SUMMARY OF FOCUS GROUP RESULTS

Project
Identifying Attitudes and Preferences of the 55+ Age Group for Seafood and Aquaculture Products

Time Period Covered
October 25-November 14, 2007

As Part of a Grant from the Federal-State Marketing Improvement Program, Agricultural Marketing Service, U. S. Department of Agriculture

This research is provided through a cooperative initiative with the Florida Department of Agriculture and Consumer Services, Bureau of Seafood and Aquaculture Marketing

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Research Objectives

The following are the research objectives for the focus group portion of the FDACS seafood project:

1. Insight relative to consumption dynamics (how, when, where, how-often)
2. Insight into barriers to consumption
3. Insight into what drives seafood purchase
4. Insight for survey development

State funds for this project were matched with federal funds under the Federal-State Marketing Improvement Program of the Agricultural Marketing Service, U.S. Department of Agriculture. This research is provided through a cooperative initiative with the Florida Department of Agriculture & Consumer Services, Bureau of Seafood & Aquaculture Marketing

Methodology

Six focus groups were held, four in Palm Beach county and Miami-Dade county, Florida area on October 25 and 26 and two in Hillsborough county, FL on November 14, 2007. Each focus group consisted of between 7 and 10 participants. Participant recruiting was effective and for three of the groups (1 in Miami-Dade, and 2 in Hillsborough) three potential focus group participants were sent home to keep the size of each focus group at a manageable level of 10 participants. It was originally hoped to gather information from both seafood and non-seafood consumers at each location. Finding non-seafood consumers proved to be difficult in the southern counties. For the Miami-Dade and Palm Beach focus groups, the screening requirements were relaxed from people who do not eat seafood to those who had not eaten seafood in the past 30 days. As a result, in the southern counties, 3 of the 4 focus groups were seafood consumers (consuming seafood an average of 2.1 times per week, Exhibit 1), and 1 focus group was comprised of occasional or "lite" seafood consumers (consuming seafood an average of .7 times per week, Exhibit 1). In Hillsborough county, one focus group was composed of seafood consumers (consuming seafood an average of 2.9 times per week, Exhibit 1) and one focus group of people who consumed little, if any, seafood (consuming seafood an average of .1 times per week, Exhibit 1).

Exhibit 1: Consumption of Seafood per Week by Location and Seafood Consumption Preference

	Times/Wk Eat Seafood
Miami-Dade and Palm Beach county Consumers	2.1
Miami-Dade and Palm Beach county Lite-Consumers	0.7
Hillsborough county Consumers	2.9
Hillsborough county Non-Consumers	0.1

Each focus group session, 90 minutes in length, was designed to get participants to think and discuss in-depth the how, when, where, how-often, and why they purchase or do not purchase seafood. This was accomplished by the following focus group agenda:

- ***Introductions*** (to build rapport)
- ***Ice breaker*** (to zone in on seafood)

- ***Discussion of seafood consumption*** (To better understand how, when, where, how often, and why consumers purchase products in the seafood category. This included a discussion regarding consumption sites, forms of seafood consumed, types of seafood they could recall, food/nutrition concerns, most important criteria for seafood purchase decision, factors that affect seafood consumption, and if respondents care where their seafood comes from.)
- ***Advice focus group participants would give to the seafood industry*** (participants were asked what advice they would give to the seafood industry to increase seafood consumption.)
- ***Brief demographic questionnaire*** (To quantify selected demographic variables of the participants.)
- ***Wrap up*** (To answer any remaining questions the participants might have and to further explain the purpose of this research.)

Qualitative Considerations

By its very nature, focus group work is not designed to prove statistical validity or causal relationships. The power of focus group research is its ability to probe deep into the underlying reasons driving the purchasing behavior of target audience consumers. Focus groups are commonly used in marketing research. Participants are typically individuals in the target population. Focus groups let participants react to information in a non-structured environment. However, discussion guidelines and elaborate moderating techniques help minimize bias. The rationale is to gain the most non-redundant information in a short period of time.

Limitations of focus group research include: less control in a group interview than individual interviews; complex data created; and variance among focus groups due to the idiosyncrasies of each session and combination of participants. Focus group research is not used to collect large amounts of data, but as an input into a full picture of consumer tastes and perceptions. To use focus groups alone to tackle the task of understanding consumer attitudes would not be a cost-efficient method. However, when used in combination with future quantitative analysis, such as a telephone survey, focus groups can provide the needed input for developing/phrasing of questions.

Key Learning Summary

The following are the key points learned as a result of the focus groups:

1. **Consumers are either passionate, luke-warm, or have distaste for seafood.** For the passionate consumers, seafood is a regular part of their diet, much like milk. These consumers are willing to experiment with new seafood species. For the luke-warm consumers, there is potential to increase consumption, but the industry must clearly address their concerns. For the non-consumers, life experiences reinforced their distaste for seafood and it is likely that little can be done to increase their consumption. However, these non-consumers can still provide insight into why they don’t purchase and consume seafood that could be useful for the passionate and luke-warm consumers.
2. **Freshness is a key factor that must be maintained and leveraged if seafood consumption is to be increased.** Freshness, like value, means different things to different consumers. Focus group participants were somewhat conflicted on the notion of fresh versus processing techniques such as flash freezing.

3. **Taste, texture, and appearance matters.** Like freshness, there is a wide range of acceptable levels of tastes. Some consumers prefer milder and flaky species, while others like a stronger, firmer species. There was a paradox between participants that wanted complete access to a given species (fresh, open filets at a fish counter) to those same participants that wanted technology to be used to ensure freshness such as vacuum packaging.
4. **Value matters.** Value was defined as the ratio of product attributes (e.g., size, flavor, packaging, etc.) to price. This may include physical surroundings such as counter displays, brochures, knowledgeable staff, and ambiance. Striking the appropriate balance between attributes offered and price is critical.
5. **Physical appearance matters.** Dried out and smelly seafood displays exist and are a big turn off to consumers. The industry would do well to work with retailers to improve the image and value of the retail experience.

Recommendations/Indicated Actions

Recommendations, based on focus group findings include:

1. **Communicate with consumers.** The industry should communicate: a) "good" news stories to combat negative news stories, b) key product attributes of seafood on a species by species basis, c) the health and nutrition aspects of seafood, and d) the procedures that are in place that assure consumers their seafood is safe.
2. **Educate consumers**. Consumers are hungry for seafood information related to: a) product uses for each species of seafood, and b) preparation and recipes that expand their knowledge of seafood (e.g., more ways to prepare shellfish at home).
3. **Work closely with both grocery and restaurant retailers to improve:** a) the retail front appeal to consumers, and b) the seafood knowledge of those retail employees that interact directly with consumers.
4. **The telephone survey needs to explore in greater detail the attitudes and preferences of consumers relative to seafood.** Results from a correctly applied survey should result in a representative sample that can be used to make specific seafood industry recommendations.

Key Findings

Focus Group Participation Background Information

Six focus groups were done over a three week period between October 25 and November 14, 2007. Four of the focus groups were conducted in Miami (to reach residents of Miami-Dade, and Palm Beach counties) and two focus groups were conducted in Tampa (to reach residents of Hillsborough County).

The results reported herein represent the quantitative information collected via Plaza Research screenings, the brief questionnaires, and a synopsis of the discussions that occurred during the question-and-answer portions of the focus groups. The quantitative results are reported first and the qualitative responses from the discussions are presented thereafter. The individual summaries from each of the focus groups as well as the audio and video tapes capture the individual data and discussions which are incorporated into the following results and observations.

Each location was split into groups being comprised of seafood consumers and non-seafood consumers. The goal was to recruit thirteen people (in the hopes that 10 would show) for each of the six focus groups. Recruiting non-seafood consumers that met all the screening criteria in Miami proved to be difficult and only 8 people were recruited for the occasional/lite-seafood focus group conducted on October 25.

At each location, the focus groups targeted people 55 years of age and older. An effort was made to obtain focus group participants across the 55-75 year old range. In general, this was accomplished with an average age of 63 years. See Exhibit 2 for a more detailed breakdown of age by area and seafood consumption preference.

Exhibit 2: Demographics of Focus Groups by Location and Seafood Consumption Preference

	Ave Age	Median Age	No. In Household
Miami Area Consumers	63	64	2.0
Miami Area Lite-Consumers	60	60	2.1
Tampa Area Consumers	62	62	1.8
Tampa Area Non-Consumers	65	68	2.3

Focus group participants (primary shoppers in their household) were predominantly female (approximately 67%, see Exhibit 2), and most participants were Caucasian (only 5 out of 55 focus group participants were non-white). The average number of people in each household across all focus group participants was 2.2. This number is not surprising given the targeted age for these focus groups. For a breakdown of household size by area and seafood consumption preference, refer to Exhibit 2.

A breakdown of focus group participation by Florida county is presented in Exhibit 3. The difficulty in finding true non-seafood consumers resulted in considerably more seafood consumers than lite seafood consumers in Miami. The research company had more lead time to find more non-consumers in Tampa, resulting in an equal amount of seafood consumers and non-seafood consumers from Hillsborough County.

Exhibit 3: Focus Group Participation by Florida County and Seafood Consumption Preference

	Broward	Dade	Palm Beach	Hillsborough
Miami Area Consumers	3	15	9	
Miami Area Lite-Consumers		7	1	
Tampa Area Consumers				10
Tampa Area Non-Consumers				10
Total = 55	**3**	**22**	**10**	**20**

Focus group participants were gathered by the research firm, Plaza Research. All focus group participants met the criteria in the attached screener, including age, gender, and recent consumption of seafood. In the case of the Miami Area Lite-Consumers, the criterion was relaxed to allow people who had not consumed seafood in the last 30 days.

The largest percentage (30.7%) of focus group participants reported income in the range of $50,000 - $100,000 (Exhibit 4). The distribution of income is representative of the population in the Miami and Tampa areas for this age group.

Exhibit 4: Income by Area and Seafood Consumption Preferences

	< $20,000	$20,000 - $30,000	$30,000 - $50,000	$50,000 - $100,000	> $100,000	No Answer	Totals
Miami Area Consumers		3.6%	10.8%	12.6%	10.9%	10.8%	**48.7%**
Miami Area Lite-Consumers			1.9%	3.6%	7.2%	1.9%	**14.6%**
Tampa Area Consumers	1.9%	1.9%	1.9%	9.0%	3.6%		**18.3%**
Tampa Area Non-Consumers	1.9%	5.5%	3.6%	5.5%	1.9%		**18.4%**
Totals	**3.8%**	**11.0%**	**18.2%**	**30.7%**	**23.6%**	**12.7%**	**100.0%**

Focus group participants were men and women. All focus group participants met the following criteria for the study:

1) Adults, that did not work for a market research firm, newspaper, radio or TV station, or a company that distributes food.
2) Have not participated in a focus group within the last 6 months.
3) Was the primary shopper for the household.
4) Were between the ages of 55 and 75.
5) Live in the appropriate county in Florida (Miami-Dade, Palm Beach, or Hillsborough).
6) Either consumer or do not consume seafood.
7) Have or have not purchased seafood in the last three months.
8) Were not allergic to any foods or additives.
9) Did not have any special dietary restrictions that prohibit them from consuming certain types of seafood.

The qualitative results presented next, are the combined results from all the focus groups. The results come directly from the responses to moderator's questions. Observations about the qualitative results were made by the researchers and presented for the benefit of FDACS.

Word Association Findings

Participants were asked to respond to a series of words related to the consumption of seafood (Exhibit 5) to set the stage for the rest of the focus group. When asked to respond to the words "fish" and "shellfish," people who consume seafood quickly listed a number of specific species such as crab, grouper, lobster, salmon, shrimp, and snapper. Those who were lite or non-consumers spoke of unpleasant experiences, smelly fish, and getting sick from consuming seafood.

When asked about catfish, the participants were mixed in their views. Some grew up with catfish and considered catfish a delicacy, while others labeled catfish as "yuk" and bottom feeders, and something that was pond or farm raised, a negative for these participants.

The term finfish confused participants. This is certainly not part of the typical participant's everyday vocabulary. Many responded by saying "don't all fish have fins." The industry would do well to avoid using this term when dealing with the general public.

The term seafood was usually understood by this time in the focus group to mean the combination of finfish and shellfish. There was some sense (not overwhelming) that these particular focus group participants might associate seafood more with the ocean than with fresh water. This may be in part due to the fact that many of the participants were not from Florida originally, but from the upper Northeastern United States for the Miami area groups and from the upper Midwestern United States for the Tampa area groups.

Exhibit 5: Word Association Results by Focus Group Location

	Miami Area Consumers	Miami Area Lite-Consumers	Tampa Area Consumers	Tampa Area Lite-Consumers
Fish	Brim; Flounder; Grouper; King Fish; Lobster; Roughy; Salmon; Shrimp; Snapper; Squid; Tilapia; Tuna Fried; Healthy; FL Keys; Light food; Nutritious; Swim	Cod; Crab cakes; Dolphin; Flounder; Raw fish; Salmon; Sea bass; Seafood; Scrod; Shrimp; Tilapia Arthur Treacher's; Broiled; Dinner; Farm-raised; Fried; Grilled; Ocean; Sautéed; Wild	Catfish; Redfish; Salmon; Snook; Tilapia; Trout; Tuna	Jaws; Mercury; Sickness; Smelly; Strong; Water; Yuk
Shellfish	Clams; Crab; Lobster; Maine Lobster; Oysters; Shrimp; Snails; Stone Crab	Conch; Crab Legs; Crawfish; Lobster; Mussels; Oysters; Scallops; Shrimp; Stone Crab	Clams; Lobster; Mussels; Oysters; Shrimp	Bottom feeders; Crab; Lobster; Oysters; Scallop; Shrimp
Catfish	Eat their young; Farm-raised; Great; I like it; Pond-raised; Same day; Thick & Oily;178 lbs	All you can eat; Bottom creature; Delicacy; Good; Fabulous; Farm-raised dirt; Never liked it; Nuggets; Toilet; Yuk	Bottom feeder; Best-fried; Catch out back yard; Cute; Difference b/t fresh & saltwater; Farm raised better than river caught; Hush puppies	Bad memories; Bland; Bottom feeders-mud fish; Gross; Ocean catfish
Fin Fish	Confusion as to what this is (thought all fish had fins) Catfish; Dolphin; Fin & Haddy's (Dish); Flounder; Marlin; Salmon; Shark	Confusion (don't all fish have fins?) Dolphin; Flying Fish; Sail Fish; Salmon; Shark; Snapper; Trout; Tuna; Yellowtail	Most fish have fins; Shark	Blue gills-sunfish; Koi; Dolphin; Perch; Swim in ponds; Tilapia
Seafood	Did not ask; but they understood both fin and shellfish by this time Cook anyway you like it; Fresh water; Ft. Lauderdale Seafood House; Healthy; Oceans; Pasta w/ seafood; Red Lobster	Bouillabaisse; Chowder; Codfish; Fish; Mahi-Mahi; Scallops; Shellfish from ocean	Did not ask; but they understood both fin and shellfish by this time	Bad smell; Caution; Restaurants; Salty; Unappetizing
Wild Caught	Original way to get seafood; Deep sea; Hard to get; Healthier to eat; worried about mercury; Once you eat wild salmon-never go back; Wild has a better flavor Alaskan Salmon; Hogfish; Snapper; Trout	Anything in the ocean; Better; Fresh-not full of chemicals; Healthy; Lot of work; More expensive; Not farm-raised	Anything not farm-raised; Catch them in the wild; Mercury concerns; More expensive; Not all understood wild caught; Some don't ask for wild caught Salmon	Gamey; Healthier In general; this term did not resonate Salmon from Alaska-best (newspaper story)
Farm-Raised	Controlled; More mercury; More toxins; Smells up the house	Catfish; Doesn't mean anything; Enhanced with antibiotics; More control; Not natural; Pure and clean; Recent bad press; Tanks in the ocean; Unnatural	As good as wild-caught; Catfish; Clean; Consistent; Research-based; Used to be bland-not any more	Catfish; More healthy (recent bad press); Salmon; Tilapia

Wild caught meant better for you, less chemicals, and better tasting to some of the participants. Other participants said wild caught brought up images of paying more, uncertainty regarding mercury levels, and a gamier taste. Alaskan salmon was the most commonly associated seafood species with the term wild caught.

The word farm-raised conjured up controlled environments, use of antibiotics, and recent bad press that pointed out problems with farm-raised fish. Not all participants shared this viewpoint. For some participants, farm-raised is a pure and clean product, one backed by considerable research, and a product that is good for you.

Exhibit 5: Word Association Results by Focus Group Location (continued)

	Miami Area Consumers	Miami Area Lite-Consumers	Tampa Area Consumers	Tampa Area Lite-Consumers
Aquaculture	Farming in the water; Mercury builds up over time; Something to do w/ H20; Studies on farm-raised fish-lower mercury; Would eat more fish if not for mercury	Controlled environment- cleaner; H20 connection; Raising & breeding fish; Way to save fish from extinction	Seemed to be more educated about this; Farm-raised; Plants for aquariums; Shrimp	Commercialized; Fish farming; New industry & technology; Many never heard of this vs. agriculture
Fresh	Buy off the fishing boats; Same-day caught; Eat quickly; From ocean to the pan; Looks & smells good; Nothing really fresh anymore; Shore lunch; Short time to market; Today-not frozen; Unfrozen	No odor; Not frozen; Not processed; Quicker; Short time from catch to customer		Fresh caught; Get it cooked; Good; Now; Prefer over processed; Unfrozen; Unprocessed
Processed	Additives; Anything with chemicals; Avoid if possible; Bread; Canned tuna; Cheese; Chemicals added; Frozen keep nutritional value better; Grains; Imitation Crab meat; Flour; Little pieces combined; Not real fish; Pasta	Additives; Altered in some way; Chemicals to make food last longer; Combined fish pieces; May or may not be bad-may filter out bad stuff; Not as pure-manipulated; Not healthy; Not interested; Prepared; Take fresh and do something to it; Word that makes you wonder	All the good stuff taken out (disagree – cereal good for you); Clean up-get product ready for consumption; Should use another word besides processed; Want your fish to be fresh-frozen (group not sure what this means)	Additives; Chemicals; Guess what is inside; Removal of good stuff; Treated & altered; Unhealthy
Organic	Corn fed?; Costs more; Fresh; Healthier; Natural; Is it for real?; Skeptical-way to charge more; What does natural really mean?; W/O pesticides	Expensive; Fad; Health freaks eat it; Healthy; How it used to be-before all these chemicals; Less additives; More natural; More purely fed; No chemicals; Rip-off; Skeptical-person laughed	Healthier; Marketing ploy; More expensive; Over used term; W/O fertilizer	Controlled environment; Healthier; More expensive
Sustainable	Corn gas-ethanol; Deadliest catch TV show; Get you through the day; Keep well; Keep you healthier; Taste & freshness is sustainable; Vacuum-packed-canned tuna; Will stay fresh longer-long lasting	Longer shelf life; Reach a certain level of freshness; Save our food stocks; Smoked fish more sustainable-lasts longer; Staying power; Stays fresh longer	More educated group; All seafood may need to come from aquaculture some day; Blue pike from Lake Erie; More of a business & marketing term; Red flag-are their preservatives used?; Replenish what you take; Taking one claw from a stone crab; Wild caught not sustainable with current practices	Longer shelf life; Preserve something; Will last; Will hold up

Aquaculture is another term that does not easily communicate to consumers. Participants thought it had something to do with water, while other said it had to do with growing plants for aquariums. In general, there is a mixed reaction to farm-raised or aquaculture practices.

The term fresh brought out the greatest emotion in the participants. Fresh meant off the boat, to the customer's plate the same day. Fresh is what all participants strived for when selecting seafood for purchase or consumption.

If fresh is the holy grail of the seafood business, processed is the opposite in the minds of consumers. Most participants associated processed with altering a product for the worse, taking all the good stuff out, using additives, combining pieces of fish scraps to make a larger piece. While the majority of participants were turned off by the term processed, some knew that processing is an integral part of the seafood industry. There seems to be tolerance for processes such as flash freezing and many participants indicated they purchased fresh shrimp, when in fact, it was processed, using flash freezing.

Organic generally means healthy and more natural to the participants, the way things used to be grown and raised before "all these chemicals." Some participants were less enthusiastic about organic products, especially when discussing seafood. There was confusion as to what constitutes organic seafood. As one participant put it "isn't all wild-caught seafood organic?"

Perhaps the most interesting finding from the word association exercise was the lack of knowledge regarding sustainability. When asked what sustainable means, the majority of participants said it had to with increasing shelf life or maintaining flavor longer. The seafood industry would do well to educate consumers about the meaning of sustainability relative to seafood before using this wording on packaging.

Discussion of Seafood Consumption

Participants were asked to describe their seafood consumption attitudes and preferences (exhibits 6 – 8).Where seafood is commonly purchased differed between locations. Participants from Miami were more likely to purchase seafood from specialty seafood houses than participants in the Tampa area. This may be due in part to the influence of the Northeastern United States, where many of the Miami participants were born and raised, compared to the upper Midwest roots for the participants from Tampa. Participants indicated that there were less specialty seafood houses in the Tampa area, compared to Miami. When it comes to purchasing salmon, Costco has a specific and excellent reputation for quality and value.

Participants were split as to where they consume their seafood. Consuming seafood at restaurants has an edge over purchasing seafood to be prepared and consumed at home. There are a lot of factors that might explain this, including the avoidance of odor from cooking seafood, and the perceived time it takes to prepare and cook seafood. Participants indicated they would be more likely to purchase shellfish at a restaurant than they would be to purchase it to take home to prepare it themselves.

The influence of others in a household on the purchasing or consumption habits of seafood was as expected. Most of the primary shoppers interviewed indicated they tried to accommodate the tastes and preferences of people in their household when purchasing seafood. In some cases this meant not purchasing seafood because the significant other did not like the smell or taste (Exhibit 6).

Exhibit 6: Seafood Consumption Questions by Area and Seafood Consumption Preference

	Miami Area Consumers	Miami Area Lite-Consumers	Tampa Area Consumers	Tampa Area Lite-Consumers
Where do you purchase seafood for consumption at home?	Supermarkets; Fish markets (more prominent in this group)	Costco – Salmon; Less likely to use specialty fish houses	More apt to purchase from grocery stores	
Where do you consume the majority of your seafood?	Mostly Restaurant– 40%; Mostly Home – 30%; Both H and R – 30%	Don't consume a lot of seafood; More likely to eat seafood at a restaurant	50/50 balance	If they consume seafood, more likely to be at a restaurant
Influence of others on your seafood purchases	Suggestion of selected species, Most accommodate household member's preferences; If I cook it, they eat it	Focus on health & organics drives purchases; Most accommodate household member's preferences; Who is shopping chooses	Most accommodate household member's preferences; Who is shopping chooses	More apt to have one family member dislike seafood, causing others to eat less seafood
Seafood-based traditions	Bakala; Gefilte fish for Jewish Passover; Fish fries in lent; Mail order (Legal Seafood); Smelt at Christmas; Boiled crabs at reunions	Bakala; Gefilte fish for Jewish Passover; Mail order (Legal Seafood); 7 fishes at Christmas; Gumbo, Creole	Not as entrenched as other foods; Scallops w/ bacon; Summertime at beach; 7 fishes at Christmas; More likely to splurge if company over for a meal	None mentioned; Seasonal impacts: when cold look for comfort food
How best prepared?	Poached; Baked; Broiled; Grilled; Deep fry (some resistance to this at home b/c of smell/mess; Wine sauce	Baked; Broiled; Fried	Baked; Broiled; Coated (coconut); Deep-fried; Fried; Grilled	For some, nuggets okay, covered in batter; De-veined shrimp okay; Still believe sting rays used for scallops; Broiled is tolerable
Forms of seafood purchased/consumed?	Filet – most popular; Occasional whole fish (hard to know how to prepare); If you fish, your spouse wants it cleaned first; Crab cakes; Most believe they can purchase seafood directly from fishing boats; Canned tuna not generally regarded as seafood; Shellfish more common at a restaurant (ease of cooking & dining experience)	Little discussion on this	More apt to try new types of seafood at a restaurant than at home; Canned tuna not seafood; Purchase seafood directly from fishing boats they know; Equally split b/t fin fish and shellfish consumption	Very little seafood consumed or purchased by this group; Tend to purchase more shellfish than finfish if they purchase at all; This group is unlikely to experiment with different species of seafood; Did not like the idea of sushi or "under-cooked" fish

Seafood based traditions exist, but do not appear to be as universal as other food-based traditions like turkey at Thanksgiving and ham at Easter. Seafood-based traditions included bakala, gefilte fish, seven fishes, boiled crabs, and gumbo.

When asked how seafood is best prepared, there were a range of answers. In general, the first suggestion tended to be broiled (filets), or baked. Seafood consumers shy away from consuming seafood with a lot of breading, while the lite users tended to prefer seafood in breading. One might argue that the breading makes consuming the seafood more tolerable (Exhibit 6).

Many of the participants believed they could meet fishing boats returning to the docks and purchase fresh fish directly from these boats. This is contradictory to state law. In some cases, these fishing boats may be owned by friends and family that have caught seafood.

Canned tuna is generally not lumped in with other types of seafood and the stated times per week the participants consume seafood is believed not to include any consumption of canned tuna.

In general, participants were very familiar with the different seafood species that are available for purchase or consumption. Exhibit 7 begins with the complete list of seafood the moderators had and the detail in the exhibit indicates which specific species of seafood the participants had not named and were not familiar with or had not named and were familiar with. The seafood industry would do well to educate consumers on the various seafood species and their best uses. This is covered in greater detail in the advice section.

Exhibit 7: Familiarity with Seafood Species by area and Seafood Consumption Preference

<table>
<tr><td colspan="5">Participants were asked to name all the kinds of seafood they could think of. This is a list of potential seafood species.

Alligator (while this is not seafood, it was included to see how it was viewed by the participants), Amberjacks, Blue Crab, Catfish, Clams, Flounder, Golden Tile, Grouper, Grunts, Jack Crevalle, King Mackerel, Mahi-Mahi, Mullet, Oysters, Pompano, Porgies, Shark, Shrimp Snapper, Spanish Mackerel, Spiny Lobster, Stone Crab, Swordfish, Tilapia, Tuna, Whiting</td></tr>
<tr><th></th><th>Miami Area Consumers</th><th>Miami Area Lite-Consumers</th><th>Tampa Area Consumers</th><th>Tampa Area Lite-Consumers</th></tr>
<tr><td>Seafood species not named and not familiar</td><td>Grunts
Golden Tile
Jack Crevalle
Porgies
Spiny lobster (some knew this as FL lobster)
Whiting</td><td>Amberjack
Grunts
Golden Tile
Jack Crevalle
Porgies
Whiting</td><td>Whiting</td><td>Amberjack
Grunts
Tile
Spiny Lobster (most did not know this was from FL)</td></tr>
<tr><td>Seafood species not named, but familiar</td><td>Alligator
Amberjack
Blue Crab
Catfish
King/Spanish Mackerel
Mullet (most think of this as bait)
Pompano
Stone Crab</td><td>Alligator
Blue Crab
King/Spanish Mackerel
Mullet (most think of this as bait)
Pompano
Shark
Stone Crab
Spiny lobster</td><td>Alligator
Spiny lobster (some knew this as FL lobster, some did not)</td><td>The group has heard about most of the species</td></tr>
<tr><td>Comments about specific species from non-consumers</td><td colspan="4">Alligator: good if prepared properly
Crab: expensive and good if you had enough to drink
Clams/Oysters: Yuk associated with sickness
Mackerel: too strong a taste and oily</td></tr>
</table>

The moderators attempted to see what the role country of origin played in seafood purchase and consumption decisions (Exhibit 8). Where seafood comes from does matter in some cases. For example, seafood from China was always given the thumbs down. Much of this may be due to the recent news stories of recalls from China. For Latin and South American seafood it depends on the past experiences of the participants. Generally, the participants were favorable, but cautious, citing lack of knowledge of standards and procedures. Respondents' attitudes were very favorable towards seafood from Norway, Maine, and Alaska. When participants were asked about purchasing seafood from Florida waters, the reaction was usually positive, but not as strong as from a place like Alaska.

Exhibit 8: Attitudes toward Country of Origin and Seafood Consumption Preferences

	Miami Area Consumers	Miami Area Lite-Consumers	Tampa Area Consumers	Tampa Area Lite-Consumers
Alaska	Excellent	Good	Excellent	Good for salmon
Latin America (Chile, Caribbean, Ecuador)	Very Good	Depends on the country and the person's perception	Overall, very positive	Indifferent
Canada	Excellent	Excellent	Excellent	Good
China	Risky – recalls	No way	Very skeptical	Very skeptical
Florida	Absolutely	Could be, some safety questions	Absolutely	Mixed; Could be some safety concerns
Japan	Excellent			
Louisiana	Good	Okay, some reservation	Mixed	Known for crawfish & shrimp
Norway	Excellent		Excellent	Reminds them of fish
Northeast U.S.	Excellent	Good	Excellent	Known for lobster
Vietnam	Acceptable	Skeptical	Skeptical	
Additional Comments	Sometimes a matter of name recognition and flavor (Maine lobster); Problem of not know regulations of other countries			Commented more on species when asked about country, not surprising as they don't purchase/consume much seafood

Factors that Affect Seafood Purchases and Consumption

A primary objective of the focus group process was to identify those factors that drive purchase and consumption of seafood. Exhibit 9 is a summary of these factors as described by focus group participants.

The industry can take a proactive role in educating consumers about seafood, from differences between species to addressing health concerns. A common theme, especially among lite and non-consumers was there awareness of "bad press" relating to seafood. Stories of high levels of mercury or worries about the safety of the consuming group caught in Florida waters strike doubt in the minds of these consumers.

Participants indicated that familiarity or lack of familiarity with a given seafood species drives purchase and consumption decisions. If they are not familiar with a given species, it doesn't matter what the price is, as they are unlikely to purchase or try it at a restaurant.

Appearance plays a role in the purchase and consumption decisions of these participants as well. If the filet looks dried out or translucent, this signals lowered quality and therefore a no-buy decision.

The role of tradition, past experiences, and habit are almost hard-wired into the purchase and consumption decisions of these participants. Stories of eating food that was constantly over-cooked or the time when a participant got sick after consuming seafood were deep emotions and a definite barrier to future sales. Interestingly, some focus group participants indicated that they have increased their consumption of seafood since moving to Florida, while others indicated they have not significantly changed their seafood eating habits. Most of the focus group participants have lived in Florida for more than 15 years and consider themselves Floridians.

Exhibit 9: Factors that affect seafood purchases and consumption

Miami Area Consumers	Miami Area Lite-Consumers	Tampa Area Consumers	Tampa Area Lite-Consumers
Bones (don't like them); If frozen don't know how old the product is, Changes the taste, Used w/ shrimp			Appearance of whole fish and fish heads in soup is a turn off; Must look good to purchase
	Bad press: very concerned about what they read about seafood		Bad press: very concerned about what they read about seafood
Budget constraints	Price: needs to be inexpensive	Budget constraints	
Expiration dates important	Important to product age		
Familiarity: how to prepare or get what you expect from restaurant		If they are not familiar with a given species, won't buy; If not cooked properly= rubbery	Some lack of knowledge for cooking in this group contributes to non-consumption
Food safety	Some worried about grouper from FL waters		A big concern; Seafood highly perishable requires a lot of planning to buy and cook right away
Freshness or perceived freshness (flash frozen is still fresh); Buy in small quantities to keep fresh	Needs to look fresh, not dried out, et	Freshness or perceived freshness (flash frozen is still fresh)	Very concerned about freshness of food in general
Habit (seafood expensive, don't experiment)	Habit and ethnic background; Grew up a meat eater	Habits important, past experiences	Habits important in non-seafood purchase/consumption
Hard to take seafood to work for lunch	Prep time is perceived to be long		Long prep time is a problem
		Living in FL increased consumption	Life experiences have not led to a change in consumption of seafood after moving to FL
Past experiences (positive & negative)	Past experiences: mother that overcooked everything, tuna and boat motor effects		Key factor for this group from sickness, to little exposure to seafood at home to seeing worms in filets; Lobster eating party was a turn-off
Price causes a switch from one species to another, not away from seafood	Generally, are Lite-Consumers b/c of things other than price	Price causes a switch from one species to another, not away from seafood	Look for sales on food
Reputation: trust stores that specialize in seafood over grocery stores or a chef that knows seafood; From local fish captain only; Costco has great reputation for salmon: quality & price; Not a crazy about specialty fish houses		Less likely to shop specialty seafood stores (less of them in Tampa)	Sound of something called a catfish is disgusting
Smell too strong	Smell = old = bad		Dislike smell of seafood; Too strong for them
Taste		Flavor important	Don't like the taste
Smelly fish departments	Don't like smelly homes	Don't like smelly homes	Dislike smell, especially a deterrent to cooking at home
Texture (some like firmer filet); Look for certain cuts of filet			Squid and lobster are chewy
Value-added: some retailers will cook fish for you; De-vein the shrimp		Expect retailer to open a package if requested	Tough sell as most in this group dislike seafood

For seafood consumers, the price of seafood tends to cause them to switch from one species of seafood to another instead of away from seafood. For the non-consumers, price is not an important factor, as they usually are not pre-disposed to purchasing or consuming seafood.

Seafood consumers rely heavily on the reputation of specialty seafood houses, their regular grocery stores, and specialty seafood restaurants when deciding whether or not to purchase or consume seafood.

Taste, texture, odor, or lack thereof, are important considerations for seafood consumers and non-seafood consumers alike. For consumers, the right taste and odor signals the freshness and quality of a particular piece of seafood, a decision of what species to buy verses not buying any seafood. For the non-consumer, taste and odor are constant reminders of why they don't consume more seafood, an obstacle that is hard for the industry to overcome at times, given the nature of seafood.

Advice to the Seafood Industry

Focus group participants were asked to put themselves into the role of consultants to the seafood industry and to state what advice they would give to increase seafood purchase and consumption (Exhibit 10).

Exhibit 10: Advice to the seafood industry

Miami Area Consumers	Miami Area Lite-Consumers	Tampa Area Consumers	Tampa Area Lite-Consumers
Advertise more; Leverage common brand names in seafood	Advertise benefits of Florida seafood more, back up with proof of claims	Internet could be used more Be honest about the processes used; Seafood festivals are a good idea	Need more advertising about seafood and how to prepare; Sources of information: local papers, the food channel (seldom do chefs use seafood), email from companies such as Campbell's, magazines, internet, bookstores, flyers and recipes on products, store programs such as Aprons, cookbooks
Consistency of product and knowledge throughout food chain		Make sure quality control is good	Quality is a must; Seafood has a "dirty industry" image
Coupons to encourage trial			
Freshness is key		Freshness is a must	
Mercury concerns			
Packaging: need to see the product (counter to freshness?); Concerned about fish that is not packaged	Needs to be neat and sanitary	Attractive and informative makes a difference	Find a way to reduce the blast of fish smell when opening a sealed package
Pricing: stay competitive with other protein options			
Samples and recipe cards needed	Cooking instructions would help	Samples and recipe cards needed; Wanted species specific ideas	Samples important in general, may be limited in seafood
Smelly seafood areas are a turnoff			Don't like a bleach smell as this signals cover-up
Trust: inspections, USDA, date product; Certification important		Need to be able to trust the supplier to deliver what is stated	Need assurances that seafood is safe and fresh
Warnings on packages reduce purchase (pregnant women should avoid)			

All four categories of focus group participants felt the industry needed to invest more in advertising the health benefits and the wide variety of seafood available. Participants noted the various ways they obtain information including newspapers, the food channel, magazines, in-store demonstrations and programs such as the Aprons program at Publix, and internet-based newsletters delivered directly to individual email inboxes.

The industry would do well to increase the consistency of product (e.g., same-sized filets in a package) and knowledge of specific species for the parts of the industry that interact directly with consumers (e.g., people working for retailers and restaurants).

Freshness is king with seafood and successful companies will document their freshness and incorporate sources of inspections and certifications that consumers trust.

The industry needs to work with retailers to improve the appearance and odor of fish counters. At the same time, retailers must not over power seafood odor with a cleaner odor such as bleach, as this is a turnoff to consumers as well.

The industry should continue to find ways to educate consumers on differences regarding preparation, cooking and potential uses on a species by species basis. When focus group participants were shown the species specific information brochures created by FDACS, they loved them. They liked the fact the brochures had pictures (some debate as to the picture of the whole fish or should it be a picture of what the consumer is likely to see in a retail setting such as a filet), safe handling instructions and recipes.