rack to allow fat to drain.
- Do not fry large, fatty types of fish such as salmon and bluefish.
- Throw away fat drippings. Don't use them in other cooking.
- These steps will not change the mercury levels in fish.

Additional information

For additional information, visit ARHP's Web site on environmental and reproductive health at www.arhp.org/topics/enviro-repro-health.

Guide to Healthy Fish		Lowest mercury levels
Up to 2 servings each week	Clams ^a Oysters ^a Shrimp ^a Tilapia Sardines Crawfish Haddock Trout (freshwater) Herring ^b Catfish Flatfish (includes flounder and sole) Mackerel (Atlantic) Scallops Crab (Blue, King, and Snow) Pollock Shad (American) Squid Tuna (canned chunk light) Lobster (spiny) Mackerel Chub (Pacific) Cod ^c Perch (Freshwater) Skate Halibut Mackerel – Spanish (S. Atlantic) Monkfish ^c Snapper ^c Weakfish (Sea Trout) Bass (saltwater; includes sea bass/striped bass/rockfish) Salmon – canned Pacific	
Up to 1 serving each week	Lobster (Northern/American) Bluefish ^b Tuna (canned, white albacore) Tuna (fresh/frozen) Mackerel – Spanish (Gulf of Mexico) Marlin Orange Roughy ^c Grouper ^c	Highest mercury levels
Up to 2 servings each month	Salmon – wild/Pacific (fresh/frozen) ^b	
1 serving every 2 months	Salmon – farmed/Atlantic (fresh/frozen) ^b	
Avoid	Mackerel – King (Atlantic & Gulf of Mexico) Shark ^c Swordfish ^c Tilefish (Gulf of Mexico) ^c	
Remember to check local and state fish advisories.		
KEY		
^a rarely tested for mercury		
^b contain PCBs or other pollutants		
^c overfished		