

A Guide to Safe Eating of Fish Caught in North Dakota (July 2003)



Fish are an excellent food -- low in saturated fat and high in protein, vitamins and minerals. Studies have shown that eating fish may help lower the chance of heart disease.

Most fish are healthy to eat. However, any fish (whether store-bought or sports-caught) could contain contaminants. Mercury is one contaminant present in fish from North Dakota's lakes and rivers. While the levels of mercury are usually low in smaller fish, larger fish of certain species can contain levels that may be harmful if those fish are eaten too often.

Do I have to stop eating fish?

There is no need to stop eating fish. But if you wish to reduce your exposure to mercury, you need to make wise choices about the kinds of fish you eat and how often you eat fish.

How much fish can I eat and how often?

All species and sizes of tested fish contain some mercury; however, it is the larger fish that contain the most mercury. Generally speaking, keep the smaller fish for eating. Practice "catch and release" of larger fish, especially the whoppers. This practice not only reduces your exposure to mercury, but enhances the fishery. If you choose to eat larger fish, eat smaller amounts or eat them less often, as shown in the advisory chart on the reverse side of this fact sheet.

How can mercury in fish harm me?

In adults, mercury can damage your kidneys and nervous system. It may cause tingling, prickling or numbness in hands and feet or changes in vision.

Young children, developing fetuses and breastfed babies are at most risk. Small amounts of mercury can damage a brain that is just starting to form or grow. Too much mercury may affect behavior and lead to learning problems. Even so, there are no known cases of illness from eating fish caught in North Dakota.

Women who are pregnant, planning to become pregnant or who are breastfeeding, and children ages 15 and younger need to be more careful about the

fish they eat and how often they eat fish. The North Dakota Department of Health has published a guide entitled, *Hooked on Healthy Fish*, which is available by calling 800.472.2286, or visiting www.ndmch.com/publications.asp.

How does mercury get into fish?

Mercury is released into the environment through natural processes such as runoff from natural leaching, volcanic activity and forest fires. Concern about mercury contamination has grown because human activity, including the burning of fossil fuels and waste incineration, also releases mercury into the environment. Once in the earth's atmosphere, mercury falls to the earth as dry deposition or rainfall and enters lakes and rivers. There, certain biological conditions can turn inorganic mercury into organic methylmercury, which can concentrate to higher levels in fish. People are exposed to mercury primarily by eating fish.

Since 1990, the North Dakota Department of Health has obtained mercury data for many fish species found in the state's lakes and rivers. The department cooperates with the North Dakota Game and Fish Department to collect fish and samples of fish. After the fish are measured and weighed, the Department of Health conducts laboratory tests on the samples. The resulting data, in combination with U.S. Environmental Protection Agency risk-assessment guidelines, are used to make the recommendations listed in this fish advisory.

How do I use the advisory chart?

The advisory chart lists the recommended number of meals per month of certain types and sizes of fish for three categories of people: (1) general population, (2) children 15 and younger and (3) breastfeeding mothers and women who are or who may become pregnant. It is important that users of this guide do not exceed the recommended frequency by combining more meals of several fish types. For example, although four to eight meals of walleye per month is considered safe for the general population, this amount plus one or more meals of other types of fish per month is not recommended.

Those in the general population who eat mostly fish for one to two weeks (e.g., people on vacation) can safely consume several meals of larger fish during that period if they then exclude fish from their diets for two or three months. Breastfeeding and pregnant women and children 15 and younger should avoid consuming larger fish altogether.

Stricter limitations apply to commercial fish such as tuna, shark, swordfish and tilefish. For recommendations on eating commercial fish, including canned tuna, call the Food and Drug Administration at 1.888.SAFEFOOD or visit the agency's website at www.cfsan.fda.gov.

How can I get more information?

Please call or visit us on the Web:



North Dakota Department of Health









Division of Water Quality

701.328.5210

<http://www.health.state.nd.us/wq>

Advisory for Human Consumption of Fish Caught in North Dakota

See explanation on reverse side.

| Species | Waterbody | Allowable Meals Per Month | | |
|---|------------------------------|---|---|---|
| | | General Population | Children 15 and Younger | Women Who Are or Who May Become Pregnant, Breast-feeding Mothers |
|  Walleye | Devils Lake | <17" 4 meals 17-20" 2 meals 20-26" 1 meal* | <14" 4 meals 14-15" 2 meals 15-17" 1 meal* | <15" 4 meals 15-17" 2 meals 17-22" 1 meal* |
| | Red River | <16" 4 meals 16-22" 2 meals 22-33" 1 meal* | <12" 4 meals 12-14" 2 meals 14-17" 1 meal* | <14" 4 meals 14-17" 2 meals 17-25" 1 meal* |
| | Lake Oahe/ Missouri River | <17" 8 meals 17-21" 4 meals >21 2 meals | <15" 4 meals 15-17" 2 meals 17-23" 1 meal* | <18" 4 meals 18-23" 2 meals >23" 1 meal |
| | Lake Sakakawea | <18" 8 meals 18-22" 4 meals >22" 2 meals | <17" 4 meals 17-19" 2 meals 19-26" 1 meal* | <20" 4 meals 20-26" 2 meals >26" 1 meal |
| | All Other Waterbodies | <15" 8 meals 15-17" 4 meals 17-23" 2 meals >23" 1 meal | <14" 4 meals 14-16" 2 meals 16-19" 1 meal* | <16" - 4 meals 16-19" - 2 meals 19-23" 1 meal* |
|  Northern Pike | Devils Lake | <22" 8 meals 22-25" 4 meals >25" 1 meal | <22" 4 meals 22-24" 2 meals 24-27" 1 meal* | <24" 4 meals 24-26" 2 meals 26-33" 1 meal* |
| | Lake Sakakawea | <27" 8 meals 27-36" 4 meals >36" 1 meal | <23" 4 meals 23-29" 2 meals >29" 1 meal | <19" 8 meals 19-22" 4 meals >22" 2 meals |
| | All Other Waterbodies | <24" 8 meals 24-26" 4 meals >26" 1 meal | <23" 4 meals 23-25" 2 meals 25-28" 1 meal* | <25" 4 meals 25-28" 2 meals 28-34" 1 meal* |
|  Channel Catfish | Red River | <22" 8 meals 22-25" 4 meals >25" 1 meal | <17" 4 meals 17-20" 2 meals 21-27" 1 meal* | <17" 8 meals 17-20" 4 meals 20-38" 1 meal* |
| | All Other Waterbodies | <22" 8 meals 22-24" 4 meals >24" 1 meal | <19" 4 meals 19-22" 2 meals 22-27" 1 meal* | <19" 8 meals 19-22" 4 meals >22" 1 meal |
|  Chinook Salmon | Lake Sakakawea | <27" 8 meals 27-33" 4 meals >33" 2 meals | <25" 4 meals 25-28" 2 meals >28" 1 meal | <25" 8 meals 25-28" 4 meals >28" 1 meal |
|  Sauger | Lake Sakakawea | <17" 8 meals 17-18" 4 meals >18" 1 meal | <15" 4 meals 15-17" 2 meals 17-20" 1 meal* | <15" 8 meals 15-17" 4 meals 17-24" 1 meal* |
|  Panfish (Crappie/Sunfish) | All Waterbodies | <9" 8 meals 9-11" 4 meals >11" 1 meal | <7" 8 meals 7-9" 2 meals >9" 1 meal | <8" 8 meals 8-12" 2 meals >12" 1 meal |
|  White Bass | All Waterbodies | < 11" 8 meals 11-13" 4 meals 13-16" 2 meals 16-21" 1 meal* | < 10" 8 meals 10-11" 4 meals 11-12" 2 meals 12-13" 1 meal* | < 11" 8 meals 11-12" 4 meals 12-13" 2 meals 13-17" 1 meal* |
|  Yellow Perch | All Waterbodies | <9" 8 meals 9-10" 4 meals 10-12" 2 meals 12-14" 1 meal* | <9" 4 meals 9-10" 2 meals 10-11" 1 meal* | <9" 4 meals 9-11" 2 meals 11-13" 1 meal* |

< means "less than"
> means "more than"

*Fish greater than this size should not be eaten.