MERCURY IN SEAFOOD
What's for Dinner?

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GotMercury.org
Is mercury a problem?

- Seafood is the #1 source of mercury exposure in the U.S.

- 15% of babies born each year estimated to have elevated mercury levels

- Mercury exposure can lead to memory loss, developmental and learning disorders, lower IQ & neurological disorders, vision loss, heart disease and other symptoms

Source: US EPA 2004, CDC 2004 NHANES Study
Bio Magnification

- Algae < 0.01 ppm
- Herring 0.01 ppm
- Salmon 0.1 ppm
- Sharks > 1.0 ppm
Over 435.6 million pounds of commercial fish were landed in California in 2010 with a value of $177.4 million
CA Fish high in mercury

Swordfish

Xiphias gladius
Heavy Metal

Tuna Accounts for 37% of US Mercury Exposure

Tuna

Thunnus alalunga
T. albacares

US consumption 2.7 # per capita canned tuna
# TUNA CONSUMPTION CHART
Maximum Weekly Tuna Consumption 6-ounce cans

<table>
<thead>
<tr>
<th>Your Weight in pounds</th>
<th>Albacore Tuna</th>
<th>Chunk Light Tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>1/4 can per week</td>
<td>1/2 can per week</td>
</tr>
<tr>
<td>60</td>
<td>1/3rd can per week</td>
<td>2/3rd can per week</td>
</tr>
<tr>
<td>80</td>
<td>1/3rd can per week</td>
<td>1 can per week</td>
</tr>
<tr>
<td>100</td>
<td>1/2 can per week</td>
<td>1 1/3rd can per week</td>
</tr>
<tr>
<td>120</td>
<td>2/3rd can per week</td>
<td>1 1/2 can per week</td>
</tr>
<tr>
<td>140</td>
<td>2/3rd can per week</td>
<td>2/3rd can per week</td>
</tr>
<tr>
<td>160</td>
<td>2/3rd can per week</td>
<td>2 cans per week</td>
</tr>
<tr>
<td>180+</td>
<td>1 can per week</td>
<td>2 cans per week</td>
</tr>
</tbody>
</table>
Operation Safe Seafood

- Fish tested from grocery stores and sushi restaurants throughout the U.S.
- 35% of supermarket swordfish & tuna have mercury levels over FDA guidelines.
- Twenty percent of tuna sushi were found to have high levels of mercury
Popular Seafood Tested for Mercury Concentrations

- Dungeness Crab
- Pacific Swordfish
- Pacific Albacore
- Ahi Tuna
- Sardines
- Pacific Halibut
- Sablefish
- Rockfish
- Squid

Five samples of each species were tested for mercury levels by an accredited laboratory.
All Samples of Pacific Swordfish and Tuna were above the FDA Advisory Level for mercury

We recommend further testing of Commercially landed seafood
Got Sushi, Got Mercury

25% > 1.0 ppm
75% > 0.5 ppm
100% > Japanese standard
Calculate Your Dose

mercury calculator

- Enter your weight: [ ] lbs.
- Select type of fish: [ ] Ahi Tuna (Bigeye, 0.639 ppm)
- Enter amount you’ll eat this week: [ ] oz.

mercury exposure

dose: [ ]

of EPA limit
(Should be under 100%)

Eating multiple types of seafood?
Use the advanced mode »
Swordfish and tuna are caught primarily through long line fishing and Drift Gill Nets.

Longlines, which set up to 5 million baited hooks set each day on 100,000 miles of line throughout the world's oceans, kill a wide range of marine species, including the critically endangered Pacific leatherback sea turtle.
**Simple, Healthy, Sustainable Choices?**

The Monterey Bay Aquarium Seafood Watch program creates science-based recommendations that help consumers and businesses make ocean-friendly seafood choices. Carry this pocket guide with you and share it with others to help spread the word.

### BEST CHOICES
- Alaskan (US farmed)
- Arctic Char (farmed)
- Barramundi (US farmed)
- Catfish (US farmed)
- Clams, Mussels, Oysters (farmed)
- Cod: Pacific (US non-trawled)
- Crab: Dungeness
- Halibut: Pacific (US)
- Lobster: California Spiny (US)
- Redfish: Black (CA, OR, WA, hook & line)
- Sablefish/Black Cod (Alaska & Canada)
- Salmon (Alaska wild)
- Sardines: Pacific (US)
- Scallops (farmed)
- Shrimp (Pink) (OR)
- Spot Prawn (Canada)
- Striped Bass (farmed & wild)
- Tilapia (US farmed)
- Trout: Rainbow (US farmed)
- Tuna: Albacore (Canada & US Pacific, troll/pole)
- Tuna: Skipjack, Yellowfin (US troll/pole)
- White Seabass (hook & line)

### GOOD ALTERNATIVES
- Bacalhau/Salt Cod (JAPAN)
- Caviar, Sturgeon (US farmed)
- Clams, Oysters (wild)
- Cod: Pacific (US trawled)
- Crab: King (US, SW)
- Flounder, Soles (Pacific)
- Halibut: California
- Lingcod
- Lobster: American/Maine
- Mahi Mahi (US)
- Pollock: Alaska (US)
- Rockfish (Pacific hook & line)
- Sablefish/Black Cod (CA, OR, WA)
- Salmon (CA, OR, WA, wild)
- Sanddabs (Pacific)
- Scallops (wild)
- Shrimp (US, Canada)
- Spot Prawn (US)
- Squid
- Swordfish (US)
- Tilapia (Central & South America farmed)
- Tuna: Bigeye, Toghi, Yellowfin (troll/pole)
- Yellowtail: California (US wild)

### AVOID
- Caviar, Sturgeon* (imported wild)
- Chilean Seabass/Tilapia*
- Cod: Atlantic (Canada & US)
- Cod: Pacific (Imported)
- Cobia (Imported farmed)
- Crab: King (Imported)
- Dogfish (US*)
- Grouper: Black (US)
- Lobster: Spiny (Brazil)
- Mahi Mahi (Imported longline)
- Marlin: Blue, Striped (Pacific*)
- Monkfish
- Orange Roughy
- Rockfish/Pacific Snapper (towed)
- Salmon (imported, including Atlantic)*
- Shark* (imported)
- Shrimp (imported)
- Swordfish (Imported)*
- Tuna: Albacore, Bigeye*, Skipjack, Toghi, Yellowfin* (except troll/pole)
- Tuna: Bluefin* (troll/pole)
- Tuna: Canned (except troll/pole)

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*Certified Sustainable Seafood MSC www.msc.org

**Support Ocean-Friendly Seafood**

**Best Choices** are abundant, well-managed and caught or farmed in environmentally friendly ways.

**Good Alternatives** are an option, but there are concerns with how they’re caught or farmed—or with the health of their habitat due to other human impacts.

**Avoid** for now as these items are overfished or caught in ways that harm other marine life or the environment.

**Key**
- CA = California
d - OR = Oregon
- WA = Washington

*Limit consumption due to concern about mercury or other contaminants. Visit www.edf.org/seafoodhealth

*Environmental Defense Fund

Seabass may appear more than one column.
Adopt Advisory Level consistent with EPA
Support Sustainable Fish Selection

ACTION

Select Fish Wisely
Better labeling (SB 1486)
Increase Testing
Truth in Labeling

Tuna, like other large predator fish, is contaminated with mercury. Mercury can damage the developing brain and neurosystem of the developing fetus. Ten percent of all women of childbearing age have blood methylmercury levels that may put their fetus at risk for adverse neurological effects. 300,000 American newborns may have increased risk of learning disabilities associated with exposure to methylmercury each year.
ACTION:

• Pledge to Protect Ocean Predators

• Support our Petition to FDA

• Support our Appeal to the OPC

• Connect
QuickTime™ and a H.264 decompressor are needed to see this picture.