

# What's The Catch?

## A Virtual Education Program to Increase Seafood Intake of New Jersey Residents

Christine Zellers, MPP Rutgers Cooperative Extension - Family & Community Health Sciences-  
Educator/Asst. Professor, Agent III

Lauren Errickson, MS, Senior Program Administrator- Rutgers Cooperative Extension,  
PhD Candidate- Nutritional Sciences Graduate Program, Rutgers University

# Overview

Problem

Content of Program

Program evaluation

Results and Conclusions

**SHORTFALL:** 90% of Americans do not eat the recommended amounts of seafood

**SURPLUS:** COVID-19 Pandemic created closures and surplus of retail seafood

**HOLISTIC APPROACH:** Inclusion of Educators with diverse areas of expertise to build a holistic program.

**PROGRAM OBJECTIVE:** To develop, deliver, and evaluate an extension program designed to increase seafood purchases and consumption

**OBJECTIVE STRATEGIES:**  
Increase knowledge & self efficacy to increase consumption



**October 14 \* 6:30 PM to 8 PM**

**Featured Speakers:**

**Dr. Douglas Zemeckis**, Agriculture & Natural Resources County Agent III, Rutgers Cooperative Extension (RCE) Ocean, Atlantic, and Monmouth Counties and

**Lisa M. Calvo**, Marine Scientist/Aquaculture Extension Program Coordinator at Haskin Shellfish Research Laboratory

**Topics covered on New Jersey's Fishing and Aquaculture Industries will include:**

- ◆ The many types of seafood that are harvested or grown
- ◆ Awareness of the responsible and sustainable practices adopted by stakeholders
- ◆ The science and management that supports the sustainability of these industries and New Jersey's marine ecosystems.

**Register by Friday, October 9 for this Zoom webinar program at:**

<https://go.rutgers.edu/qgjvslnh>

**October 28 \* 6:30 PM to 8 PM**

**Featured Speakers:**

**Christine Zellers**, Family & Community Health Sciences (FCHS) Educator/Asst. Professor, RCE Cape May County, **Joanne Kinsey**, FCHS Educator/Professor, RCE Atlantic and Ocean Counties, **Rachel Tansey**, FCHS Educator, RCE Monmouth County, **Lauren Erickson**, Senior Program Administrator, RCE; PhD Candidate, Department of Nutritional Sciences

**Topics covered will include:**

- ◆ The dietary guidelines for seafood consumption for Americans, including pregnant women
- ◆ The nutritional value and benefits of seafood consumption
- ◆ Tips on cooking seafood and decoding seafood labeling

**Register by Friday, October 23 for this Zoom webinar program at:**

<https://go.rutgers.edu/zihwtben>

# Featured Speakers

- **Christine Zellers**, FCHS Educator III (Asst. Prof.), Cape May County: [zellers@njaes.rutgers.edu](mailto:zellers@njaes.rutgers.edu)
- **Lauren Errickson**, RCE Senior Program Administrator, Ph.D. Candidate - Department of Nutritional Sciences: [lauren.errickson@rutgers.edu](mailto:lauren.errickson@rutgers.edu)
- **Rachel Tansey**, FCHS Senior Extension Associate, Monmouth County: [tansey@njaes.rutgers.edu](mailto:tansey@njaes.rutgers.edu)
- **Joanne Kinsey**, FCHS Educator II (Assoc. Prof.), Atlantic and Ocean Counties: [jkinsey@njaes.rutgers.edu](mailto:jkinsey@njaes.rutgers.edu)
- **Lisa Calvo**, Marine Scientist/Aquaculture Extension Program Coordinator [lcalvo@hsrl.Rutgers.edu](mailto:lcalvo@hsrl.Rutgers.edu)
- **Douglas Zemeckis**, Agriculture and Natural Resources County Agent Ocean, Atlantic & Monmouth County [Zemeckis@njaes.Rutgers.edu](mailto:Zemeckis@njaes.Rutgers.edu)



# Key Educational Components

Science and  
Management of  
Sustainable Seafood

Aquaculture

Dietary Guidelines  
for Americans

Food Safety

Nutrition Benefits

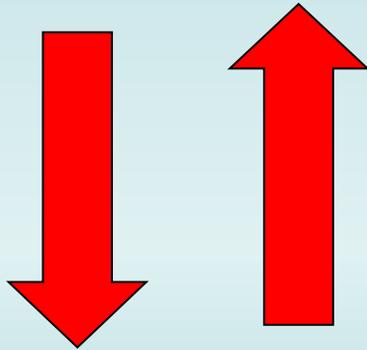
Seafood labeling

Mercury Content &  
Recommendations

Preparation and  
Recipes

## Quick Guide to % DV

5% DV or less is Low



20% DV or more is High

# Seafood

## Nutrition Facts

Cooked (by moist or dry heat with no added ingredients), edible weight portion. Percent Daily Values (%DV) are based on a 2,000 calorie diet.

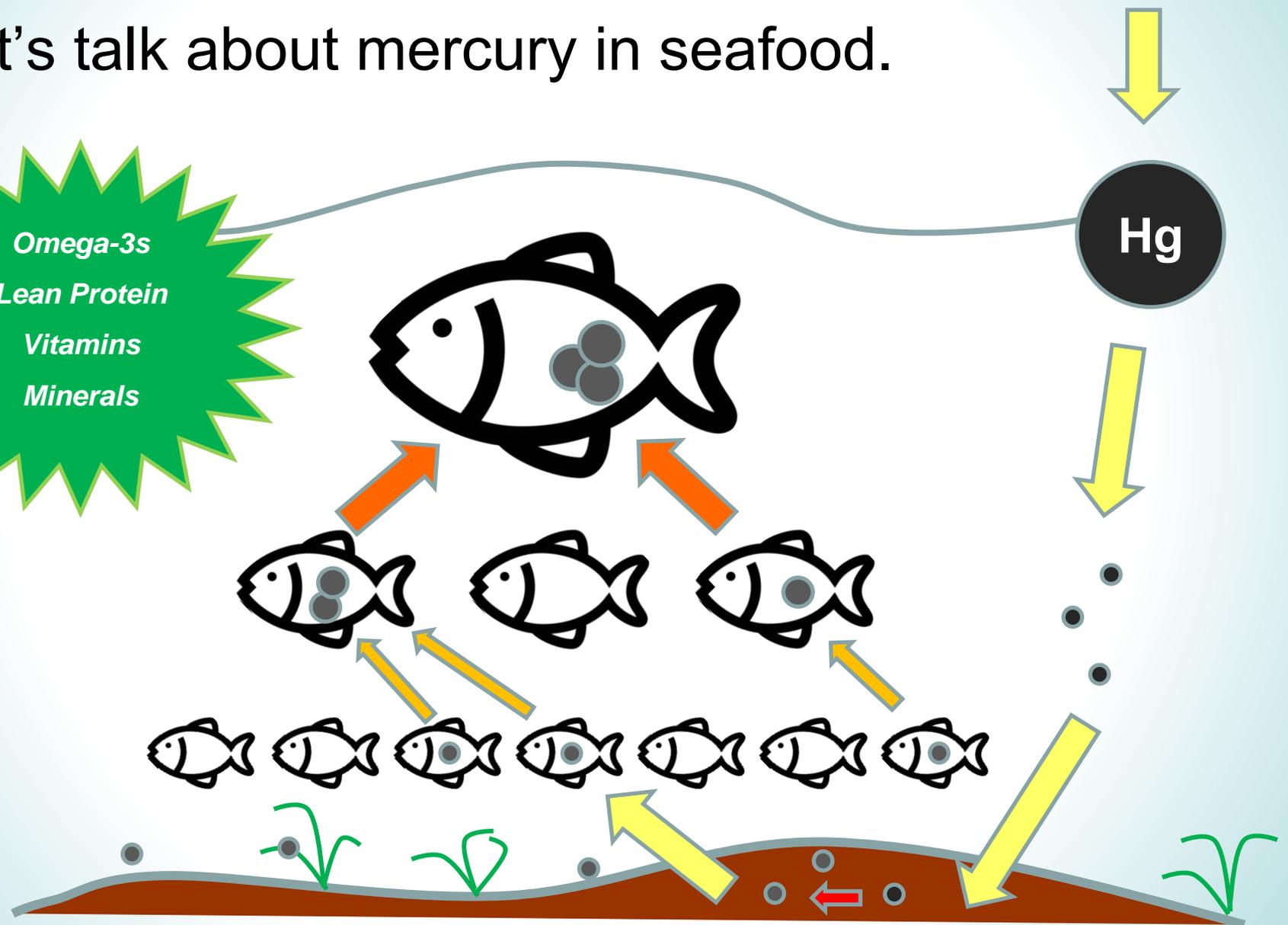
Seafood Serving Size (84 g/3 oz)	Calories		Calories from Fat		Total Fat		Saturated Fat		Cholesterol		Sodium		Potassium		Total Carbohydrate		Protein		Vitamin A		Vitamin C		Calcium		Iron		
			g	%DV	g	%DV	mg	%DV	mg	%DV	mg	%DV	g	%DV	g	%DV	g	%DV	%DV	%DV	%DV	%DV	%DV	%DV	%DV	%DV	
<b>Blue Crab</b>	100	10	1	2	0	0	95	32	14	330	9	0	20g	0%	4%	10%	4%										
<b>Catfish</b>	130	60	6	9	2	10	50	17	40	230	7	0	17g	0%	0%	0%	0%										
<b>Clams, about 12 small</b>	110	15	1.5	2	0	0	80	27	95	470	13	2	17g	10%	0%	8%	30%										
<b>Cod</b>	90	5	1	2	0	0	50	17	65	460	3	0	20g	0%	2%	2%	2%										
<b>Flounder/Sole</b>	100	15	1.5	2	0	0	55	18	100	390	4	0	19g	0%	0%	2%	0%										
<b>Haddock</b>	100	10	1	2	0	0	70	23	85	340	4	0	21g	2%	0%	2%	6%										
<b>Halibut</b>	120	15	2	3	0	0	40	13	60	500	3	0	23g	4%	0%	2%	6%										
<b>Lobster</b>	80	0	0.5	1	0	0	60	20	320	300	13	9	17g	2%	0%	6%	2%										
<b>Ocean Perch</b>	110	20	2	3	0.5	3	45	15	95	290	4	0	21g	0%	2%	10%	4%										
<b>Orange Roughy</b>	80	5	1	2	0	0	20	7	70	340	3	0	16g	2%	0%	4%	2%										
<b>Oysters, about 12 medium</b>	100	35	4	6	1	5	80	27	300	220	6	2	10g	0%	6%	6%	45%										
<b>Pollock</b>	90	10	1	2	0	0	80	27	110	370	5	0	20g	2%	0%	0%	2%										
<b>Rainbow Trout</b>	140	50	6	9	2	10	55	18	35	370	1	0	20g	4%	4%	8%	2%										
<b>Rockfish</b>	110	15	2	3	0	0	40	13	70	440	3	0	21g	4%	0%	2%	2%										
<b>Salmon, Atlantic/Coho/Sockeye/Chinook</b>	200	90	10	15	2	10	70	23	55	430	2	0	24g	4%	4%	2%	2%										
<b>Salmon, Chum/Pink</b>	130	40	4	6	1	5	70	23	65	420	3	0	22g	2%	0%	2%	4%										
<b>Scallops, about 6 large or 14 small</b>	140	10	1	2	0	0	65	22	310	430	13	2	27g	2%	0%	4%	14%										
<b>Shrimp</b>	100	10	1.5	2	0	0	170	57	240	220	10	0	21g	4%	4%	6%	10%										
<b>Swordfish</b>	120	50	6	9	1.5	8	40	13	100	310	4	0	16g	2%	2%	0%	6%										
<b>Tilapia</b>	110	20	2.5	4	1	5	75	25	30	360	1	0	22g	0%	2%	0%	2%										
<b>Tuna</b>	130	15	1.5	2	0	0	50	17	40	480	2	0	26g	2%	2%	2%	4%										

Seafood provides negligible amounts of trans fat, dietary fiber, and sugars.

U.S. Food and Drug Administration  
(January 1, 2008)

# Let's talk about mercury in seafood.

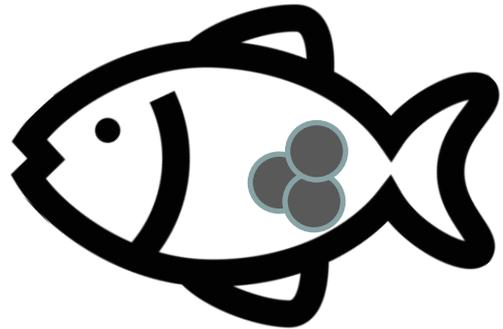
**Omega-3s**  
**Lean Protein**  
**Vitamins**  
**Minerals**



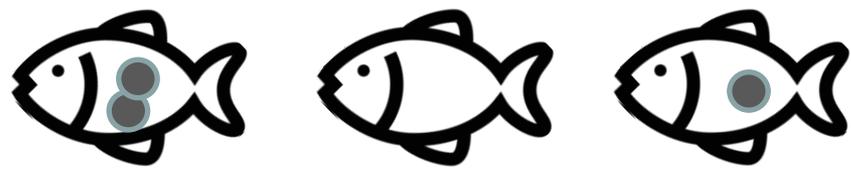
# What does the EPA-FDA advice suggest for the special populations who are most vulnerable to mercury?

Hg

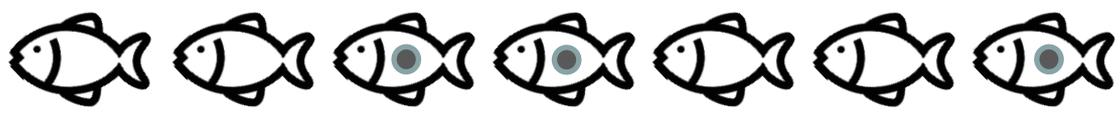
**Choices to Avoid**



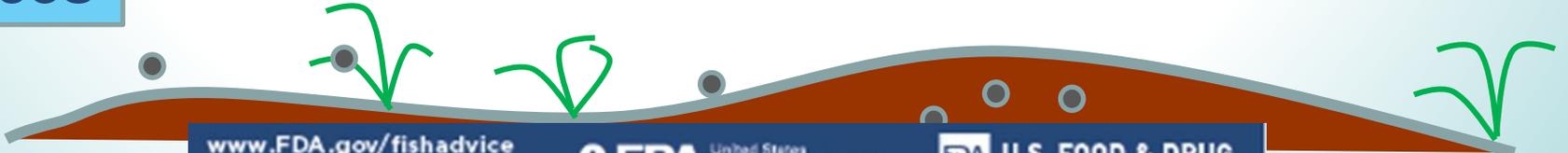
**Good Choices**



**Best Choices**



Based on potential mercury content according to likely age, size, and harvest location of fish



# Seafood Package Labels

<b>Nutrition Facts</b>	
8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

- 1 The serving size now appears in larger, bold font and some serving sizes have been updated.
- 2 Calories are now displayed in larger, bolder font.
- 3 Daily Values have been updated.
- 4 Added sugars, vitamin D, and potassium are now listed. Manufacturers must declare the amount in addition to percent Daily Value for vitamins and minerals.



**EP** Excellent Source of Protein  
See nutrition information for cholesterol content.

**GS** Good Source of Calcium  
See nutrition information for cholesterol content.



**OMEGA-3**  
**910mg**  
FATTY ACIDS™

\*SEE NUTRITION INFORMATION FOR CHOLESTEROL CONTENT



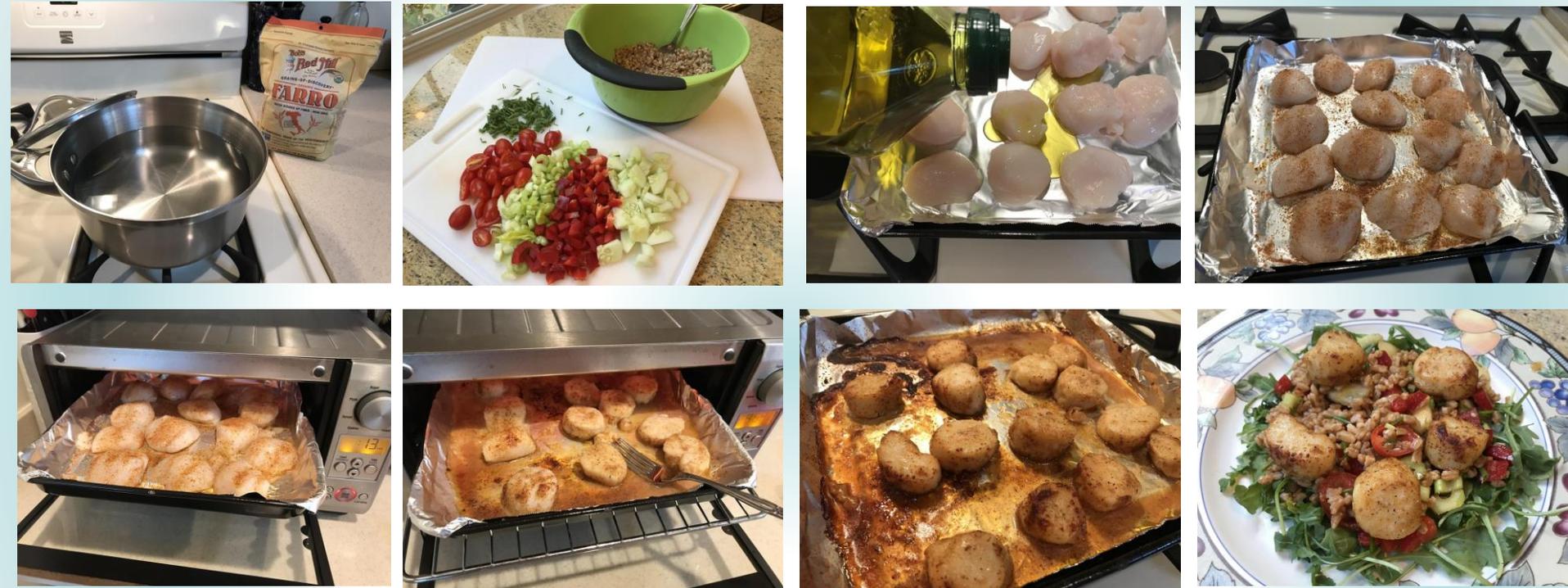
**CERTIFIED SUSTAINABLE SEAFOOD**  
**MSC**  
[www.msc.org](http://www.msc.org)

TM



LIVE FARM-RAISED  
**LITTLENECK CLAMS**

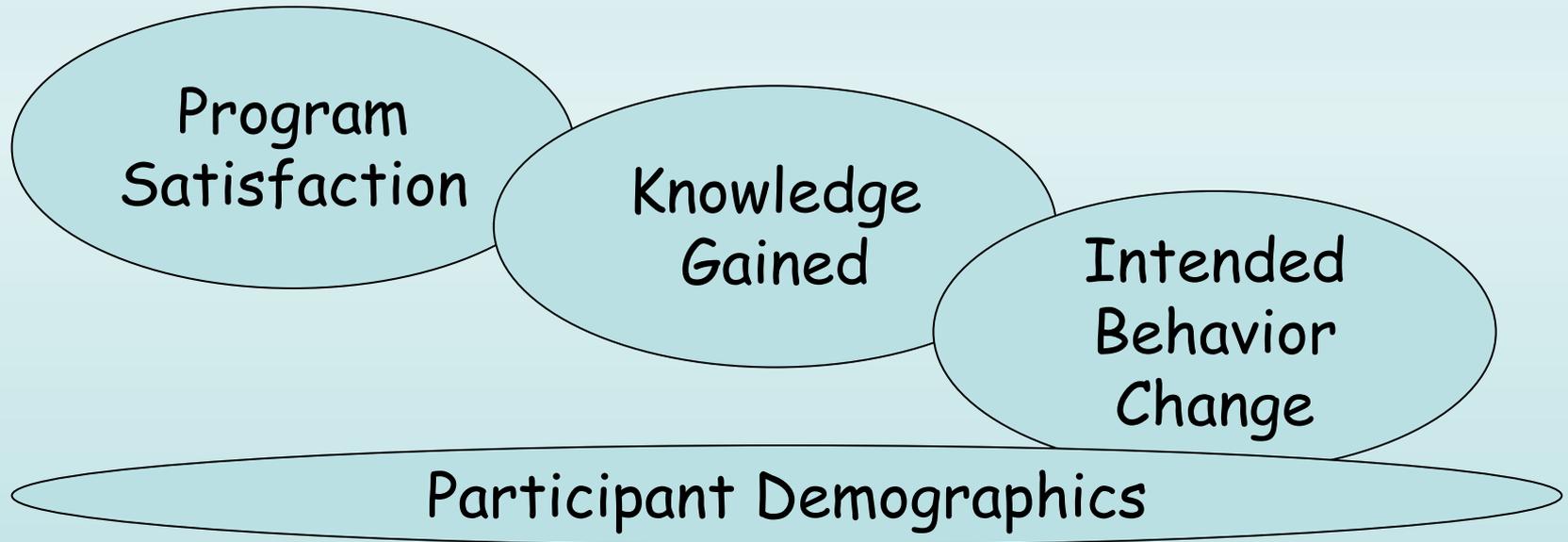
# Broiled Scallops with Farro Salad



Farro cooked according to directions. 1 cup grape tomatoes, 1 cup celery, 1 onion, 1 cup red or pepper, ½ cup cucumber, fresh chives or parsley, 1 lb. fresh flounder, drizzle olive oil & seasoning to taste.

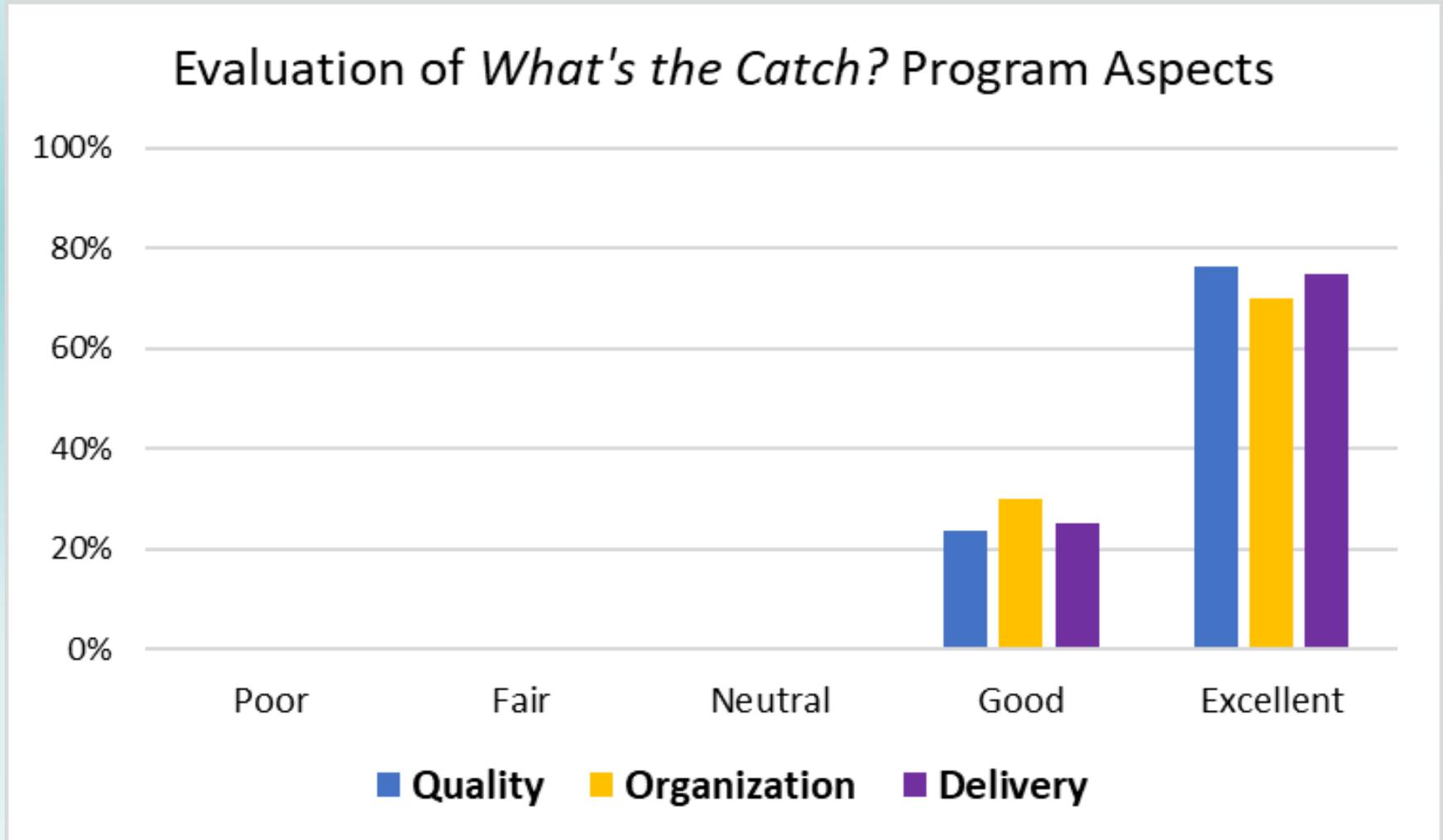
# Program Evaluation

- Qualtrics survey to determine

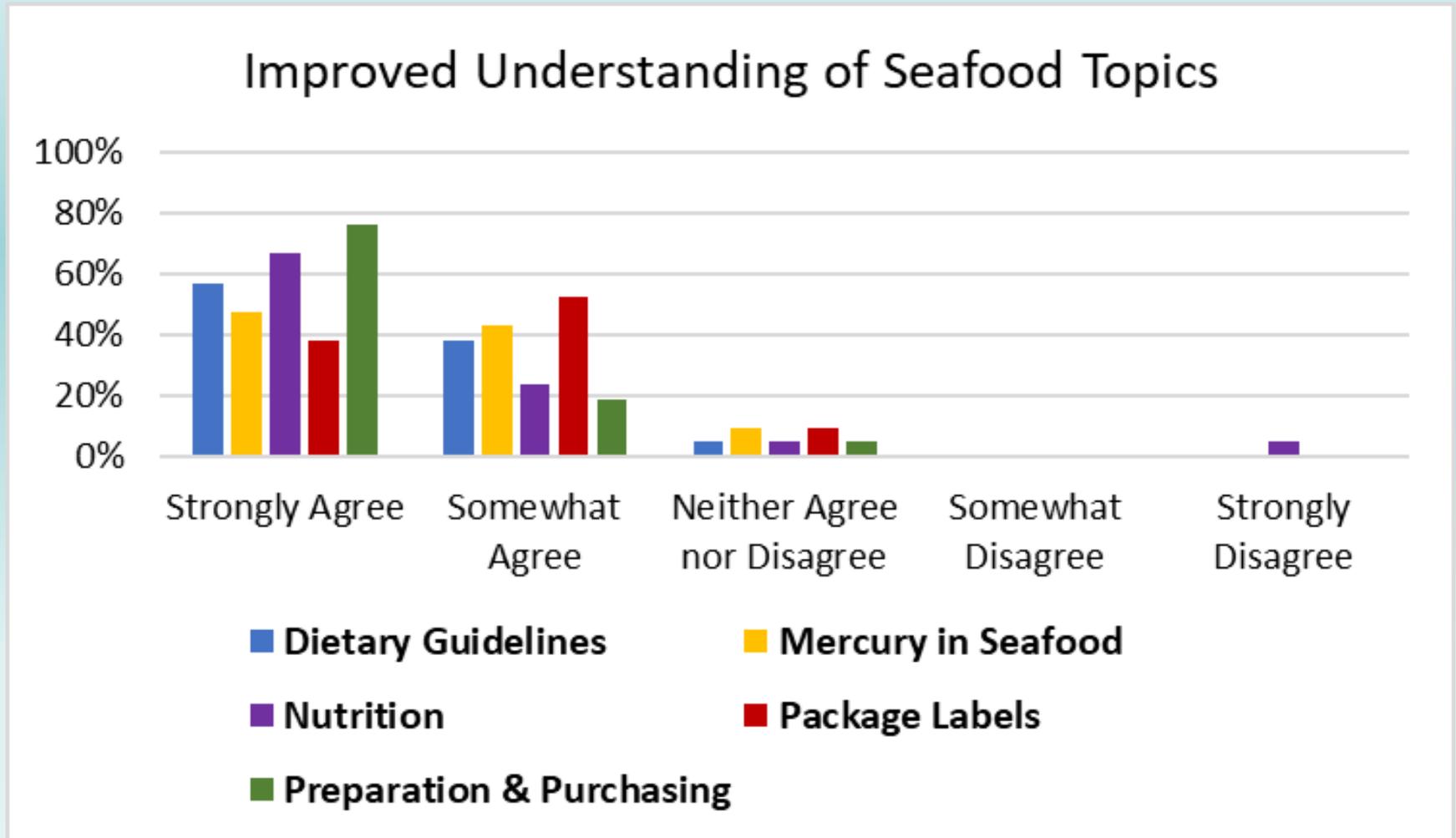


- 33% response rate (n=21)
- The Rutgers University IRB approved this study.

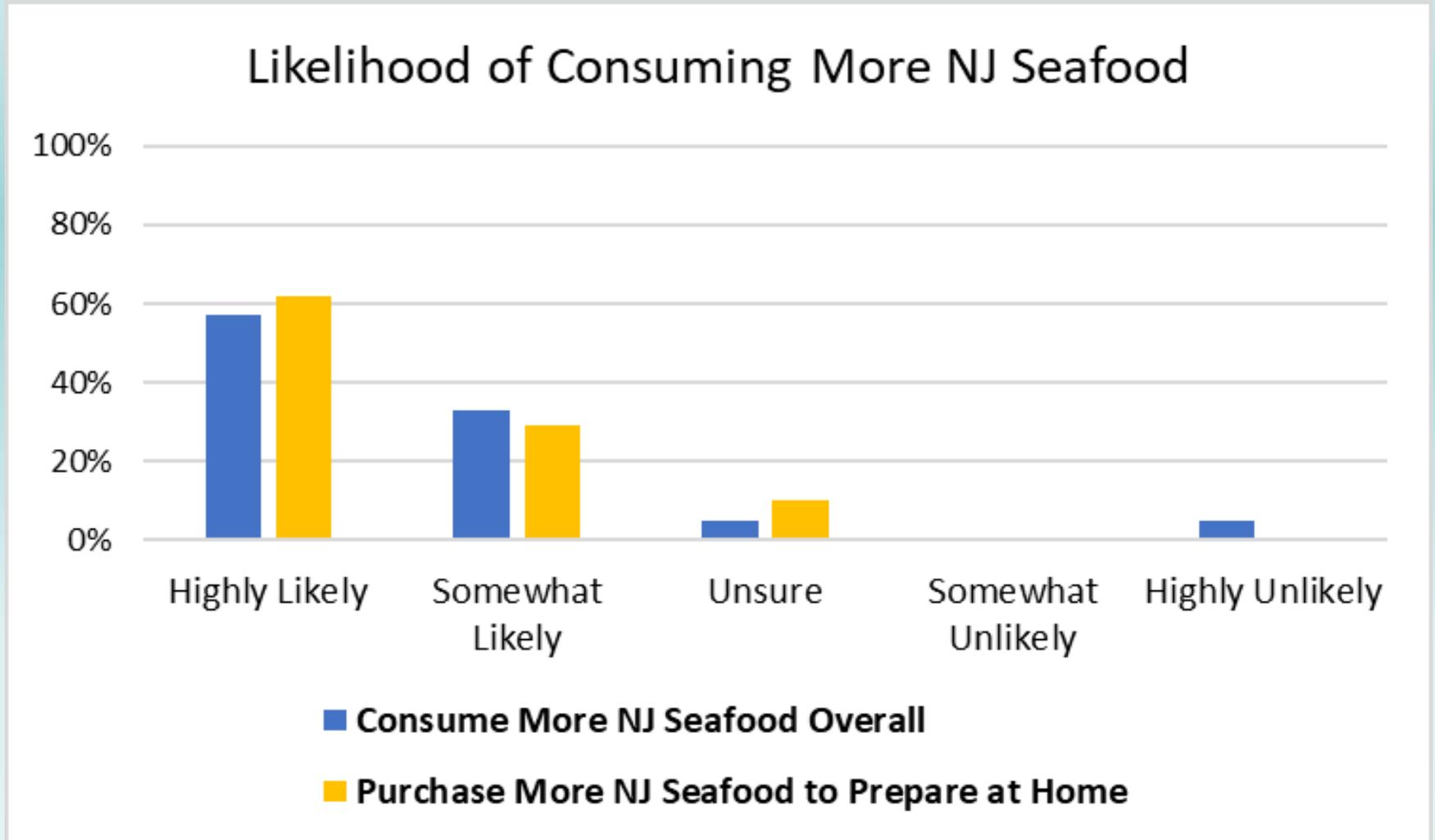
# Program Satisfaction



# Knowledge Gained



# Intended Behavior Change



# Program Participants: Seafood Intake

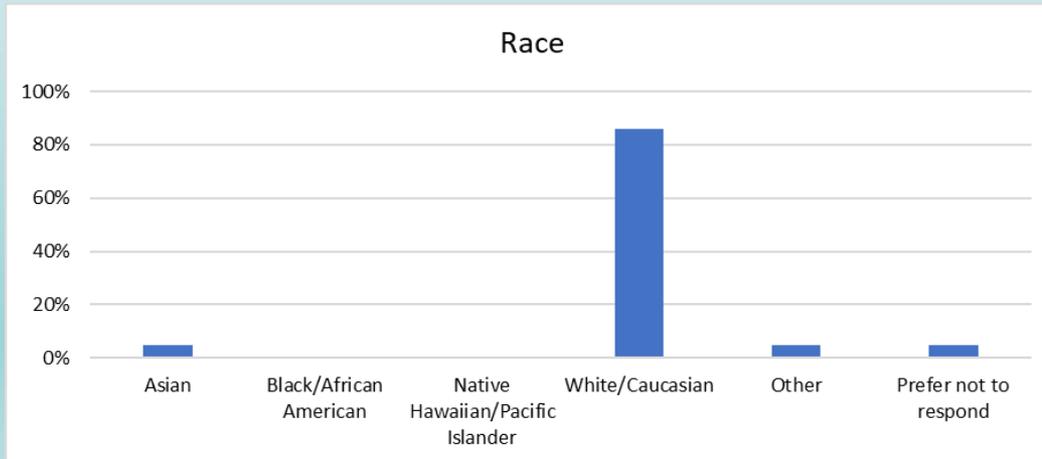


(n = 21)

Approximate Dietary Guidelines for Americans recommendation

# Program Participants: Demographics

*Do you identify as:*



**The majority of participants were white, non-Hispanic; 57% female, mean age 59 years**

(n = 21)

# Implications & Next Steps

*Overall, What's the Catch? was*

- *A strong collaboration among extension professionals*
- *Effective towards*
  - *improving understanding of multiple seafood topics*
  - *increasing intention to eat more seafood*
- *A well-received program that can be replicated*

*Future efforts will*

- *Focus on recruitment and engagement of diverse audiences*
- *Aim to reach individuals not already meeting seafood intake recommendations*
- *Expand to include additional timely and relevant seafood topics*

## **What's The Catch?- New Jersey Seafood & Healthy Living A Virtual Education Program to Increase Seafood Intake of New Jersey Residents**

FCHS Healthy Recipes in PDF available at:  
<https://njaes.rutgers.edu/fchs/recipes>

FCHS Recipe Videos at:  
<https://vimeo.com/getmovinggethealthynj>

Christine Zellers- [zellers@njaes.rutgers.edu](mailto:zellers@njaes.rutgers.edu)

Lauren Errickson- [lauren.errickson@rutgers.edu](mailto:lauren.errickson@rutgers.edu)

## References

- Americans' Seafood Consumption Below Recommendations. (n.d.). Retrieved October 23, 2020, from <https://www.ers.usda.gov/amber-waves/2016/october/americans-seafood-consumption-below-recommendations/>
- Center for Food Safety and Applied Nutrition. (n.d.). Advice About Eating Fish. Retrieved October 23, 2020, from <https://www.fda.gov/food/consumers/advice-about-eating-fish>
- Chapter 2 Shifts Needed To Align With Healthy Eating Patterns. (2015). Retrieved October 22, 2020, from <https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines/guidelines/chapter-2/a-closer-look-at-current-intakes-and-recommended-shifts/>
- <https://www.fda.gov/media/70799/download>
- Seafood Health Facts: Making Smart Choices. (n.d.). Retrieved October 23, 2020, from <https://www.seafoodhealthfacts.org/seafood-nutrition/healthcare-professionals/seafood-and-current-dietary-recommendations>
- *U.S. Food and Drug Administration*. FDA. (n.d.). <https://www.fda.gov/media/102331/>.