

Expanding Aquaculture through the Nutrition Value Proposition

- **BERT BACHMANN**, CAMANCHACA
- **VIDAR GUNDERSEN**, BIOMAR
- **JILL KAUFFMAN JOHNSON**, CORBION ALGAE INGREDIENTS
- MODERATED BY **STEVE HART**, GAA



Steve Hart

Steve joined GAA as VP in 2015. His primary responsibility is directing GAA's activities in Asia, focused on growing market acceptance of the Best Aquaculture Practices certification program. He is also leading efforts focused on improving animal welfare protocols and working with GAA constituents to respond to emerging issues. Steve also serves as vice chair on the Seafood Nutrition Partnership board. He received a Ph.D. from Purdue University in 2006.

VICE
PRESIDENT
GAA



Bert Bachmann

Bert is U.S. strategic development director and former president of Camanchaca, with 31 years of aquaculture experience. He led the start-up of the company's U.S. office in Miami in 2001, growing it to more than \$200 million in sales. He has served on the boards of the British Columbia Salmon Farmers Association and Salmon of the Americas. Currently, he serves on the boards of the Chilean Salmon Marketing Council and Global Aquaculture Alliance (for the last 12 years).

US STRATEGIC
DEVELOPMENT
DIRECTOR
CAMANCHACA



Vidar Gundersen

Vidar began working in the fish feed industry after earning an MSc in marine biotechnology. As a product manager, he implemented several product concepts and started building the company's overall sustainability and smart feed concepts. After receiving an MBA in marketing management and sustainability communication, he has specialized in sustainability, with a leading role in marketing, product strategies and business development with BioMar Group.

GLOBAL
SUSTAINABILITY
DIRECTOR
BIOMAR



Jill Kauffman Johnson

Jill is head of global market development for algae ingredients at Corbion, a Netherlands-based global leader in food and bio-based ingredients. She leads the sustainability, external affairs and marketing efforts for Corbion's algae ingredients business. Previously, Jill was a principal and managing director of California Environmental Associates. She was also the founding director of the Pacific Coast Regional Office of the Ocean Conservancy.

GLOBAL
MARKET
DEVELOPMENT
CORBION

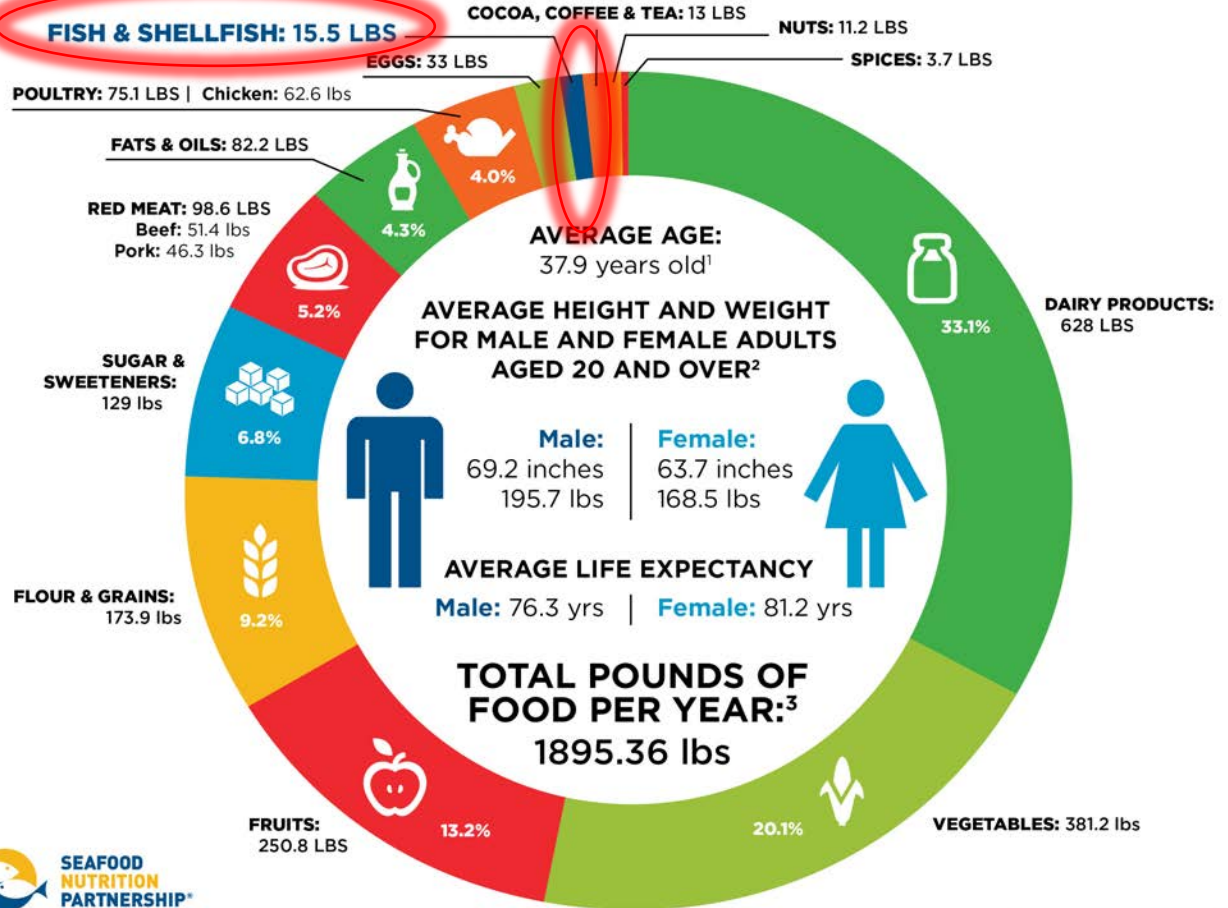


**SEAFOOD
NUTRITION
PARTNERSHIP**

U.S. Seafood Consumer Insights: A Snapshot

First: a look
at what
Americans
are eating

What We Eat In America THE AVERAGE AMERICAN



seafoodnutrition.org

Source: 1 census.gov • 2 cdc.gov • 3 ers.usda.gov 2015 data

#Seafood2xWk

First: a look
at what
Americans
are eating

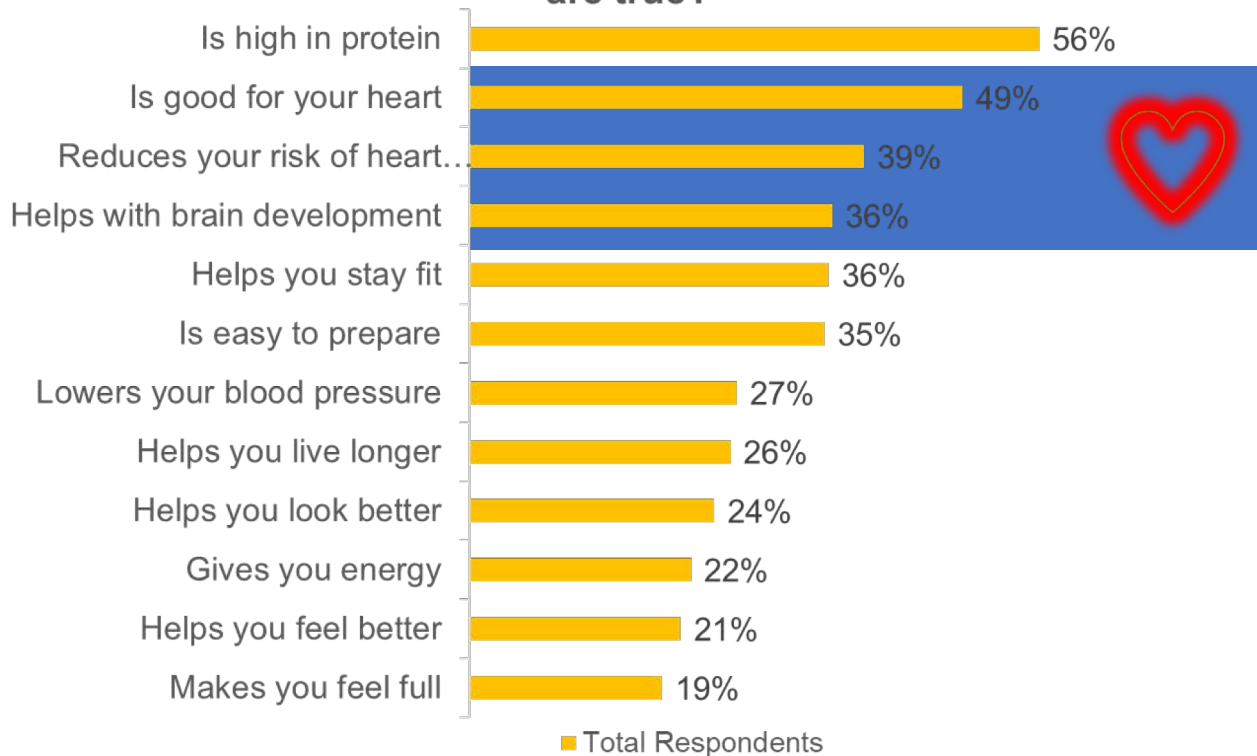
America's Top 10 Favorite Foods*

- 1. Hamburgers**
- 2. Hot Dogs**
- 3. French Fries**
- 4. Cookies**
- 5. Pizza**
- 6. Soda**
- 7. Chicken Tenders**
- 8. Ice Cream**
- 9. Donuts**
- 10. Potato Chips**

*Data compiled from Healthy You Naturally

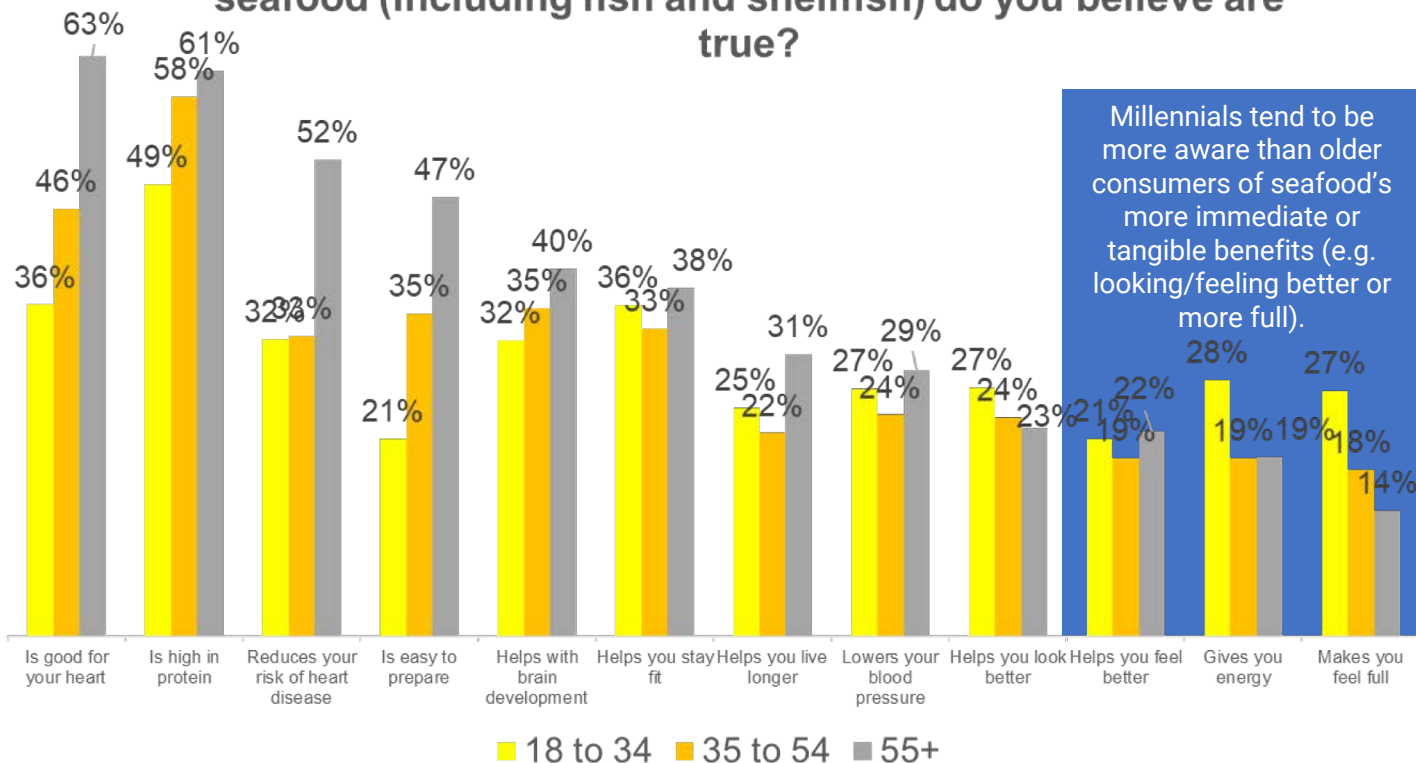
Americans are aware that seafood is high in protein, and secondarily the benefits for heart and brain health.

Which, if any, of the following statements about eating seafood (including fish and shellfish) do you believe are true?



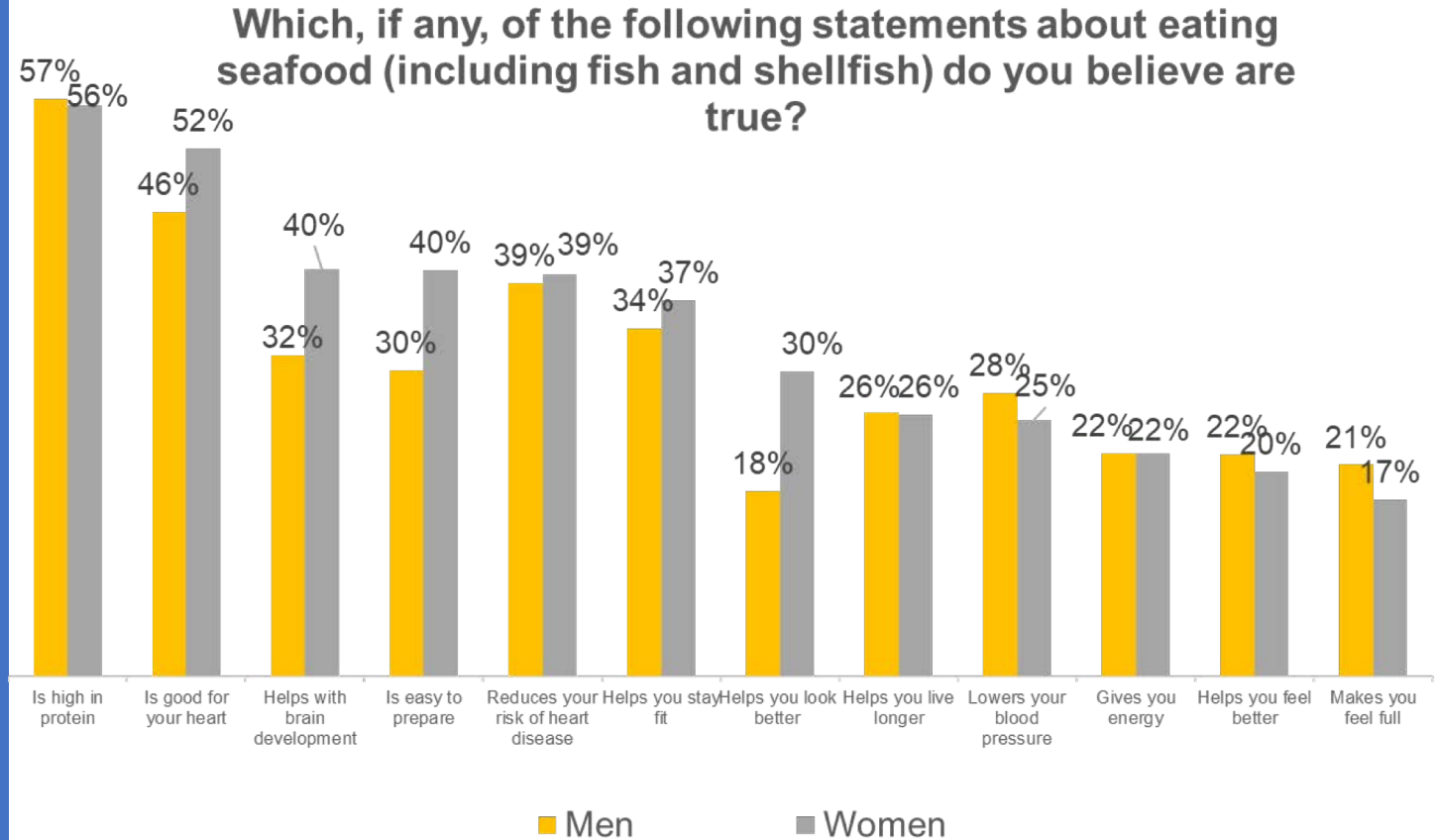
Older demographic is aware of the long-term, preventative and heart health benefits, but millennials are less aware.

Which, if any, of the following statements about eating seafood (including fish and shellfish) do you believe are true?



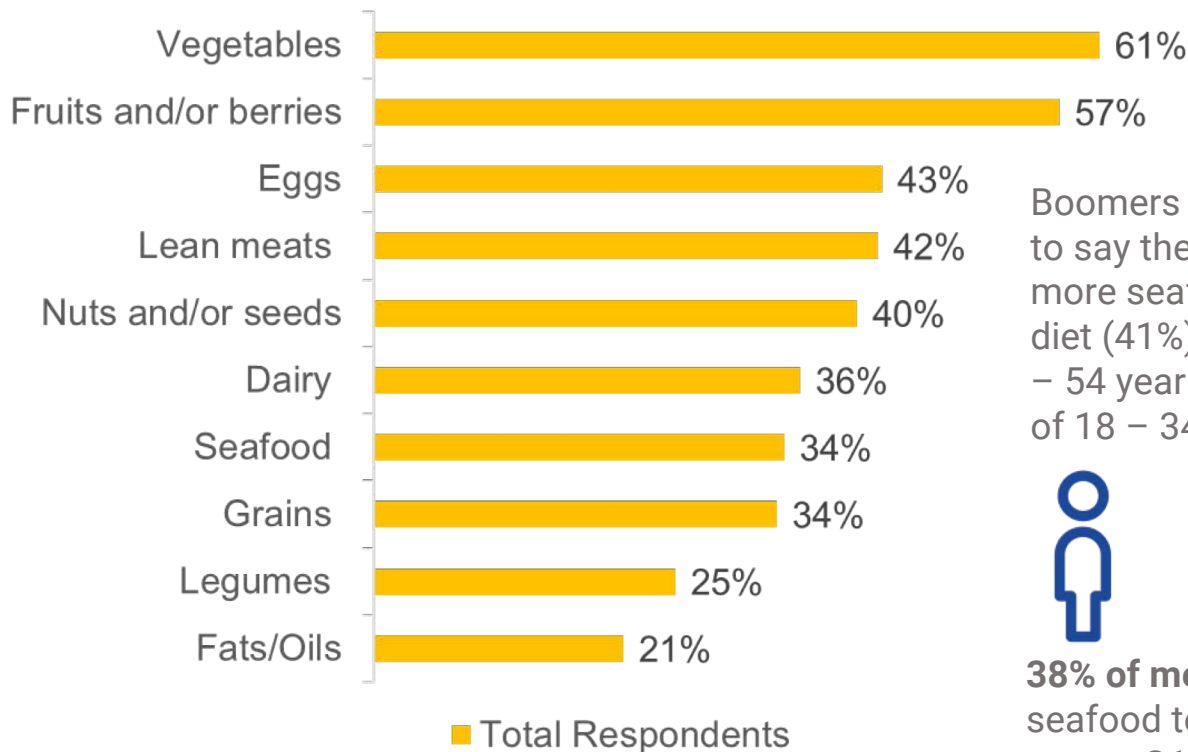
Millennials tend to be more aware than older consumers of seafood's more immediate or tangible benefits (e.g. looking/feeling better or more full).

Women are significantly more likely than men to think that seafood is good for their heart, and that it helps them look better.



About a third
of Americans
say they've
added
seafood to
their diets in
an effort to
eat healthier

In the past year, which, if any, of the following
food groups have you intentionally consumed
more of in an effort to eat more healthily?



Boomers are most likely
to say they've added
more seafood to their
diet (41%) vs. 37% of 35
– 54 year olds and 23%
of 18 – 34 year olds.

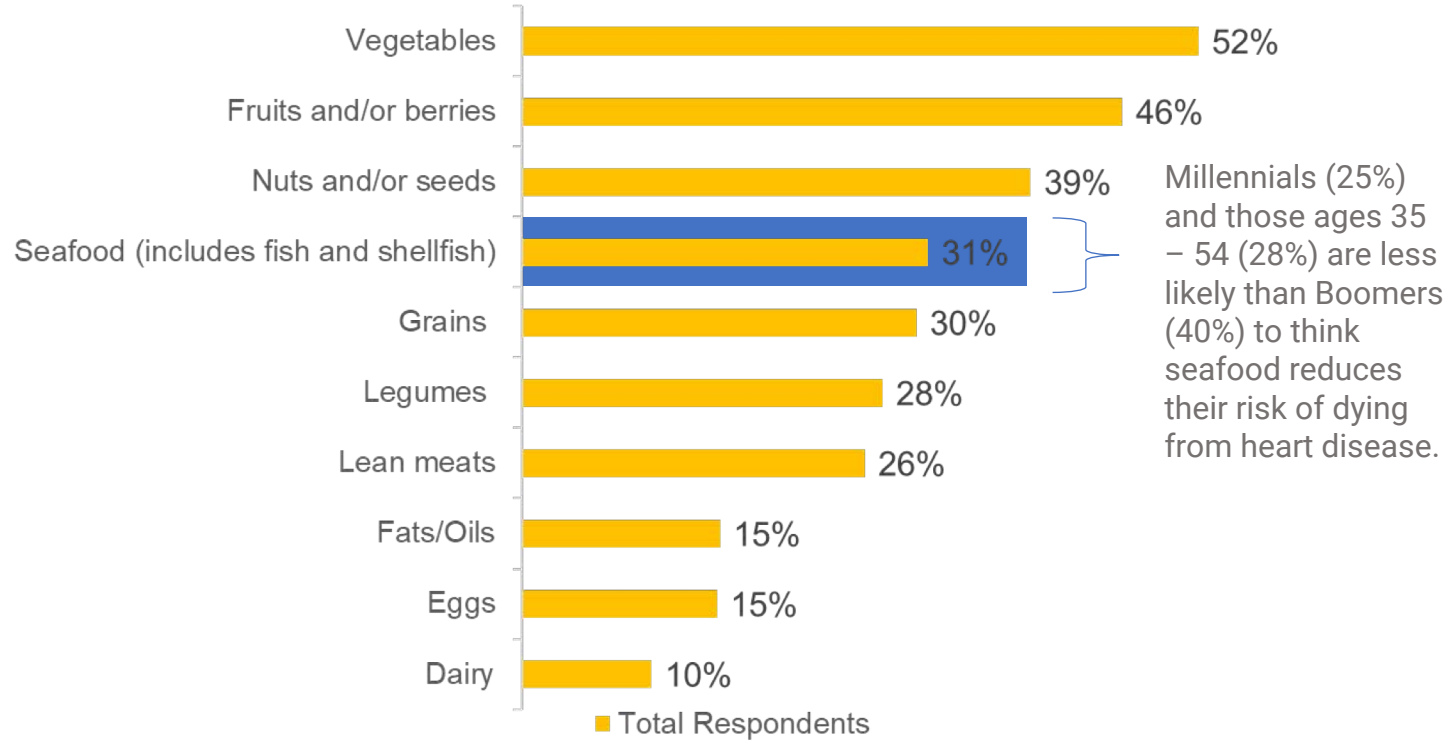


38% of men added
seafood to their diets
versus **31% of women**.



Men (30%) and women (32%) say in near equal numbers that seafood has been proven to reduce the risk of dying from heart disease, though men (38%) are more likely to have added seafood to their diet in order to be healthier (vs 31% of women).

Which, if any, of the following food groups do you think have been proven to reduce the risk of dying from heart disease?



Messaging Opportunities

- Consider **reinforcing the preventative and long-term health benefits of seafood**, particularly among Millennial audiences.
- **Explore ways to reinforce seafood as a highly functional food that should be added to people's diet at least twice a week**, as consumers tend to underestimate the extent of seafood's benefits.
 - "Superfoods" tend to come and go in mainstream media, but "functional foods" may reinforce the proven and lasting health benefits of eating more seafood.

Overview

- On behalf of Seafood Nutrition Partnership, Ketchum Global Research & Analytics (KGRA) conducted an online survey of 1,129 U.S. adults ages 18+ across the country.

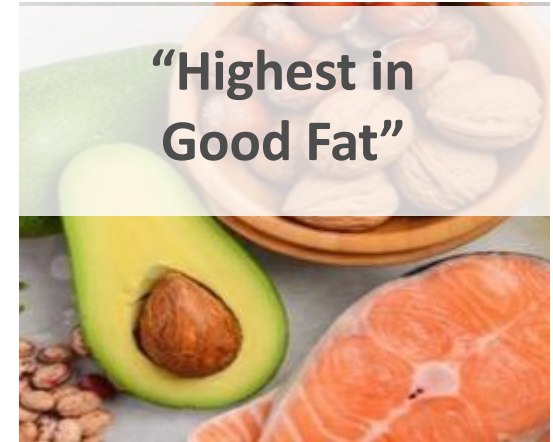
Methodology

- KGRA used the field services of YouGov to collect audience data. Stat testing was done at a 95% confidence level and the margin of error was +/-3%. The survey was in field February 15-16, 2017.

Consumer Survey Insights Salmon & Omega-3s

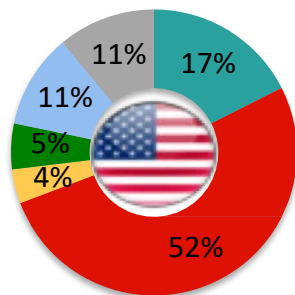
Jill Kauffman Johnson, Head of Global Market Development
Corbion Algae Ingredients

NielsenSurvey Results: consumer purchases are motivated by the health and sustainability promise of salmon



Source: 2017 Harris Poll commissioned by Corbion., among 2,129 participants in the US, 1,061 participants in the UK, 1,111 participants in France, 1,094 participants in Germany, 1,012 participants in Brazil, and 1,240 participants in Japan. Participants are aged 18 and older. Respondents selected up to 5 out of 20 statements across 6 categories: Sustainability, Health, Traceability, Non-GMO, and Feed

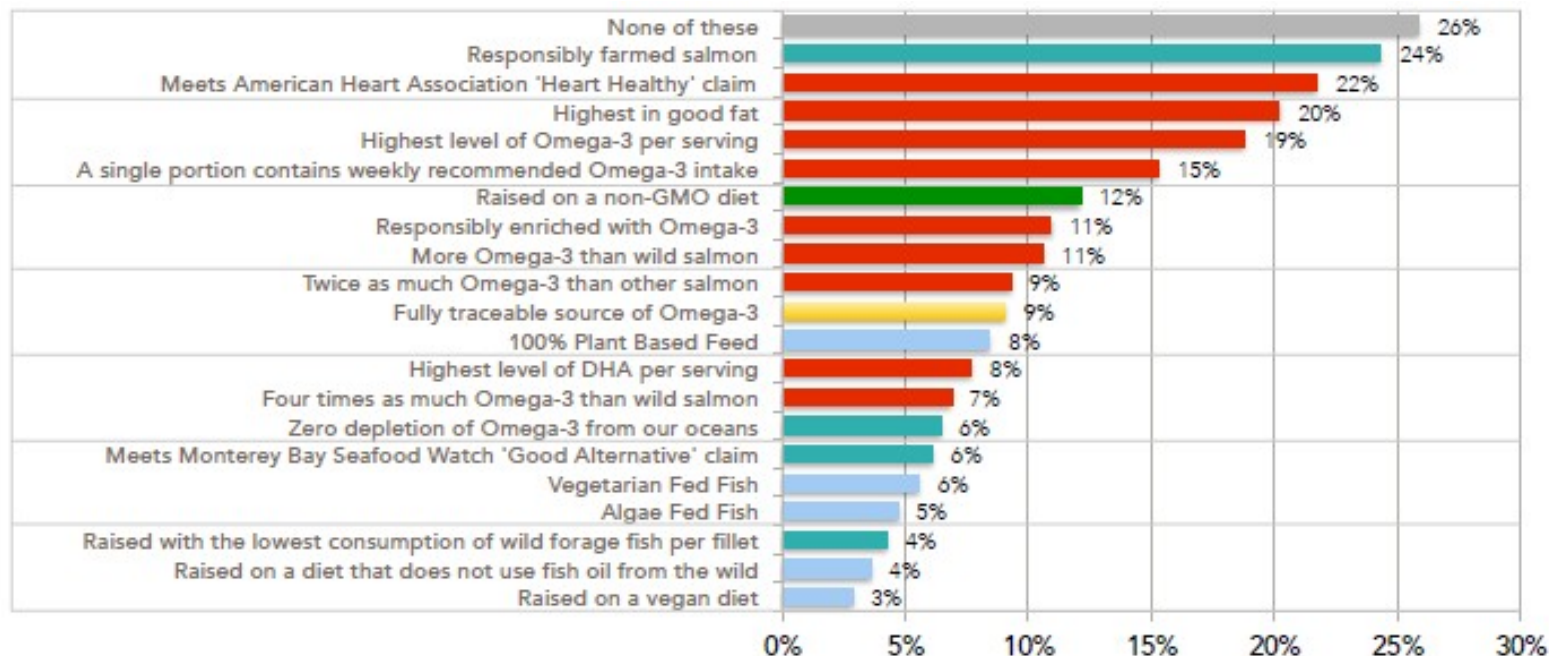
US Salmon Consumer Study



2,149 responses from 917 U.S. consumers who purchased fresh salmon in the last 12 months

- Responsibly Sourced
- Health
- Traceability
- Non-GMO
- Feed
- None

Detail: % of consumers that selected statement



Source: 2017 Harris Poll commissioned by Corbion., among 2,129 participants in the U.S., 1,061 participants in the UK, 1,111 participants in France, 1,094 participants in Germany, 1,011 participants in Brazil, and 1,240 participants in Japan. Participants are aged 18 and older.

What does the U.S. Salmon consumer value?

“Omega 3” and “Plant-based Feed”



“Omega-3”



**“Responsibly Sourced”
“Heart Healthy”**



**“Highest Level of Omega-3”
35-44**



**“Responsibly Farmed” and
“Fully Traceable”
\$75-100k**



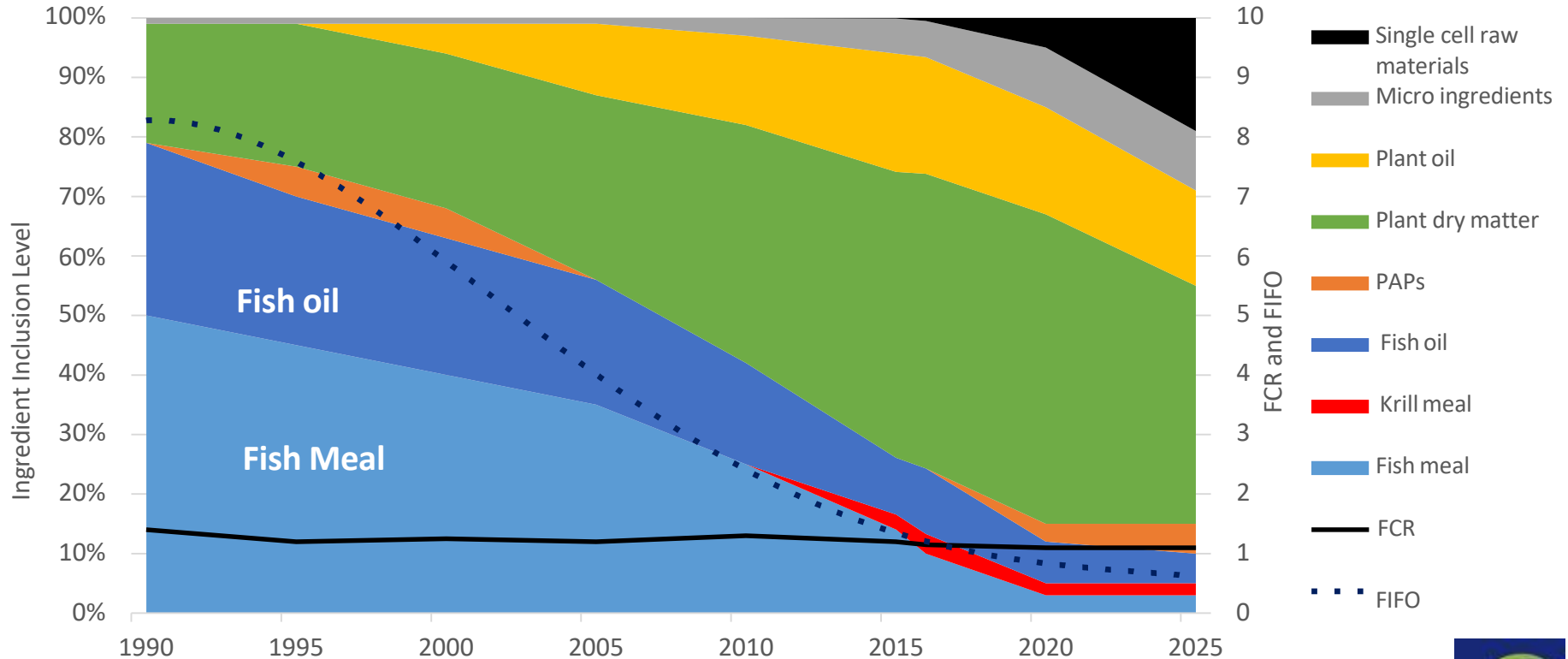
**“Plant-Based”
<45 years old**



2,149 responses from 917 consumers in the U.S. who purchased fresh salmon in the last 12 months

Source: 2017 Harris Poll commissioned by Corbion., among 2,129 participants in the US, 1,061 participants in the UK, 1,111 participants in France, 1,094 participants in Germany, 1,012 participants in Brazil, and 1,240 participants in Japan. Participants are aged 18 and older.

Maintaining the omega 3 nutritional promise in seafood will require alternative ingredients



Recent studies and media questioning the benefits of omega-3s are focused on supplements



Fish oil supplements for a healthy heart
'nonsense'

MEDICAL NEWS TODAY

Fish oil may not be as healthful as you think, study finds



Harvard Health Publishing
HARVARD MEDICAL SCHOOL
Trusted advice for a healthier life

Fish oil: friend or foe?

The New York Times

ALTERNATIVE MEDICINE

Fish Oil Claims Not Supported by Research

Key message: Get your omega-3s from fish

Eat fish 2x week

Near universal consensus by health professionals and government agencies - eating fish 2x a week, with at least one being oily fish, is recommended as part of a healthy diet.

It's not just about heart health, DHA and EPA are an important part of a healthy diet

There are tremendous benefits of eating seafood and omega-3s for brain, eye, heart, and prenatal health.

Farmed salmon is an important source of omega 3s

With a growing population and demand for seafood, wild fisheries simply can not provide all of our seafood needs. Sustainably raised seafood is meeting these demands and one of the best sources of omega 3s.

OPPORTUNITY: Advocating the omega 3 and sustainability value proposition of farmed salmon

Deliver on the Consumer Promise:
Enhancing Nutrition
Responsibly™

