

California Fish Advisory Evaluation

A qualitative and community-
based approach to creating
state educational materials



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California Department of Public Health

Environmental Health Investigations Branch

Fish Mercury Project

- Stakeholder driven and collaborative effort between CBO's, state and county agencies, and academia.



Stakeholder feedback:

The current
advisory format
is not understood
by those who
need it most!



California Environmental Protection Agency • Office of Environmental Health Hazard Assessment

SAFE EATING GUIDELINES

Based on mercury in fish from the

SAN JOAQUIN RIVER

From the Port of Stockton to Friant Dam



Women of Childbearing Age,
Pregnant and Breastfeeding Women, and
Children 17 Years and Younger



Women Beyond Childbearing Age
and Men

Best Choices

Bluegill and other sunfish, or crayfish
Eat up to 4 servings* a week
(Total of 12 ounces cooked fish a week)

Best Choices

Bluegill or other sunfish
Daily
(Total of 21 ounces cooked fish a week)
OR
Crayfish, crappie, or carp
Eat up to 6 servings* a week
(Total of 18 ounces cooked fish a week)
OR
Catfish or sucker
Eat up to 4 servings* a week
(Total of 12 ounces cooked fish a week)

OR

OR

Good Choices

Catfish, crappie, carp, or sucker
Eat up to 2 servings* a week
(Total of 6 ounces cooked fish a week)

Good Choices

Largemouth, smallmouth, or spotted bass
Eat up to 2 servings* a week
(Total of 6 ounces cooked fish a week)

Avoid

Largemouth, smallmouth, or spotted bass
Do Not Eat

Follow the “No Consumption” warnings where signs are posted for the Port of Stockton area

* The recommended serving size for adults is three ounces of cooked fish (four ounces prior to cooking)

For more information, call OEHHHA at (510) 622-3170 or visit www.oehha.ca.gov and click on “Fish”

The Evaluation

■ Objectives

- Identify best practices visual tools and concepts that can be used in risk communication materials.
- Create best practices Safe Eating Guidelines, to be used at the state and/or county levels to communicate risk to large and diverse populations.



Our approach

■ Qualitative inquiry

- One-on-one interviews
 - N=41
- Field-testing
 - N=25
- Focus groups
 - N=80, 9 focus groups

■ Collaboration

- Community & County agency input
 - Elicit input from LSAG
- State agency input
 - Work with OEHHA to identify parameters and apply findings

Participants & Procedure

- Partnered with 3rd party recruiters who work in the communities we need to reach.
- Held meetings in the participants' community.
- Provided stipends for participation.
- Followed a 'focused conversation' approach.



Participant Demographics

■ Sex

- 56% male
- 44% female

■ Ethnicity

- 26% Asian
- 26% Black
- 18% Latino
- 21% White
- 9% other (including Russian and Native American)

■ Education

- 20% Less than high school
 - 34% Graduated from high school
 - 27% Some college
 - 12% College graduates
- (not everyone answered this question)

■ Income

- 87% made below \$24,999
- 9% made \$25,000-\$49,999
- 4% made \$50,000 and above



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Symbols

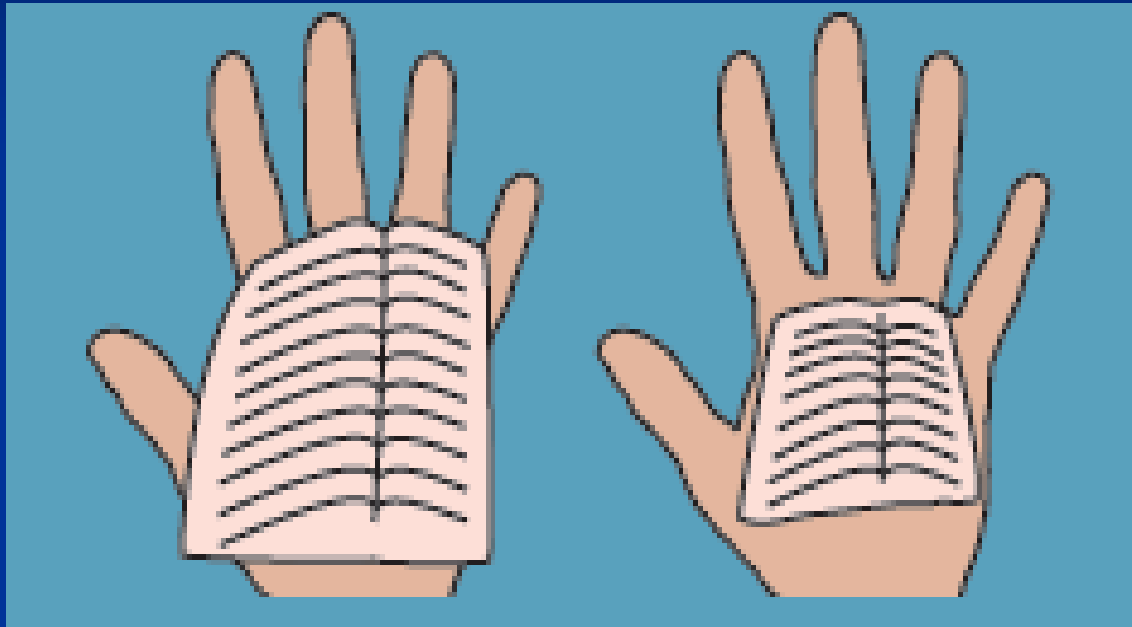
Names for
population
groups

Categories
of risk

Quantities

Next, we tested different language and numerous visuals to see what worked best for “most” people....

What is a serving?



For Adults

For children

The recommended serving of fish is about the size and thickness of your hand. Use your hand to measure a serving of fish. Give children smaller servings.

Why eat fish?

Eating fish is good for your health. Fish have Omega 3s that can reduce your risk for heart disease and improve how the brain develops in unborn babies and children.

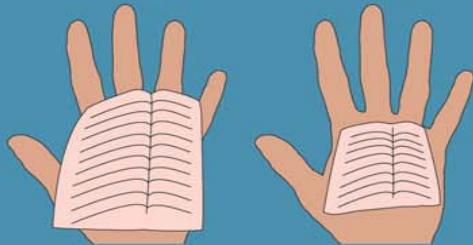
What is the concern?

Some fish have high levels of mercury that can negatively affect how the brain develops in unborn babies and children.

What should I do?

- Use this guide to choose fish lower in mercury and high in Omega 3s.
- Eat smaller fish of legal size. Fish build up mercury in their bodies as they grow.

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For Adults

For Children

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More fish eating advice for women ages 18 – 45 and children ages 1 – 17

- You can eat 2 servings per week of fish from stores or restaurants. But, do not eat fish caught by you, friends or family in the same week.
- Only one of your two servings of fish per week should be canned albacore (white) tuna.
- When shopping for fish, good choices are salmon, pollock, catfish, tilapia, and shrimp.
- Do not eat shark, swordfish, tilefish, or king mackerel. These fish are very high in mercury.

For more advice about what you can do to protect your family from mercury in fish, contact:

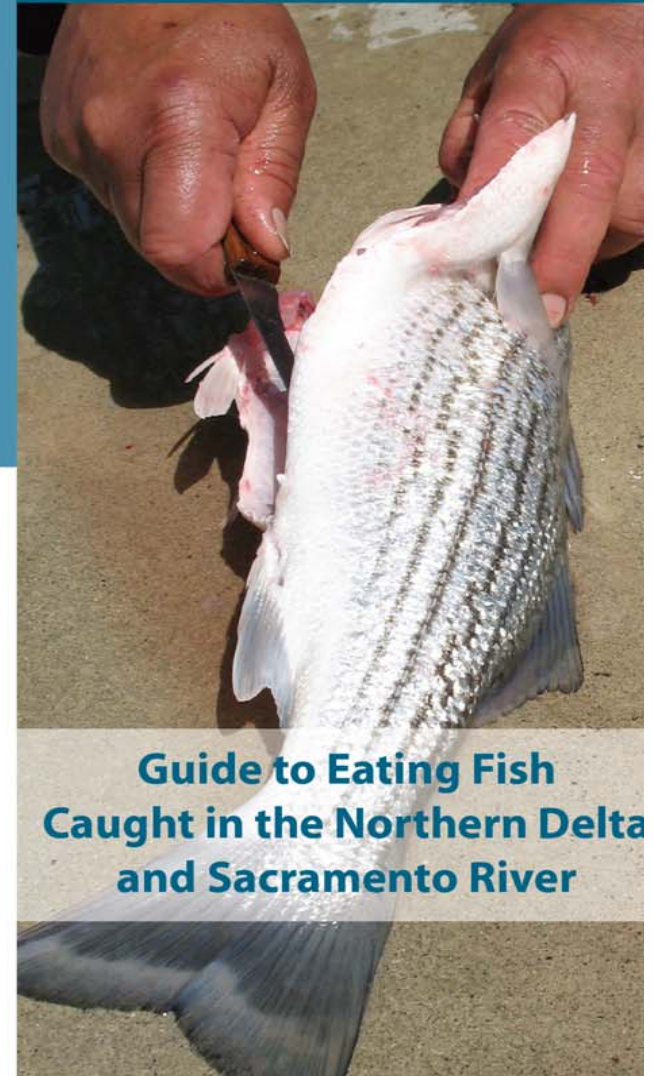


<http://www.oehha.ca.gov/fish.html>

(916) 327-7319 or (510) 622-3170

California Environmental Protection Agency
Office of Environmental Health Hazard Assessment
1515 Clay Street, 16th floor
Oakland, California 94612

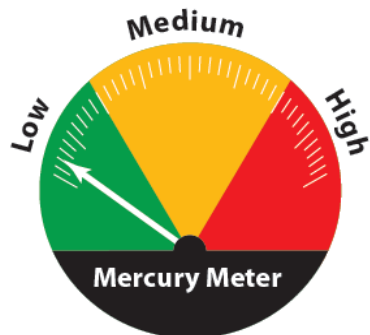
Eat fish. Be safe. Choose wisely.



Guide to Eating Fish Caught in the Northern Delta and Sacramento River

A guide to eating fish caught in the northern Delta and Sacramento River

For women ages 18 - 45, especially those who are pregnant or breastfeeding, and children ages 1 - 17



American Shad



Asiatic Clam

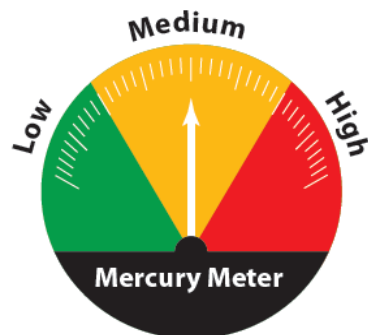


Trout ♥



Salmon ♥

♥ = High in Omega 3s



Carp and Goldfish



Sucker



Crappie



Catfish



Hitch



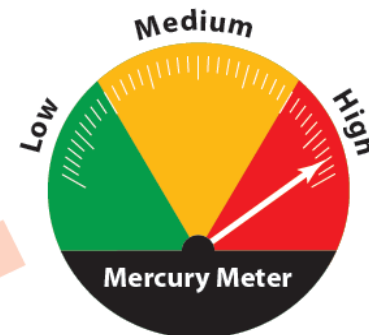
Sunfish



Hardhead



Crayfish



Striped Bass*



Largemouth Bass



Sturgeon*



Pikeminnow

Safe to eat
3 servings per week

OR

Safe to eat
1 serving per week

Do not eat

*Striped bass under 27 inches or sturgeon:
safe to eat 1 serving per month

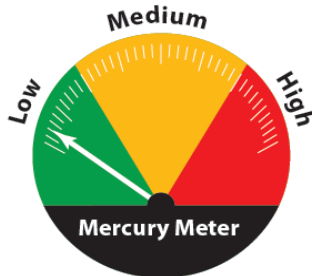
Analysis Plan

- Grounded theory - the Gold Standard for qualitative research
- Transcripts - third party transcription of all focus groups
- Coding - Two coders to ensure inter-coder reliability
- Themes - Codes group themselves into larger categories, or theoretical frameworks
- Analysis - Describe themes using codes and quotes

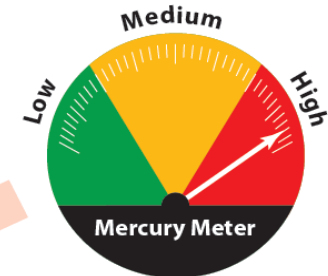
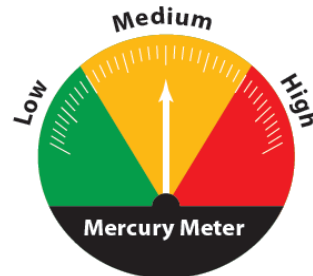
Preliminary Findings....

A guide to eating fish caught in the northern Delta and Sacramento River

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♥ = High in Omega 3s



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Limitations & Unresolved Questions

- Time
- Agency buy-in
 - Limited agency understanding of qualitative methods
- Some people want more information
 - Making this information accessible to a larger and broader audience, draws attention to smaller (but vocal) audience.
- Distribution questions
 - Agencies not mandated to distribute
- One vs. two population approach
- Incorporating commercial fish
- Location descriptions/boundaries

Questions?

Acknowledgements

- Office of Environmental Health Hazard Assessment
 - Local Stakeholder Advisory Group
 - Minigrant groups
 - Food Stamp Nutrition Education Program
- Expanded Food and Nutrition Education Program
 - Women, Infants, and Children (WIC) Program
 - California Striped Bass Association
 - Oroville Hatchery