

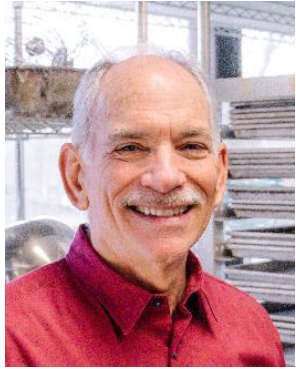


GAPP – Roe Processing

11/12/2024



# PROJECT TEAM



**Mark Crowell, CRC**

**Founder & CEO**  
**MBA, BS, AOS**

Since Mark founded the company in 2005, CuliNEX has become the industry's foremost consultancy focusing on the development of Clean Label products. Mark has a lifetime achievement award from Research Chefs Association.

- Starbucks Coffee Company
- The Olive Garden
- Marriott Corporation
- Restaurant owner



**Bret Lynch**

**Culinologist**

Senior food industry executive with 25+ years of successful product development/commercialization for top food manufacturers and hospitality firms including:

- Trident Seafoods
  - Ocean Beauty Seafoods
  - Alaka Seafood Marketing Institute
- Compass Group Intl.
- Tree Top
- Lee Kum Kee
- Yum Brands International (KFC, Pizza Hut, Taco Bell, Long John Silvers)



**Aleksandr Klovov**

**Culinologist**

Aleksandr, a Culinologist I, joined CuliNEX with valuable experience in developing successful applications using textured vegetable proteins. Prior to joining CuliNEX, Alex worked at Rebellious Foods in Seattle.

B.S. Food Science & Technology, California State University, Fresno

## **Other CuliNEX Support:**

**Nick Roundy**, Project Manager | **Webb Girard**, Technical Director | **Shannon Koski**, Account Manager

# TODAY'S AGENDA

- Ideation Project Outcome
- Scope of Protocept Development & Concepts
- Roe Processing
  - Objective
  - Clean Label Roe Processing
  - FDA Guidance
  - Protocepts and Market Opportunities
    - Salts and Seasonings
    - Sushi
    - Mayonnaise
    - Sauces, Dressings and Dips
- Roe Claims & Messaging – Areas to Explore
- Next Steps





# PROJECT 1 OBJECTIVE

Explore ways to **expand the usage** of Wild Alaska Pollock Roe in the US market and **generate incremental value** for this limited resource. **Identify potential opportunity platforms** for this ingredient across channels, as well as illustrative concepts to bring potential new applications to life.



# OPPORTUNITY PLATFORMS



## Seasonings and Toppings

- Retail or Foodservice
- Examples: Furikake, Togarashi, Season blends for snacks



## Sauces, Dips, and Spreads

- Retail or Foodservice focused
- Examples: Hummus, Aioli, Hollandaise, Truffle Oil



## Center Of Plate

- Foodservice
- Either hero or included as part of dish
- Examples: Sushi, Pasta, Stews, Marinated in chili sauce, etc.



## Snacks and Treats

- Retail or Foodservice or Pet Food
- Examples: Roe jerky, salted cured nuggets, spicy musubi and snack chips

# CONCEPT SUMMARY

	Concept Name	Description	Category	Roe Source
1	<b>Tarako Shmear</b>	Made with high quality whipped cream cheese and swirled with delicate tarako (pollock roe).	Dips, Sauces, and Spreads	Cured, Clean Label Roe
2	<b>Tarako Compound Butter</b>	Made with premium grade A butter and mixed with brightly colored tarako (pollock roe).	Dips, Sauces, and Spreads	Cured, Clean Label Roe
3	<b>Tarako Puffs</b>	Made with a corn or rice base mixed with freeze dried tarako (pollock roe) powder that's extruded into a light, airy crunchy puff that's dusted with a blend of dried tarako seasoning.	Snacks	Green and Water Roe
4	<b>Bottarga Pasta Sauce</b>	Bottarga is a semi-firm salt cured pollock roe that is grated and mixed in a cream or tomato-based sauce.	Dips, Sauces, Spreads and Ingredient	Cured, Clean Label Roe
5	<b>Tarako Roe Rolls</b>	Known as the "Alaskan Roll" made with avocado, brightly colored tarako roe skeins, cucumber wrapped with nori and sushi rice and topped with shaved Mentiako (spicy, cured, roe).	Center Of Plate, Food Service	Cured, Clean Label Roe
6	<b>Tarako Ramen</b>	Made with dried ramen noodles made from dried tarako roe and wheat with a dried seasoning packet that contains dried tarako roe.	Center Of Plate	Green and Water Roe
7	<b>Tarako Crackers</b>	These light and crispy cracker that's made with a blend of tarako (Pollock roe) and rice in the base for an umami packed satisfying snack.	Snacks	Green and Water Roe
8	<b>Tarako Salt and Seasonings</b>	A variety of seasonings blends made with dried tarako to provide a salty, umami boost of flavor that can be used as a topical seasoning for snacks, dry rubs, or marinades.	Seasonings and Toppings	Green and Water Roe
9	<b>Tarako Mayonnaise</b>	Elevate your culinary creations with Japanese-inspired Alaskan tarako (Pollock Roe) mayo that provides a pop of color and flavor.	Dips, Sauces, and Spreads	Cured, Clean Label Roe
10	<b>Dry Aged Shaved Tarako</b>	With a texture and savory flavor similar to parmesan, this deep dark red colored dry aged tarako (pollock roe) can be enjoyed shaved in foodservice or purchased a grated version at your favorite grocery.	Seasonings, Toppings, and Commercial Ingredient	Green and Water Roe

# U.S. Launch Strategy

## Value-Added Processing

## Foodservice Distribution

Creation of  
US-cured, clean  
label roe

Expand uses for  
green and water  
roe

Novel processing  
methods for  
enhanced quality

Chef-driven  
distribution of  
premium roe

Use of **clean label  
functional  
ingredients**

Freeze for industrial  
uses, dehydrate for  
seasonings

Explore HPP, pulsed  
light, TG enzymes,  
lower salt

Consider  
applications,  
packaging needs



## PROJECT 2 OBJECTIVES

The objectives of this project are to:

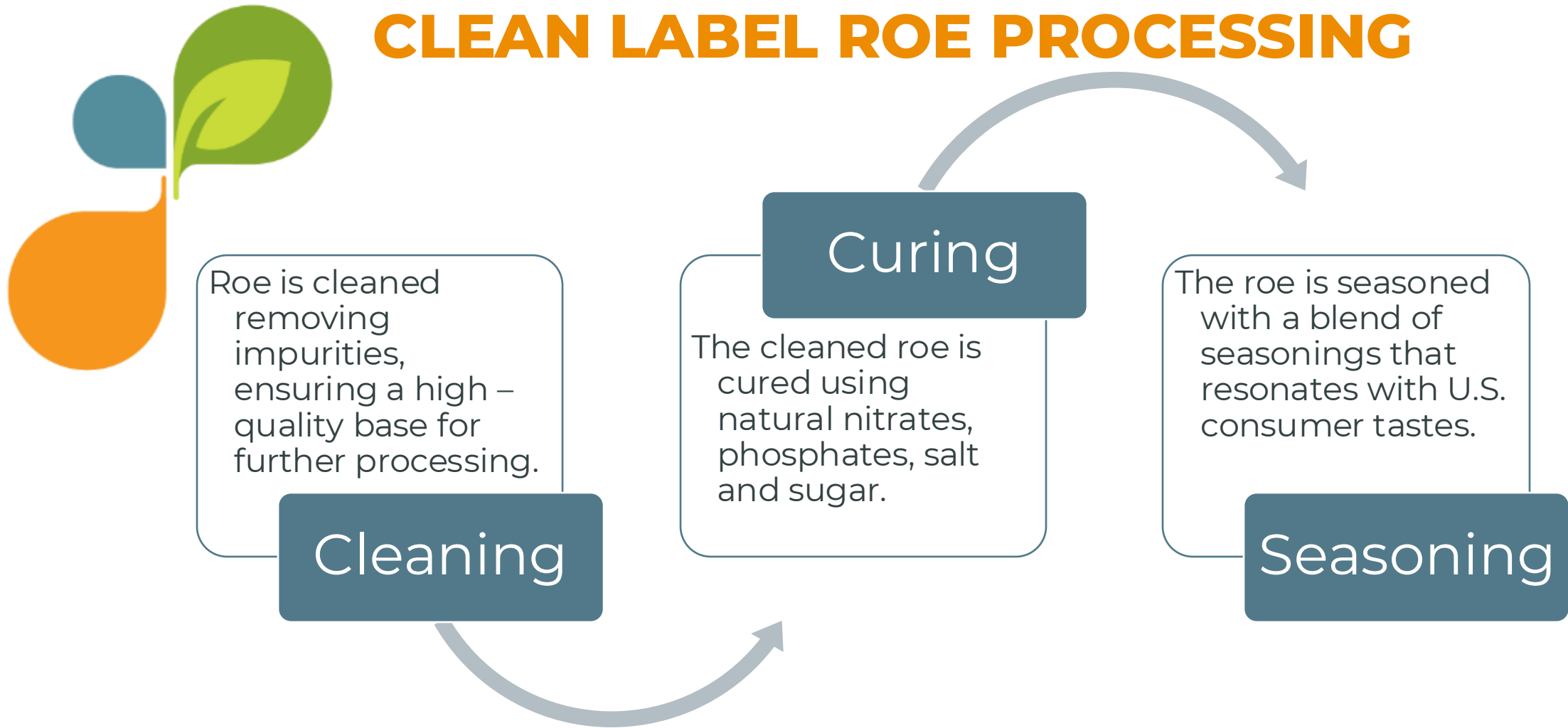
- Produce benchtop samples of a clean label, cured roe product suitable for US audiences (foodservice and CPG).
- Three protocept formulas developed by the CuliNEX team, as chosen from the project 1 concepts.
- Samples of the protocepts for tasting at the Wild Alaska Pollock Annual Meeting.



# DELIVERABLES

- Raw material process development
  - Development of curing process and product featuring clean label processing for US consumers
  - Drying and grinding of clean label product
  - Conversations with process authorities in methods and work
- Development of three protocepts from ideation concept list. This includes:
  - Formula and final ingredient documentation
  - Identification of 2-3 potential industry partners per concept
  - Marketing considerations and positioning for each concept
  - Samples for tasting by GAPP staff
- Protocept Sample Production of ~200 samples for September 26 annual meeting of each protocept
  - CuliNEX chef onsite to present/prepare food items
  - CuliNEX rep to give project update/presentation

# CLEAN LABEL ROE PROCESSING



Traditional curing methods involve synthetic agents to enhance the flavor and safety of the product.

We've adapted these methods by using clean label sources of nitrates and phosphates. This ensures the sensory quality and safety of the roe while aligning with modern consumer preferences for transparency and natural ingredients.

# CLEAN LABEL ROE PROCESSING

## Sanitization & Curing

Roe is cleaned and sanitized with a chlorine dioxide solution, ensuring food safety and retaining its delicate structure. Following sanitation, it is cured in brine solution to enhance flavor, texture, and shelf stability through a controlled curing process.

## Seasoning & Coloring

Seasoning and natural coloring are evenly applied to enhance flavor and visual appeal. The roe undergoes a brief infusion process, resulting in a consistent and vibrant product.

## Optional Freeze-Drying

For extended shelf life and ready-to-eat applications, the roe can be freeze-dried, making it shelf-stable.



# FOOD SAFETY PROTOCOLS

- Micro Guidelines for Protocept Development:
  - Water phase salt – 5.0% target
  - Salt in water phase – target 3.0-4.5%
- 3rd party micro tested for APC < 10- 50, Negative in 25g; Salmonella, Listeria, E.coli and Vibrio toxins
- Keep frozen until use. Thaw under refrigeration.
- Consume within 8 days, ready to eat cured product.
- Pathogen Controls:
  - Nitrate source: Beet Powder
  - Phosphate: Fermented Yeast Extract
  - Cultured vinegar as an additional safety hurdle
- Contacts for next phase of development to commercialize. An email outlining these protocols was sent to FDA on 11/4:
  - Christina Dewitt - OSU and Member of HACCP Seafood Alliance, Steering Committee
    - [christina.dewitt@oregonstate.edu](mailto:christina.dewitt@oregonstate.edu)
  - Steven Bloodgood – FDA Director, Division of Seafood Safety
    - [steven.bloodgood@fda.hhs.gov](mailto:steven.bloodgood@fda.hhs.gov)
  - Alexandra Marques de Oliveira, Ph.D, CFS – FDA Chief, Seafood Processing & Technology Policy Branch
    - [alexandra.oliveira@fda.hhs.gov](mailto:alexandra.oliveira@fda.hhs.gov)

# PROTOCEPT SUMMARIES

	CONCEPT NAME	DESCRIPTION
1	<b>Barako Mediterranean Flatbread</b>	<p>Freeze-dried Alaska Pollock Roe crispy lemon, herb gremolata, topping mini-bite, baked sundried tomato, basil flatbread.</p> <p>Benefit: seasoning blends, topical sprinkle-on, breading, coating and filling ingredients</p>
2	<b>Barako Tekkamaki</b>	<p>Dashi seasoned, sushi-style cured Alaska Pollock Roe. Topped with radish, sesame and ginger.</p> <p>Benefit- cured loose Barako or in-skein Tarako for US foodservice sushi market to compete with salmon and tobiko roe</p>
3	<b>Barako Sriracha Aioli</b>	<p>Alaska Pollock Roe studded, sriracha chili, garlic and lime mayonnaise. Served as a garnish smear with the Barako Tekkamaki.</p> <p>Benefit: Umami and texture addition to in-trend Aioli and global inspired ingredients with the wild Alaska protein, premium message.</p>
4	<b>Soba Noodle-Crispy Barako Furikaki</b>	<p>Chilled soba noodle salad mini-spoon bite, Barako cured Alaska Pollock Roe, pickled vegetables, sesame, miso and citrus yuzu dressing, topped with Freeze-dried roe Furikaki, blended with smoky nori flakes, dried egg, spring onion, bonito, sesame seeds.</p> <p>Benefit: seasoning blends, topical sprinkle-on, breading, coating and filling ingredients or in sauce or dressing for umami and texture</p>



# SOBA NOODLE SALAD WITH ALASKA POLLOCK ROE

Introducing **freeze-dried Alaska Pollock Roe** as a standout ingredient in seasoning. This versatile product allows for endless possibilities, adding unique umami-rich flavors to a variety of dishes.

*Green tea soba noodles are dressed in a zesty miso yuzu dressing paired with crunchy pickled vegetables. The salty-sweet furikake blend with **freeze-dried roe** enhances the fresh and vibrant components of the dish.*

## Ingredients:

- Soba Green Tea Noodles
- Miso Yuzu Dressing
- Pickled Vegetables
- **Alaska Pollock Roe Furikake**





# POLLOCK ROE SALTS & SEASONINGS

## THE IDEA

Clean label-cured Alaska Pollock Roe can be dried and blended with other ingredients to create delicious, flavor-enhancing seasoning blends for use in foodservice, retail or CPG channels.

## OPPORTUNITIES

- An outlet for lower grade or damaged roe not suitable for other uses. Could be considered up-cycled.
- Benefit of extending the shelf life compared to other roe formats (dried vs frozen). Also, year-long availability is essential.
- Can be used as a seasoning on snack crackers, popcorn or breading/coating blends. In prepared foods, toppings, etc.
- This ingredient is a natural fit with other marine flavor profiles and ingredients such as kelp and bonito.
- Global flavors have grown year over year with expansion in authentic, regional flavors and foods.



## MARKETING CONSIDERATIONS

- Consumers are looking for new, adventurous flavor profiles and snack foods are a comfortable entry point to try new flavors.
- Asian flavor profile trends reflect a broader interest in diverse and authentic taste experiences, driven by increasing globalization and cultural exchange.
- Appeals to environmentally motivated and mission-driven consumer groups, and restaurants looking for responsibly sourced products.
- Made in the USA, Harvested in Alaska, etc. create storytelling opportunities. 63% of US and Canadian consumers are excited to try diverse flavors found in specific regions and dishes on their table.<sup>1</sup>

1. Innova Flavor Survey 2023 (average of US & Canada), Innova Database.



## POTENTIAL PARTNERS



**AJINOMOTO**



# TEKKAMAKI ALASKA POLLOCK ROE BITE

*This classic maki roll is presented on a delicate eel sauce pillow, topped with **Alaska Pollock Roe** and a colorful garnish, highlighting roe's adaptability and appeal across different culinary settings.*

*Roe is also incorporated into a flavorful aioli, served on the side as a condiment.*

## Ingredients:

- **Alaska Pollock Roe with Dashi Seasoning – Barako Loose Roe**
- Rice Nori Maki
- Wasabi Eel Sauce (no MSG)
- Daikon, Sesame, Ginger, Chive Mix
- **Aioli Sauce with Alaska Pollock Roe**



# POLLOCK ROE TARAKO ROLLS

## THE IDEA

Alaska Pollock Roe can be utilized in sushi in many ways – in-skein center-of-roll, as a texture garnish or mixed into a ‘seafood salad’ type product. The creative options are endless once the ingredient is available to creative chefs.

## OPPORTUNITIES

- The US sushi market size is estimated to be \$34.9 billion in 2024, over the past five years the industry has experienced 4.6% CAGR.<sup>1</sup>
- Applications for loose roe, in-skein and varying grades exist in the category as well as in the garnishes used.
- Proving food safety documentation to process authority and proper handling/processing is an essential process.
- Consumers see value in seasonal and local food, from a sustainability and quality standpoint.

1. Ibisworld.com

## MARKETING CONSIDERATIONS

- Create a unified, consistent name prior to launch so the industry is speaking with one voice and gaining name recognition with operators and consumers.
- Target high volume/off-site operations with broad distribution for largest volume potential.
- Sushi consumers are typically more adventurous and can bridge the gap to Alaska Pollock Roe trial in other products.
- Younger generations are looking for sensory excitement beyond flavor when trying new foods. Adding this within a familiar (sushi) format is simple and customizable.
- Operators can emphasize the unique and briny flavor roe adds, elevating the taste and texture of sushi.



## POTENTIAL PARTNERS



# INDUSTRIAL USE OF ALASKA POLLOCK ROE

**Alaska Pollock Roe** offers innovation opportunities across the food industry. It provides a rich, umami flavor that enhances foods while meeting a growing consumer demand for natural and minimally processed products.

*No shelf-stable freeze-dried ingredient currently exists and would open new opportunities in food manufacturing.*

## Key Benefits:

- **Versatility:** Easily integrates into sauces, spreads, and seasonings.
- **Clean Label:** Meets the demand for natural, transparent ingredients.
- **Flavor Enhancement:** Adds a distinctive umami boost to many applications.
- **Customization:** Can be tailored to different flavor profiles to meet specific market needs.





# TARAKO MAYONNAISE

## THE IDEA

Alaska Pollock Roe can be incorporated into creamy sauces, including mayonnaise, as a flavor enhancer, adding texture and visual appeal.

## OPPORTUNITIES

- Flavored mayo can be used as a garnish in foodservice or sold via retail to consumers for home use.
- Mintel reports that umami-rich flavor profiles like miso, kimchi and fermented soy are expected to remain popular in 2024 and beyond.
- An outlet for roe from damaged skeins, not suitable for other uses. Could be considered up-cycled.
- Mayonnaise is a universal base for creating ethnic and local flavor combinations for foodservice and CPG markets.
- Consumers like to treat themselves but cost limitations are making this harder. There is a growing emphasis on delivering indulgent tastes and more affordable everyday products.<sup>1</sup>

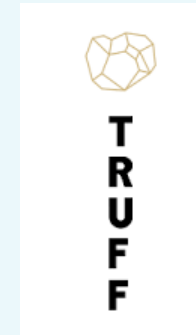
## MARKETING CONSIDERATIONS

- Adding Alaska Pollock Roe creates a fun and exciting textural experience with bright, flavorful roe in a creamy mayonnaise base.
- Addition of roe creates a more premium experience and will appeal to companies highlighting high-quality, gourmet ingredients.
- This product is ideal for collaboration with foodservice operators, LTOs and seasonal launches.
- Flavored mayonnaises currently represent a fast-growing market that consumers appear keen to dip into. Kantar research shows that over 35% of non-users are willing to buy and try.<sup>1</sup>

1. [The Rise of Hellmann's Flavoured Mayo | Unilever \(unileverusa.com\)](#)



## POTENTIAL PARTNERS



1. Innova Market Insights. Flavor Insider: Taste & Texture Creating Global Elevated Eating Experiences, Nov. 2023

# ROE CLAIMS & MESSAGING AREAS TO EXPLORE

SUSTAINABILITY	USA/LOCALLY SOURCED	SUPPLY	HEALTH	OTHER
<ul style="list-style-type: none"><li>GAPP already has strong data and messages on ocean stewardship. Continue to share the messages and build networks.</li><li>Industry adoption of similar language and claims will help provide clarity to consumers.</li></ul>	<ul style="list-style-type: none"><li>Sourcing claims do drive purchase by consumers, so keep consistent source messaging.</li><li>Wonderful resources exist on your website. Consider moving the label certifications to a more visible location.</li></ul>	<ul style="list-style-type: none"><li>Seasonality can be a benefit in Foodservice to promote fresh and seasonal for LTO offerings.</li><li>Scarcity can drive demand, especially in foodservice but will be a detriment in CPG.</li><li>Year-round supply will be needed to break into CPG category and can be achieved through dried formats.</li></ul>	<ul style="list-style-type: none"><li>Very little data exists on the nutrition of raw roe. Some literature, but it is aged. Consider testing baseline.</li><li>Develop comparison between roe processed using different ingredients.</li></ul>	<ul style="list-style-type: none"><li>Asian textures and flavors are exciting global food trends. Consumers are inspired by salty, umami, chewy and jelly/popping flavors and textures.</li><li>Visually, roe can be used to create appealing layers of color or color variations within a product. It instantly adds color, flavor, texture and sophistication to any category.</li></ul>



# NEXT STEPS

## Commercialization Project Phase

- Optimize product formula for production (taste, food safety, spec ingredients)
- Conduct shelf life study to determine limits and validate shelf life
- Further communications with process authorities (FDA, others) to meet guidelines
- Identify potential copackers and partners for commercialization
  - Support scale-up
- Support Sales, Marketing and Distribution efforts





**Nick Roundy**

Project Manager  
nicholas@culinex.biz

206-855-0837

**CuLiNEX.biz**

**CULINARY INNOVATION CENTER**

360 Corporate Drive N  
Tukwila, WA 98188

Thank you

CULINEX

# INNOVA SOURCE SLIDES

# Five things to know about fish & seafood subcategory

1

## Value growth is expected to increase in 2024F

Value growth is expected to increase from 6.7% in 2023 to 7.2% in 2024F, with sales value witnessing a steady increase from €419.4 billion in 2020 to €550.6 billion in 2024F. Asia Pacific is the leading region for sales value, accounting for 67% in 2023 and 2024F with halal options, selections prepared with sauces, and fish ball ranges.

2

## Europe is the leading region for NPD

Europe is the leading region for fish & seafood launches in Oct 23-Mar 24 with 50%, helped by premium quality ingredients and gourmet range preparations. However, Middle East/Africa registered the highest CAGR (Apr 21-Mar 24) of +6.6% among the five regions for NPD and, along with Asia Pacific, exhibits high innovation and value growth in 2022-2024F.

3

## Health-related positionings are driving innovation

Omega-3 is the top positioning for fish and seafood in Oct 23-Mar 24 with 16.2% and it is the top positioning in the majority of regions including Europe, where DHA and heart health are growing positionings, with NPD including launches rich in omega-3 (16%) which might support the normal heart function and protein-rich choices (12%).

4

## Natural, free from & reductionism claims are growing

No additives/preservatives is the third top positioning for fish & seafood with 10.7% and growing positionings include natural (APAC, LATAM), GMO free, gluten free (MEA), sugar free, lactose free (LATAM), low/no/reduced fat (APAC, North America), low/no/reduced sodium (APAC) and no trans fats (North America).

5

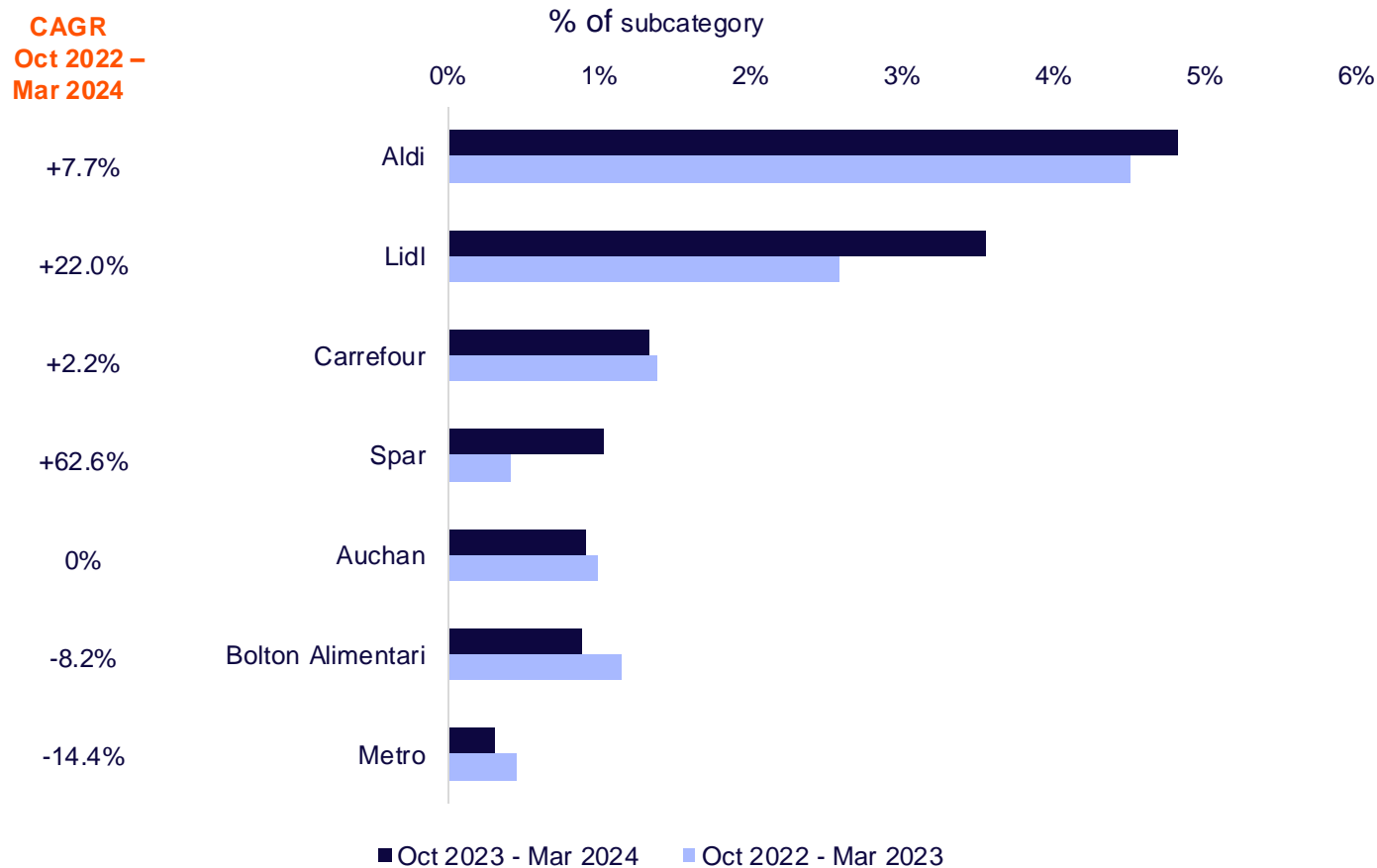
## A wide range of flavors

Growing flavors are herbs, dill, oregano, onion, ginger, maple, salt & vinegar, jalapeno chili and cheese, Mediterranean and Japanese teriyaki. In line with this, with traditional a growing positioning in Europe, NPD includes region-inspired recipes and flavors (Japanese teriyaki, Korean gochujang, Mexican, Spanish, Chinese).

Source: Innova Market Insights

# Aldi is the key company for fish & seafood launches

**Figure 11:** Top 7 companies for Fish & Seafood launches



- Aldi leads with 4.8% NPD share in Oct 2023 – Mar 2024, globally, and registers a marginal increase in share by 0.2% (Oct 2023 – Mar 2024 vs Oct 2022 – Mar 2023)
- In Oct 2023 – Mar 2024, Aldi is supported by its top brands, the fishmonger (34%), golden seafood (13%) and Almare (9%). Breaded/battered varieties (fishcakes, calamari, fish goujons, cod fillets), diverse sauce inclusions (herring fillets in dill, yogurt, curry, pineapple sauce and cod fillets in watercress, mustard, lemon dill, Norwegian and Bearnaise sauce), remain attractive.
- Spar is the fastest growing company among the top 7 companies (+62.6% CAGR, Oct 2022 – Mar 2024) with its low salt options, hake fillets, sardines in oil + lemon and herring rolls.

**13%**

share of these companies in total  
Oct 2023 – Mar 2024 Fish & Seafood  
launches tracked

**Source:** Innova Database

# NPD trends in fish & seafood: summary

Europe is the top region for fish & seafood launches during Oct 2023 – Mar 2024



Aldi is the leading company for fish & seafood NPD in Oct 2023 – Mar 2024



Natural, traditional and DHA claims are growing in popularity

Fish & seafood records a CAGR of +0.6% during Apr 2021 – Mar 2024



Cheese, beechwood smoked and onion are the growing flavors

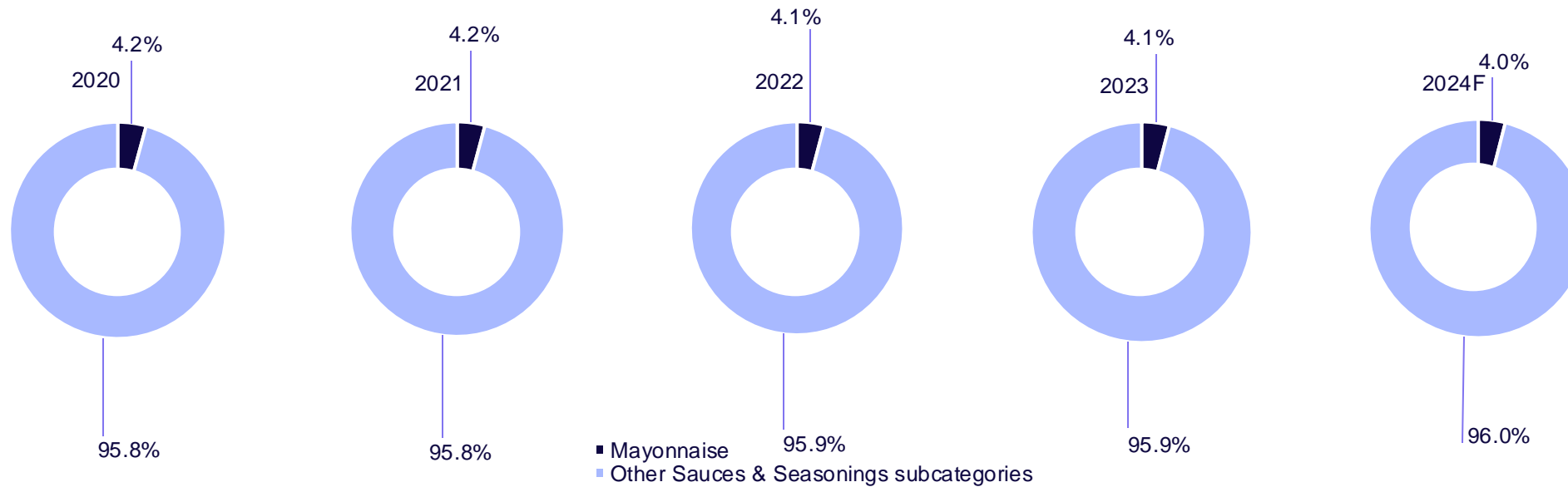
Source: Innova Database



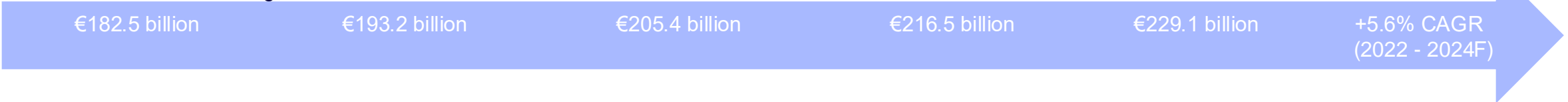
# Mayonnaise sales value records a positive performance during 2022 – 2024F

**Figure 2:** Mayonnaise sales value as a percentage of global Sauces & Seasonings sales value

Global Mayonnaise sales value



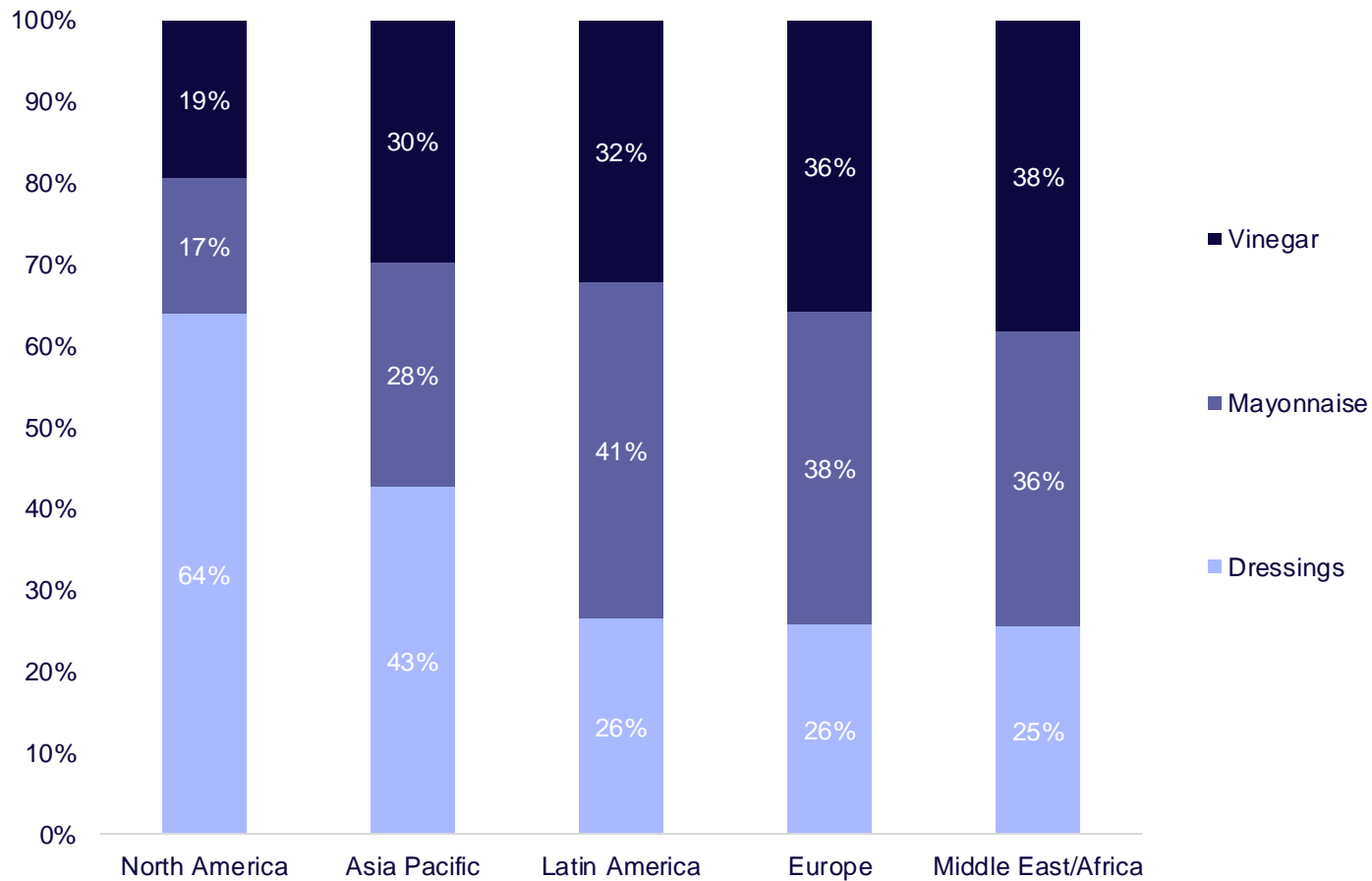
Global Sauces & Seasonings sales value



**Source:** Innova Market Sizing

# Dressings NPD displays a predominant share in North America

**Figure 4:** Mayonnaise – dressings & vinegar category launches, by region (Oct 2022 – Mar 2024)



- During Oct 2022 – Mar 2024, dressings subcategory dominates in North America with a 64% share.
- Meanwhile, mayonnaise records the largest share in Latin America (41%), and vinegar leads in the Middle East/Africa (38%).
- In North America, the persistence of clean label claims (no additives/preservatives: 48%, organic: 11%, GMO free: 9%) might attract consumers who desire transparency. Alongside options free from allergens and catering to specific dietary needs (gluten-free: 46%, HFCS-free: 18%, lactose-free: 2%), support the product development in the dressings subcategory in Oct 2023 – Mar 2024.

**Source:** Innova Database

# Megatrend drivers – challenging dynamics

 **Megatrends**



## HEALTH OF THE PLANET

#1 global issue of concern  
for consumers globally



## HEALTH OF THE POPULATION

#2 global issue of concern



## COST-OF-LIVING CRISIS

3 in 4 consumers are concerned



## TECH TRANSFORMATION

Impacts for how we live, work,  
shop and entertain

**3 in 5**



consumers globally say  
they are making lifestyle  
changes due to global  
issues of concern.

- **Source:** Innova Lifestyle & Attitudes Survey 2023 (average of 11 countries)

**Note:** Qs: "Which of these global issues concern you most?" "To what extent are you concerned about the following 'crises'/issues and their impact in your country/community?" "To what extent have you changed your lifestyle in response to these issues?"

# INSPIRE INNOVATION DRIVE GROWTH



INNOVA  
MARKET  
INSIGHTS

## TOP TEN TRENDS 2024

### INGREDIENTS: TAKING THE SPOTLIGHT

Feed into positive consumer attitudes towards key ingredients by promoting a product's star element.

star ingredient    macronutrients  
front-of-pack communication

### MINIMIZING THE NOISE

Open and straightforward communication appeals to consumers who want an escape from information overload.

trust & transparency    simple messaging  
open communication

### NURTURING NATURE

Business responsibilities go beyond sustainability, requiring actions that make a positive difference to nature protection.

nature protection    beyond sustainability  
healing planet

### PRIORITIZING PREVENTION

Positive action to prevent health concerns before they arise is driving consumers to products that meet their personal wellbeing needs.

preventative care  
health management

healthy aging

### PLANT-BASED: THE RISE OF APPLIED OFFERINGS

Adapting well-known dishes and formats offers familiarity and clarity to consumers who are keen to embrace plant-based products.

winning with formats    familiar twists  
recognizable choices

### LOCAL GOES GLOBAL

From authentic, adventurous foreign dishes to ingredients produced close to home, the power of local is spreading across the globe.

global tastes    local sourcing  
authentic & familiar

### HOME KITCHEN HEROES

The home becomes an alternative venue for enhanced social occasions that fit changed lifestyles and budgetary realities.

quality cooking    socializing at home  
creating occasions

### INDULGING IN HEALTH

Health brands move into indulgence while comforting treats come with added goodness, creating an ideal mash-up.

positive pleasures    combined benefits  
novel ingredients

### OCEANS OF POSSIBILITIES

The seas are developing into the farms of the future, providing inspiration alongside new, environmentally positive ingredient sources.

marine protection  
novel ingredients  
plant-based

### H2.O: QUENCHING THE FUTURE

Added health benefits and exciting endorsements lead the way in carving out a strong future for hydration products.

functional health    electrolytes  
replenish



# Taste of the sea: Algae as a flavor enhancer



Australia, Nov 2023

The flavors and aromas of guava and lychee from the hops are boosted by the salinity of seaweed for a fruity and **umami** combo that finishes crisp to leave you wanting more.

Popcorn seasoned with green kale, seaweed and black pepper. "Rich with **umami** flavor, it's bound to satisfy a craving and hit the spot."



United Kingdom, Oct 2023



Japan, Oct 2023

Soba noodles with **umami** soup made with bonito, kelp, and dried sardines.

Source: Innova Database

# Future directions for NPD



## Emphasis on healthiness and naturalness

There is a **strong interest in health, naturalness, nutritional value and balanced nutrition**. The various health benefits of marine ingredients open opportunities in the functional beverage and food space.



## Expansion through innovation

Utilizing the ocean's bounty of marine ingredients is expected to become more prevalent especially for **plant-based innovations (fish and seafood substitutes)**, but also as a **natural flavor enhancer**.



## The future of the ocean

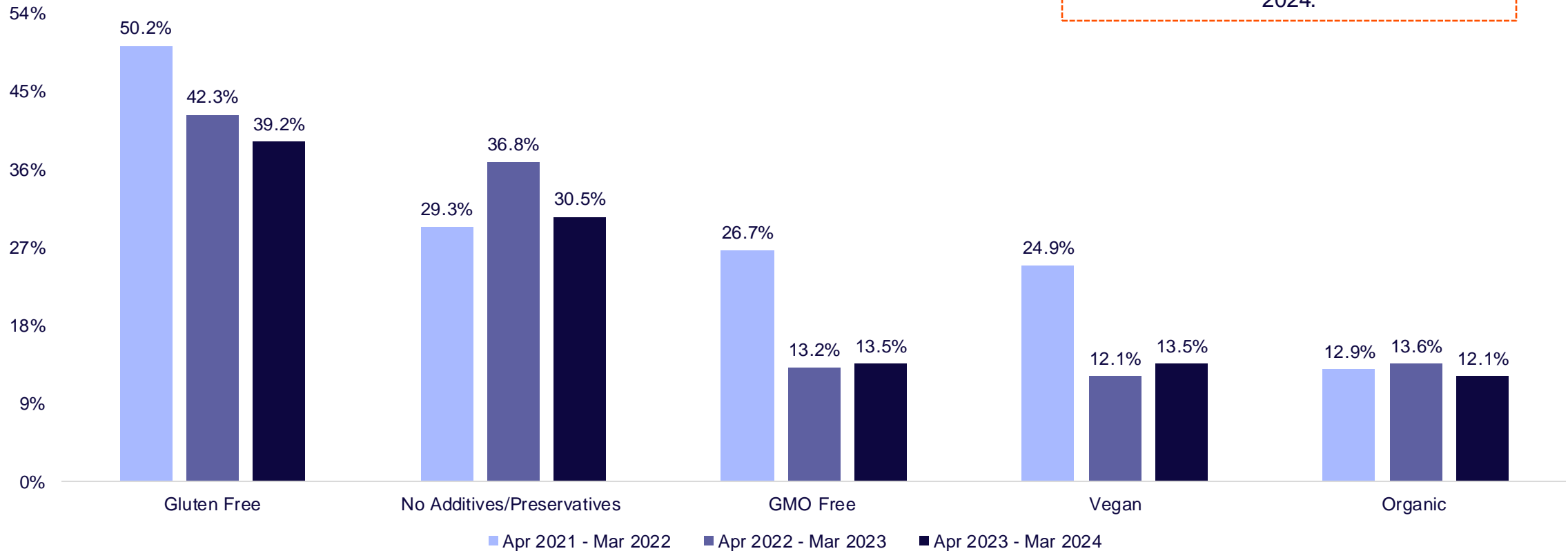
Possible challenges to farming the ocean (e.g., climate change) allow **technological innovation** to advance. Seafood companies will continue to actively respond to environmental issues through **ocean stewardship**.

Source: Innova Market Insights



# Clean labels occupy 3 out of top 5 claims

**Figure 9:** Top 5 positionings for Mayonnaise – Dressings & Vinegar launches in North America

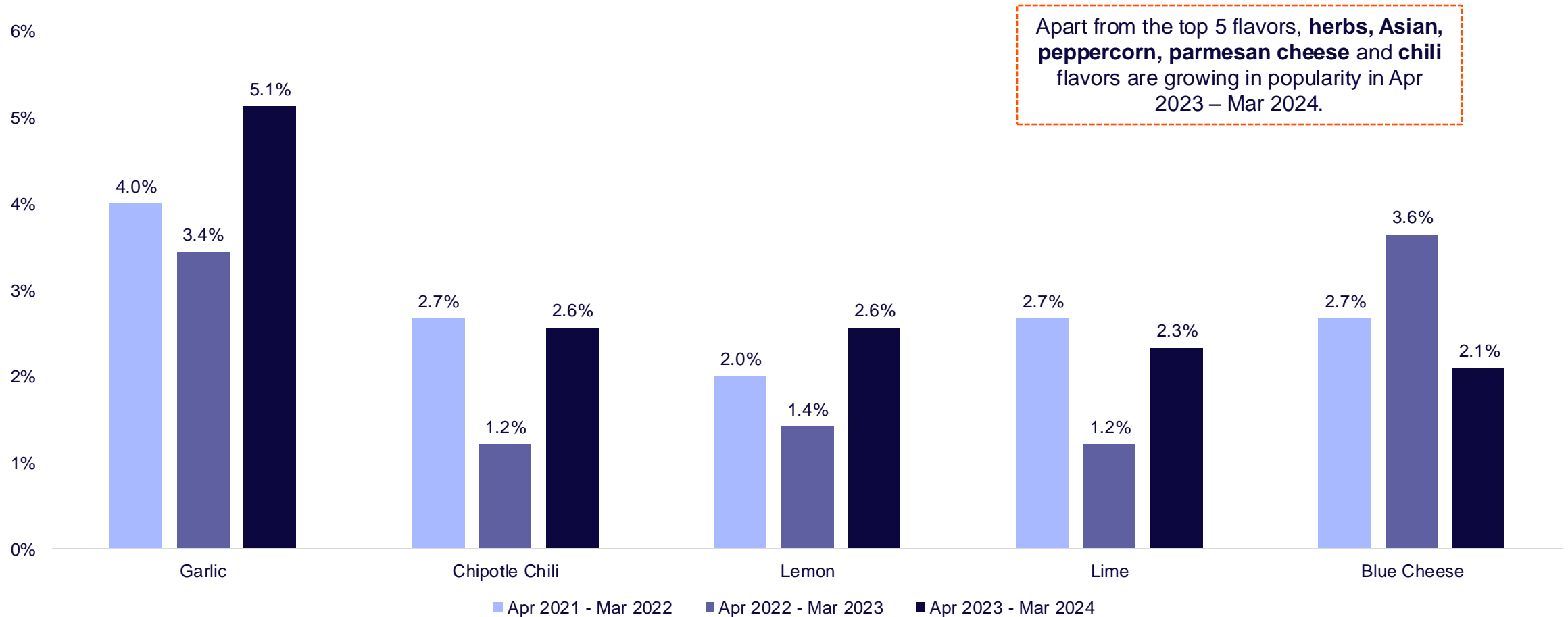


**Source:** Innova Database

**Note:** Sum of the percentages may be greater than 100% due to multiple positionings per product

# Garlic flavor takes the lead with an increase in share during Apr 2022 – Mar 2024

**Figure 11:** Top 5 flavors for Mayonnaise – Dressings & Vinegar launches in North America



**Source:** Innova Database

**Note:** Sum of the percentages may be greater than 100% due to multiple flavors per product



# BARAKO ROE SAUCES AND DRESSINGS

## THE IDEA

Alaska Pollock Roe is a unique ingredient that can be added to sauces, dressings and dips. It instantly adds color, flavor, texture and sophistication to a growing category.

## OPPORTUNITIES

- Consumers like to treat themselves but cost limitations are making this harder. There is a growing emphasis on delivering indulgent tastes and more affordable everyday products.<sup>1</sup>
- Clean label claims are very important to consumers in the dressings category. Clean label curing of roe is essential for success.
- Visually, roe can be used to create appealing layers of color or color variations within a product.

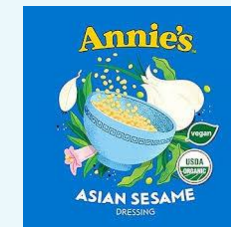


## MARKETING CONSIDERATIONS

- Innova Market Insights reports that Asian flavor profiles and limited-edition offerings are trending in this category.
- Younger generations are looking for sensory excitement beyond flavor when trying new foods. Adding this through sauces and dips is simple and customizable.
- Manufacturers can emphasize the unique and briny flavor roe adds, elevating the taste of dips and sauces.



## POTENTIAL PARTNERS



1. Innova Market Insights. Flavor Insider: Taste & Texture Creating Global Elevated Eating Experiences, Nov. 2023.

# Foodservice Use of Alaska Pollock Roe

**Alaska Pollock Roe** is a distinctive ingredient. There is presently no *clean label, cured, ready to eat* roe ingredient available. Clean label roe is a *new to the market ingredient* supporting the growing trend towards using domestic ingredients.

**Barako-style:** seasoned, loose roe packed like Ikura Salmon Roe.

**Tarako-style:** seasoned, cured in skein, typically used in the US by Asian restaurants for soup and as a garnish for noodles.

## Key Benefits:

- **Menu Innovation:** Provides chefs unique, flavor-rich dishes that set their establishments apart.
- **Local Sourcing:** Leverages a U.S. product, highlighting a commitment to local sourcing and sustainability.





# Mediterranean Flatbread with Alaska Pollock Roe

The Mediterranean flatbread highlights the incredible versatility of **freeze-dried Alaska Pollock Roe**, proving that it's not just for Asian-inspired dishes.

*Creamy basil ricotta spread and a flavorful sun-dried tomato relish, the roe & gremolata add a bright, citrusy finish. The combination of these Mediterranean elements showcases how **freeze-dried roe** can blend into a variety of culinary traditions.*

## Ingredients:

- Crostini
- Sundried Tomato Relish
- Basil Ricotta Spread
- **Freeze-dried Alaska Pollock Roe**
- Gremolata





CATEGORY: Seasonings and Toppings

ROE TYPE: Green or Water Roe

# POLLOCK ROE SALTS & SEASONINGS

Introducing **Pollock Roe Salts and Seasonings**, a delicious line of seasonings that lend a spark of bold, unique flavor to elevate any dish.

This unique line of chef-quality seasonings features a variety of blends crafted with aged and dried Tarako to that brings a distinctly salty, umami boost of flavor to your cooking. Ideal for dry rubs, in marinades or as a topical seasoning for snacks, the possibilities are endless...and delicious!

**Appropriate for CPG, Retail and Foodservice channels.**

## Inspirational Flavors:

- Korean BBQ with Tarako, gochugaru, cayenne pepper, and dried chilies
- Savory Tarako with garlic, tamari, kelp, and mushroom powder
- All purpose Umami seasoning and steak rub



CATEGORY: Center of the Plate

ROE TYPE: Cured, Clean Label Roe

# POLLOCK ROE TARAKO ROLLS

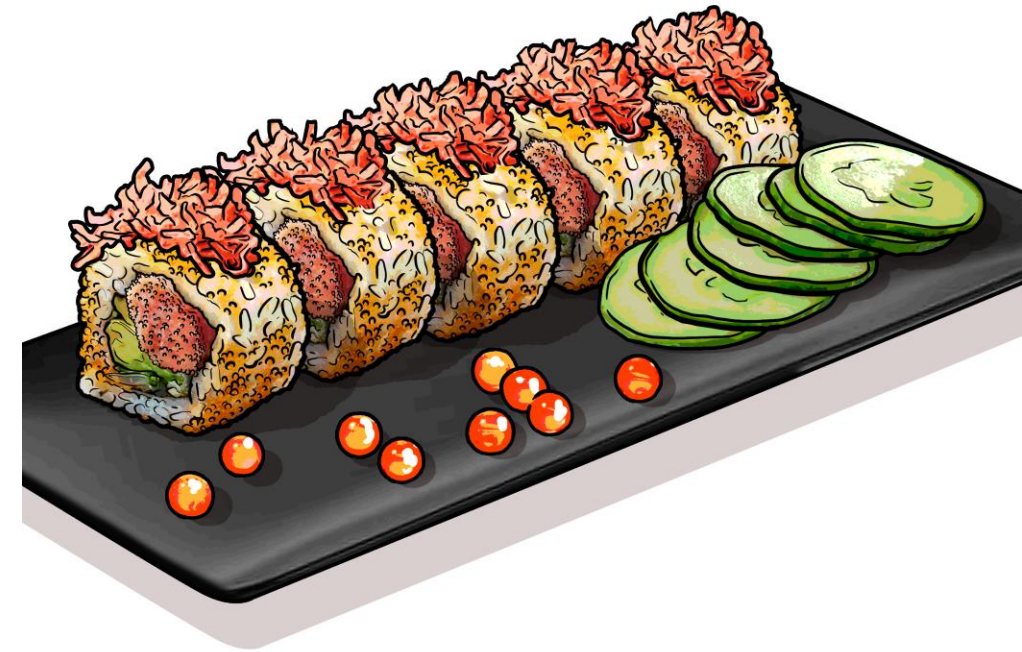
Introducing **Tarako Roe Rolls**, a delicious new spin on Sushi to help elevate and differentiate your menu.

Move over boring California Rolls, this “Alaska Roll” is filled with avocado, cucumber and brightly colored Tarako roe skeins, all expertly wrapped in sushi rice and nori and topped with shaved Mentiako (spicy, cured, roe). This sought-after roe not only elevates plating with a bright and appealing color contrast, but also delivers a deliciously intense umami flavor that’s sure to become a menu fave. Drizzle with Mentiako hot sauce for an even more refined experience.

**Primary usage is Foodservice.**

## Inspirational Flavors:

- Alaskan Roll
- Alaskan Volcano Roll drizzled with Mentiako Hot Sauce
- PNW roll with Tarako roe skeins, cream cheese, and cucumber



# TARAKO MAYONNAISE

CATEGORY: Dips, Spreads and Sauces

ROE TYPE: Green or Water Roe

Introducing a **Tarako Mayonnaise**, a delicious line of uniquely flavored condiments to add a little zing to your culinary creations.

Elevate your favorite dish with Japanese-inspired Tarako (Pollock Roe) Mayo that provides a tasty pop of flavor and color with one simple squeeze. A delightful fusion of velvety smooth mayo and a deliciously intense umami hit of roe, this tangy, creamy sauce can be used for dipping, drizzling on sushi or fish tacos, spreading on sandwiches and so much more!

**Can be sold in CPG or Foodservice packaging options.**

## Inspirational Flavors:

- Spicy Asian Tarako Mayo
- Old Bay and Tarako Mayo
- Chipotle Tarako Mayo



CATEGORY: Dips, Spreads, and Sauces

ROE TYPE: Cured, Clean Label Roe

# BARAKO ROE SAUCES AND DRESSINGS

Introducing **Barako Roe Sauces and Dressings**, a delicious line of premium sauces made with Barako to transform your next salad or noodle dish.

Barako provides a bright, briny and umami-forward essence to sauces that is reminiscent of the sea. For a unique and sophisticated flavor, simply toss with your favorite pasta, use as an elevated topping or in a creamy dip.

**Suitable for Foodservice or Retail packaging.**

## Inspirational Flavors:

- Alfredo Bottarga
- Arrabbiata Bottarga
- Bottarga Pesto

