

Exploring the Potential of a Point System for Communicating Fish Consumption Guidance

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Guidelines for AK Women & Children

5 Consumption Categories (# meals/week)

Unlimited	4	3	2	1
Pacific cod Walleye pollock Black rockfish Pacific ocean perch King salmon Chum salmon Pink salmon Red salmon Silver salmon Halibut < 20 lb. Lingcod < 30 in.	Sablefish Roughey rockfish Halibut 20 - 39 lb. Lingcod 30 - 39 in. Includes: any halibut from stores and restaurants	Halibut 40 - 49 lb.	Yelloweye rockfish Halibut 50 - 89 lb. Lingcod 40 - 44 in.	Salmon shark Spiny dogfish Halibut ≥ 90 lb. Lingcod ≥ 45 in.



Canned chunk light tuna




Canned albacore tuna
























Federal advice: avoid shark,
tilefish, king mackerel,
swordfish



Answer these questions:

- *How should we present our 5 consumption categories?*
 - *Do women know how to interpret consumption categories (in tables/charts) correctly?*
 - *How can you optimize a mixed species diet?*
- 

Below are safe eating guidelines for women who are pregnant, planning to become pregnant, or are breastfeeding, and for children age 15 and under.



Idaho Sport Fish	Commercial Fish
<p>Click here for water body specific advisories</p> <p>Walleye</p>  <p>1 Meal a Month</p>	<p>Shark</p>  <p>Swordfish</p>  <p>DO NOT EAT</p>
<p>Bass</p>  <p>Large Brown Trout</p>  <p>Large Lake Trout</p> 	<p>Albacore Tuna</p>  <p>Snapper</p>  <p>Orange Roughy</p> 
<p>Yellow Perch</p>  <p>Channel Catfish</p>  <p>Lake Whitefish</p> 	<p>Halibut</p>  <p>Mahi Mahi</p> 
<p>Salmon</p>  <p>Crappie</p>  <p>Rainbow Trout</p> 	<p>Light Tuna</p>  <p>Cod</p>  <p>Catfish</p>  <p>Salmon</p>  <p>Tilapia</p>  <p>Trout</p>  <p>Also: Oysters, Shrimp, Sole, Sardines, Flounder, Ocean Perch</p>

Remember The Following Tips

Cut away the fat

SAFE EATING GUIDELINES for women who are pregnant, planning to be pregnant, or are breastfeeding and for children under age 15.

For most of Wisconsin's Inland (non-Great Lakes) waters.*

WEEKLY	2 meals per WEEK			Atlantic or Pacific Salmon (not Great Lakes), farm-raised catfish, shrimp, pollock, and other purchased fish low in mercury.
	OR			
	1 meal per WEEK			Canned "light" tuna, Wisconsin panfish including bluegill, sunfish, crappies, and yellow perch. Also, bullheads, and inland trout†.
MONTHLY	1 meal per MONTH			Canned "white" tuna (6 oz.), tuna steaks, and halibut. Wisconsin gamefish including walleye, pike, bass, catfish, and any other Wisconsin species†.
DO NOT	DO NOT EAT			
		ANY SWORDFISH, SHARK, KING MACKEREL, TILEFISH, OR WISCONSIN MUSKIE		

SAFE EATING GUIDELINES for men and women beyond their childbearing years.

Unrestricted* – Wisconsin panfish, bullheads, and inland trout. Also, farm-raised catfish, shrimp, pollock, canned "light" tuna, Pacific or Atlantic salmon (not Great Lakes), and other purchased fish low in mercury.

1 meal per week* – Wisconsin gamefish and any other Wisconsin species. Also, canned "white" tuna, tuna steaks, and halibut.

1 meal per month – Shark, swordfish, king mackerel, tilefish, and Wisconsin muskie.

*On certain waters, where data indicate higher mercury levels, more restrictive advice is needed. Please visit our website at: dnr.wi.gov/fish/consumption or call your local health department.



Fish is good for you. Eat fish low in mercury!



For more information about purchasing fish, visit the FDA website at fda.gov.














Fish not on the list?

Call Oregon Public Health
Division at 1-877-290-6767
or visit our Web site at
www.health.state.or.us/isde

WHAT KINDS AND HOW MUCH FISH SHOULD I EAT?

Safe eating guidelines for women who are pregnant, planning to be pregnant, or are breastfeeding and for children under age 6.

Below are general guidelines based on mercury levels measured in fish throughout Oregon and levels of mercury found in commercial fish. Please check for and follow specific advisories for fish caught in local lakes and rivers before using the general advice in the table below (see back of brochure).

EAT UP TO TWO MEALS A WEEK	EAT UP TO ONE MEAL A WEEK	AVOID OR EAT RARELY (up to 1 meal per month)
Bluegill  Crappie  Perch  Salmon & Steelhead  Trout  Anchovies Cod Flounder Haddock Mackerel, canned Ocean Perch Salmon & Steelhead Sardines Shellfish (shrimp, crabs, clams, oysters, mussels) Sole Tilapia Trout Tuna, canned light	Carp  Catfish  Sturgeon  Sucker  Halibut Mahi mahi Sea bass Tuna, canned white Albacore	Bass  Brown trout  Northern pike/minnow  Walleye  Mackerel, King (DO NOT EAT) Shark (DO NOT EAT) Swordfish (DO NOT EAT) Tilefish (DO NOT EAT) Tuna, steaks

UNCOOKED MEAL SIZE:

Adult = 8 oz. Child = 4 oz.



SPORT CAUGHT FISH ARE
DESIGNATED BY THIS SYMBOL

Fish, crabs, and other seafoods are tasty and give the body nutrients.

- Most are safe to eat. But some have too much mercury or PCBs.
- Mercury and PCBs may harm a growing brain or body. Your child could have trouble learning or growing from eating food with too much mercury or PCBs.

What seafood can women & children eat?

Follow the rules in the table & eat up to:

- Green Group:** 2 servings each week
- Yellow Group:** 1 serving each week
- Orange Group:** 1 serving each month
- Red Group:** Do not eat!

If you eat seafood often:

- Eat up to 2 servings a week of fish or seafoods that are lower in mercury & PCBs - the **Green Group**.
- If you eat one serving from the **Yellow Group**, do not eat any other fish or seafood during the same week.
- If you eat one serving from the **Orange Group**, do not eat any other fish or seafood during the same month.

Women and Children's Guide to choosing fish and seafood from fish markets, stores, restaurants, and local waters

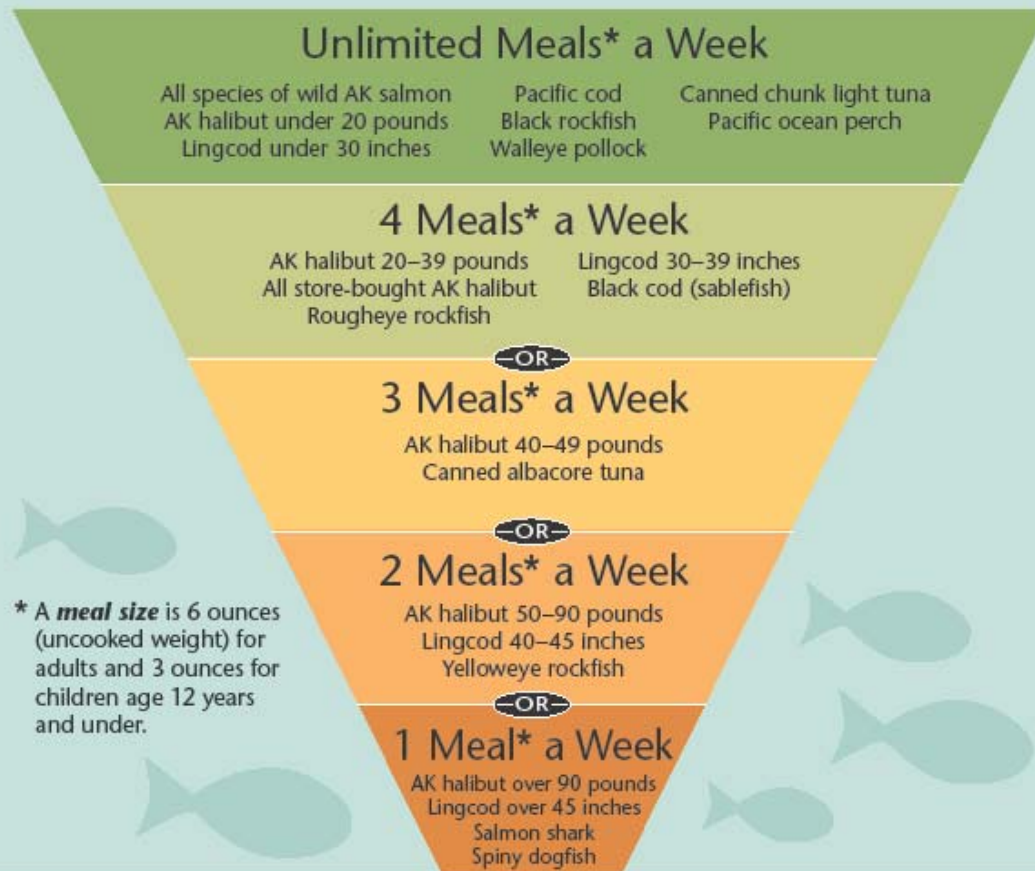
2 servings each WEEK	<ul style="list-style-type: none">• Catfish: store bought• Clams• Cod• Crappie: From fresh waters in MD• Crabmeat: WITHOUT the “mustard”• Flounder• Haddock• Ocean Perch• Oysters• Pollock• Salmon• Scallops• Shrimp• Sunfish: From fresh waters in MD• Tilapia• Trout• Tuna (only Light Tuna)• White Perch: From all Eastern Shore rivers south of Kent Island• Yellow Perch: From fresh waters in MD	1 serving each MONTH	<ul style="list-style-type: none">• Catfish under 18 inches: From Middle River & all Western Shore rivers south of Baltimore Harbor• Striped Bass: From Chesapeake Bay and its tributaries (Striped bass over 28 inches: less than 1 serving each month)• White Perch: From all Western Shore rivers
	1 serving each WEEK	<ul style="list-style-type: none">• Catfish: from all Eastern Shore rivers south of Kent Island• Large and Small Mouth Bass: From fresh waters in MD• Tuna (only Albacore/White Tuna)• Walleye: From fresh waters in MD	DO NOT EAT

Baltimore Harbor
<ul style="list-style-type: none">• Carp• Catfish• Crab “mustard” (green gland)• Eel• White Perch

<h3>How large is one serving?</h3> <p>Women: 9 crabs; 1 can of tuna; 6 ounces of fish (fillet) – about the size of 2 decks of cards</p> <p>Children: 4 crabs; half a can of tuna; 3 ounces of fish (fillet) – about the size of 1 deck of cards</p>

Guide to Eating Fish Safely for Alaska Women and Children

This advice only applies to women who are or can become pregnant, nursing mothers and children age 12 years and under.



*Everyone else can eat as much fish caught
from Alaska waters as they would like.*

Guide to Eating Fish Safely for Alaska Women and Children

Mix and match your fish meals* for up to:

**12 POINTS
PER WEEK**

* A **meal size** is 6 ounces (uncooked weight) for adults and 3 ounces for children age 12 years and under.

Alaska fish is good for you. State health officials recommend that everyone eat fish at least twice a week. All fish contain some level of mercury, a toxic metal that can harm the developing nervous systems of unborn babies and young children.

Women who are or can become pregnant, nursing mothers and children 12 and under should follow these guidelines to limit their mercury intake. Everyone else can eat as much seafood as they like.

PER MEAL
**0
Points**

Unlimited amounts

All species of AK salmon
AK halibut under 20 pounds
AK lingcod under 30 inches
AK Pacific cod
AK black rockfish
AK walleye pollock
Canned chunk light tuna
AK Pacific ocean perch

Eat a **variety** of fish and other seafood as part of a balanced diet.

PER MEAL
**3
Points**

AK halibut 20–39 pounds
All store-bought AK halibut
AK rougheye rockfish
AK lingcod 30–39 inches
AK black cod (sablefish)

PER MEAL
**4
Points**

AK halibut 40–49 pounds
Canned albacore tuna

PER MEAL
**6
Points**

AK halibut 50–89 pounds
AK lingcod 40–44 inches
AK yelloweye rockfish

PER MEAL
**12
Points**

AK halibut 90 pounds or more
AK lingcod 45 inches or more
AK salmon shark
AK spiny dogfish

Avoid these fish: tilefish, king mackerel, swordfish, and shark



For more information:
www.epi.hss.state.ak.us/
(907) 269-8000




Urban Focus Groups

- 3 focus groups conducted Sept. 2009
 - Held 5:30 – 7:00pm Tuesday – Thursday
- Recruited via flyers posted at:
 - WIC clinics
 - Head Start centers
 - Fred Meyer stores
 - Public libraries
 - Neighborhood recreation and health centers
- Callers screened over the phone
- Participants received \$40 gift card



Focus Group Participation Eligibility Criteria

- Between age 21 to 45
 - Live in Alaska
 - Eat fish (at least occasionally)
 - Either:
 - Pregnant
 - Planning to get pregnant
 - Nursing
 - Have kid(s) under age 12
- 

Discussion Outline

- Introductory warm-up questions
- 2 quizzes (done individually):
 - 1st Reverse Pyramid
 - 2nd Point System (aka. mix & match)
- Go through quiz answers
- Compare and evaluate two designs
 - Content
 - Design
- Rate importance, potential impact of info.

Sample Quiz Questions

- *How many meals of halibut that you bought at the store can you eat in a week?*
- *You'd like to have tuna (albacore) sandwiches for lunch and salmon for dinner this week. How many meals of each can you eat?*
- *You had a meal of yelloweye rockfish on Monday. How many meals of black cod could you have for the rest of the week?*

Focus Group Participant Characteristics (n=14)

- **Age:**

21 to 30: 9

31 to 45: 5

- **Residency in AK:**

entire life 9

1.5 - 15 yrs 5

- **All Anchorage residents**

- **Schooling:**

High school 8

College 3

Master's 1

- **Motherhood status:**

1+ child <12 10


Nursing 1

Pregnant 2

Plan to have kids 3



Focus Group Findings: Point System

- 13 of 14 preferred Point System:
 - Clearer, easier to understand
 - Much easier to answer questions when point values were assigned
 - You can mix and match
 - Similar to Weight Watchers: *“a lot of people are on diets”*
 - Would take and put on fridge if convenient size
 - Criticisms/concerns:
 - More time-consuming than Reverse Pyramid
 - Some people might think it's too much work
 - Could be confusing for some who aren't good at math, so give examples!
 - Confusion about relationship between 6-oz. meal size and points
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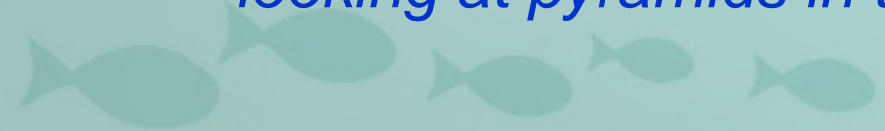


Focus Group Findings: Reverse Pyramid

- Criticisms:

- “ORs” are confusing, can’t combine with “ORs”, really hard to think about the “ORs” and what that means
- Didn’t notice the “ORs” (2 people)
- Hard to mix and match: *“I like the way this one looks better, but it was hard to answer the questions”*

- Strengths:

- Less time-consuming: *“At first I didn’t like it, but I like it better than mix and match; people don’t have time for the point system”*
 - More streamlined, familiar shape: *“we’re used to looking at pyramids in terms of eating”*
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Limitations



- Evaluation based on a small number of self-selected urban women
- Untested with rural or subsistence populations
- May not be a big deal for most people:
 - Don't eat most of the listed species
 - Eat only 1 – 3 fish meals per week





Bottom Line

- Point system has potential to reduce confusion and misinterpretation of fish consumption categories → ↑ consumption, ↓ risks of over-exposure to contaminants
- Conventional approaches for presenting consumption advice may not communicate intended advice, and may limit “mix and match”
- Very important to test materials with target audience; don’t assume something is simple or straightforward



Devoted fish eaters

“If they [the State] started telling me not to eat my fish, man, they are going to war. This is Alaska!”

- focus group participant

