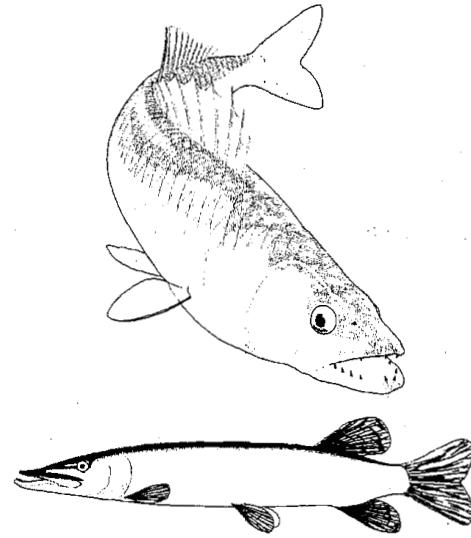


CASS LAKE & PIKE BAY FISH  
CONSUMPTION GUIDE  
2002



LEECH LAKE DIVISION OF RESOURCE  
MANAGEMENT and the MINNESOTA  
CHIPPEWA TRIBE RESEARCH LAB

## INTRODUCTION

Mercury, PCBs, Dioxins and DDT in fish from Tribal lakes have been recognized as a potential health risk for many years. Most recently, multiple contaminant studies have been done on Cass Lake and Pike Bay. These studies offer sufficient information for the publication of this fish consumption guidance. It is estimated that at least 90 percent of Tribal lakes have fish that exceed the health consumption action level for one or more of these persistent, bio-accumulative contaminants and thus require some degree of advisory for Tribal members who consume fish.

The toxicity of these contaminants is of particular concern for some individuals. Women of child-bearing age and children under the age of fifteen are most sensitive to contaminant impacts. This guide presents consumption guidance for the most sensitive population (Group I) and the general adult population (Group II).

The health benefits of fish should NOT be overlooked. Fish is generally low in fat, a good source of protein, and the oils of some fish may reduce heart disease. It is our hope that people will trim fat from fatty fish before cooking (see Figure I), and eat fish as advised in this guidance.

## FOR MORE INFORMATION

Leech Lake Division of Resource  
Management  
15756 St Hwy 371 NW  
Cass Lake, MN 56633  
218-335-7400

## WHAT YOU CAN DO

- ◆ Support legislation and groups that work for pollution prevention.
- ◆ Recycle products that contain persistent bio-accumulative contaminants such as batteries, quiet switches, fluorescent lightbulbs, and plastic.
- ◆ Recycle paper and cardboard at home and at work to reduce toxic emissions from municipal waste incinerators.  
Do not burn your waste in a burn barrel.

## DEFINITIONS

Table 1: Fish Consumption Guide listing fish species, size range, and the maximum consumption of that species and size per person in pounds per month

No Limit: fish consumption greater than 15 pounds per month is considered unlimited for the purposes of this guide

Group I: pregnant women, women of child-bearing age, and children fifteen and under

Group II: Adults not included in Group I, and children 16 years and older

## RULES OF THUMB

- ◆ Eat the smaller fish of each species, and species such as perch and panfish.
- ◆ It's better to eat several smaller meals than to eat one large meal.
- ◆ There is no method of cleaning or cooking fish that will reduce the amount of mercury. Other contaminants may be reduced by trimming fat from fatty fish such as whitefish and cooking them so grease is drained away (see Figure I).

Table 1. Consumption Guidance

	Group I	Group II
Fish Species and Size	Pounds of fish per month	Pounds of fish per month
Walleye (up to 5 lb)	0.5	1.0
Walleye (over 5 lb)	Eat None	0.5
Northern (up to 5 lb)	0.5	1.0
Northern (over 5 lb)	Eat None	1.0
Tulibee (all)	Eat None	0.5
Sucker (all)	Eat None	0.5
Whitefish (all)	Eat None	Eat None
Perch/Panfish (all)	2.0	4.0

Note: If you consume the maximum amount of a fish species per month, as listed in Table I above, do not consume any other fish from Cass Lake or Pike Bay.

Figure I

CLEANING FISH TO REMOVE FAT

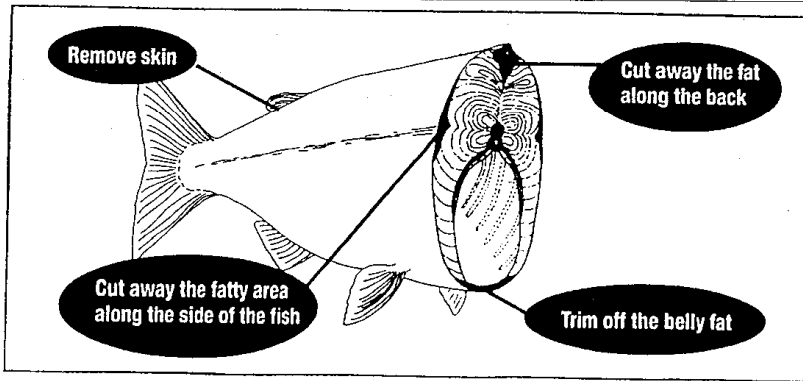


Diagram from Wisconsin Fish Advisory

CONTAMINANTS IN THE ENVIRONMENT

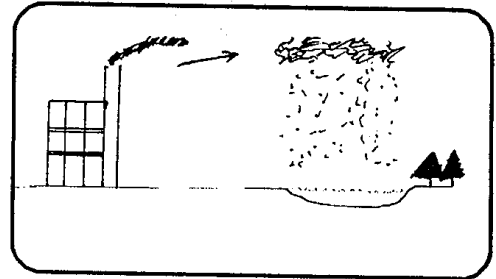


Figure 1. Today, the deposition of persistent bio-accumulative contaminants to Tribal lands and waters is from the burning of wastes and fossil fuels.

Historically, many persistent bio-accumulative contaminants were used as pest (plant and animal) control and as part of industrial practices. Lakes, streams and lands adjacent to the uses of contaminants often contain greater contaminant quantities than those areas impacted by the atmospheric deposition of contaminants alone.

Once these contaminants enter the watershed and waters of a lake, they persist for many years. These contaminants accumulate through the food chain and concentrate in fish. Humans who consume contaminated fish are at higher risk for cancer and some non-cancer diseases.