Copyright Disabled-World.com

Mercury Level Contamination in Fish Chart

• Author: Disabled World: Contact: Disabled World (www.disabled-world.com)

• Published: 2015-06-15: (Rev. 2020-12-08)

Synopsis and Key Points:

- List of low and high mercury concentration levels in fish species, includes chart of fish species safe and not safe for pregnant women and public consumption.
- US government scientists tested fish in 291 streams around the country for mercury contamination. They found mercury in every fish tested.
- Fish and shellfish concentrate mercury in their bodies, often in the form of methylmercury, a highly toxic organic compound of mercury.

Main Digest

The U.S. FDA recommends eating 8 - 12 ounces of fish low in mercury per week. Fish contain vital nutrients including omega 3 fatty acids, protein, vitamins, and minerals such as iron. These nutrients are essential, particularly-for-pregnant-moms (https://www.disabled-world.com/fitness/nutrition/seafood.php), as they foster healthy fetal, infant, and childhood development. However, some types of fish contain a lot higher mercury levels than others.

Mercury is defined as a chemical element with symbol Hg and atomic number 80. It is commonly known as quicksilver and was formerly named hydrargyrum. Mercury occurs in deposits throughout the world mostly as cinnabar (mercuric sulfide). Mercury can be absorbed through the skin and mucous membranes and mercury vapors can be inhaled, so containers of mercury are securely sealed to avoid spills and evaporation. The most toxic forms of mercury are its organic compounds, such as dimethylmercury and methylmercury. Mercury can cause both chronic and acute poisoning.

Mercury poisoning (also known as hydrargyria or mercurialism) is a type of metal poisoning and a medical condition caused by exposure to mercury or its compounds. Symptoms typically include sensory impairment (vision, hearing, speech), disturbed sensation and a lack of coordination. The type and degree of symptoms exhibited depend upon the individual toxin, the dose, and the method and duration of exposure.

Mercury-containing plants and tiny animals are eaten by smaller fish that are then eaten by larger fish, whose tissue accumulates mercury. That is why larger, longer-living predators such as sharks and swordfish tend to have more of the toxin than smaller fish such as sardines, sole, and trout.

US government scientists tested fish in 291 streams around the country for mercury contamination. They found mercury in every fish tested, according to the study by the U.S. Department of the Interior. They found mercury even in fish of isolated rural waterways. 25% of the fish tested had mercury levels above the safety levels determined by the U.S. Environmental Protection Agency for people who eat the fish regularly.

Fish and shellfish concentrate mercury in their bodies, often in the form of methylmercury, a highly toxic organic compound of mercury. Mercury is known to bio-accumulate in humans, so bio-accumulation in seafood carries over into human populations, where it can result in mercury poisoning. The presence of mercury in fish can be a particular health concern for women who are or may become pregnant, nursing mothers, and young children.

Mercury levels in the northern Pacific Ocean have risen about 30 percent over the past 20 years and are expected to rise by 50 percent more by 2050 as industrial mercury emissions increase, according to a 2009 study led by researchers at the U.S. Geological Survey and Harvard University. When you eat seafood containing methylmercury, more than 95 percent is absorbed, passing into your bloodstream. It can move throughout your body, where it can penetrate cells in any tissue or organ.

In comments submitted to federal health officials, a group of scientists and policy analysts pointed out that a 6-ounce serving of salmon contains about 4 micrograms of mercury vs. 60 micrograms for the same portion of canned albacore tuna - and 170 micrograms for swordfish.

The list below shows the amount of various <u>types of fish that a woman who is pregnant or planning to become pregnant (https://www.disabled-world.com/fitness/nutrition/foodsecurity/fish-advice.php)</u> can safely eat, according to the Environmental Protection Agency (EPA).

Jump-to:

- » Fish with Least Mercury Levels (https://www.disabled-world.com#least)
- **>>** <u>Fish with Moderate Mercury Levels</u> (https://www.disabled-world.com#moderate)
- » Fish with High Mercury Levels (https://www.disabled-world.com#high)
- » Fish with Highest Mercury Levels (https://www.disabled-world.com#highest)

Least Mercury - Less than 0.09 Parts Per Million (PPM)

- Enjoy these fish with the least amount of mecury content:

 But ONLY buy Wild Caught or they will have other toxicants in high amounts
 - » Anchovies
 - » Butterfish
- » Catfish
- » Clam
- » Crab (Domestic)
- » Crawfish/Crayfish

- » Croaker (Atlantic)
- » Flounder
- » Haddock (Atlantic)
- » Hake
- » Herring
- » Mackerel (N. Atlantic, Chub)

- » Mullet
- » Oyster
- » Perch (Ocean)
- » Plaice
- » Pollock
- » Salmon (Canned)
- » Salmon (Fresh)
- » Sardines
- » Scallops

- » Shad (American)
- » Shrimp
- » Sole (Pacific)
- » Squid (Calamari)
- » Tilapia
- » Trout (Freshwater)
- » Whitefish
- » Whiting

Moderate Mercury - From 0.09 to 0.29 Parts Per Million (PPM)

Eat six servings or less per month:

If you care about your long term health, do not eat these. Only the low mercury fish in the previous list above. David Getoff

- » Bass (Striped, Black)
- » Carp
- » Cod (Alaskan)
- » Croaker (White Pacific)
- » Halibut (Atlantic)
- » Halibut (Pacific)
- » Jacksmelt (Silverside)
- » Lobster
- » Mahi Mahi

- » Monkfish
- » Perch (Freshwater)
- » Sablefish
- » Skate
- » Snapper
- » Tuna (Canned chunk light)
- » Tuna (Skipjack)
- » Weakfish (Sea Trout)

High Mercury - From 0.3 to 0.49 Parts Per Million (PPM)

© Eat three servings or less per month:

Are you trying to get a neurological disease or a cancer?

If not, STAY AWAY and only eat from the Least Mercury List

- » Bluefish
- » Grouper
- » Mackerel (Spanish, Gulf)

- » Sea Bass (Chilean)
- » Tuna (Canned Albacore)
- » Tuna (Yellowfin)

Highest Mercury - More than 0.5 Parts Per Million (PPM)

Are you trying to get a neurological disease or a cancer? © Avoid eating these fish types: If not, STAY AWAY and only eat from the Least Mercury List

» Mackerel (King)

» Swordfish

» Marlin

» Tilefish

» Orange Roughy

» Tuna (Bigeye, Ahi)

» Shark

Below are the actual tests and the ranges of mercury found in each

Mercury Levels in Fish/Shellfish I recommend you read Diagnosis Mercury by Jane Hightower, MD

Species	Mean (ppm)	Std dev (ppm)	Median (ppm)	Comments	Trophic level	Max age (yrs)
Tilefish - Gulf of Mexico	1.123	(ii)	(ii)	Mid-Atlantic tilefish has lower mercury level.	3.6	35
Swordfish	0.995	0.539	0.870		4.5	15
Shark	0.979	0.626	0.811			
Mackerel - King	0.730	(ii)	(ii)		4.5	14
Tuna - Bigeye	0.689	0.341	0.560	Fresh/Frozen	4.5	11
Orange Roughy	0.571	0.183	0.562		4.3	149
Marlin*	0.485	0.237	0.390		4.5	
Mackerel - Spanish	0.454	(ii)	(ii)	Gulf of Mexico	4.5	5
Grouper	0.448	0.278	0.399	All Species	4.2	
Tuna	0.391	0.266	0.340	All Species, Fresh/Frozen		
Bluefish	0.368	0.221	0.305		4.5	9
Sablefish	0.361	0.241	0.265		3.8	94
Tuna - Albacore	0.358	0.138	0.360	Fresh/Frozen	4.3	9
Patagonian Toothfish	0.354	0.299	0.303	AKA Chilean Sea Bass	4.0	50+
Tuna - Yellowfin	0.354	0.231	0.311	Fresh/Frozen	4.3	9
Tuna - Albacore	0.350	0.128	0.338	Canned	4.3	9
Croaker White	0.287	0.069	0.280	Pacific	3.4	
Halibut	0.241	0.225	0.188		4.3	

Mercury Levels in Fish/Shellfish								
Species	Mean (ppm)	Std dev (ppm)	Median (ppm)	Comments	Trophic level	Max age (yrs)		
Weakfish	0.235		0.157	Sea Trout	3.8	17		
Scorpionfish	0.233	0.139	0.181					
Mackerel - Spanish	0.182	(ii)	(ii)	South Atlantic	4.5			
Monkfish	0.181	0.075	0.139		4.5	25		
Snapper	0.166	0.244	0.113					
Bass	0.152	0.201	0.084	Striped, Black, Black Sea	3.9			
Perch	0.150	0.112	0.146	Freshwater	4.0			
Tilefish - Atlantic	0.144	0.122	0.099		3.6	35		
Tuna - Skipjack	0.144	0.119	0.150	Fresh/Frozen	3.8	12		
Buffalofish	0.137	0.094	0.120					
Skate	0.137	(ii)	(ii)					
Tuna	0.128	0.135	0.078	All Species, Canned, Light				
Perch - Ocean(i)	0.121	0.125	0.102					
Cod	0.111	0.152	0.066		3.9	22		
Carp	0.110	0.099	0.134					
Lobster - American	0.107	0.076	0.086					
Sheephead - California	0.093	0.059	0.088					
Lobster - Spiny	0.093	0.097	0.062					
Whitefish	0.089	0.084	0.067					
Mackerel - Chub	0.088	(ii)	(ii)	Pacific	3.1			
Herring	0.084	0.128	0.048		3.2	21		
Jacksmelt	0.081	0.103	0.050		3.1			
Hake	0.079	0.064	0.067		4.0			
Trout	0.071	0.141	0.025	Freshwater				
Crab	0.065	0.096	0.050	Blue, King, Snow				
Butterfish	0.058	(ii)	(ii)		3.5			

Mercury Levels in Fish/Shellfish								
Species	Mean (ppm)	Std dev (ppm)	Median (ppm)	Comments	_	Max age (yrs)		
Flatfish(i)	0.056	0.045		Flounder, Plaice, Sole				
Haddock	0.055	0.033	0.049	Atlantic				
Whiting	0.051	0.030	0.052					
Mackerel - Atlantic	0.050	(ii)	(ii)					
Croaker - Atlantic	0.065	0.050	0.061					
Mullet	0.050	0.078	0.014					
Shad - American	0.039	0.045	0.045					
Crayfish	0.035	0.033	0.012					
Pollock	0.031	0.089	0.003					
Catfish	0.025	0.057	0.005		3.9	24		
Squid	0.023	0.022	0.016					
Salmon(i)	0.022	0.034	0.015	Fresh/Frozen				
Anchovies	0.017	0.015	0.014		3.1			
Salmon(i)	0.014	0.021	0.010	Canned				
Sardine	0.013	0.015	0.010		2.7			
Tilapia(i)	0.013	0.023	0.004					
Oyster	0.012	0.035	(iii)					
Clam(i)	0.009	0.011	0.002					
Shrimp(i)	0.009	0.013	0.001			6.5		
Scallop	0.003	0.007	(iii)					

 $[\]gg$ (i) - Indicates only methylmercury was analyzed - Other results are for total mercury.

Related Documents

^{» (}ii) - Data not available.

^{» (}iii) - Below detection level (0.01ppm).