



The  
United States Market

for  
**ORGANIC  
SEAFOOD**



**Linda J. O'Dierno  
Sho Islam  
Ramu Govindasamy  
Joseph J. Myers  
Venkata Puduri**



**New Jersey Department of Agriculture  
Fish & Seafood Program**

PO Box 330  
Trenton, NJ 08625-0330  
(609) 984-6757  
FAX: (609) 633-7229

**Department of Agricultural,  
Food and Resource Economics**

55 Dudley Road  
New Brunswick, NJ 08901-8520  
(732) 932-9155 ext. 254  
FAX: (732) 932-8887

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**The full report on this project is available at the New Jersey  
Department of Agriculture website: [www.jerseyseafood.nj.gov](http://www.jerseyseafood.nj.gov)**

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## INTRODUCTION

*For the purposes of this report, the term seafood is used to characterize all freshwater and saltwater finfish and shellfish used for food. The inclusion of bivalve molluscan shellfish raised on leased beds as a farm-raised product differs from state to state, but for the purposes of this report, those products are considered farm-raised.*

The sale of organic food in the United States grew by more than 20 percent year over year in the 1990's and in 2002 the organic food market was estimated to be at \$11 billion (Willer and Yussefi, 2004). Although the total percentage of

the food supply produced using organic methods in the United States is only between one and two percent, that number is on the rise as a result of the demand from consumers (Whole Foods Market, Wild Oats, Trader Joe's).

### Consumer Sales and Growth Rates of Organic Foods, 1997-2003

Year	Sales (Billion dollars)	Growth Rate (percent)
1997	\$3.6	
1998	\$4.3	19.7
1999	\$5.0	18.2
2000	\$6.1	21.0
2001	\$7.4	20.7
2002	\$8.6	17.3
2003	\$10.4	20.2

*Source: Nutrition Business Journal, 2004*

The long-term goal of this project was to develop a profile of prospective market opportunities for organically grown seafood products in the United States. Organic production offers tremendous potential for small farmers who would like to differentiate their products and develop viable markets for premium products. Segmented premium price markets are especially vital to the survival of the small farmer since cost of production is generally higher and the output is lower for this producer segment.

Availability of appropriate market intelligence will assist farmers in meeting the challenges of a global market. It will allow industry to adjust business and market planning to develop innovative strategies that can support viable price struc-

tures over the long term.

The United States aquatic farming community has expressed a keen interest in the development of long-term sustainable organic farming systems. This interest was clearly demonstrated by the draft organic standards that have been provided to the National Organic Standards Board by the National Organic Aquaculture Working Group.

***For the consumer, the availability of organically grown aquatic products will increase their comfort level and may increase their willingness to purchase and prepare seafood products for their families. This shift would greatly add to the quality of the American diet.***

## METHODOLOGY

The methodology employed was a compilation of qualitative and quantitative data collection in four target markets that were identified as representative of specific consumer purchase patterns. Those markets were: Colorado Springs, Colorado (land-locked market without a strong seafood tradition but with an influx of consumers from across the country); Boston, Massachusetts (strong market with a highly developed seafood tradition); Chicago, Illinois (an inland market that purchases a high volume of bivalve molluscan shellfish); and Central New Jersey (an affluent, well educated, coastal market).

The first phase of the project consisted of a series of consumer focus groups hosted by local supermarkets in each of the target markets. Sites included both upscale stores that carry a broad range of organic products and cater to a health-conscious consumer as well as more generic

stores. At the conclusion of each focus group, participants were asked to complete a short questionnaire. The questionnaire helped to verify their answers especially about willingness to pay.

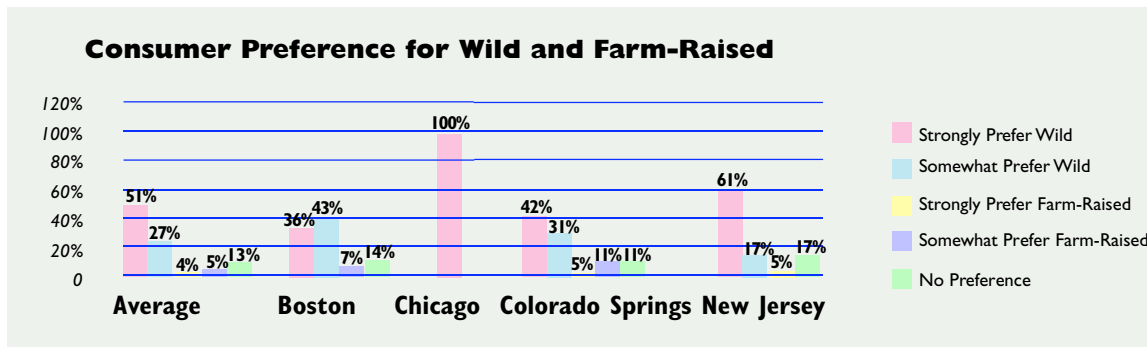
The focus groups provided direction for a larger telephone survey. Two hundred telephone surveys were completed in each of the four target markets for a total of 800 surveys. The telephone surveys were limited to individuals who actually purchase seafood for home consumption.

At the completion of the consumer portion of the project, a nationwide survey of retailers was undertaken. The return was better than expected (14.8 percent) and many respondents were extremely forthcoming about their attitudes and concerns regarding seafood products including aquacultured and organically grown products.

## PHASE I - FOCUS GROUP RESULTS

Consumers showed an overall preference for wild-caught seafood products. Many felt it is superior in quality and taste compared to farm-raised. Seventy-eight percent of the participants indicated that they preferred wild seafood, only 9 percent preferred farm-raised, and 13 percent had no preference. Although this is a strongly

expressed preference, price is an important determining factor in actual purchase decision. Generally, prices for farmed seafood tend to be lower than those for wild caught product. The term farm-raised conjured up antibiotics, hormones, GMOs, and all the negative issues that have been raised about other farm-raised products.



Typical comments were,

***“I prefer wild.”***

***“I don’t understand why farm-raised salmon lose their color and have to be dyed to be sold.”***

***“Are the fish okay?”***

Respondents also indicated preference for domestic seafood products. Fifty-nine percent indicated that they strongly prefer domestic, 21 percent indicated that they somewhat prefer domestic and 14 percent had no preference. However, in the broader telephone survey, when asked about whether country of origin would influence the purchase decision only 60 percent

said yes.

When asked which term conveys the highest quality, consumers in each of the focus groups except Massachusetts preferred “harvested from the wild”. This may be a reflection of the food press that tends to promote the idea that wild harvest is preferable to farm-raised product because it is perceived to have a more distinct taste. Since consumers in coastal states may hear more about marine recreational fishing advisories issued based on the level of contaminants in sportfish, there may be some transference between those advisories and consumption of commercial fish. Concerns about those contaminants might be expected to drive sales toward organic products; however, this wasn’t evident in the responses.

### **Consumer Perceptions about Seafood Type that Conveys the Highest Quality**

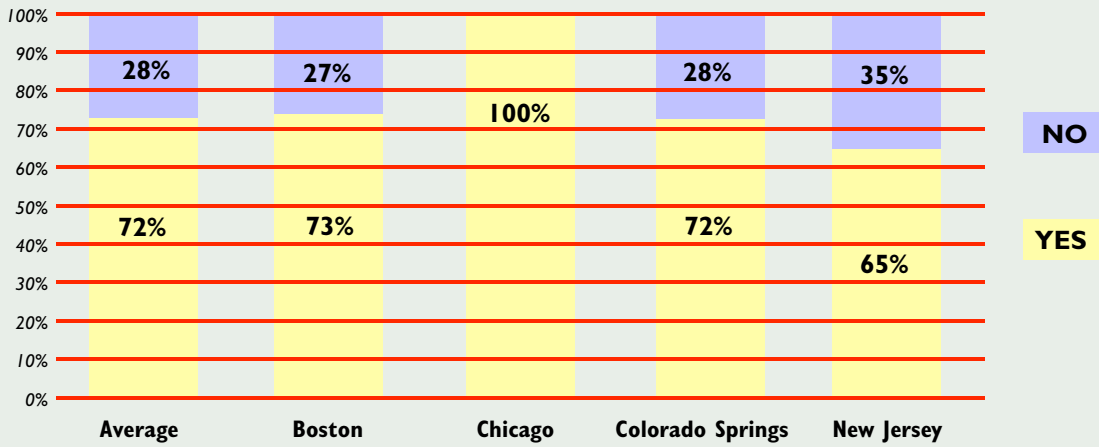
Fish/Shellfish Type	Percentage				
	Average	Boston	Chicago	Colorado Springs	New Jersey
Organically grown	24%	20%	25%	25%	28%
Harvested from the Wild	53%	47%	50%	60%	50%
All Natural	23%	33%	25%	15%	22%
Total	100%	100%	100%	100%	100%

When asked what the term organic means, consumers responded with natural, whole, unprocessed, no pesticides, natural fertilizers, and no sprays. About seventy-eight percent of the consumers polled indicated that they had purchased organic products. All agreed that organic products cost more. There were differing opinions about whether or not they were worth the price differential. Most had never seen a seafood

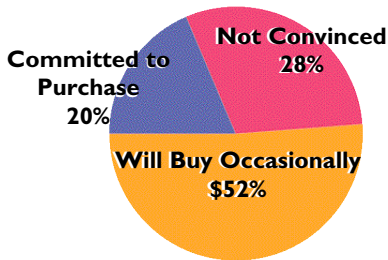
product labeled organic, although in several of the stores in which the focus groups were conducted such products were on display in the seafood case.

Overall, respondents were enthusiastic about the availability of organic seafood. A large majority (72 percent) indicated they would purchase organic seafood if presented with the opportunity.

### If Available, Would Consumers Purchase Organic Seafood?



### Consumer Attitudes Toward Organic Seafood



However, there was reluctance to total commitment. Twenty percent were committed to purchase as often as they could and were willing to seek out sources of organic seafood. Fifty-two percent of the participants felt that organic seafood was better and would purchase it from time to time. Twenty-eight percent were not convinced of the value of the products and would not purchase them.

### Advantages of Organic Seafood

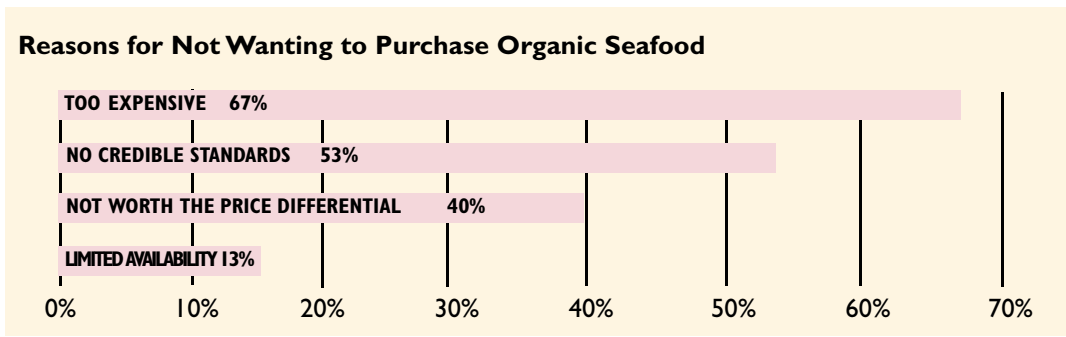
REASON	PERCENTAGE				
	Average	Boston	Chicago	Colorado Springs	New Jersey
Chemical/Pesticide Free	95%	90%	100%	92%	100%
Free of antibiotics	87%	73%	75%	100%	91%
Safer	64%	73%	75%	54%	64%
Superior Flavor	62%	55%	75%	62%	64%
Ecologically sound	59%	64%	50%	62%	55%
Better quality	59%	46%	75%	69%	55%
More nutritious	54%	82%	50%	39%	46%
Credible standards	49%	46%	75%	46%	55%
Animal welfare	36%	27%	0	39%	55%

Aquaculture production systems raised additional concerns about the use of synthetic hormones and genetically modified organisms. Ninety-five percent of the consumers in the focus groups felt that a major advantage of organic fish/shellfish was that it was chemical/pesticide free and this was a major force driving interest in the purchase of organic products. Other reasons for wanting to purchase organic seafood include antibiotic free (87 percent), superior flavor (62 percent), ecological soundness (59 percent) and better quality (59 percent).

Many consumers in the focus groups had heard negative stories about aquacultured seafood and felt that, specifically in this category, it was important to have some third party guarantees of the safety of the product. Several individuals reiterated the importance of the store reputation in ensuring the safety of the product. Most had specific stores in which they purchased seafood because they felt the quality and safety of

the product was better.

A major concern was the cost of an organic product since many consumers already view seafood as an expensive alternative. Surprisingly, lack of credible standards was also a major consideration. Many consumers want to see a government seal. Those consumers wanted an authority figure to do their due diligence. Currently, in many instances, because of the lack of quality/inspection seals, the store reputation becomes that authority. Reasons for not wanting to purchase organic seafood included too expensive (67 percent), no credible standards (53 percent), not worth the price differential (40 percent), and limited availability (13 percent). Thirteen percent of those surveyed indicated that they were not concerned about additives, chemicals or residues. Because they are not concerned, most felt that purchasing organic product was not worth the price differential.



When asked about organic labeling, consumers preferred the term “organically grown” This may reflect the current labeling for fruits and vegetables. Although it might be thought that farmed or farming has a resonance with the con-

sumer, for aquatic products, this did not seem to hold true. “Organically aquacultured” (34 percent) was favored over “organically farmed” (12 percent).

## Terminology that Conveys the Highest Quality

Types of Organically Grown	Percentage				
	Average	Boston	Chicago	Colorado Springs	New Jersey
Organically Farmed	12%	13%	0	15%	12%
Organically Aquacultured	34%	27%	75%	30%	35%
Organically Grown	54%	60%	25%	55%	53%
Total	100%	100%	100%	100%	100%

In almost all of the focus groups, consumers felt that the price of seafood was too high. However, in some instances, that did not affect purchase. In at least one upscale store, the frequent response was “I want what I want and am willing to pay for it”. This group was comprised primarily of dual-income, no kids at home families. A number of people in that group indicated that their households were small, generally two person, and since they didn’t need to buy much, cost wasn’t that much of an issue. One woman with several children said that she sometimes purchases farm-raised fish since the

price is more affordable.

In upscale store groups, most participants felt that the price of seafood was about three times the price of meat. There was consensus that organic meat was priced 30-40 percent higher and organic poultry was priced 20-25 percent higher than non-organic products in the same category. For those consumers interested in organic seafood products, most indicated that they were willing to pay between \$3 and \$5 more per pound for organic seafood.

## PHASE II - TELEPHONE SURVEY

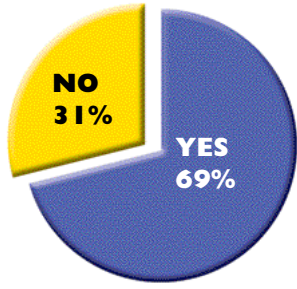
To gain a better understanding of consumer attitudes and potential demand for organically grown aquatic products, two hundred telephone surveys were completed in four target markets during the summer of 2005 for a total of 800 completed surveys. The four target markets were Boston, Chicago, Colorado Springs and Central New Jersey. Telephone numbers were randomly generated. For the purposes of this report, seafood is defined as any saltwater or freshwater finfish or shellfish for human consumption.

To better examine consumer perceptions

and attitudes toward organic seafood as a food category and identify specific purchase patterns, the sample was limited to individuals who buy seafood for home consumption. Sixty-nine percent of the original sample indicated that they purchased seafood for home consumption while thirty-one percent did not. If the respondent indicated that he or she did not purchase seafood for home consumption, the survey was terminated. The final sample of 800 respondents consisted only of individuals who actually made the purchase decision for home consumption of seafood.



**Do You Purchase Seafood for Home Consumption?**



Most Americans eat much less seafood than is recommended for a healthy diet. According to FDA, the average United States per capita consumption is 2.292 ounces per week although most health and diet authorities recommend at least two eight-ounce fish meals per week.

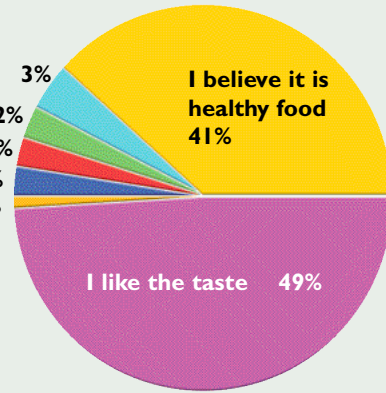
Developing a better understanding of consumer wants and needs will assist the seafood industry in meeting those needs and, hopefully, increase sales.

Many consumers felt that good taste (49 percent) was the main reason that they consume seafood. The health attributes of seafood ranked a close second (41 percent). Most consumers have an overall perception that seafood is a healthy alternative but during the focus group portion of the project, it was difficult to find consumers who could provide a clear explanation of those benefits. Many were familiar with the positive effects of omega-three fatty acids on coronary health but were hard pressed to elucidate other benefits.

**The Most Important Reason for Consuming Seafood**

*(Average of those surveyed in Boston, Chicago, Colorado Springs and New Jersey)*

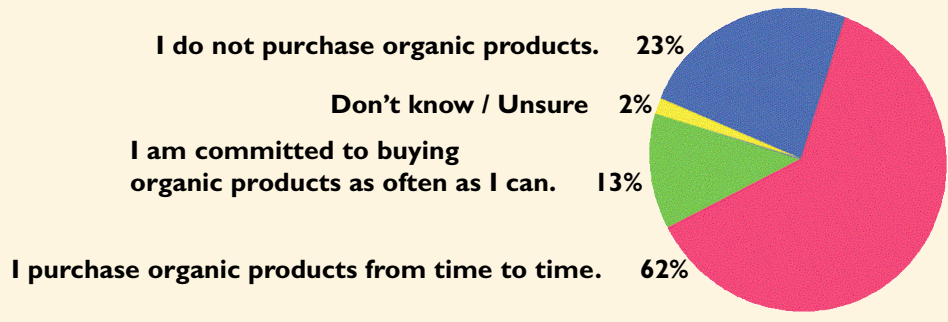
- I believe it is a low calorie food 3%
- I believe it is easy to prepare 2%
- I like the gourmet appeal 2%
- Other 2%
- I feel it is priced lower 1%



Thirteen percent of those surveyed indicated that they purchase organic products as often as they can, 62 percent purchase organic products from time to time and 23 percent do not purchase organic products. In many of the questions, there was a consistent hard core of approximately 25 percent who did not see the value in organic products and had no interest in

purchasing them. In 2001, Seafish conducted a similar consumer study in the United Kingdom. In that study, 52 percent of the consumers were non-converts to the organic concept and agreed with the third statement (I'm not convinced about the value of organic products in terms of health and taste benefits).

**Statement that Best Describes Consumer Attitude and Purchase Behavior with Respect to Organic Foods**



To determine what consumers perceive to be the components of organic farming systems, consumers were asked what makes a food organic. No prompts were given and respondents could provide more than one answer. The question was directed at organic food in general and did not specify organically grown seafood products. By far, the most common answer was pesticide and antibiotic free (59 percent). Twenty-nine percent felt nothing. Nineteen percent said nothing. This reinforces the idea that there remains a hard core of consumers who are not interested in organic products. The next most common responses were better for the environment (5 percent) and more

nutritious (5 percent). Four percent felt that organic seafood was safer. Better quality was listed by 3 percent of the respondents. Better taste and animal welfare standards were each listed by 2 percent of respondents.

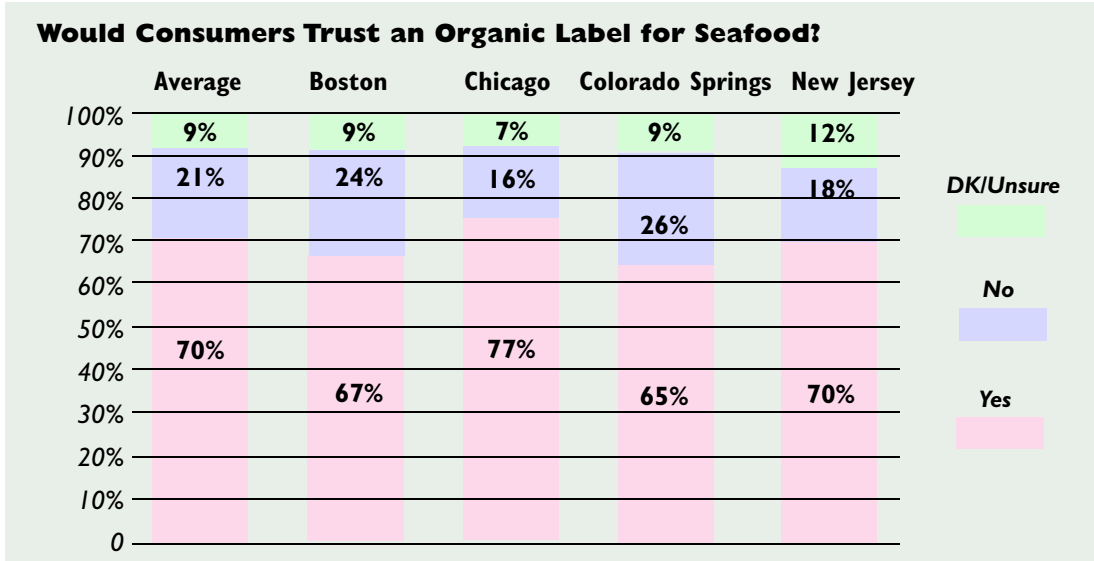
Consumers are most concerned about contaminants in their food and because they view seafoods as carriers of certain contaminants especially mercury, organic labeling may be a positive marketing tool. This, however, would be a perception. Some consumers have unachievable expectations of organic production systems, specifically a zero tolerance for contaminants.

**Consumer Perception of Characteristics that Makes Food Organic**

Characteristics	Percentage				
	Average	Boston	Chicago	Colorado Springs	New Jersey
<i>Pesticide/antibiotic free</i>	59%	60%	61%	61%	55%
<i>Other</i>	29%	23%	28%	35%	28%
<i>None</i>	19%	18%	18%	15%	24%
<i>Better for the environment</i>	5%	5%	7%	2%	6%
<i>More nutritious</i>	5%	6%	5%	5%	4%
<i>Safer</i>	4%	4%	4%	4%	6%
<i>Better quality</i>	3%	4%	1%	2%	4%
<i>Better taste</i>	2%	2%	1%	2%	4%
<i>Animal welfare standards</i>	2%	1%	3%	3%	3%

Seventy percent of those surveyed indicated that they would trust an organic label for seafood, while 21 percent would not. The survey did not ask about the certifying agency. This has been an area of concern since the United States Department of Agriculture (USDA) does not

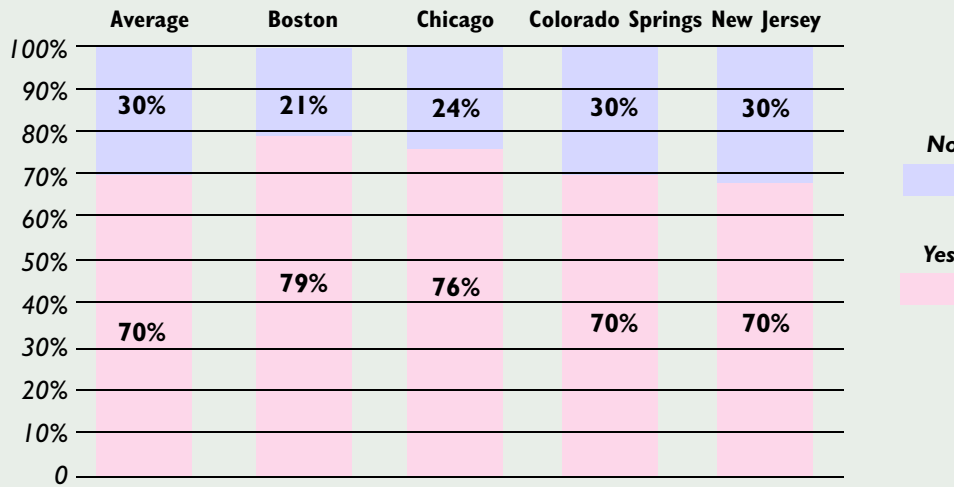
have regulations in place to certify aquacultured products as organic. Several foreign certification agencies are providing seals for products, including farmed salmon, that are reaching American supermarkets. This provides a competitive advantage for those operations.



When asked about possible interest in purchasing an organic seafood product, 70 percent of those surveyed responded positively. The level of commitment was slightly higher (72 percent) in the focus groups. This might be due to the more general sample used in the telephone sur-

vey. In the focus groups, several populations were drawn from upscale stores that offer a wide range of organic product. Those consumers were familiar with organic products and often purchased them.

### Would You Purchase Organic Seafood?



Consumers were then asked how much of a price premium they would be willing to pay for certified organic seafood. Thirty-five percent expressed a willingness to pay a premium of 50 percent or more premium for a certified organ-

ic product. Since the price point was very low, one dollar per pound, the response is somewhat biased. It provides no insight into consumer behavior when the price more accurately reflects the market price.

### If the Seafood You Purchase Costs \$1 per pound, How Much of a Price Premium are You Willing to Pay for Organic Certified Seafood?

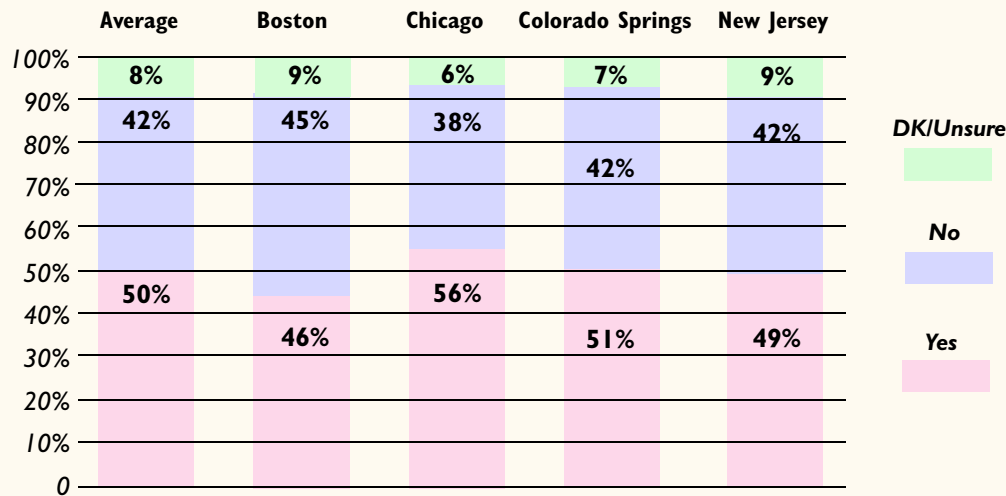
Price Premium	Percentage				
	Average	Boston	Chicago	Colorado Springs	New Jersey
None	26%	28%	25%	32%	17%
Yes, I would pay up to 5 cents more per pound	6%	5%	7%	9%	5%
Yes, I would pay up to 10 cents more per pound	12%	12%	17%	10%	7%
Yes, I would pay up to 25 cents more per pound	16%	13%	14%	18%	20%
Yes, I would pay up to 50 cents more per pound	14%	14%	13%	11%	18%
Yes, I would pay more than 50 cents more per pound	21%	22%	19%	18%	26%
Don't Know / Unsure	5%	6%	5%	2%	7%
Total	100%	100%	100%	100%	100%

Again, 26 percent of the sample was unconvinced about the value of a certified organic product. However, a large percentage (21 percent) indicated a willingness to pay a premium of more than 50 cents a pound. Clearly organic products have an intrinsic value to the consumer.

Fifty percent of the respondents indicated that they would change their shopping location to be able to purchase organic seafood. This may

reflect the concerns that were raised in the focus groups where consumers trusted the store to provide the best quality seafood. The store reputation became the brand of the seafood. The availability of organically grown seafood products promotes a positive image of the store and reinforces the consumers' impression that the store will cater to the customers' wants and needs.

### Would Consumers Change their Shopping Location to be able to Purchase Organic Seafood?

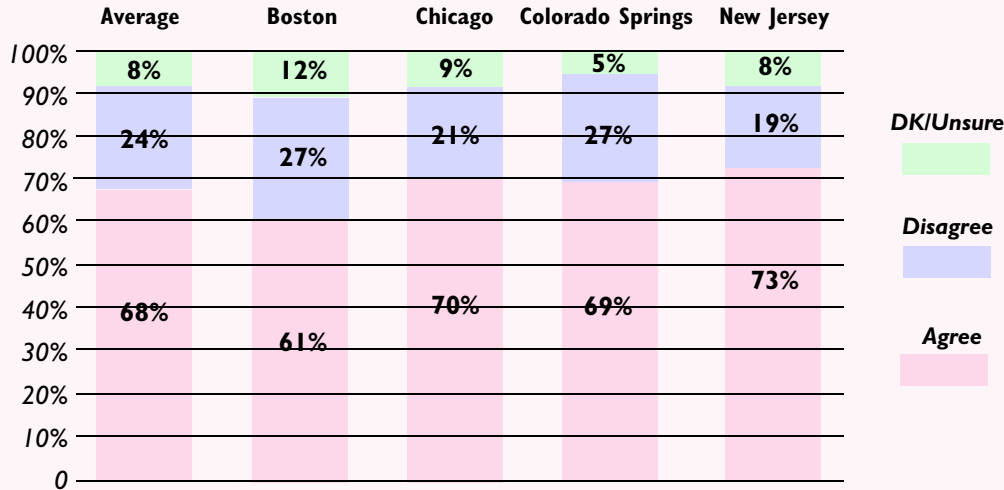


The next set of questions compared perceived attributes of organic seafood with conventional seafood.

Sixty-eight percent felt that organically

grown seafoods would be safer than conventional seafood. This reflects consumer concerns about contaminants in conventional seafood.

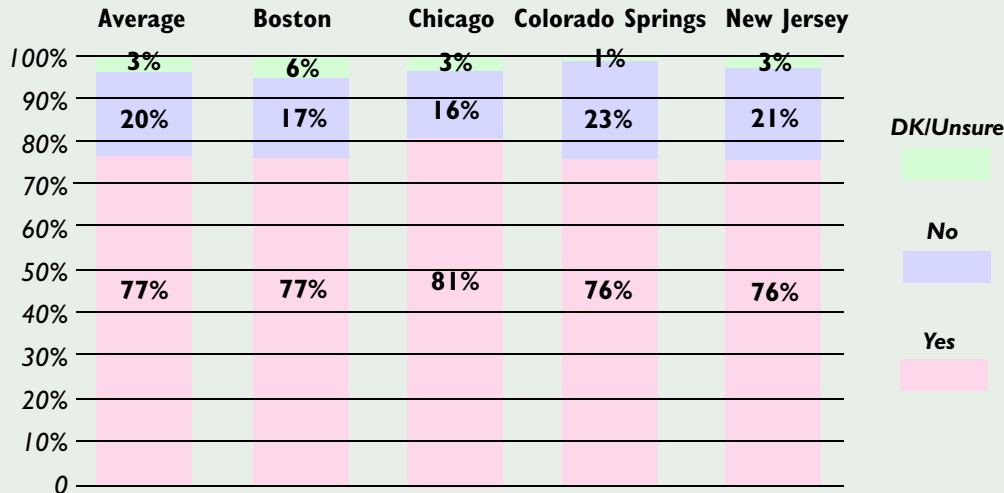
### Consumer Perception that Organic Seafood Would be Safer than Conventional Seafood



Seventy-seven percent of those surveyed felt that organic seafood would be free of chemicals, pesticides and antibiotics. As in the focus groups, consumer perceptions were directed toward the

product not the process of organic farming. This perception is an important consideration since most consumers were concerned about contaminants in seafood.

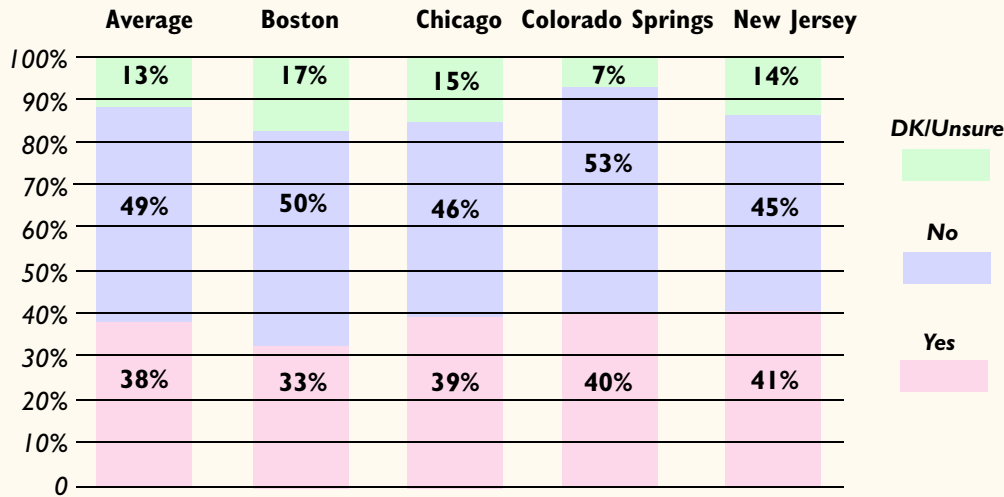
### Consumer Perception that Organic Seafood is Free of Chemicals, Pesticides, and Antibiotics



Consumers did not believe that organic seafood would taste better than conventional seafood. In the broader set of questions dealing with farm-raised and wild harvest seafoods, consumers had serious reservations about the

human factor in production. This may be part of the concern that is expressed in these answers. Most of the focus group participants felt that the less human involvement, the better the product.

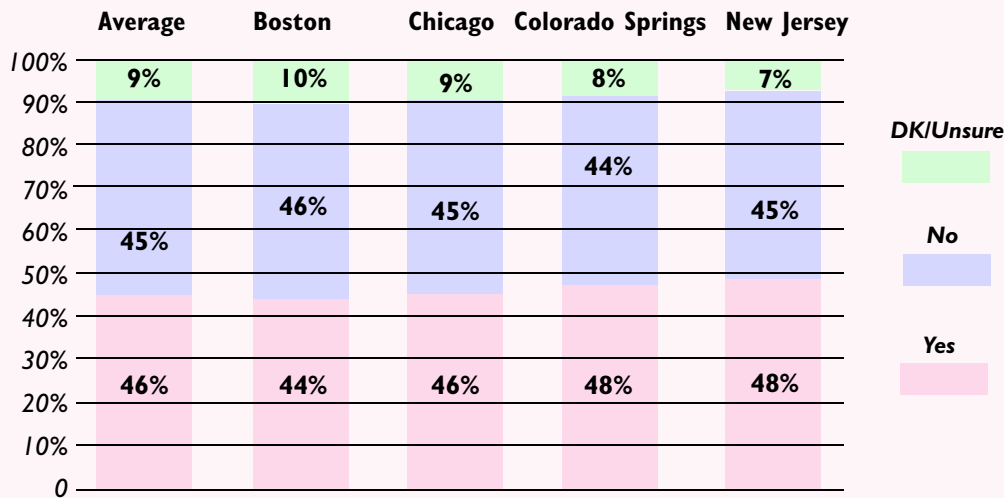
### Consumer Perception that Organic Seafood has Better Flavor than Conventional Seafood



Consumers were evenly divided about the nutritive value of organic seafood (46 percent)

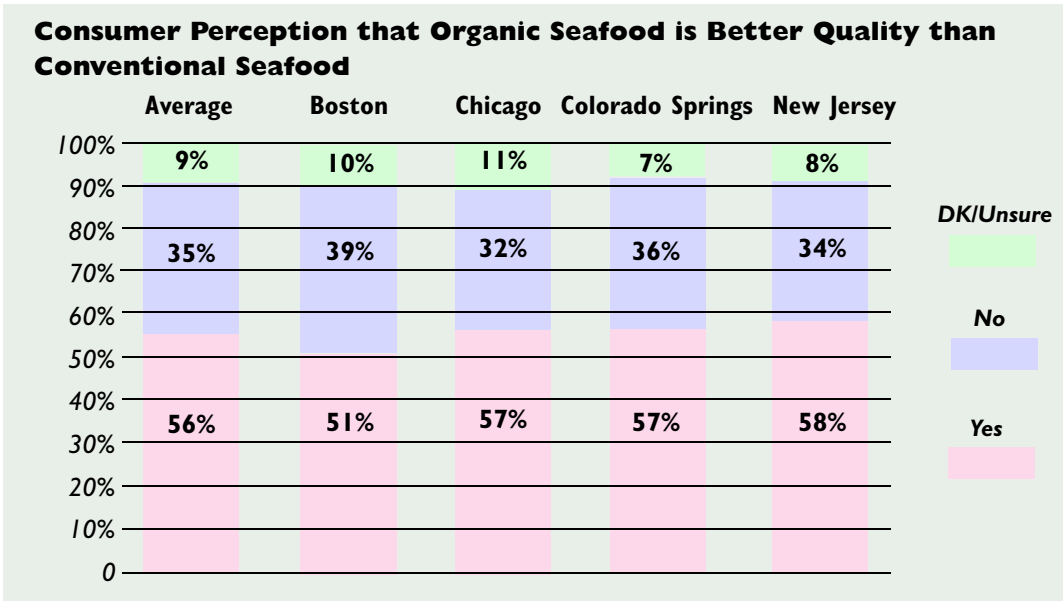
compared to wild harvest (45 percent).

### Consumer Perception that Organic Seafood is More Nutritious than Conventional Seafood



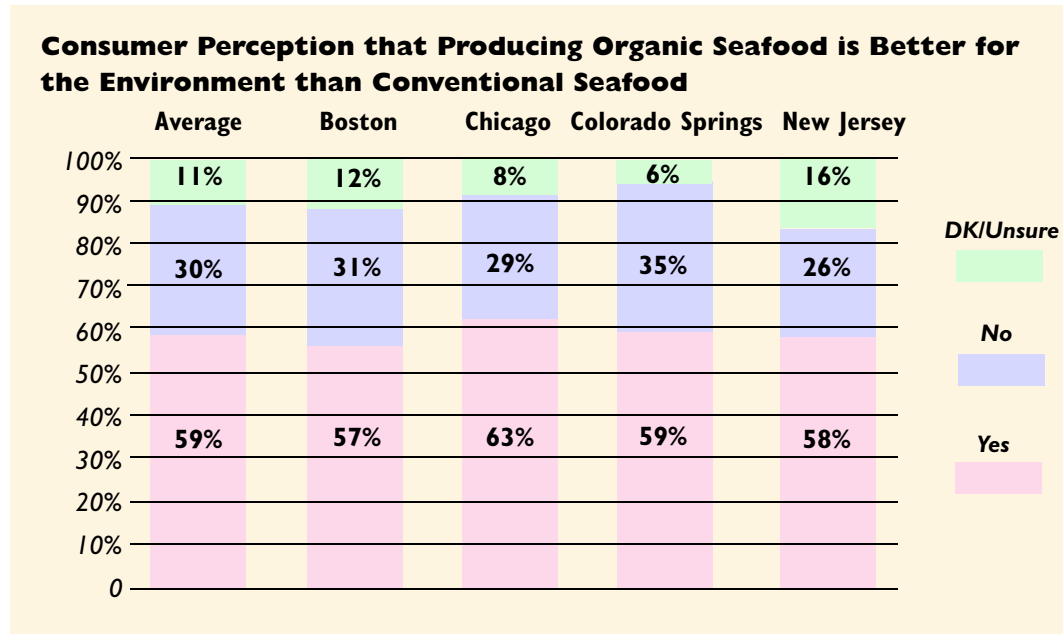
Consumers believed that organic seafood (56 percent) would be of better quality than conventional seafood (35 percent). No attempt was

made to develop an understanding of what constitutes quality in the mind of the consumer.



However when it came to environmental impact, 59 percent of those surveyed felt that organic

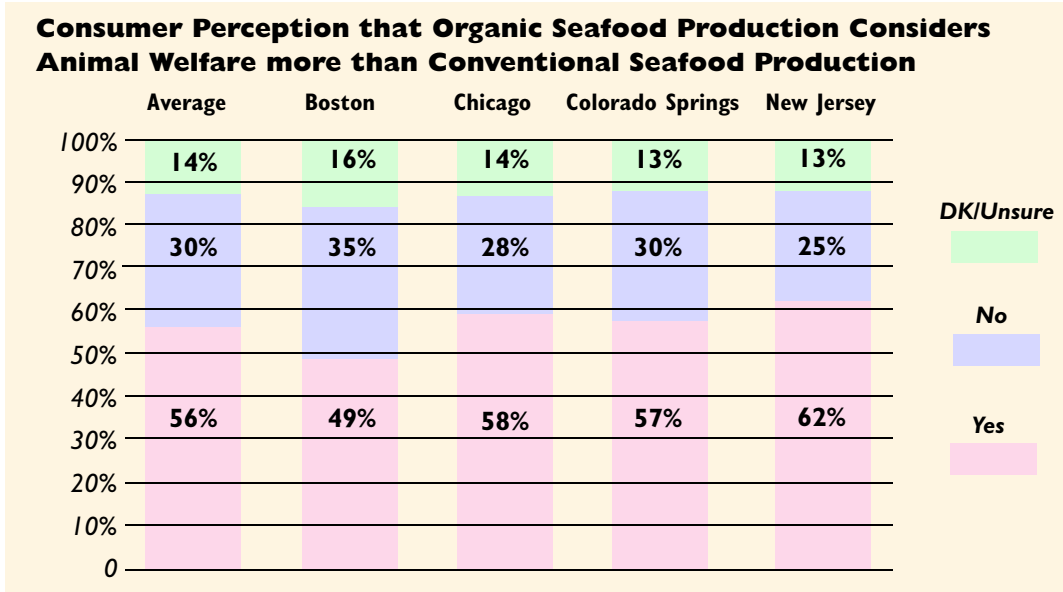
production would be better while only 30 percent felt that conventional seafood was better.





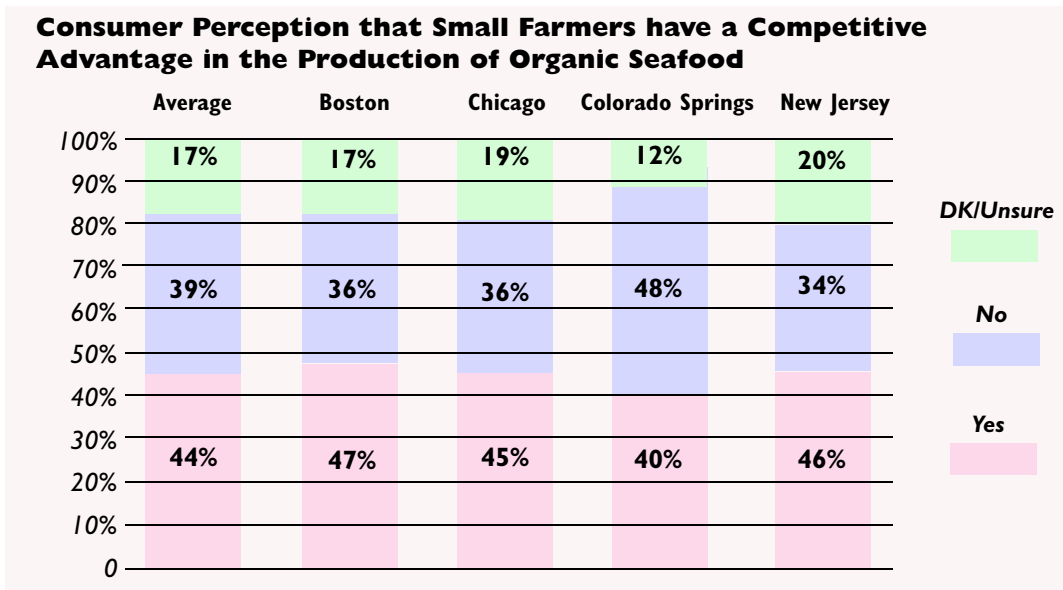
Many people in both the focus groups and the telephone survey did not consider animal welfare when listing attributes of organic farm-

ing. Fourteen percent of those surveyed were unsure about this aspect of organic production.



Thirty-nine percent of those surveyed did not believe that small farmers have a competitive advantage in the production of organic

seafood. The concept of low production numbers to support environmentally sound farming methods did not resonate.



## PHASE III - SUPERMARKET SURVEY

The final phase of the study examined attitudes, marketing needs, and opportunities for organically grown seafood products in the supermarket sector. The survey instrument was designed to provide data that could be used to:

- gain a better understanding of the concerns that retailers have when marketing seafood products,
- determine which attributes of organically-grown seafood can be utilized in promotional programs to develop a better market position,
- identify those markets that present the most promising opportunities for organically-grown seafood, and
- sensitize retailers to the potential availability of organically grown seafood products.

## RESULTS

Seventy-two percent of those surveyed indicated that their customers prefer wild harvest while 19 percent preferred farm-raised. Many felt that farm-raised seafood was getting too much negative press and people were increasingly concerned with the use of antibiotics, synthetic chemicals, colorants, and feed ingredients.

### ***“Farmed is getting too much bad publicity”***

Several mentioned that consumers often believe that the fish are swimming in dirty water. This mirrors the concerns that were raised during the focus group portion of the project. Many felt that consumers believe that wild harvest is more natural. A number indi-

cated that although there was an overall preference for wild harvest, price points are important in the final purchase decision. Most felt that there was a place for both wild harvest and farm-raised seafood at their counters.

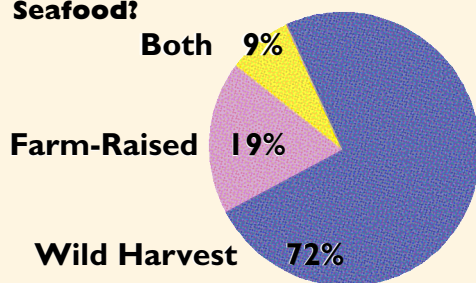
***“Customers want the choice. Some care about antibiotics in their food and see it as bad while others see it as okay to raise fish. We need both.”***

The major concerns raised were about salmon because of all the press that the product had been getting. Several respondents said that their customers are beginning to ask about the source of the product.

***“Wild helps to sell the product in the salmon category”.***

From a buyer perspective, a large number of respondents felt that farm raised seafoods had significant advantages in terms of lower cost, steady supply and consistent quality. Lower cost was the primary advantage cited. At the buyer level, several mentioned that farm raised fish were better for the environment. A few mentioned renewable supply.

### **Do Your Customers Prefer Farm-Raised or Wild-Harvest Seafood?**

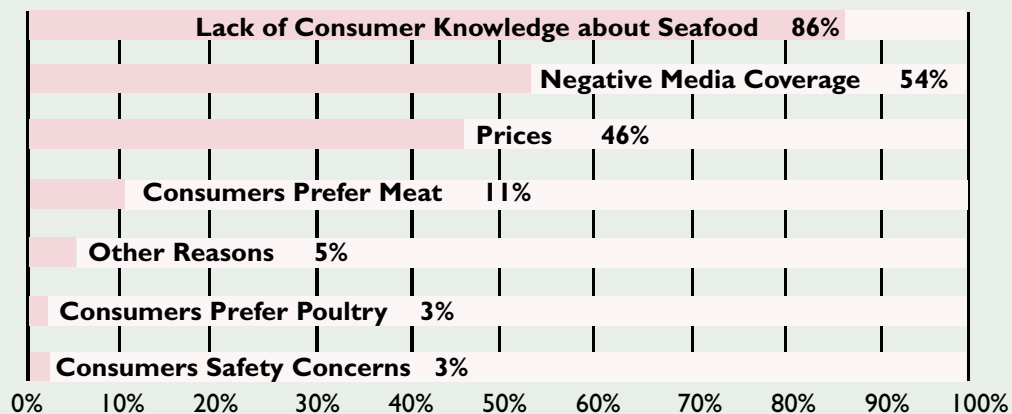


However, when asked about disadvantages of farm-raised seafoods, there were concerns about the public perception of the product being detrimental to the environment. Environmental concerns, water quality in fish farms and additives were cited by a number of the respondents. Feed was a concern but it

was primarily based on additives. Although many respondents cited negative media coverage and opposition of environmental groups, no one mentioned the concern about feeding fish to fish.

**“Trend is toward natural foods. Farm-raising fish is not natural.”**

### Major Barriers to Increase Seafood Sales

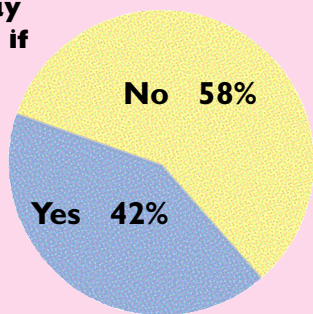


### Opportunities for Organically Grown Seafoods

Most respondents did not feel that their customers would buy **more** seafood if were labeled organic while 42 percent did believe that they

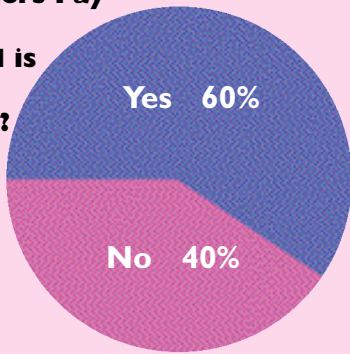
would. There was some concern about which agency would issue an organic or eco-label. This becomes a trust concern which was voiced strongly by consumers in early phases of the study. Many felt that consumer acceptance would depend heavily on price.

**Would Customers Buy More Seafood if the Product Were Labeled Organic?**



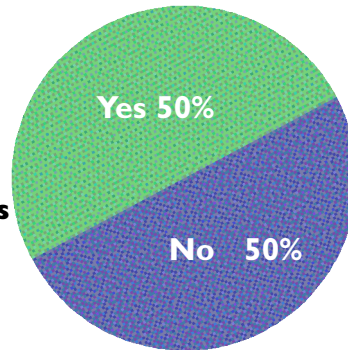
Sixty percent of those surveyed indicated that their customers would pay more for an organic label. This is most likely driven by concerns about contaminants, antibiotics and hormones. From the consumer standpoint, most people felt that being pesticide and antibiotic-free were the most important characteristics in making a product organic. Consumers routinely considered the end product not the process when discussing organic.

**Would Customers Pay More if Seafood is Labeled Organic?**



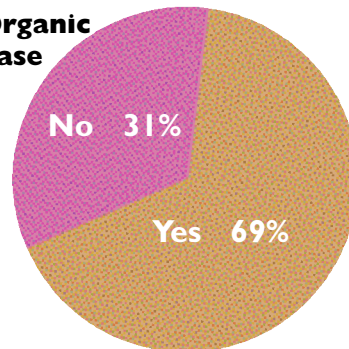
Retailers were evenly divided on the question of whether or not the customer would pay more for an eco-friendly label. Ten percent more felt that the organic label had a greater push with the customer than an eco-friendly label. When consumers were asked about attributes of an organic label, only 5 percent mentioned it as being better for the environment.

**Would the Customer pay More for a Product that Carries an Eco-Friendly Label?**



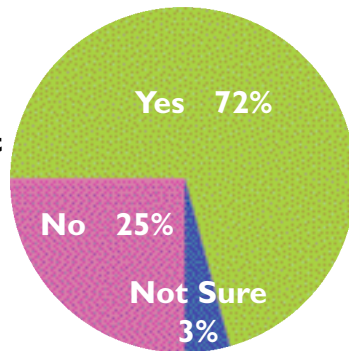
Retailers felt that their customers would pay more for product that had an organic label largely because of the concerns about product safety and wholesomeness expressed above.

**Would an Organic Label Increase Consumer Confidence in the Wholesomeness of the Product?**



Most respondents felt that organically grown seafood would fit into their seafood programs. There were some concerns voiced about how higher price would impact sales.

**Would an Organically Grown Seafood Product Fit Into Retailers Seafood Program?**



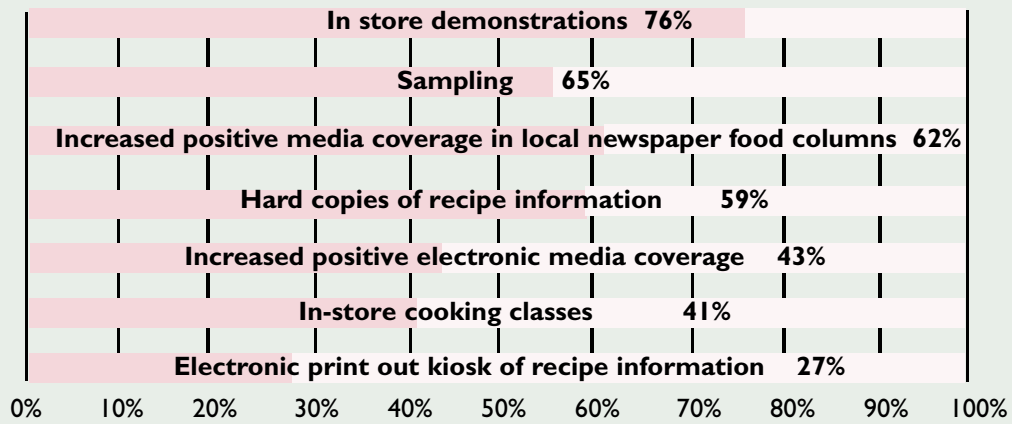
## INCREASING SALES

Lack of consumer knowledge about seafood was identified as the major barrier to increasing sales. This has consistently been problematic for the industry. Negative media coverage was also cited as a concern followed by price. Very few of the respondents felt that their customers actually preferred meat and poultry. This is an important consideration for seafood sellers. ***If lack of knowledge is the major barrier rather than a preference for another commodity, it is one***

***that can be overcome.***

Retailers felt that more consumer education was important in increasing seafood sales. Cooking demonstrations and sampling were rated as important mechanisms to provide that education. Although, there is a trend toward home meal replacements (HMR) in the supermarket sector, many stores have begun offering cooking classes as a counter trend.

### Promotional Materials that Fit into Retailers Seafood Program and Help to Sell More Seafood



Most of the educational alternatives suggested by the respondents are low-tech options. Increased local coverage in newspaper food columns was rated as an important delivery mechanism.

Most respondents felt that organically grown seafood would fit into their seafood programs. There were some concerns voiced about how higher price would impact sales.

# CONCLUSION

## Consumer Perceptions

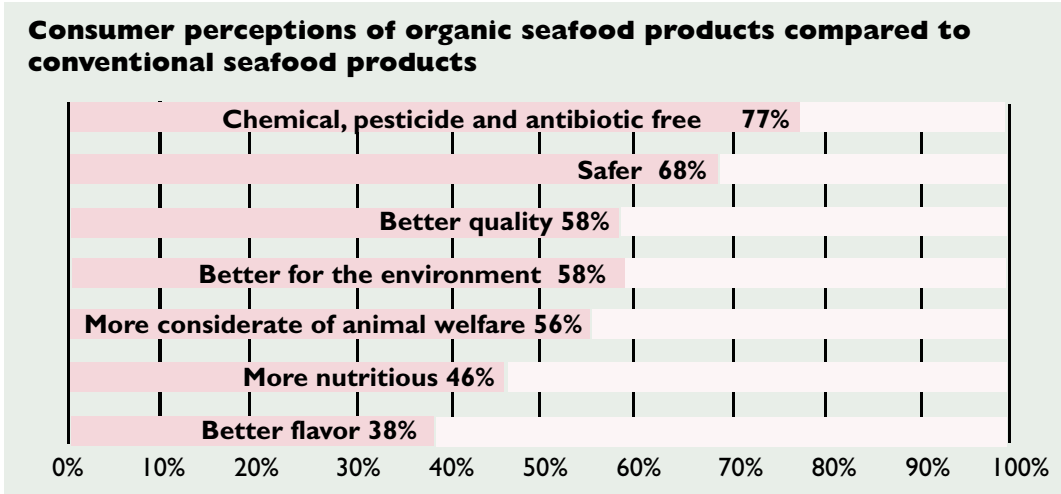
Seventy percent of the consumers surveyed expressed an interest in the purchase of organic seafood and sixty-nine percent expressed a willingness to pay a premium for a seafood product that they perceived as being safer than product that is currently on the market. Fifty-nine percent of those surveyed believed that an organic seafood product would be antibiotic, chemical and pesticide free. Seventy-four percent of the respondents indicated that they were aware of health concerns related to seafood. When asked what those concerns were, sixty-five percent listed mercury. Fifteen percent listed contaminants.

Seventy percent indicated that they would trust an organic label for seafood and many wanted some third party assurance of the quality of

seafood products. Currently, many consumers depend heavily on the reputation of the store and the recommendations of sales associates when purchasing seafood. Most indicated that they limit their purchase of seafood products to specific stores.

Throughout the survey, approximately 25 percent of the respondents expressed the belief that organic products are not significantly different from conventional products and are not worth any price differential.

Overall most consumers had very positive beliefs about organic seafood.



## Consumer Profile

There was no significant difference between male (76 percent) and female (73 percent) interest in purchasing organic seafood. Overall men spent slightly more when asked to estimate their monthly spending on seafood for home consumption. When considering neighborhood of residence [urban (74 percent), suburban (75 percent) and rural (72 percent)], there was no significant difference in interest in purchasing organic seafood. When region of the country was considered 79 percent of those surveyed in Boston expressed an interest in purchasing organic seafood, 76 percent in Chicago, 70 percent in Colorado Springs and 70 percent in New Jersey. No significant association was found to relating to household size, however, cost may play a signif-

icant role in purchase decision in larger households. This idea was clearly expressed during the focus group sessions. If there is a significant price differential between conventional and organically-grown products, sellers might consider targeting high end markets that already carry a wide range of high priced products.

When considering age, there was a slightly significant difference with younger consumers expressing more of an interest in organic products. Interest in purchase decreased to 56 percent in the over 65 category. However, among those consumers who were interested in purchasing organic seafood, willingness to pay a premium was not associated with age.

### Interest in Purchasing Organic Seafood by Age

Interest to Purchase	Age Distribution			
	Up to 35	36 to 50	51 to 65	>65
Yes	80%	83%	75%	56%
No	20%	17%	25%	44%
Total	100%	100%	100%	100%

### Interest In Purchasing Organic Seafood by Educational Level

Interest to Purchase	Education Level				
	Some High School	High School	Some College	2 or 4-Year College Degree	Post Graduate
<b>Yes</b>	25%	61%	67%	78%	82%
<b>No</b>	75%	39%	33%	22%	18%
<b>Total</b>	100%	100%	100%	100%	100%

Higher income levels also affected interest in purchasing organic seafood. This would be expected given the higher real or perceived cost of organic products. However, among those con-

sumers who were willing to pay a premium, the anticipated premium was not associated with income level.

### Interest In Purchasing Organic Seafood by Income

Interest to Purchase	Income		
	\$ Up to 50,000	\$ 50,000-100,000	\$ 100,000+
<b>Yes</b>	73%	78%	85%
<b>No</b>	27%	22%	15%
<b>Total</b>	100%	100%	100%

## Opportunities for Market Penetration

Price, or the perception of higher prices, is a major limiting factor in the purchase of all seafood. The price issue is compounded in the case of organic seafood since many consumers view organic product as being more expensive than conventional products in the same category.

Product freshness and visual appeal are important considerations. The consumer needs to perceive an inherent higher value for organic seafood. That will require consumer education.



## Type(s) of Information that Would Induce Consumers to Purchase More Seafood

Information Type(s)	Percentage				
	Average	Boston	Chicago	Colorado Springs	New Jersey
Lower Price	69%	72%	73%	72%	60%
Product Freshness	67%	69%	66%	68%	65%
Visual Appeal	48%	50%	48%	48%	45%
Knowledgeable Counter Personnel	34%	40%	30%	37%	31%
Availability of Recipes or Information	30%	24%	39%	29%	27%
In-Store Demonstration/Samples	23%	24%	26%	24%	20%
None	5%	4%	4%	2%	9%
Don't Know/Unsure	1%	1%	2%	0%	1%

When retailers were asked to identify barriers to increased seafood sales, lack of consumer knowledge about the product was rated highly (86 percent) and price was lower (46 percent) on the list. When the question was changed and retailers were asked what would induce customers to purchase more seafood, lower price and product freshness were rated highly. Retailers felt that in-store demonstrations and samples were the most important promotional tools. This corresponds to the consumer focus groups where buyers wanted to know how the product would taste. Knowledgeable counter personnel as a way to increase sales was cited by both consumers and retailers. Printed recipes and other information were listed by 30 percent of those surveyed.

Retailers felt that an organic product would command a higher price and help bolster consumer confidence in the product. Seventy-two percent of the retailers felt that organic seafoods

would fit into their current program. Retailers felt that consumers would be willing to pay a premium for organic products (60 percent) but that the availability of organic products would not convince consumers to purchase more seafood (58 percent).

Clearly there is a core population of American consumers who are interested in purchasing organic seafood and are willing to pay a premium. That population is evenly divided among different market segments in terms of region of the country and neighborhood (urban, suburban and rural). Given the consumer perceived concerns about conventional seafood (contaminants) and farm-raised seafood (use of hormones, colorants, antibiotics), availability of an organic product may alleviate some of those concerns and lead to increased sales.