



Reputation at Risk: How Animal Welfare, Antimicrobial Resistance and Social Responsibility Are Shaping Consumer Perception

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REGISTERED DIETITIAN DATASSENTIAL

Marie Molde

With a strong background in both nutrition and business — Marie holds a combined MBA/RD from Dominican University Marie brings a unique culinary perspective to Datassential, a leading Chicago-based food market research firm. Restaurant chains and suppliers have relied on Marie's expertise in menu and product development, and for years she has helped foodservice and retail companies excel in better-for-you innovation.







FOUNDER & PARTNER CHANGING TASTES

GOAL

Arlin Wasserman

Arlin is founder of Changing Tastes, a consultancy providing business strategy and culinary consulting to Fortune 500 companies, restaurant and hospitality businesses, investors and the philanthropic sector. He served as Sodexo's first vice president of sustainability and corporate responsibility. Arlin's commentary on food sustainability and public health has been featured in The New York Times, Wall Street Journal, Washington Post, USA Today, Fortune, CNN.com and NPR.



US MARKETPLACE LANDSCAPE

OPPORTUNITIES

IN HUMANE AQUACULTURE PRODUCTION



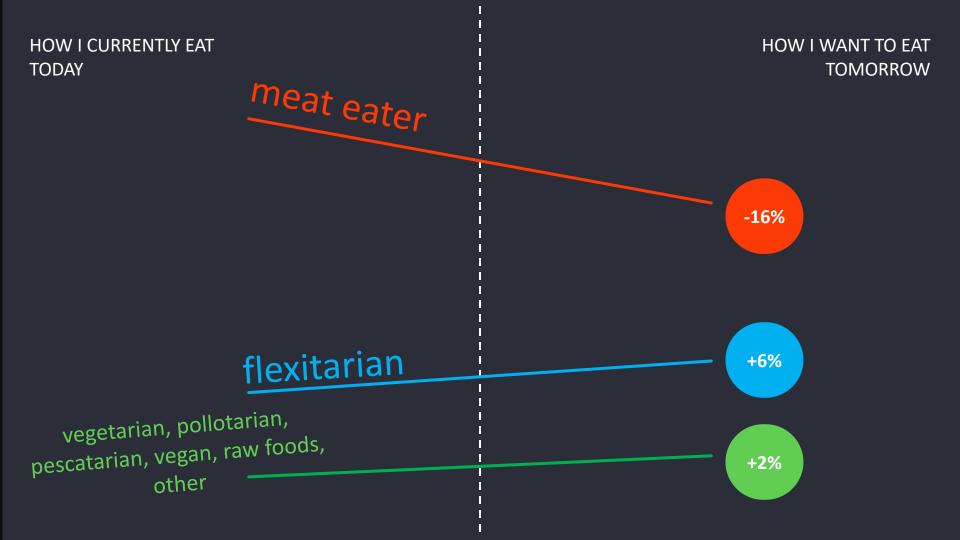




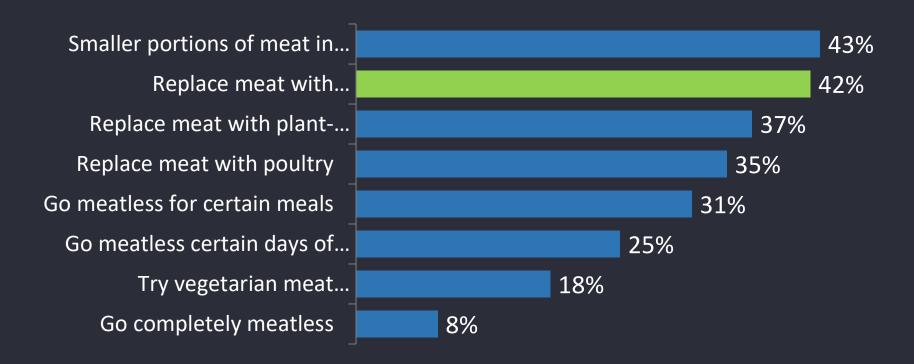
operators major buyers

consumers general population

how americans eat



today's consumers who want to eat less meat also want to eat more fish and seafood instead



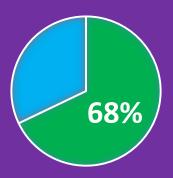
concerns with animal-based protein

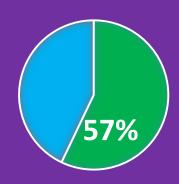
animal welfare is a driving force in changing what consumers eat

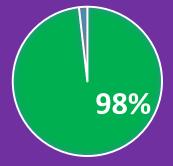
animals given antibiotics	34%
unnatural farming techniques	29%
animals not treated well	26%
too expensive	21%
lack of food safety	18%
artificial flavoring / coloring added	18%
not healthy	16%
environmental impact	15%
don't know how to cook it	6%
friends / family don't eat animal protein	5%

most large US restaurant companies have commitments to humane production

ANIMAL WELFARE ANTIBIOTICS CAGE & CRATE FREE







seafood landscape

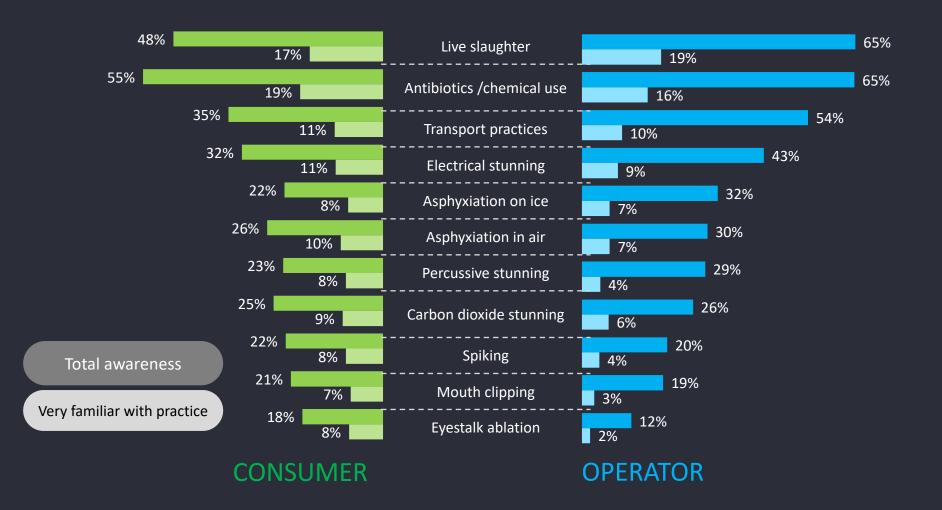
Consumer: preference for different Operator: preference for different seafood origins seafood origins Prefer Prefer Prefer Prefer Wild-Wild-Farm-Farm-53% 42% 18% Caught Raised Caught Raised Seafood Seafood Seafood Seafood No Preference No Preference Prefer Prefer Prefer Prefer Line-Net-Line-Net-27% 62% 24% 61% 16% Caught Caught Caught Caught Seafood Seafood Seafood Seafood

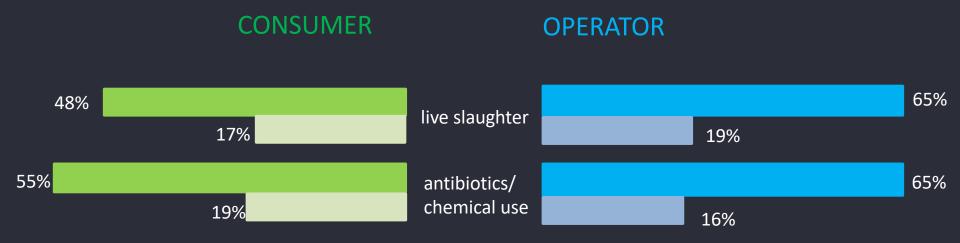
most menued & fastest growing seafood species in U.S. restaurants

	2018 PENETRATION	4-YEAR GROWTH
Shrimp	65%	-1%
Salmon	43%	+7%
Tuna	38%	-2%
Crab	34%	-5%
Scallop	26%	-12%
Calamari	24%	-6%
Clam	22%	-13%
Lobster	20%	-3%
Anchovy	18%	-6%
Mussel	16%	-10%
Cod	14%	+8%
Oyster	13%	+5%
Tilapia	11%	-15%
Squid	10%	-4%
Ahi Tuna	10%	+27%
Octopus	9%	+17%
White Fish	8%	+2%
Catfish	7%	-1%
Albacore Tuna	7%	-10%
Snapper	6%	-10%

adopting humane practices can unlock the market for aquaculture





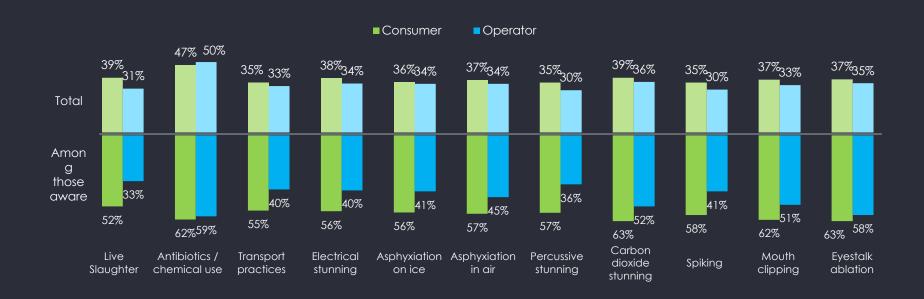


both groups are most aware of live slaughter and antibiotic use

likely some halo awareness from land based livestock

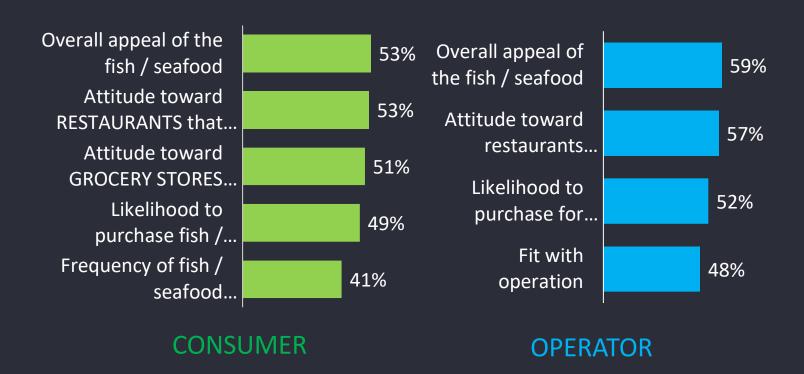


concern over aquaculture practices grows with awareness



...market recognition increases with humane practices

humane practices enhance appeal among both groups



humane practices elevate perceived quality



...and increase purchase intent

likelihood to purchase [humanely caught and harvested] fish / seafood

likelihood to purchase [humanely caught and harvested] fish / seafood for operation

CONSUMER

49%

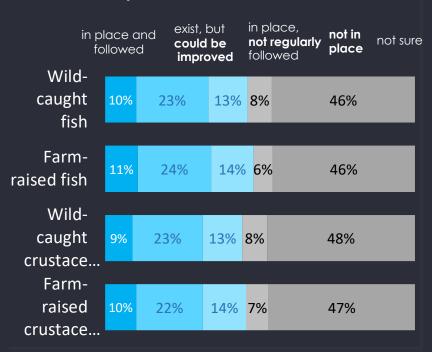
OPERATOR

52%

current market understanding implies embedded risk...

both consumers and operators are largely unaware of what kind of humane practice regulations are in place





CONSUMER

OPERATOR

Monterey Bay Aquarium **Seafood Watch**

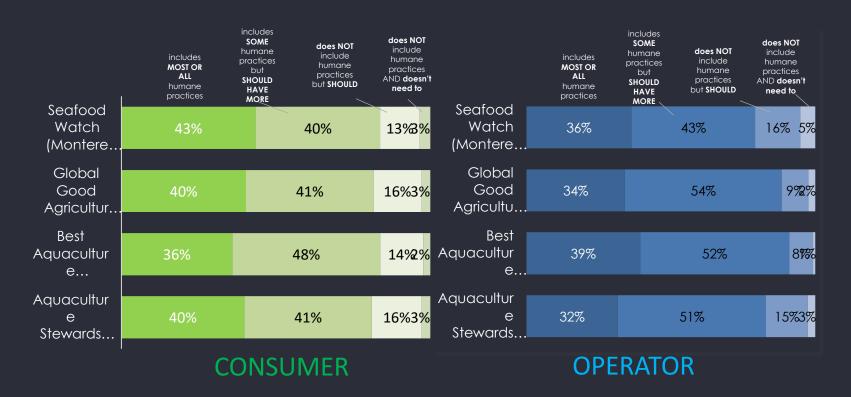








most consumers and operators believe that major ratings and certification include humane practices



a majority of operators and consumers want a guarantee that fish / crustaceans are humanely caught and harvested

