Marine Aquaculture Opinion Research

Prime Group July 2019



Methodology

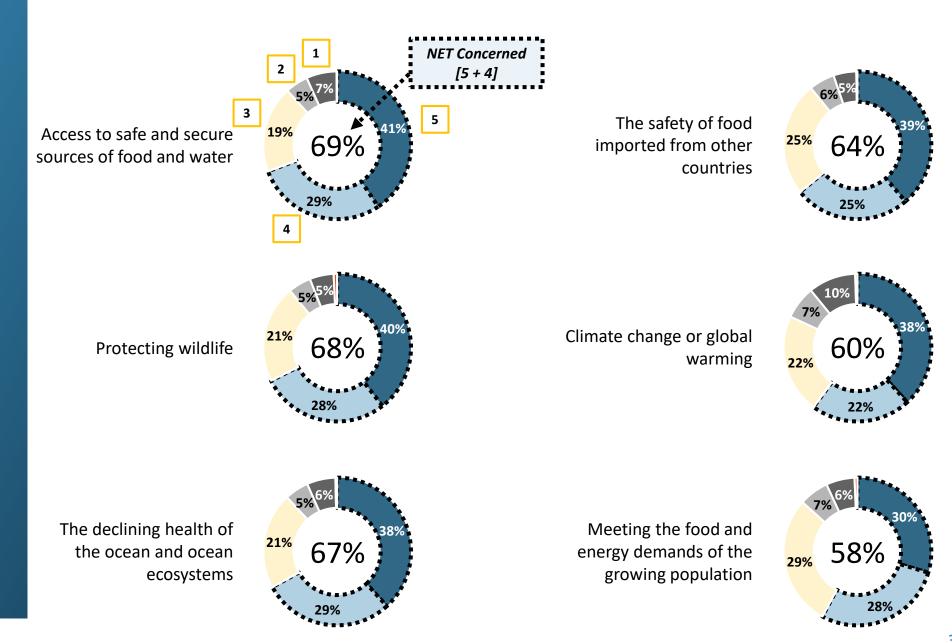
 Online nationwide survey fielded June 12-June 20, 2019

- Nationwide census-representative sample
- n=800 completes
- Respondents rated messages in support of marine aquaculture using Prime Group's M3 testing methodology
- Respondents watched and evaluated video segments about marine aquaculture

Concern for Specific Environmental Issues

Of the three food-related items, there is greatest concern about "safe and secure" food and water sources.

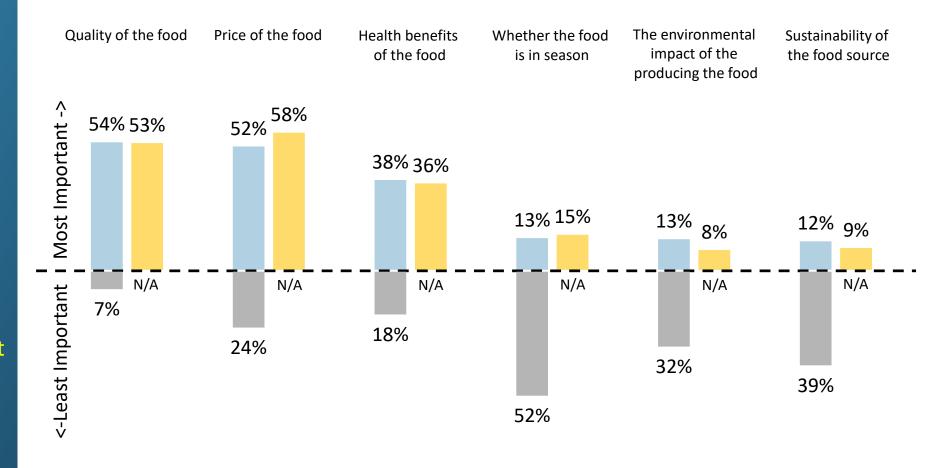
Question wording: How concerned are you with each of the following issues using a five-point scale where "5" is very concerned and "1" is not at all concerned?



Factors Influencing Food Purchasing Decisions

As with the first survey, price and quality are the two most important factors in food purchasing decisions. While some do value seasonality and sustainable food sources, these two factors are selected as last important by large segments of the population.

Question wording: The following is a list of factors you may consider when making decisions about what food to purchase either at the store or in a restaurant. Please select the two which you consider [most/least] important.



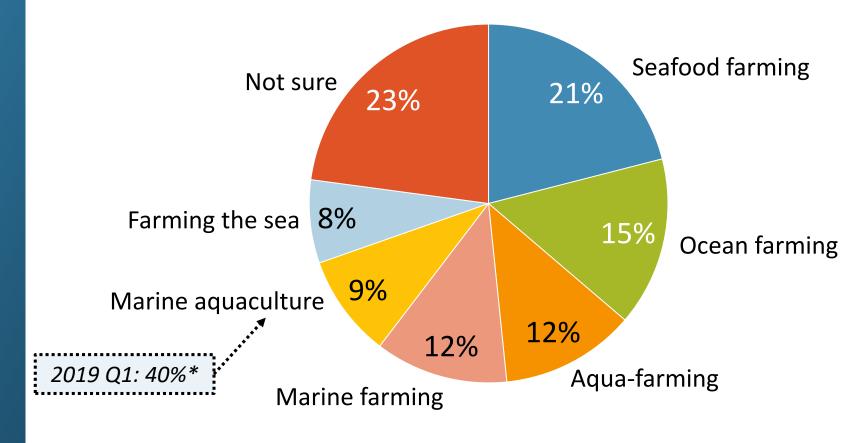
2019 Q2 2019 Q1

Preferred Terminology for "Seafood Farming"

In the first survey, the best description question was asked near the end of the survey which tipped the scales in favor of "marine aquaculture". The earlier placement of this question in this survey results in more balanced results that lack a clear winner.

Question wording: As you may know, much of the seafood that we eat is caught in lakes and oceans through commercial fishing. But some seafood is farmed in the ocean, like livestock are raised on land.

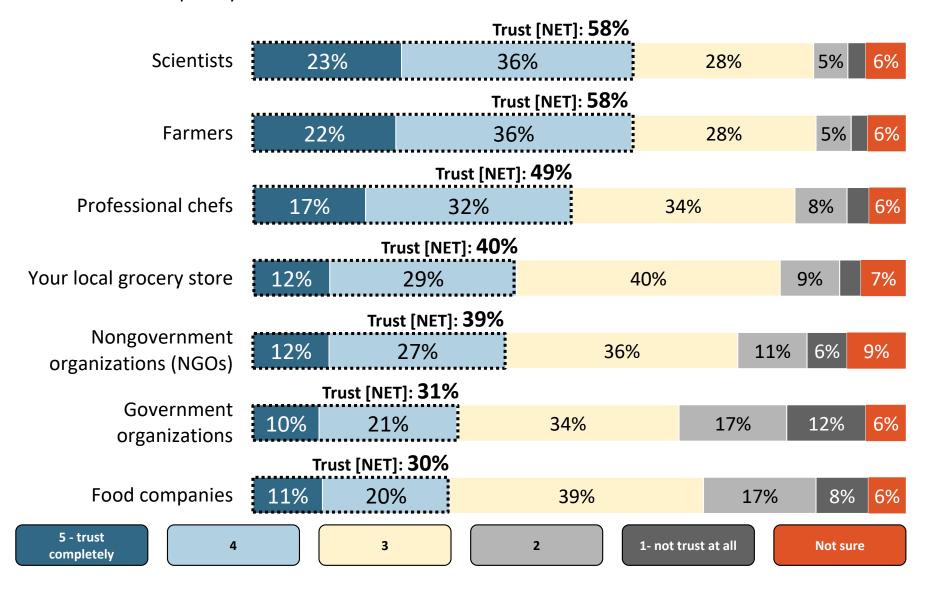
In your opinion, which of the following phrases best describes this type of food production?



Most Trusted Sources of Information Regarding Environmental Sustainability of Food

Scientists and Farmers are the most trusted sources of information, while government organization and food companies are the least trusted.

Question wording: If you received information from each of the following organizations or individuals concerning the environmental sustainability of the food that you and your family eat, how much would you trust that information to be accurate and fair on a five-point scale where 5 means "trust completely" and 1 means "not trust at all".

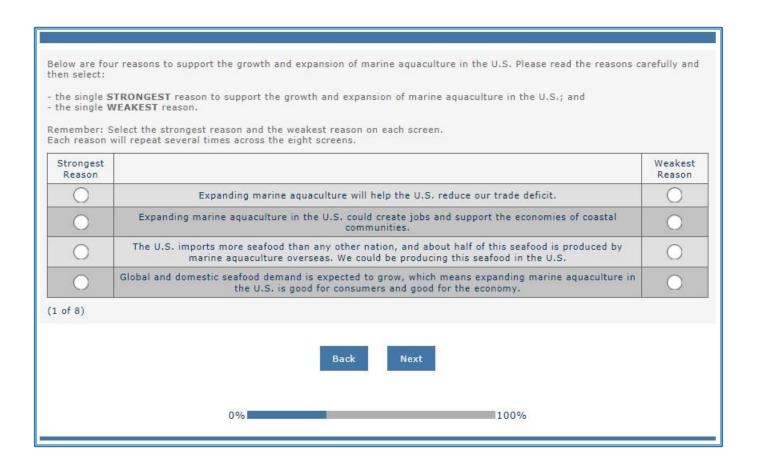


M3 Message Testing

M3 Message Testing: Overview

- We tested 10 messages using Prime Group's M3 methodology.
- M3 testing is a forced choice methodology requiring respondents to react to a series of screens, each with four messages.
- Respondents are asked to choose the strongest and the weakest message on each screen. Each message is repeated multiple times but always with a different set of "competing" messages.
- With this sample size (n=800) this methodology produces more than 32,000 unique data points, resulting in much greater precision and differentiation than traditional rating exercises which rely on each message being rated independently.

M3 Message Testing: Sample Screen



M3 Message Testing: How to Interpret the Results

Preference Scores:

- Through the M3 process, respondents reveal their relative preferences for the each message.
- These scores are NOT percentages.
- Taken together the preference scores for all messages will always add to 100.
- In effect respondents collectively distribute 100 points across the messages based on their relative appeal.

· Reach Analysis:

- While the preference scores tell us the relative ranking of the messages for all respondents, a
 message's "reach" equals the percentage of respondents ranking that item as their favorite
 or second favorite message.
- The "reach" for any two messages equals the percentage of respondents ranking either message as their favorite or second favorite.
- Our algorithm examines the total reach for every possible message combination and determines the message packages that have the broadest appeal.
- As an analogy, think of individual messages as items on a restaurant menu. Similar menu
 items such as two types of steak attract the same type of customer. Adding different types of
 menu items, such as seafood or vegetarian selections, broaden the overall appeal of the
 menu by "reaching" different customer types.

M3 Preference Scores

Two messages – long-term sustainability and the better environmental protections governing U.S. productions – score the highest but they are followed closely by five other messages. The flatness of the top scores suggest that there is no "silver bullet" message.

Tier 1

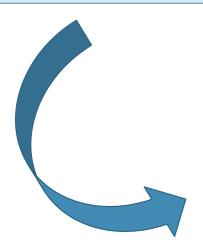
Tier 2

Tier 3

	Total
Expanding marine aquaculture can provide a long-term sustainable alternative to wild fisheries, many of which are severely depleted.	12.5
Farming seafood in the U.S. is better than producing it in countries with no regulation or less stringent regulation to protect ecosystems and wildlife.	12.5
Strict U.S. laws ensure that the marine aquaculture industry in the U.S. is among the safest in the world.	11.6
Expanding marine aquaculture in the U.S. will lower the cost of seafood, making this healthy food source more accessible to those with lower incomes.	11.2
Expanding marine aquaculture in the U.S. could create jobs and support the economies of coastal communities.	10.7
Global and domestic seafood demand is expected to grow, which means expanding marine aquaculture in the U.S. is good for consumers and good for the economy.	10.5
The U.S. imports more seafood than any other nation, and about half of this seafood is produced by marine aquaculture overseas. We could be producing this seafood in the U.S.	10.4
Producing more seafood domestically can decrease the likelihood of seafood mislabeling and fraud that occurs in some other countries.	8.5
Marine aquaculture is much better for the environment than producing land-based food such as beef or pork.	6.6
Expanding marine aquaculture will help the U.S. reduce our trade deficit.	5.4

M3 Reach Analysis

31% of respondents
identified this message as
the strongest or secondstrongest message



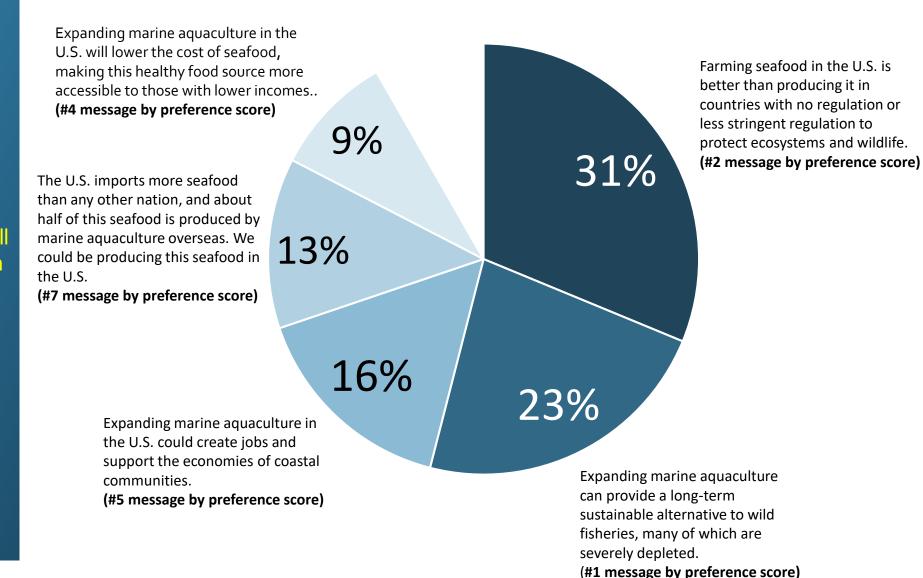
Farming seafood in the U.S. is better than producing it in countries with no regulation or less stringent regulation to protect ecosystems and wildlife.

(#2 message by preference score)

The optimal five message package reaches **92% of respondents**

M3 Reach Analysis

The Reach Analysis shows how well the messages work in combination with each other. Although not the strongest by preference score, the "coastal" message and "too much overseas" message load into the most effective message platform.



Video Segment Testing

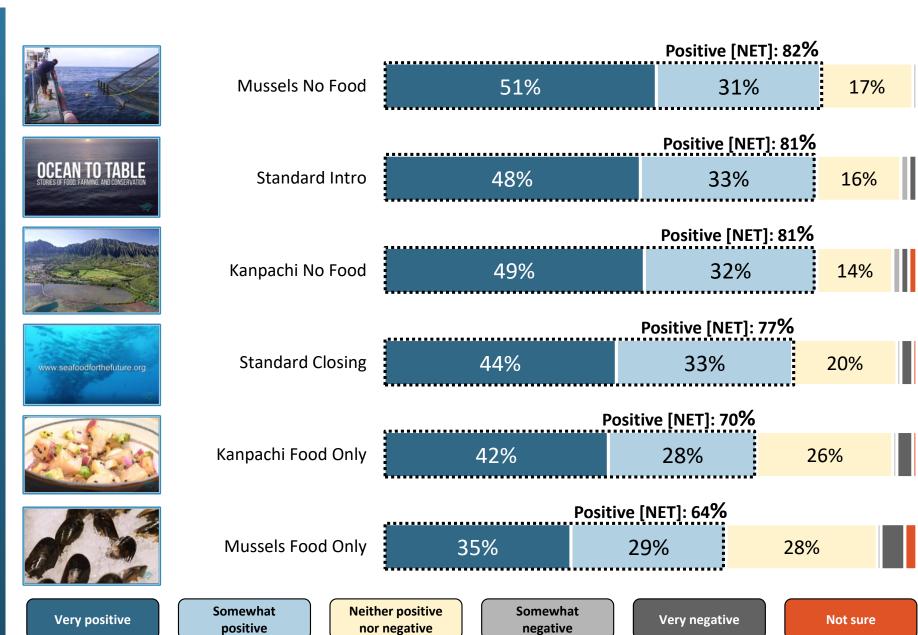
Video Testing Methodology

- Respondents watched and evaluated six videos about marine aquaculture. They were required to view the entirety of a given video before proceeding through the survey.
- The five videos were randomly assigned, with each video shown to 133 respondents.
 - Standard Intro (n=133)
 - Mussels No Food (n=133)
 - Mussels Food Only(n=134)
 - Kanpachi No Food (n=133)
 - Kanpachi Food Only (n=133)
 - Standard Closing (n=133)

Question wording: Do you have a positive or negative opinion of the video you just watched?

Positive/ Negative View of Video Segments

Both "No Food" segments and the Intro test extremely well.
Respondents who viewed either "No Food" segment are also more likely to support marine aquaculture and purchase seafood produced through marine aquaculture compared to respondents who viewed the other videos.

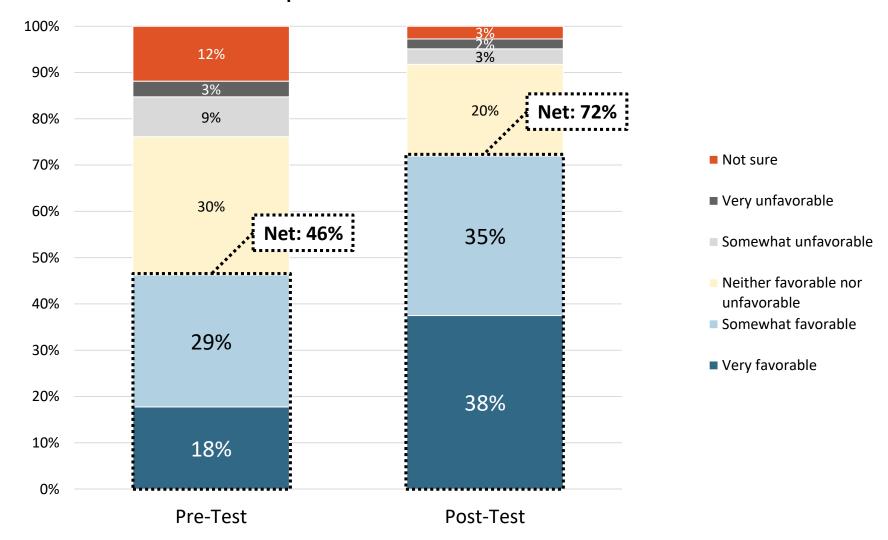


Marine Aquaculture Favorability

As with the first survey, the videos and messages "move the needle" on marine aquaculture in the positive direction.

Question wording: As you may know, much of the seafood that we eat is caught in lakes and oceans through commercial fishing. But some seafood is farmed in the water, like livestock are raised on land. Farming in the ocean is often known as marine aquaculture.

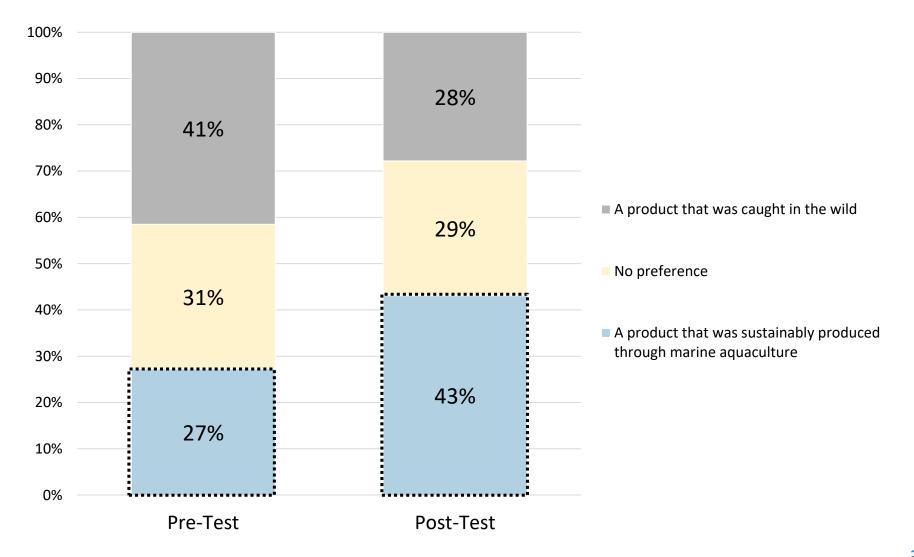
Based on this description and anything else you may know, would you say you have a favorable or unfavorable view of **marine aquaculture**?



Seafood Preference

Question wording: Assuming the two seafood products below were identical in quality, which would you choose?

Condition: Respondents who eat seafood daily, weekly, monthly, or occasionally (n=694)

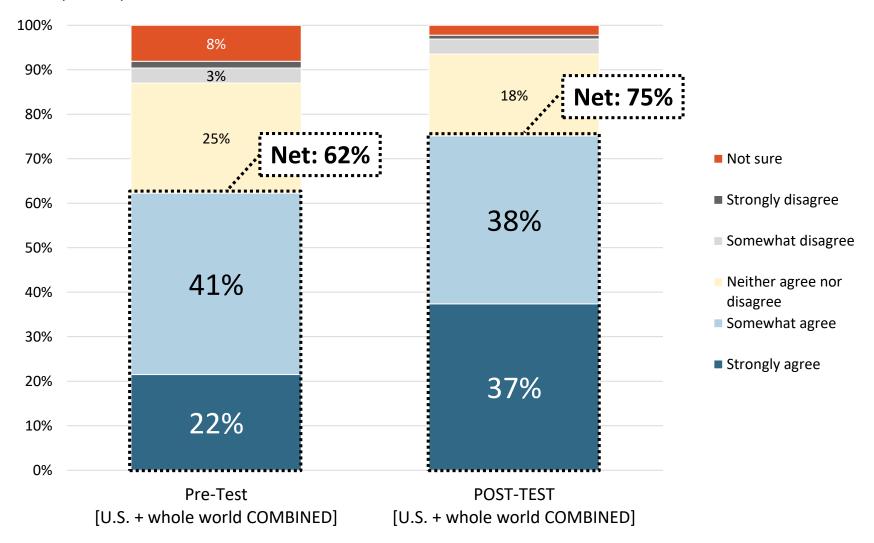


Seafood Produced Through Marine Aquaculture

Question wording: Please indicate whether you agree or disagree with the following statement. **[SPLIT SAMPLE]**

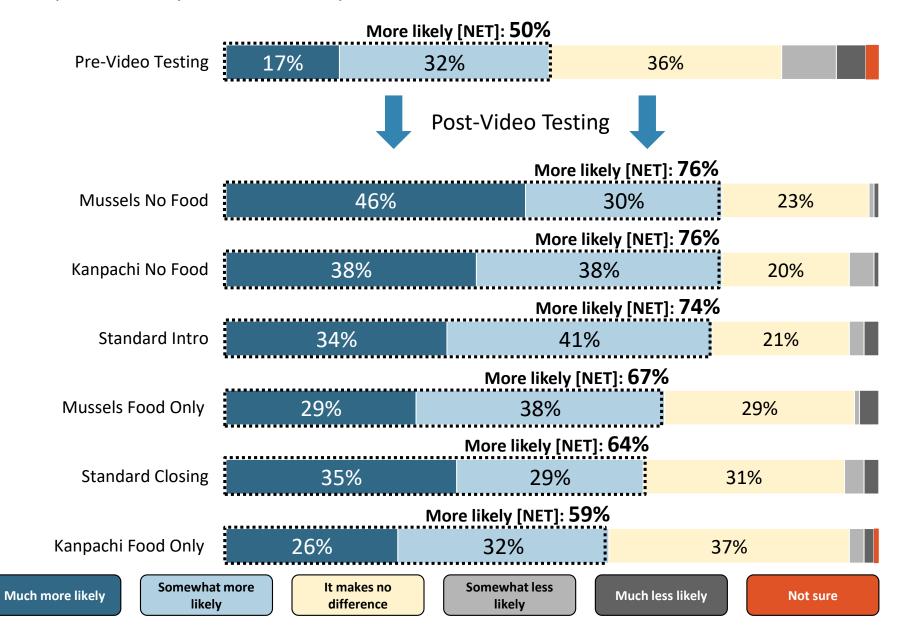
Seafood produced through marine aquaculture can help support a sustainable food supply for the whole world. (n=403)

Seafood produced through marine aquaculture can help support a sustainable food supply for the **U.S.** (n=397)



Supporting the Growth & Expansion of Marine Aquaculture

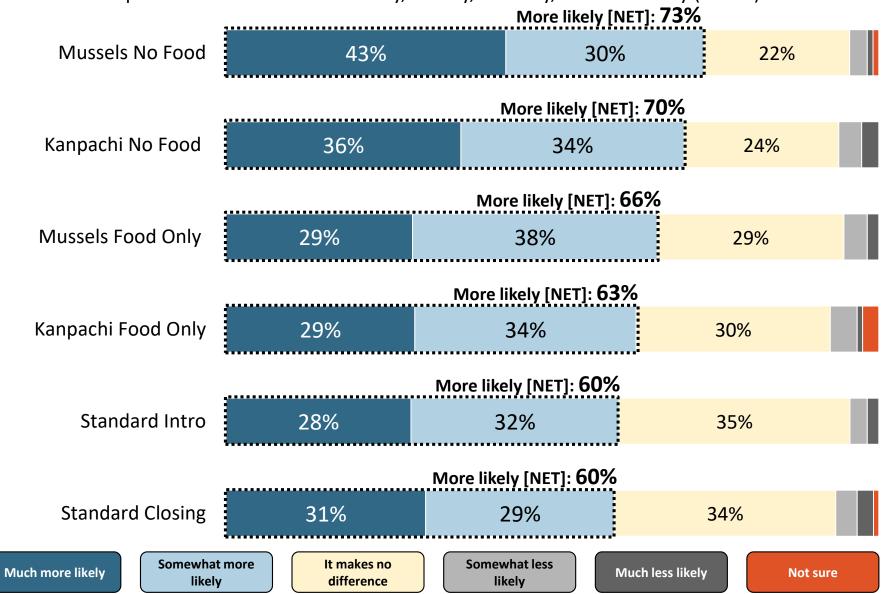
Question wording: Based on this video, would you be more likely or less likely to support the growth and expansion of responsible marine aquaculture in the U.S.?



Purchasing Seafood Products

Question wording: Based on this video, would you be more likely or less likely to purchase a seafood product that was sustainably produced through marine aquaculture?

Condition: Respondents who eat seafood daily, weekly, monthly, or occasionally (n=694)



Other Issues

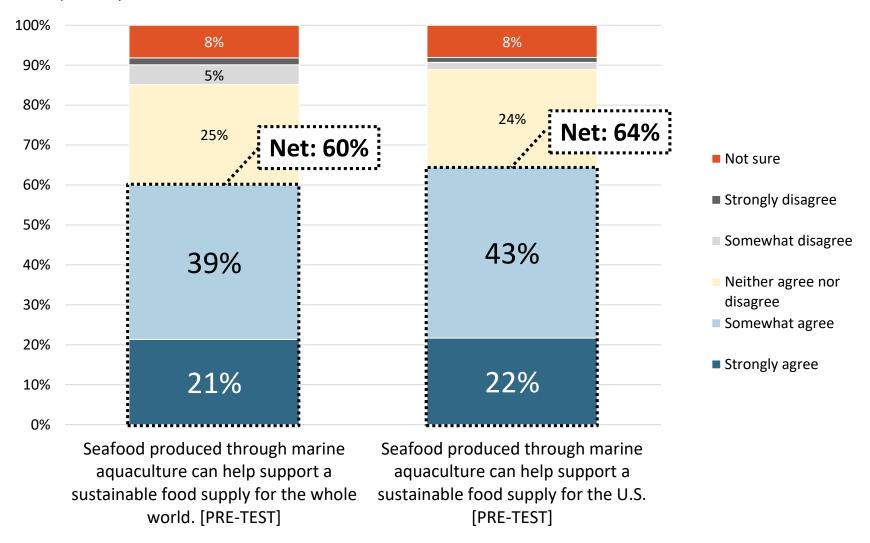
Seafood Produced Through Marine Aquaculture

Using the "whole world" vs. the "U.S." does not have much of an impact on this measure.

Question wording: Please indicate whether you agree or disagree with the following statement. **[SPLIT SAMPLE]**

Seafood produced through marine aquaculture can help support a sustainable food supply for the **whole world**. (n=403)

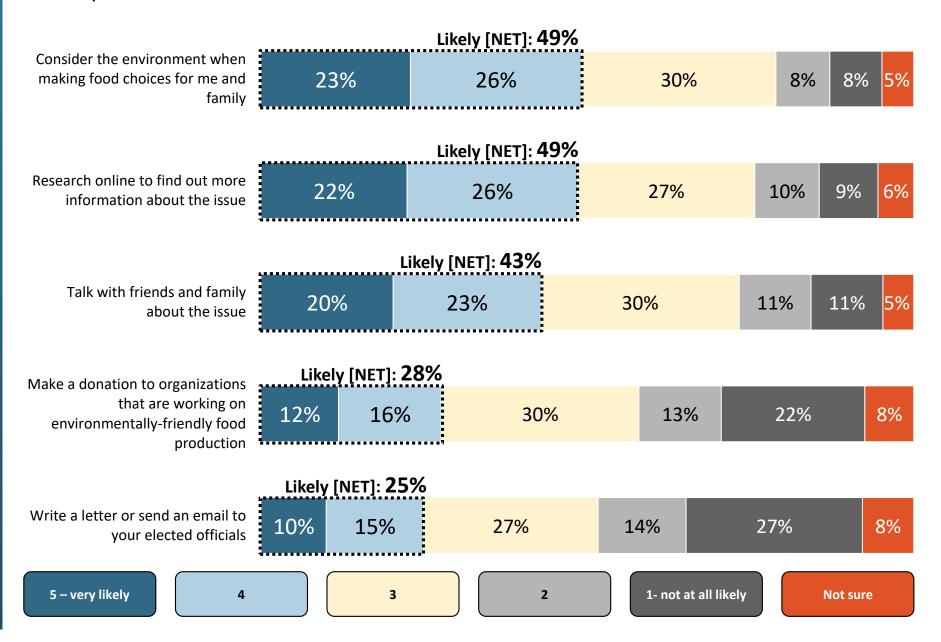
Seafood produced through marine aquaculture can help support a sustainable food supply for the **U.S.** (n=397)



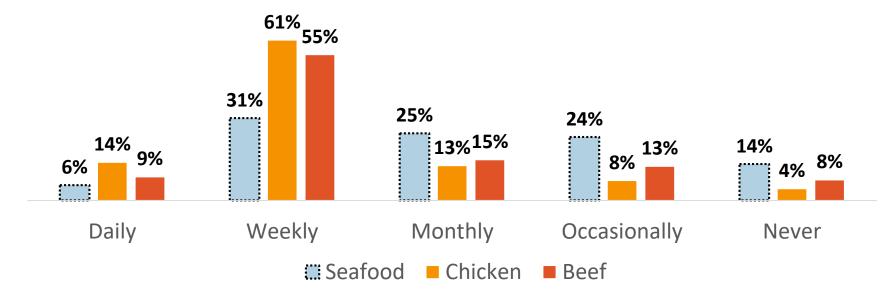
Likelihood to Take Action on Environmentally Friendly Food Sources

These measures are virtually unchanged compared to the first survey.

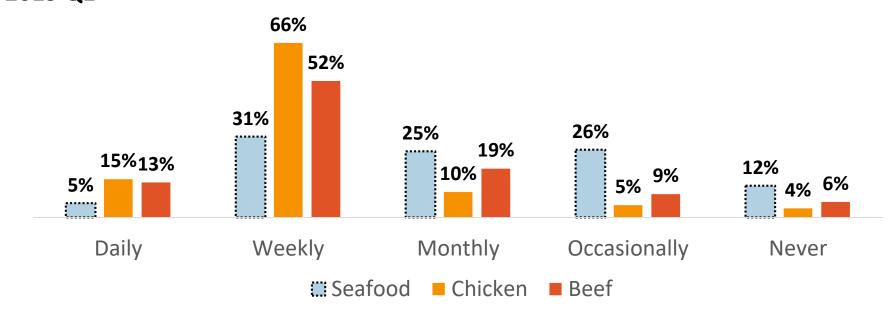
Question wording: How likely are you to take the following actions related to the environmentally-friendly food sources?



2019 Q2



2019 Q1



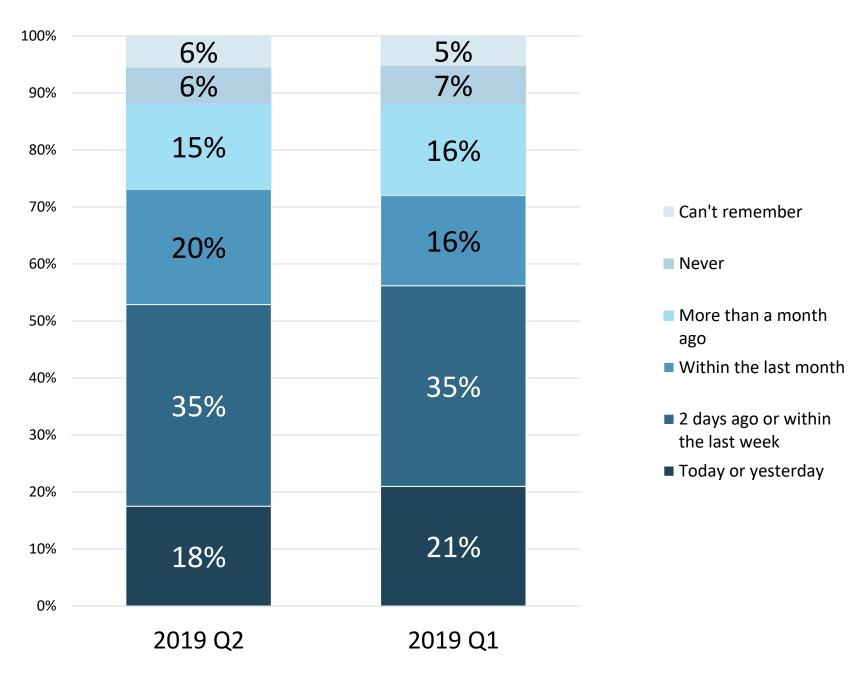
Seafood Diet

primegroup

Washington DC * Los Angeles CA

Seafood Diet

Question wording: When was the last time that you ate seafood at home or at a restaurant?



Thank You.

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