

Seafood Technical Program Update

An aerial photograph of a fishing vessel in the middle of the ocean, pulling a large, circular net. The net is a light color, contrasting with the deep blue water. A smaller boat is visible to the left, connected to the main vessel by a rope. The water shows ripples and the wake of the boats.

April 11 2023

John Burrows

A fisherman in a red jacket and black cap is handling a large fish on the deck of a boat. Another person in a dark jacket and orange pants is visible in the background. The scene is set on a boat with various equipment and ropes. The text "Outreach and Resource Development" is overlaid in white serif font.

Outreach and Resource Development

Materials

- Bairdi Re-Eval
- In-Plant Adjustments
- Climate and Salmon SeaGrant Sheets

ALASKA SEAFOOD
Wild, Natural & Sustainable

GASTRONOMY
DELICATE • VERY SWEET • TENDER

NATURALLY WILD
CRAB SHELL QUALITY
Shell color varies with the age of the crab but has no effect on meat quality.

NUTRITION
WILD ALASKA BAIRDI CRAB IS PACKED WITH SHELL-SHOCKING LEVELS OF PROTEIN, OMEGA-3'S AND VITAMINS.

3.0 oz. of BAIRDI CRAB
20 g PROTEIN (40% DV)
405 mg OMEGA-3'S DHA & EPA
8.8 mg VITAMIN B-12 (367% DV)
40 mcg VITAMIN D (267% DV)

THE HIGH PROTEIN CONTENT OF WILD ALASKA BAIRDI CRAB IS EASILY DIGESTIBLE, AND HAS ALL NINE AMINO ACIDS THE BODY CAN'T PRODUCE ITSELF - A COMPLETE PROTEIN OF THE HIGHEST QUALITY.

Benefits of Vitamin B-12
• Promotes bone mineralization
• Ensures muscles, heart, lungs, and brain function properly
• Plays neuroprotective role
• Acts as a hormone

COOKING PROFILE
METHOD: Boiling, grilling, roasting, baking, steaming
LEAN, SWEET MEAT
Preps and pairs easily!

RECIPE
Lemon Wild Alaska Crab / Mustard Softened Crayfish / Spicy Anchoas with Alaska Crab
Alaska Crab Cakes with Spicy Aioli / Chili Grilled Alaska Tanner Crab
Find these and more at: WILDALASKASEAFOOD.COM/RECIPES

ALASKA SEAFOOD MARKETING INSTITUTE | WWW.ALASKASEAFOOD.ORG

CLIMATE
The diverse and complex ecosystems in which salmon live can be affected in numerous ways, but one variation is the nutrition of smaller salmon.

NUTRITION
The nutrition of smaller salmon is similar to that of larger salmon and is likely identical for many products. While fewer servings are likely to be available for each fish, official numbers for nutrients in each species are themselves averages of many different fish, which as wild animals have all variance. The same high quality protein, omega-3's, and other nutrients are present in smaller fish.

WILD ALASKA SALMON

Species	Pounds (lb)	Omega-3's (DHA+EPA, mg)	Vitamin D (mcg)
Alaska King	22	1476	NA
Alaska Coho	20	900	9.6
Alaska Sockeye	23	730	14.2
Alaska Keta	22	683	NA
Alaska Pink	21	524	11

POTENTIAL CAUSES
The interlocking variables that influence salmon life cycles make it difficult to isolate a specific cause of smaller sizes at the time of harvest.

COMPETITION
Salmon are at times seeing far more competition for finite food resources than in previous years, which in some cases is a result of a higher abundance of individual fish. Increased competition may have several short and long term outcomes, but most indications are that salmon stocks will endure and may even see range extensions. This flourishing of fish may drive lives of higher numbers of younger fish, which compete for resources with not only each other, but also other species.

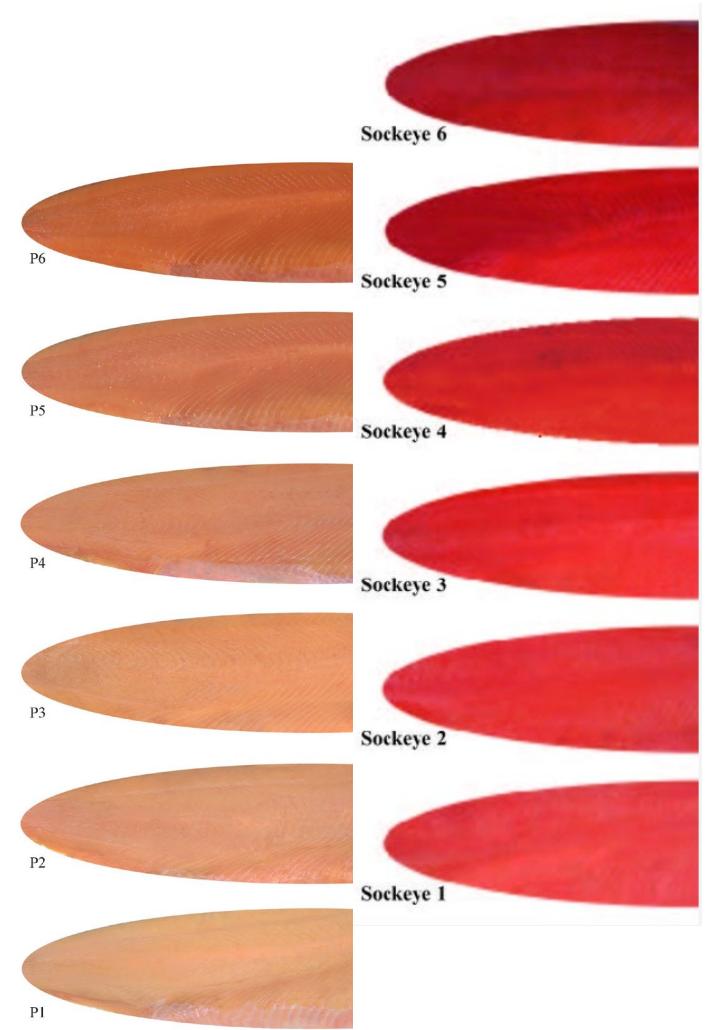
POTENTIAL DRIVERS

STANDARD
3 MONTHS TO 1 YEAR
1.5 YEARS

LIKELY VARIABLES
3 MONTHS TO 1 YEAR
1.5 YEARS

FOR MORE INFORMATION ABOUT THE ALASKA DEPARTMENT OF FISH AND GAME'S RESEARCH INTO HATCHERY FISH AND COMPETITION.

ALASKA SEAFOOD MARKETING INSTITUTE | 312 N. Franklin Street, Suite 200, Anchorage, AK 99503 | 3147 | P: 907-479-2200 | 907-460-5560 | ALASKASEAFOOD.ORG



Nutrition:

Welcome Roxana Ehsani, MS, RD, CSSD, LDN



- **RDN**
- **Board Certified Sports Dietitian**
- **Medical Review Board for:**
 - **Everyday Health (also does recipe dev for them)**
 - **Health.com**
 - **Verywell Health**
- **Natl Nutrition Media Spokesperson**
- **Adj. Prof at VA Tech in sports nutrition**



A close-up photograph of a cooked crab, likely a Dungeness crab, resting on a metal tray. The crab is bright orange and is surrounded by crushed ice. In the background, the head of a fish is visible, partially obscured by the crab and ice. The text "Applied Investigations" is overlaid in a white, serif font across the center of the image.

Applied Investigations



Applied Investigations



BRISTOL BAY
Regional Seafood
Development Association

MAINE



Oregon State
University



UCONN



- Nutrient/Contaminant Database
- Alaska Salmon Consumption and Reduced Inflammation for Breast Cancer (UCONN)
- Consumer Acceptability and Shelf-life Assessment of Frozen Seafood
- Sustainable Packaging Literature/Regulatory Analysis and Guidance for Industry
- Chef Sensory Analysis of Frozen AK Seafood
- McKinley Efforts
 - Update of specialty product analysis
 - Feasibility of reshoring of value-added production (w AFDF)



NOAA SK Grant: Nutrient Contaminant Database

Selected Species:

Definite Inclusion	Plus 2 to 6 of:
P. Cod	Sablefish
Pollock	Opilio
Sockeye	Coho
Keta	Red King Crab
Halibut	Golden King Crab
Pink Salmon	Roe or Oil

Samples Received:

Species	Number	Area	Processing complete
Halibut	20	GoA	In progress
Pollock	60	Bering	40 out of 60
Pink Salmon	20	GoA	Yes
Sockeye Salmon	20	GoA	Yes
Chum Salmon	20	GoA	Yes
Chinook Salmon	20	SE	No



NOAA SK Grant: Nutrient Contaminant Database: As of 11/10/22

Species	GoA	BSAI	SE
Halibut	20/20	0/20	0/20
Pollock	0/30	40/30	NA
Pink	20/20	0/20	0/20
Sox	20/20	0/20	0/20
Keta	20/20	0/20	0/20
P Cod	0/20	0/20	0/20
Chinook*			20/20*
Sablefish	0/20	0/20	0/20
Coho	0/20	0/20	0/20



NOAA SK Grant: Nutrient Contaminant Database: As of 4/11/23

Green=In hand
Yellow=Agreement in place or in progress

Species	GoA	BSAI	SE
Halibut	20/20	0/20	0/20
Pollock	0/30	40/30	NA
Pink	20/20	0/20	18/20
Sox	20/20	0/20	20/20
Keta	20/20	0/20	20/20
P Cod	0/20	0/20	0/20
King salmon*	*	*	20/20*
Sablefish	0/20	0/20	0/20
Coho	0/20	0/20	20/20

Recommendation: Inclusion of chinook, sablefish, coho. Discussion needed re: shellfish
First nutritionals received 3/1/23



Seafood Innovation & Quality Summit

MARCH 20 @ 8:30 AM - 3:00 PM | Free





Seafood Innovation & Quality Summit

A GATHERING FOR NEW ENGLAND CHEFS

MARCH 20 | MONDAY | PORTLAND, ME

Join us for a day of culinary tasting, innovative local product sampling, demonstrations, and more. This event has limited capacity, so register today!

Researchers from the Alaska Seafood Marketing Institute, University of Maine, and Oregon State University are working to enhance the quality of US seafood and need the help of chefs to do it. If you are a chef or foodservice professional in the New England area and want to help improve the quality of seafood, join us for an lively gathering giving you first access to new and innovative seafood products and processes, industry networking and more.

- Engage with local seafood vendors on their innovative new products and efforts
- Keynote Presentation from Barton Seaver
- Culinary demonstrations
- Discussion panel comprised of prominent seafood academics, local trendsetters, and chefs
- Sample wild caught US seafood as part of research
 - Participants in research tasting to receive \$50 compensation



Seafood Innovation and Quality Summit



Sensory Program Director
OSU's Food Innovation Center



Food Science Innovation Coordinator/Facility Manager for
the School of Food and Agriculture
Chapter Lead: ACF Downeast





Oregon State
University

Seafood Innovation and Quality Summit



Sockeye



Keta



Halibut



Yellowfin Sole

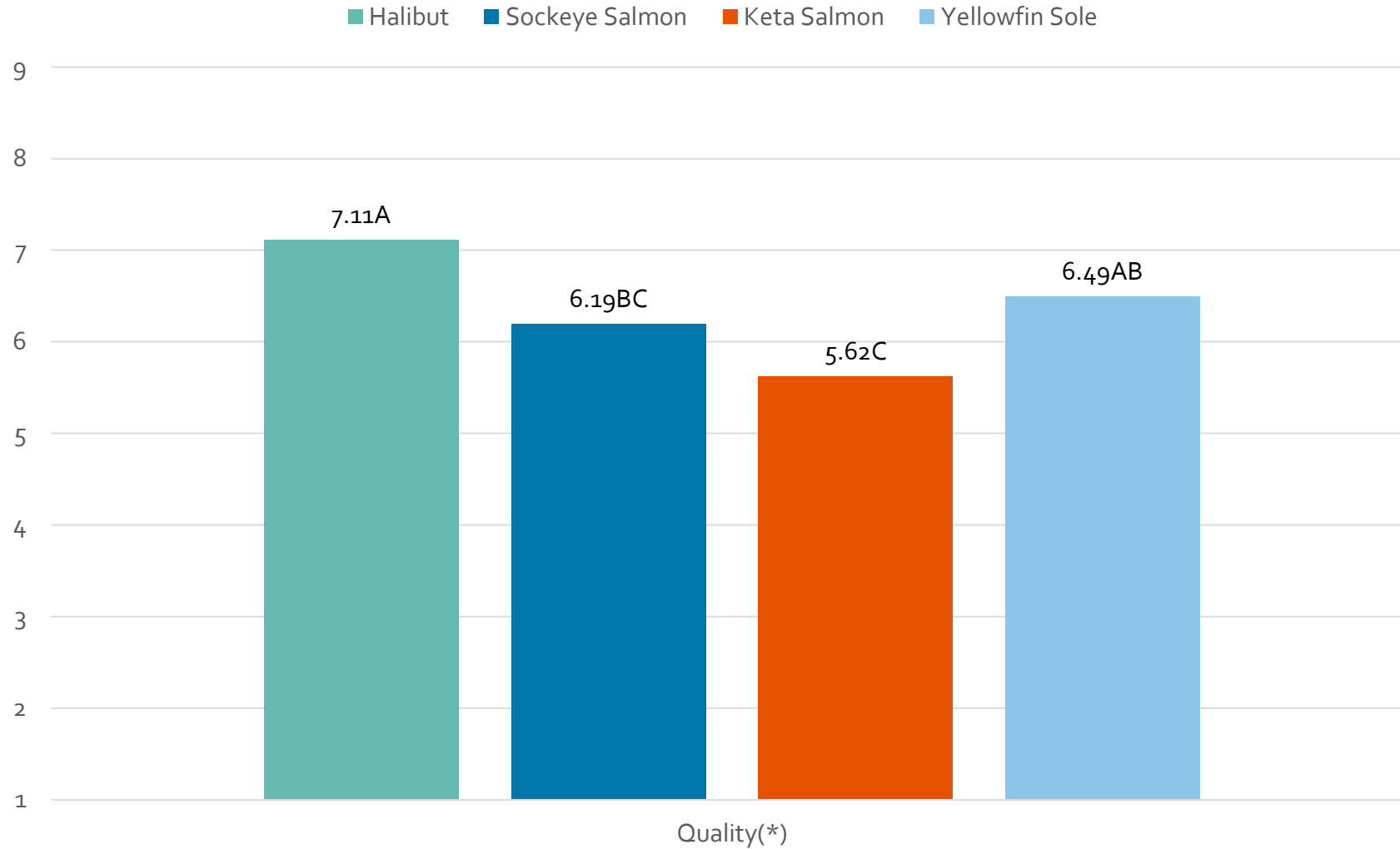
Species of Inclusion





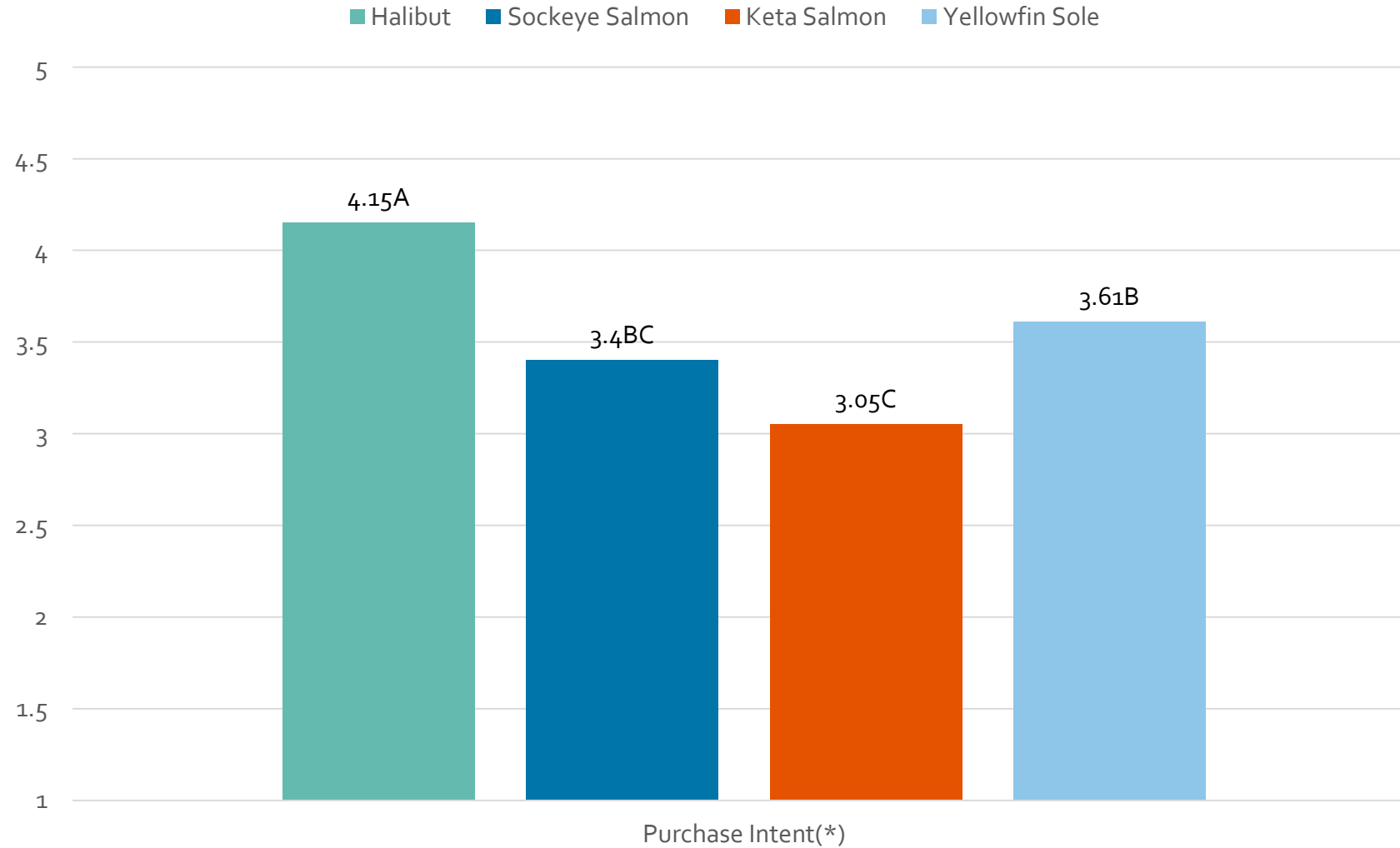
- Simple preparation by seafood-savvy chefs of high quality frozen product
- No comparative element
- Qualtrics and/or Compusense systems, results will be analyzed at the 95% confidence level
- ‘Chefs as consumers’ data as well as sensory
- raw and summarized data will be presented in a summary report

Quality - Mean Graph



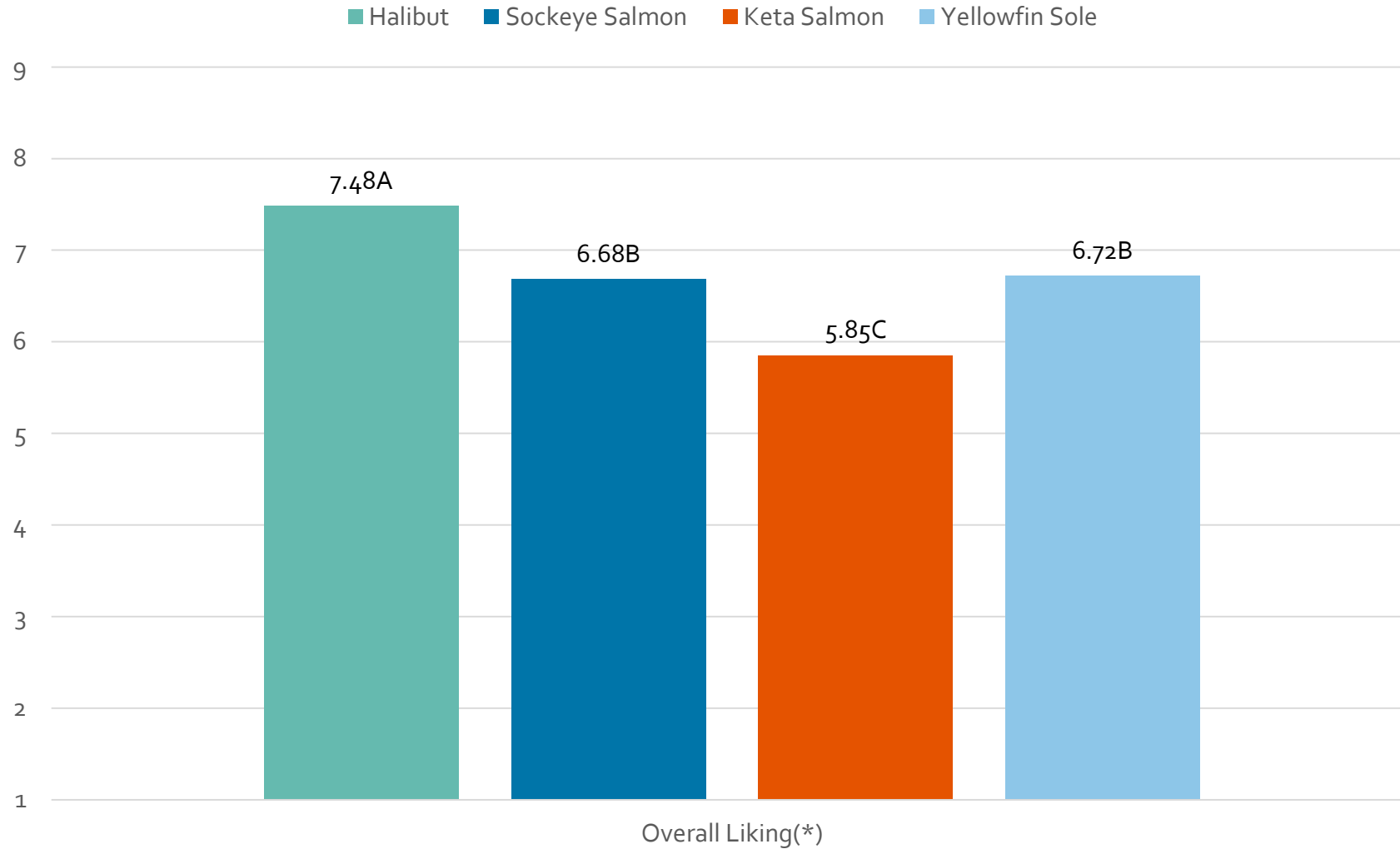
Scale Values: 1=low quality and 9=high quality

Purchase intent - Mean Graph



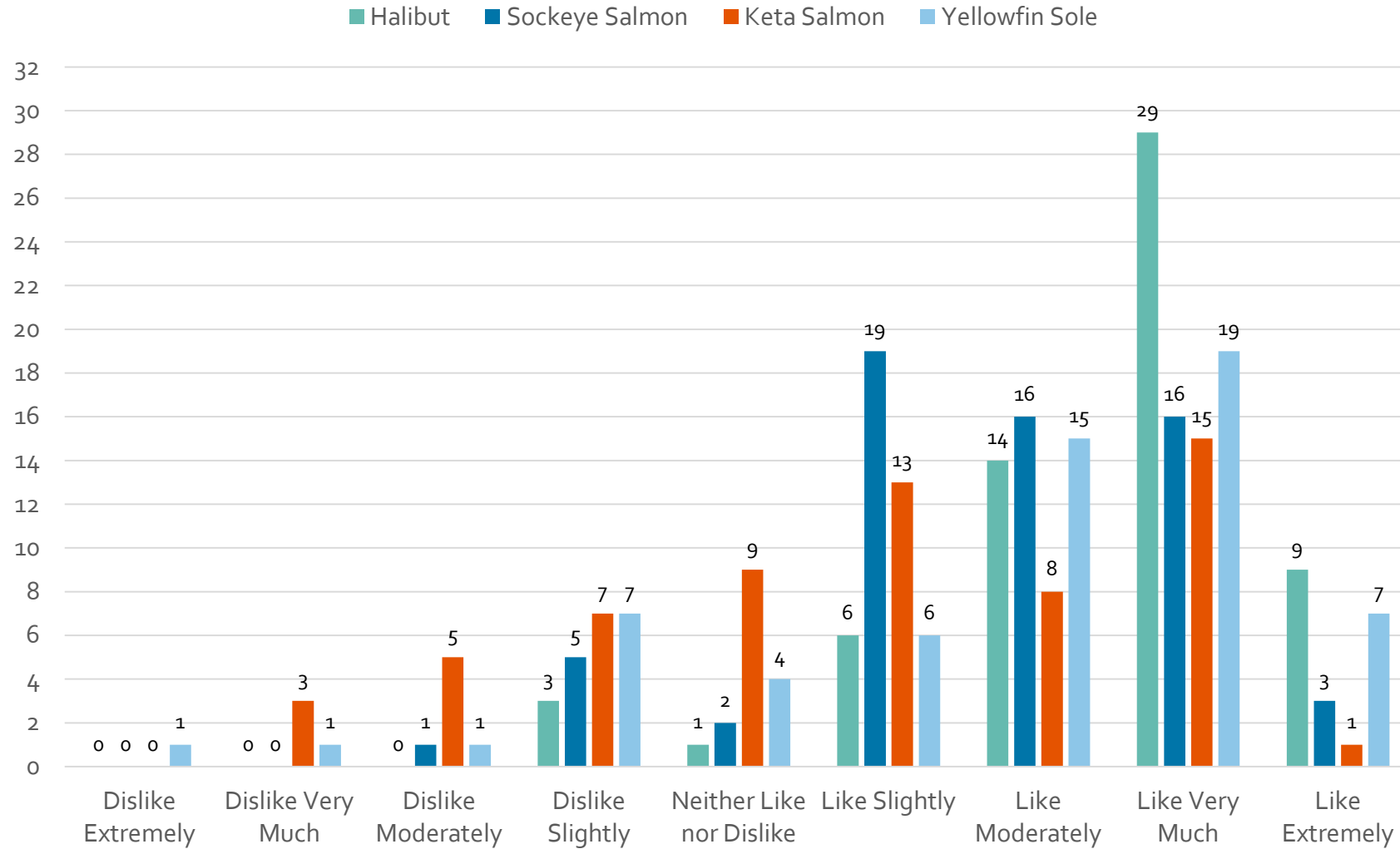
Scale Values: 1=definitely would not buy/recommend and 5=definitely would buy/recommend

Overall liking - Mean Graph

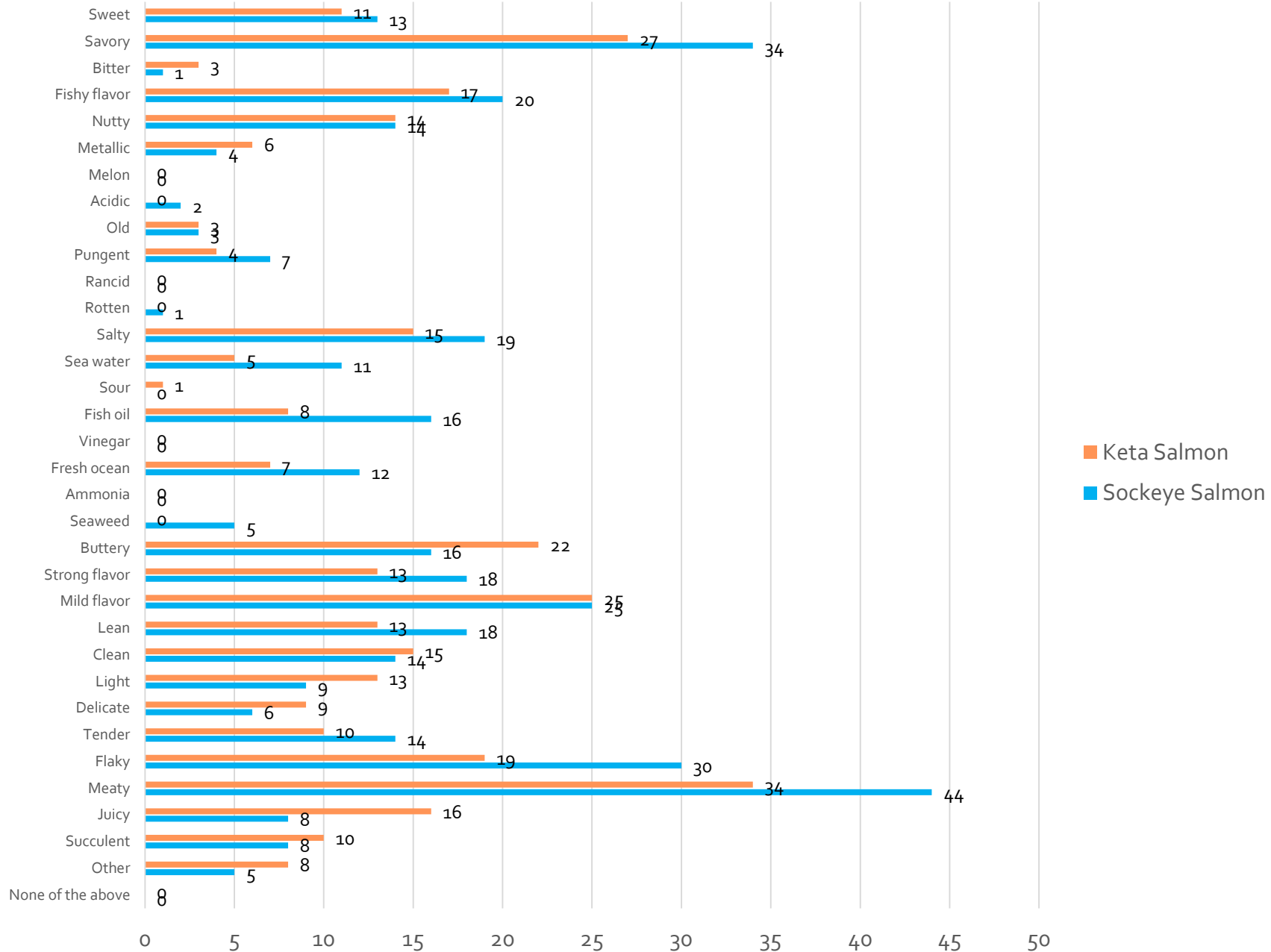


Scale Values: 1=dislike extremely and 9=like extremely

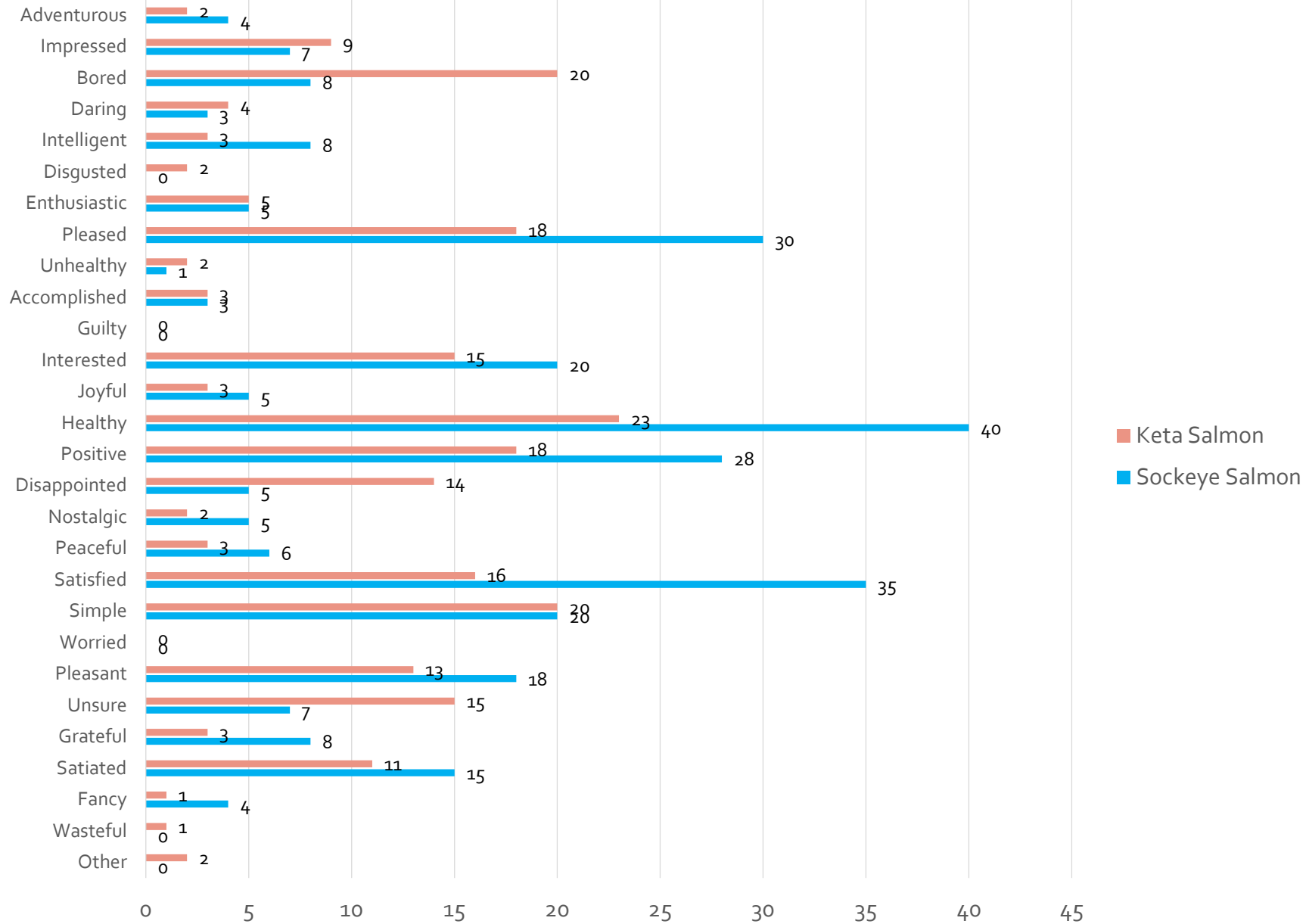
Overall Liking - Crosstabulations



Salmon Descriptive Sensory Check all that apply, n=61



Salmon Essense28 Emotion Check all that apply for Seafood, n=61



Trade Education and Regulatory



Trade Education/Regulatory



- 'Healthy' Rule
- Alaska Farm Bureau w/McKinley
- Accelerate Alaska
- Martha Stewart

Products that Could Qualify for "Healthy under the Proposed Rule"



Proposed Criteria for Certain Food Groups and Sample Foods

Per Reference Amount Customarily Consumed

oz = ounce
 g = grams
 mg = milligrams
 DV = Daily Value

Food Groups	Food Group Equivalent Minimum	Added Sugar Limit	Sodium Limit	Saturated Fat Limit
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THANK YOU

John Burrows

Program Director

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