**TED** 



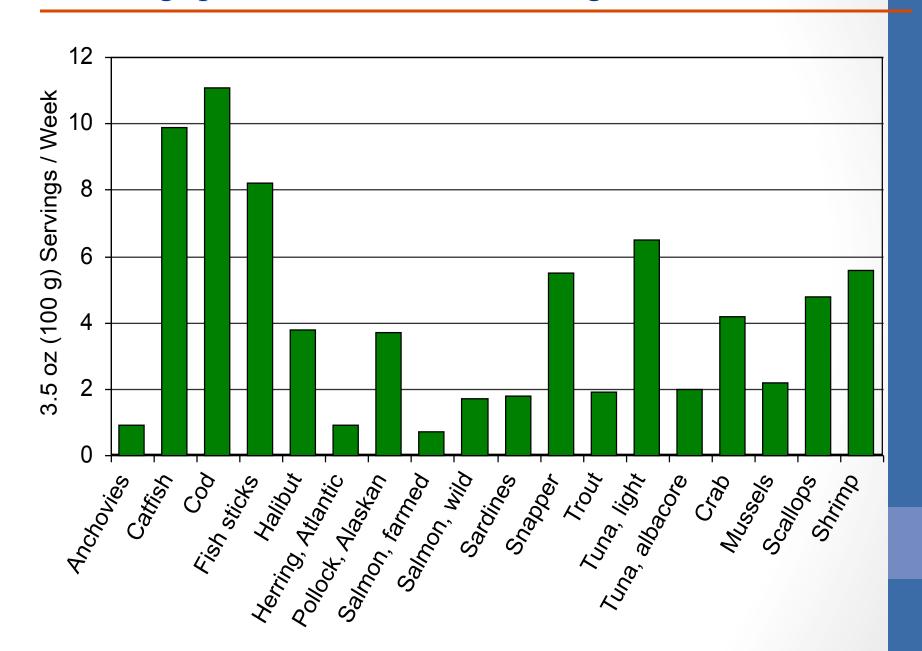
# The Seafood Paradox

Balancing Nutrition, Health and Sustainability

# Why We Should Be Eating More Seafood

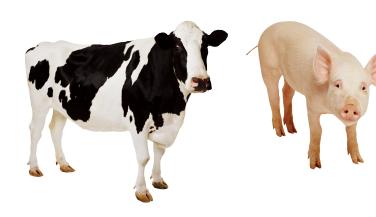
- What happened between 2005 and 2010, that changed the Dietary Guidelines for Americans recommendation?
- Evidence shows that consuming 8 ounces of a variety of seafood provides an average of 250 mg/day of EPA & DHA which is associated with reduced cardiac deaths. With or without preexisting cardiovascular disease.
- Benefit of adequate omega-3 fats for optimal neurological development in utero led to 12 ounce/week recommendation for pregnant and lactating women.

#### Servings per week to achieve 250 mg/d EPA+DHA



### Benefits of Seafood

- Americans eat about 44% of the Recommended Dietary Guideline Amount, 3.5 ounces per week.
- Despite all the benefits of eating seafood, consumption has decreased slightly.
- 2009 American Consumed
  - 105.7 pounds red meat
  - 69.4 pounds poultry
  - 15.8 pounds seafood







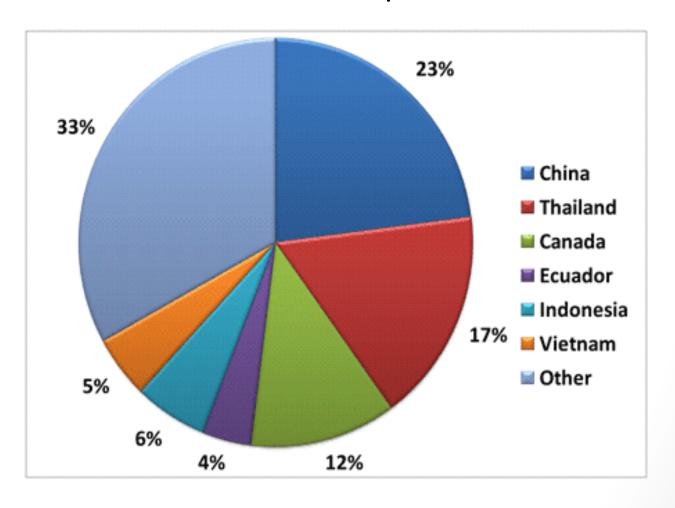
### What Americans Eat

• 90 % from 10 species

2010 Data	Species	Annual Pound/per person
1	Shrimp	4.0
2	Canned Tuna	2.7
3	Salmon	1.99
4	Tilapia	1.45
5	Pollock	1.19
6	Catfish	0.80
7	Crab	0.57
8	Cod	0.46
9	Pangasius (Swai)	0.40
10	Clams	0.34
Total All Species		15.8

### Fish Facts

• 85 % of the fish we eat is imported.



CHEFSURVEY: WHAT'S



IN 2012



- National Restaurant Association Trends Survey
- Sustainable Seafood ranked #9 out 20 top trends.

#### Trends in Center of the Plate

- #1 locally sourced meats
- #2 sustainable seafood

• <u>Is it local?</u>



# Does Our Pallet Lack Sophistication?

- Maybe, Basically we eat only 10 fish
- 60% of what we do eat, we eat in restaurants
- Most popular fish menu items







Tuna Salad, Shrimp cocktail etc.

## Why Don't Americans Eat More Fish?

#### Barriers

- FEAR, Myths and Untruths
- Lack of Familiarity
- Cost
- Confusion about Sourcing & Environmental Impact
- How can we help them eat more?





# Who is Controlling the Message About Eating Seafood?

National Fisheries Institute (NFI) AboutSeafood.com



- Nutrition Messages that resonate with consumers are positive can do messages.
- Is the message about seafood a positive message?

# Fear: Mercury in Perspective

Of the top 10 fish that make up 90% of Americans seafood consumption ...

	Mercury mcg/4 oz.
<ul><li>Shrimp &amp; Clams</li></ul>	0
<ul> <li>Canned Tuna-(light)</li> </ul>	12
<ul> <li>Salmon, Tilapia,</li> </ul>	2
<ul> <li>Pollock, Catfish</li> </ul>	6-7
<ul><li>Crab</li></ul>	9
• Cod	14

King Mackerel, Swordfish, Tilefish,\* Shark 110, 147,219,151

- EPA reference dose limit is 0.1 mcg/Kg/day. Currently no recommendation to limit fish for the general population.
- A 39 mcg of mercury per week would reach the EPA threshold for a woman who is pregnant or breastfeeding and weighs 124 pounds (56 Kg)

## What Supermarket RD Can Do

- Our role is to provide information & inspiration to help customers buy and prepare good food.
- Give people the facts and relevant messages.
- Unless you are pregnant, planning to get pregnant, nursing, or a young child, there is no health warning to limit seafood or fish consumption.
- Mercury conversation should only about the 4 four fish to avoid.



### Fear- Dioxin

 If you're eating the typical North American diet, this is where you are getting your dioxin from:

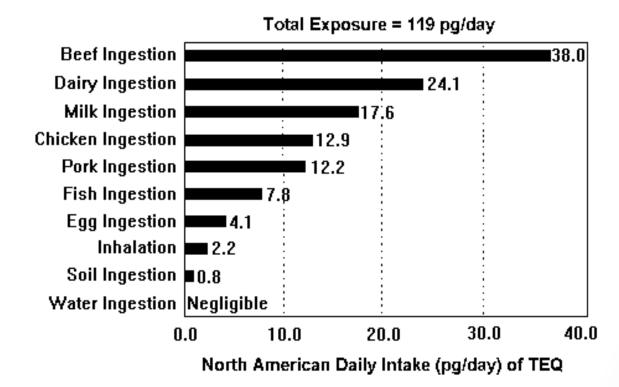
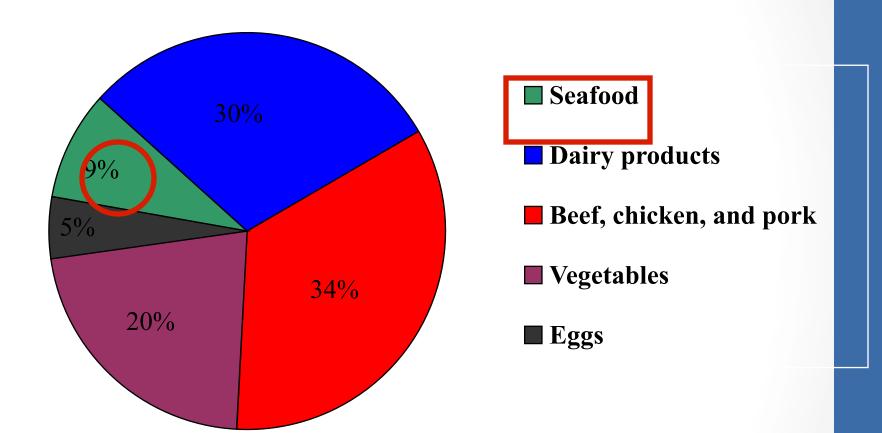


Chart from <u>EPA Dioxin Reassessment</u> Summary 4/94 - Vol. 1, p. 37 (Figure II-5. Background TEQ exposures for North America by pathway)



# Supermarket RD Message

- Dioxins and PCBs are an issue in our worldwide food supply and the concern about these toxins is not specifically related to seafood.
- The EPA will be releasing recommendations in 2012. Those recommendations should form the basis for future dietary recommendations.
- Until then, The US Dietary Guidelines for choosing lean meat and low fat or fat free dairy products and increasing fish, fruits, vegetables and grain products is the best recommendation.

# Expanding the Pallet by Increasing Familiarity

- Recipes and exposure to new varieties
- It can be done- lessons from other fish
- Tilapia 20,000 pounds to 475,000 pounds in 20 years
- Salmon 260,000 pounds to 600,000 pounds in 20 years
- Last year USA imported \$ 360 million of Swai, a 88% increase from the previous year.
- People can learn (and are) learning to eat different fish varieties







# Inspire Customers to Cook Seafood

- Provide recipes & cooking ideas. Weekly menus.
- Cooking classes.
- Sampling with recipe cards
- Keys to fish cookery.
  - Gentle heat for short periods, no connective tissue little fat.
  - Don't over marinate-especially with vinegar & wine.
  - Remember about carry-over temperature.







# Shopping for Fish

- All fish in supermarket is frozen or hyper-chilled (32-34 F)
- Teach about the general guidelines for purchasing fish.
- Why is Fish is more perishable than other animal flesh?
- Fish Microbiology
- Fish Physiology
- Fish Fat Chemistry







# **Eco-labeling**













### Wild Fish

NOAA FISH WATCH



MARINE STEWARDSHIP COUNCIL



- MONTERRAY BAY SEAFOOD WATCH PROGRAM
- GREEN PEACE: CARTING AWAY THE OCEANS SCORE CARD



**Supermarket Seafood Sustainability** Scorecard RANK RETAILER **SAFEWAY** 64.61 **TARGET** 63.74 WEGMANS 63.74 WHOLE FOODS 61.77 **AHOLD** 59.22 HARRIS TEETER 58.35 **ALDI** 54.62 A&P 51.63 PRICE CHOPPER 47.90 **DELHAIZE** 10 47.66 COSTCO 44.89 TRADER JOE'S 44.57



**Be Happy Fish** 

# Aquaculture



- Aquaculture is essential to feeding a world of 7 billion people.
- Aquaculture is not benign, but neither is agriculture.
- Sound aquaculture practices address:
  - benthic impacts,
  - chemical inputs,
  - disease/parasites,
  - escapes,
  - feed, nutrient loading





#### Global Aquaculture Alliance

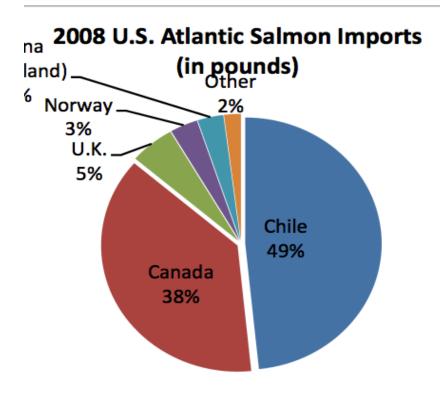
#### Aquaculture Stewardship Council

Standards set by World Wildlife Foundation hands off to ASC Currently for a few species: Shrimp, Pangsius (swai), Tilapia

Soon to come: Salmon

## Salmon

### **Import**



### Consumption

- 300,000 metric tons Annually
- 1/3 Pacific (wild US)
- 2/3 Atlantic (farmed)

# Sustainability and the Role of the Supermarket RD

- Complex Issue
- Will only become more relevant in the future
- Educate yourself
- Learn about the seafood sold in your store.
- Know how your store sources seafood
- Engage with Seafood category manager
- Seafood is confusing for customers and helping them understand this category better should translate into higher sales.

# Wrap Up

 The Supermarket RD is the credible voice to convey positive messaging about seafood.

 We are poised to deliver positive, useful and accurate health messages about the benefits of eating seafood.

 In addition, we can help inspire & promote seafood cookery, preparation, and general knowledge around seafood.

### Is Sustainable Seafood An Oxymoron?

- FNCE 2012 Monday, October 9<sup>th</sup> at 12:30 pm
  - Moderated by Sylvia Geiger
  - Marine Biologist Olaf Jenson & Food Service Director Diane Imrie
  - My Blog SeafoodRD.com

