REGULATING ORGANIC: IMPACTS OF THE NATIONAL ORGANIC STANDARDS ON CONSUMER AWARENESS AND ORGANIC CONSUMPTION PATTERNS

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Executive Summary

With $12 billion in sales in 2004 – up from $1 billion in 1990 – and an approximately 20% annual rate of growth (Organic Trade Association 2005), the U.S. organic sector is alive and well. Nonetheless, heightened demand for organic products during the 1990s saw a concomitant increase in the use of the term "organic" for marketing purposes, as well as a patchwork of organic certification standards that began proliferating nationwide. Those factors resulted in confusion as to the nature of organic and eroded consumer confidence in products labeled as organic. In order to address those concerns, the National Organic Standards – a set of rules regulating virtually all aspects of organic production nationwide – were established in October 2002.

Prior to the establishment of the National Organic Standards, observers predicted that, "The new U.S. Department of Agriculture standards for organic food…are expected to facilitate further growth in the organic foods industry." What have the impacts of the National Organic Standards on consumers been? Are organic and non-organic consumers familiar with these standards? To what extent do they recognize the USDA organic seal? Has consumer confidence in products marketed as "organic" increased as a result of this effort? Has increased consumer confidence in turn had impacts on organic purchases?

Through a cooperative agreement with the USDA Agricultural Marketing Service, the California Institute for Rural Studies conducted research designed to provide answers to the above questions. The research methodology consisted of a nationwide telephone survey and focus group discussions with organic and non-organic consumers. A random digit dial telephone survey of 1,000 households nationwide was conducted between April 18-28, 2004. The survey findings were complemented with focus group discussions with organic and non-organic consumers in Des Moines, Iowa; Raleigh, North Carolina; and Albuquerque, New Mexico during the spring and summer of 2005.

Key findings include the following:

- 52.4% of survey respondents reported prior purchase of organic food.
- 37.1% report awareness of the USDA National Organic standards. Less than half (44.2%) of organic consumers reported awareness of the standards, compared with nearly one in three (29.9%) non-organic consumers.
- Nearly two in five (39.3%) survey respondents have seen the USDA organic seal where they shop for food.
- Nearly half (48.2%) of all respondents reported increased likelihood of purchasing organic food as a result of the National Organic Standards.
- Two in five (39.1%) respondents that have never purchased organic food would be more likely to do so as a result of the National Organic Standards.
- 70.5% of all respondents reported increased confidence in the integrity of organic products as a result of the National Organic Standards, the case for over three fourths (76.7%) of non-organic consumers.
- Respondents reported varying levels of understanding of what the National Organic Standards entail; 80.5% were aware of the prohibition on synthetic pesticides; 80.4% were

aware of issues regarding the use of hormones and antibiotics in animal products; 69.1% knew about synthetic fertilizers; 64.2% knew about genetically modified organisms; and 60.1% were aware of the prohibited use of irradiation.

- Respondents also reported varying perceptions of food with the USDA organic seal; 64.8% believe it is healthier, 70.2% feel it is safer, 45.9% feel it is more nutritious, and 74.3% believe it is better for the environment.
- Slightly over one in ten (13.5%) know that products with 95% organic ingredients can display the organic seal, in addition to products that are 100% organic.
- Less than one in ten (9.3%) survey respondents are aware that there are different categories for organic processed food.
- 8.3% of survey respondents are aware that organic certification is conducted by independent third party certifiers, and not directly by the USDA.
- Nearly half (46.2%) of all respondents expressed interest in USDA certification for other food and non-food organic products. Respondents expressing interest in certification of additional products cited the following items: shampoos and conditioners (31.8%), lotions and moisturizers (21.9%), cotton clothing (19.9%), cosmetics (14.4%), vitamins, food supplements and herbs (10.7%), household cleaning products (10.1%), toothpaste (3.9%) and deodorants (2.5%).
- Survey respondents and focus group participants expressed high levels of interest in and appreciation for information about organic products and the USDA National Organic Standards.

Introduction

With $12 billion in sales in 2004 – up from $1 billion in 1990 – and an approximately 20% annual rate of growth (Organic Trade Association 2005), the U.S. organic sector is alive and well. Nonetheless, heightened demand for organic products during the 1990s saw a concomitant increase in the use of the term "organic" for marketing purposes, as well as a patchwork of organic certification standards that began proliferating nationwide. Those factors resulted in confusion as to the nature of organic and eroded consumer confidence in products labeled as organic. In order to address those concerns, the National Organic Standards – a set of rules regulating virtually all aspects of organic production nationwide – were established in October 2002.

According to this legislation, all producers and handlers of agricultural products with annual sales of over $5,000 must be certified by a USDA-accredited agent to sell, label, or represent their products as organic. Prior to the establishment of the National Organic Standards, observers predicted that, "The new U.S. Department of Agriculture standards for organic food…are expected to facilitate further growth in the organic foods industry" (Dimitri and Greene 2002). What have the impacts of the National Organic Standards on consumers been? Are organic and non-organic consumers familiar with these standards? To what extent do they recognize the USDA organic seal? Has consumer confidence in products marketed as "organic" increased as a result of this effort? Has increased consumer confidence in turn had impacts on organic purchases?

Methodology

Through a cooperative agreement with the USDA Agricultural Marketing Service, the California Institute for Rural Studies conducted research designed to provide answers to the above questions. The research methodology consisted of a nationwide telephone survey and focus group discussions with organic and non-organic consumers. A random digit dial telephone survey of 1,000 households nationwide was conducted between April 18-28, 2004, approximately one and a half years after the implementation of the National Organic Standards.[1] Criteria for the selection of respondents included 18 years of age or over, having purchased groceries during the month preceding the interview and having primary or equally shared responsibility for grocery shopping.[2]

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[1] The survey was conducted by Directions in Research, a market research firm based in San Diego. The survey findings have a margin of error of + or – 3% at a 95% level of confidence. All significant findings are reported at the $p < .05$ level.

[2] Although the original sample design called for a completely random sample, after completing approximately half of the surveys, it became apparent that the survey sample was not representative of the ethnic and racial breakdown of the U.S. population, with a preponderance of white respondents and under-representation of other racial and ethnic groups. We therefore obtained targeted samples for areas with high concentrations of African-American, Asian and Latino consumers. While that measure significantly increased the representation of those populations in the survey, the final sample still had a preponderance of white respondents. The final data set was subsequently weighted for purposes of the analysis, in order to reflect Census 2000 racial and ethnic breakdowns for the U.S. population.

The survey findings were complemented with data from focus group discussions conducted during the spring and summer of 2005. Focus groups were conducted in Des Moines, Iowa; Raleigh, North Carolina; and Albuquerque, New Mexico. The purpose of the focus group discussions was to obtain more in-depth insights regarding specific survey findings and to identify regional variations in attitudes and behaviors.

Two focus groups were conducted at each site, one with "frequent" organic consumers (defined as purchasing organic at least once a month), and another with non-organic consumers (defined as those that had never purchased organic, or had not done so during the past year).[3] Conducting two focus groups at each site allowed us to identify the comparative impacts of the USDA National Organic Standards on organic and non-organic consumers, while controlling for regional variations.

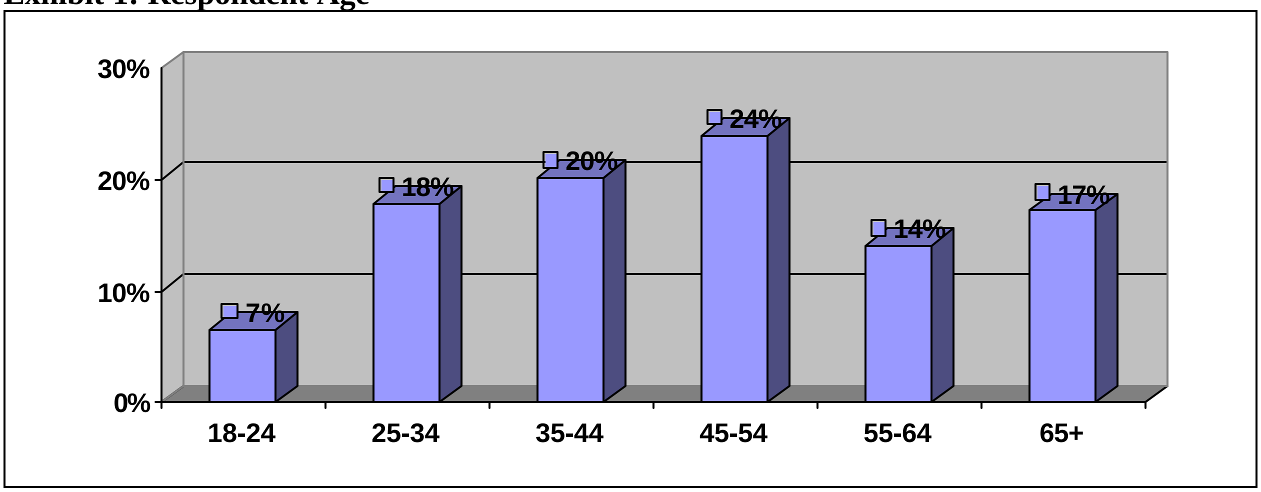
Research Findings

Respondent Characteristics

Age

The survey respondents range in age from 18 to 98, with a mean age of 47 years. The smallest age category is young adults between the ages of 18 and 24, while the largest comprises adults between 45 and 54 years of age.

Exhibit 1: Respondent Age



[3] The focus group respondents were recruited through a combination of market research firm databases and random-digit-dial calling. Somewhat surprisingly, it proved very difficult to find consumers that had never purchased organic food. As a result, screening criteria for inclusion in the "non-organic" focus groups were relaxed to include consumers that had not purchased organic during the past 12 months.

Gender

As is often true in the case of random digit dial telephone surveys, women are over-represented in the survey findings. The majority (69.3%) of survey respondents are women. In contrast, the U.S. population is almost evenly divided between men (49.1%) and women (50.9%).

Race/Ethnicity

Since the data were weighted by race/ethnicity for purposes of the analysis, the ethnic/racial breakdown of the respondents mirrors that of the U.S. population in general. As such, white respondents represent nearly two-thirds (64.7%) of the sample, followed by Latinos (11.6%), African-Americans (11.4%), Asians (3.4%). Respondents reporting other ethnic groups, or identifying as members of more than one ethnic group represent 6.0% of the sample, while those preferring not to identify a racial/ethnic category account for 2.8% of the sample.

Educational Attainment

The survey respondents are well educated, with 45.0% having completed college or graduate studies. Conversely, 5.2% of the sample has not completed high school, 21.8% have a high school degree, and 28.0% have completed some college. The survey respondents report significantly higher educational levels than the U.S. population in general, where 24.4% of all adults over age 25 have completed college or a graduate degree.

Income

The majority (84.8%) of respondents provided a household income range for purposes of the survey. Of those, approximately one fifth (20.5%) earn under $25,000, 29.3% earn between $25,000-$50,000 and 23.9% earn between $50,000 and $75,000. At the higher end of the income spectrum, 12.7% earn between $75,000 and $100,000, while 13.7% have household incomes above $100,000. These figures are in line with income ranges for the U.S. population in general.

Place of Residence

The majority (34.2%) of survey respondents live in the Southern region, followed by the West (27.9%), North Central states (21.3%) and Northeast (16.5%).[4]

Presence of Children

Approximately two in five (39.9%) respondents reported children under the age of 18 in the household. This variable was included because other research has found associations between the presence of children and increased organic consumption.

[4] Regional categories are based on U.S. Census classifications, as follows: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; North Central: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; and West: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY.

Organic Consumption Patterns

In line with other research on U.S. organic consumption patterns (Whole Foods 2005), slightly over half (52.4%) of all survey respondents reported prior purchase of organic food. Slightly over half (54.1%) of those reporting organic consumption – i.e., one fourth (28%) of all respondents – are "frequent shoppers" that buy organic products at least once a month.[5]

Asian respondents were most likely to report having purchased organic food (75.0%), followed by whites (55.2%), Latinos (54.4%) and African-Americans (41.5%). While the majority (86.8%) reported purchasing organic food at supermarkets, respondents reported organic purchase at a wide range of other outlets, including natural food stores such as Whole Foods (43.8%), farmers' markets (38.6%), roadside produce stands (24.4%), directly from the farm (18.3%), restaurants (13.1%) and food cooperatives (11.0%).

"Non-organic" respondents were asked about reasons for not purchasing organic food. As previous research has demonstrated (Whole Foods 2005, Fresh Trends 2005, Hartman 2005), price is by far the principal barrier to organic purchase, as cited by the majority (52.0%) of survey respondents.[6] Other barriers to purchasing organic include a lack of availability (37.3%) and doubts about the benefits of organic food (28.0%).

Nonetheless, a lack of confidence in the integrity of organic products – i.e. concerns as to whether food labeled or sold as organic truly is organic – was the *second* most commonly reported reason for not buying organic, and was cited by nearly half (46.4%) of all "non-organic" respondents.

These survey findings were strongly corroborated by focus group discussions. When asked if they ever had concerns about whether food labeled organic truly is organic, most participants – both organic and non-organic – responded in the affirmative. As a non-organic focus group participant in Des Moines noted, "You never know what you're going to get. They say it's organic, and they put a higher price on it, but you don't know if it's really organic." An organic consumer in Raleigh supported that sentiment, noting that, "I've often wondered about that. You look at the cherry tomatoes in those little plastic containers, and you think 'Is that really organic?'" A non-organic focus group participant in Des Moines further explained that,

> It's a trust issue. Do you trust the labeling? Do you believe what you read? You look at the label, and you don't know what's really in the can or package. You have to place your trust in that label and decide if that's the way you want to go, given the price, the cost-benefit of the product. Does it go in the cart or not?

While mistrust of organic labels was generally higher among non-organic consumers, it did exist among organic consumers as well. However, it was clearly not as high a deterrent. As an organic

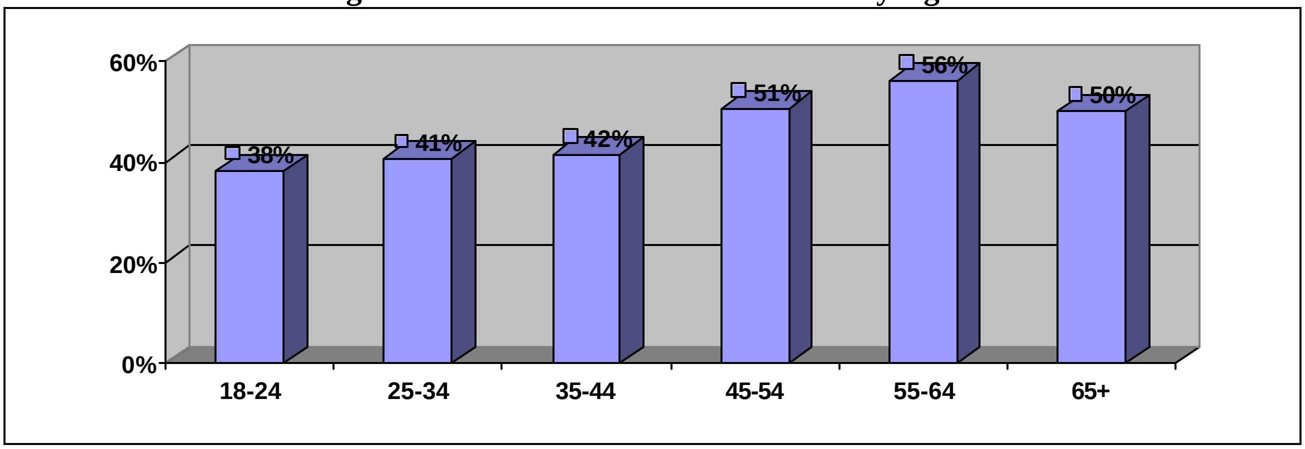
[5] The breakdown of "frequent shoppers" is: 13.0% several times a week, 37.8% several times a month and 3.3% once a month. Conversely, 43.4% of those reporting organic consumption do so less than once a month, while 2.5% were unsure as to their frequency of organic purchase.

[6] Interestingly, however, with the exception of individuals earning over $100,000, respondents earning under $25,000 were in fact *less* likely to report price as a barrier to purchasing organic food, than those in other income ranges.

consumer in Des Moines noted, "We wonder about it, but when push comes to shove, I guess we trust them." Some observers report a perception of organic businesses as small scale, which ties in with the belief that organic food is grown on family farms (as reported by 35% of survey respondents). That perception is generally associated with greater trust in the integrity of organic claims. As an organic focus group participant in Des Moines commented, "From my experience, people that are in the organic food business are very small scale. They have small operations and are very proud of their product and what they're selling. I don't think they would put an organic label on anything that's not organic. I just don't see that happening."

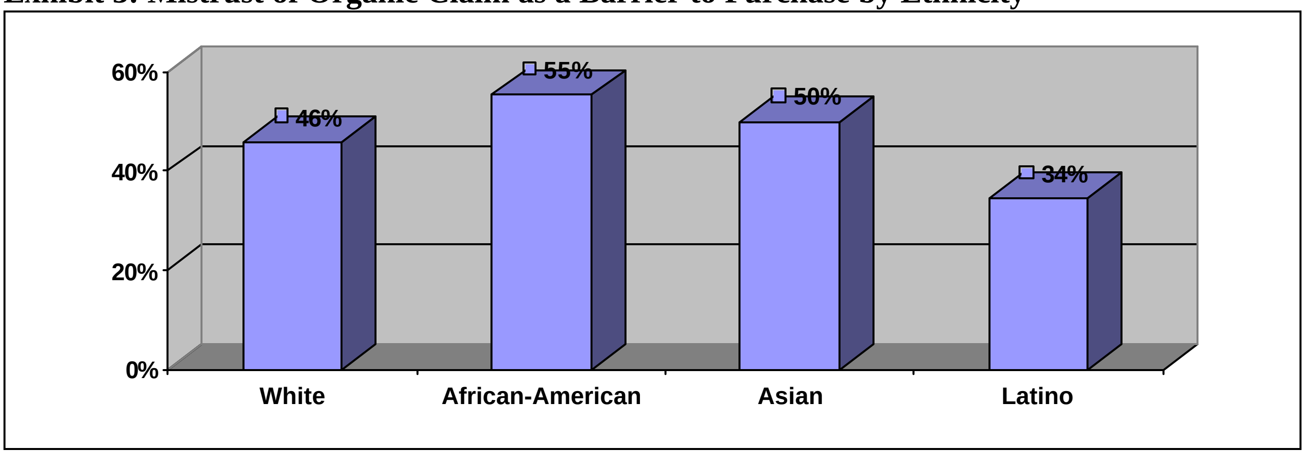
The survey findings reveal differences regarding trust about organic claims based on both age and ethnicity. For example, these concerns increase steadily with age. Whereas mistrust of organic claim was cited as a barrier to organic purchase by 38.2% of respondents in the 18 to 24 age range, it was a concern for over half (56.2%) of those between the ages of 55 and 64.

Exhibit 2: Mistrust of Organic Claim as a Barrier to Purchase by Age



African-Americans were also most likely to report mistrust as a barrier to purchasing organic products (55.3%), while Latinos (34.4%) were least likely to do so.

Exhibit 3: Mistrust of Organic Claim as a Barrier to Purchase by Ethnicity

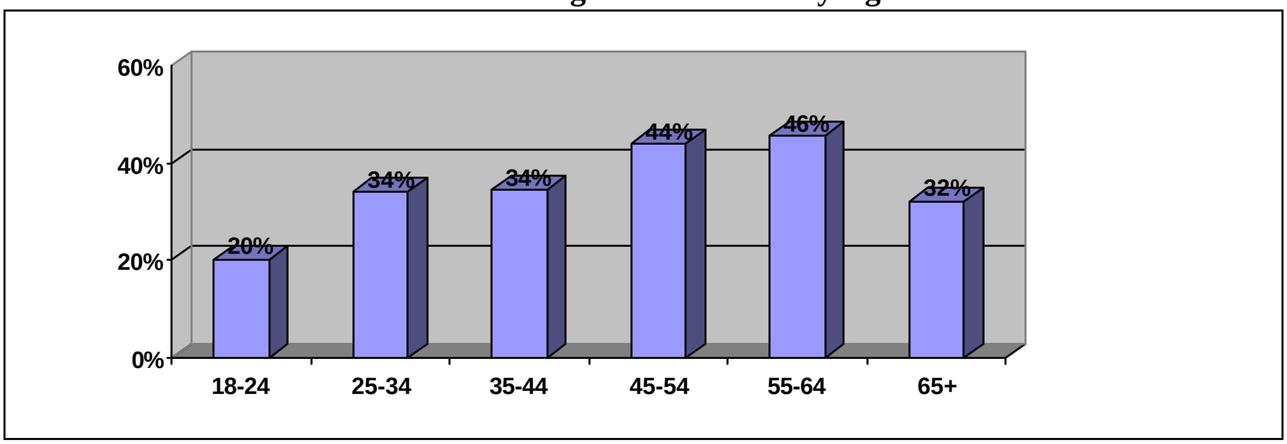


Awareness of the USDA National Organic Standards

Slightly over one third (37.1%) of all survey respondents report awareness of the USDA National Organic standards, a finding that is comparable with similar studies (Whole Foods 2005). Less than half (44.2%) of organic consumers reported awareness of the standards, compared with nearly one in three (29.9%) non-organic consumers. Whereas over half (53.7%) of frequent organic purchasers had heard of the National Organic Standards, that was true for less than one in three (29.8%) infrequent organic purchasers, the same as non-organic consumers.

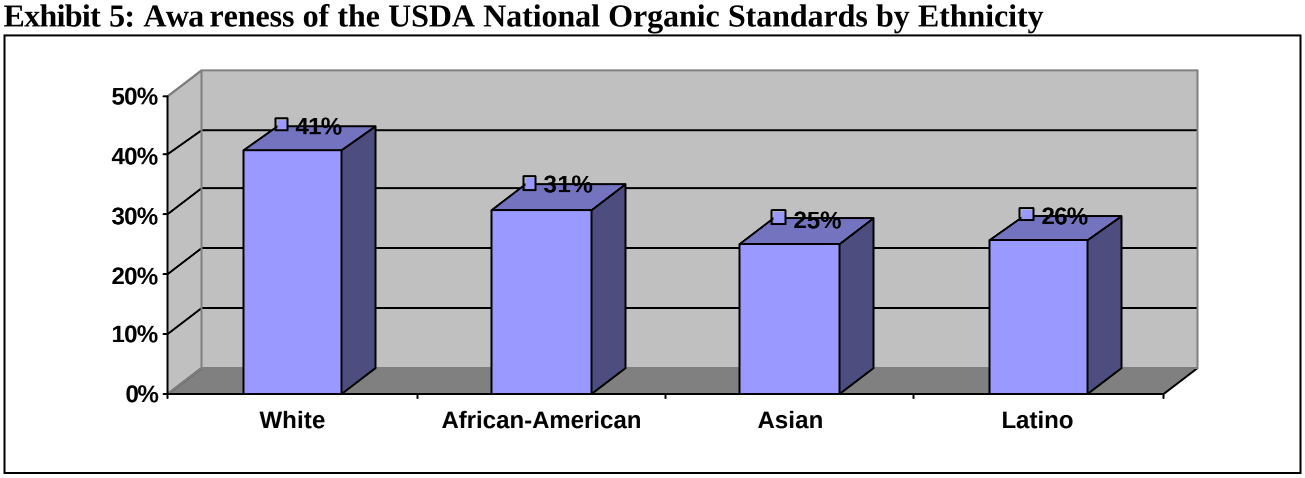
Awareness of the National Organic Standards increases steadily with age among respondents between the ages of 18 and 64, with a decline among those 65 and over. Whereas 20.3% of 18 to 24 year olds have heard of the National Organic Standards, that was the case for over twice as many (45.6%) respondents between the ages of 55 and 64.

Exhibit 4: Awareness of the National Organic Standards by Age



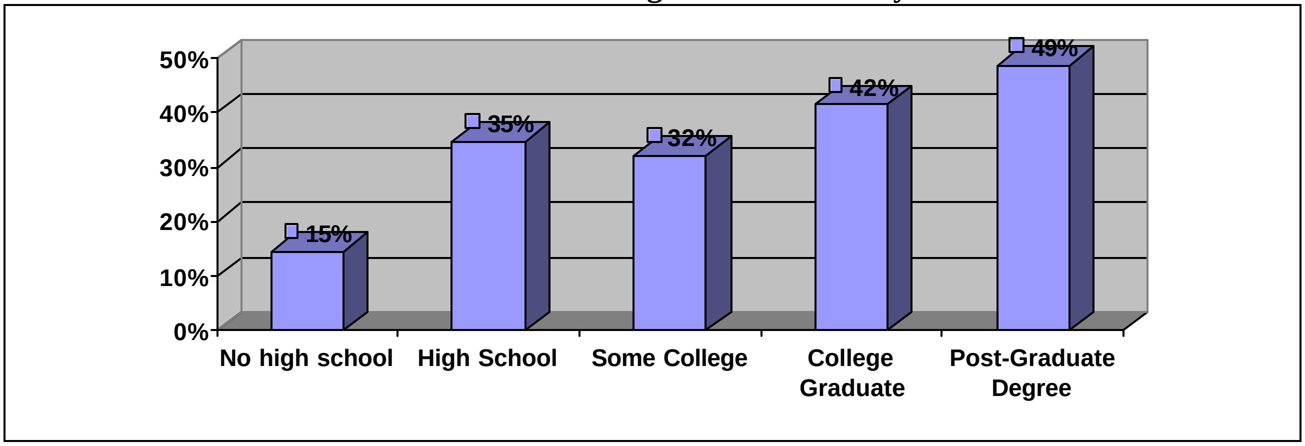
White (40.7%) respondents were more likely to have heard of the National Organic Standards than other ethnic/racial groups, followed by African-Americans (30.9%). Conversely, Asian and Latino consumers reported the least familiarity. These differences persist even when controlling for factors such as income, educational level and organic consumption patterns.

Exhibit 5: Awareness of the USDA National Organic Standards by Ethnicity



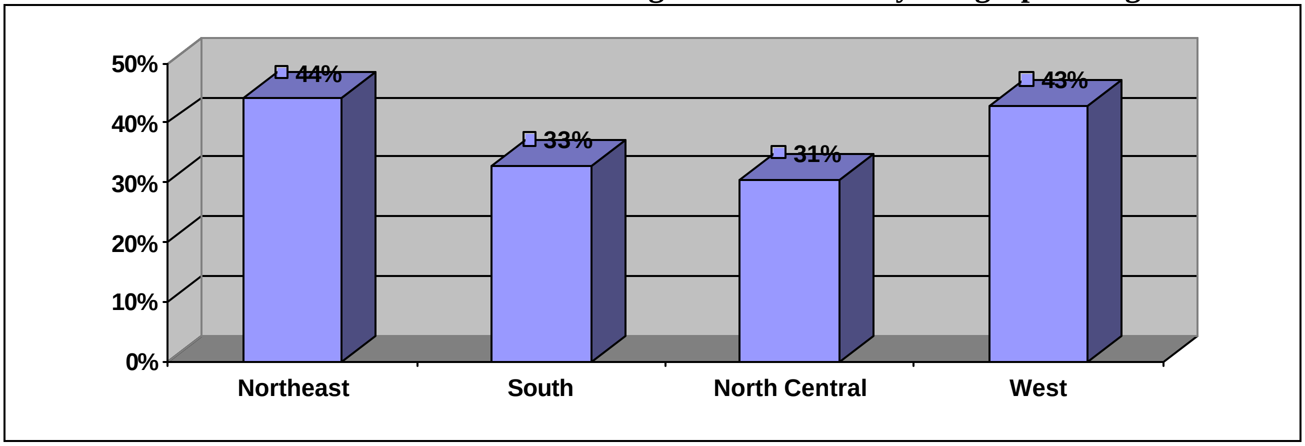
Not surprisingly perhaps, educational level is associated with awareness of the National Organic Standards. Whereas 14.5% of respondents with less than a high school degree reported familiarity with the National Organic Standards, that was the case for over three times as many (48.8%) respondents with a post-graduate degree.

Exhibit 6: Awareness of the USDA National Organic Standards by Educational Attainment



The survey findings also reveal regional variations with respect to awareness of the National Organic Standards. Respondents in the Northeast and West exhibited the highest levels of awareness, with significantly lower levels in the South and North Central states.

Exhibit 7: Awareness of the USDA National Organic Standards by Geographic Region

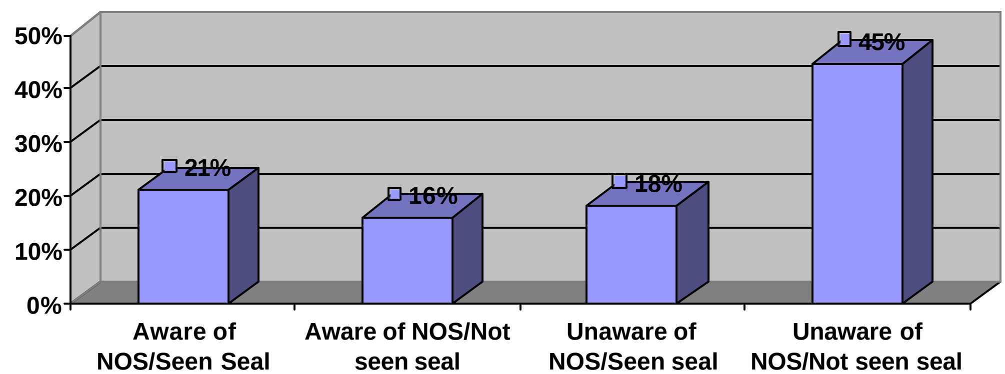


Familiarity with the USDA Organic Seal

In addition to awareness of the National Organic Standards, the research gauged familiarity with the USDA organic seal. Consistent with other research (Whole Foods 2005), nearly two in five (39.3%) respondents report having seen the USDA organic seal where they shop for food (a slightly higher percentage than the 37.1% reporting an awareness of the National Organic Standards).

There is, however, a gap between familiarity with the USDA organic seal and awareness of the National Organic Standards. Only half (53.6%) of respondents that have seen the seal report an awareness of the National Organic Standards, while only half (56.8%) of those reporting familiarity with the National Organic Standards report familiarity with the USDA organic seal. Overall, one in five (21.1%) respondents is familiar with the National Organic Standards <u>and</u> have seen the USDA seal. Conversely, 18.3% have seen the seal but are unaware of the National Organic Standards, 16.0% are aware of the National Organic Standards but have not seen the seal and 44.7% have neither heard of the National Organic Standards nor seen the USDA organic seal.

Exhibit 8: Awareness of the USDA National Organic Standards and the Organic Seal

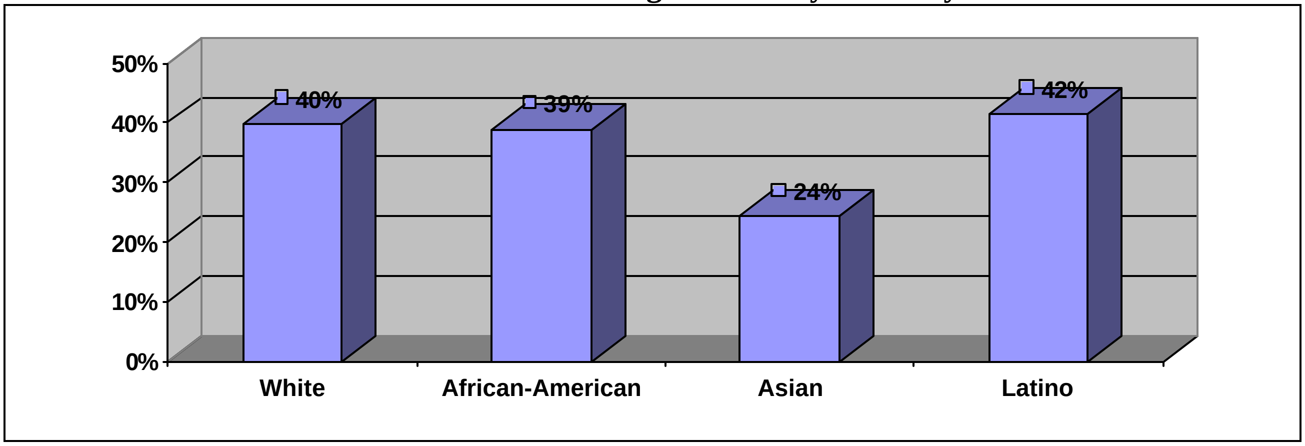


Familiarity with the USDA organic seal is more closely associated with likelihood of organic purchase as a result of the National Organic Standards than awareness of the standards without recognition of the seal. That is, over half of respondents that had seen the organic seal reported increased likelihood of purchasing organic as a result of the National Organic Standards. Conversely, 40% of those that had not seen the seal reported increased likelihood of organic purchase, regardless of awareness of the National Organic Standards.

Similarly, 79.1% of respondents that had seen the USDA organic seal but were not familiar with the National Organic Standards reported increased confidence in the integrity of organic products as a result of the National Organic Standards, compared with 58.1% of those that had heard of the standards but had not seen the seal. These findings indicate that a campaign to increase consumer familiarity with the USDA organic seal would likely have positive impacts on organic consumption patterns.

The impacts of the USDA seal may, however, vary with ethnicity. For example, despite reporting the highest rates of organic consumption, familiarity with the USDA organic seal is lowest among Asian respondents (24.3%). Familiarity with the seal is highest among Latinos (41.6%), who nonetheless rank third in terms of organic consumption.

Exhibit 9: Awareness of the USDA National Organic Seal by Ethnicity



Impacts of the National Organic Standards

Organic Consumption Patterns

Nearly half (48.2%) of all respondents reported increased likelihood of purchasing organic food as a result of the National Organic Standards. This finding is corroborated by other studies on the impacts of the National Organic Standards (Food Marketing Institute 2003; Natural Marketing Institute 2003: Whole Foods 2003). However, most previous studies have found lower levels of impact, with approximately 30% of consumers reporting increased likelihood of organic purchase as a result of the National Organic Standards. These differences may in part be attributable to an educational component of this survey, which provided respondents with basic information on the National Organic Standards. Many respondents greatly appreciated that information, which may in turn be associated with increased impacts.

In fact, two in five (39.1%) non organic respondents reported that they would be more likely to purchase organic food as a result of the National Organic Standards, a potential market of approximately 50 million consumers.

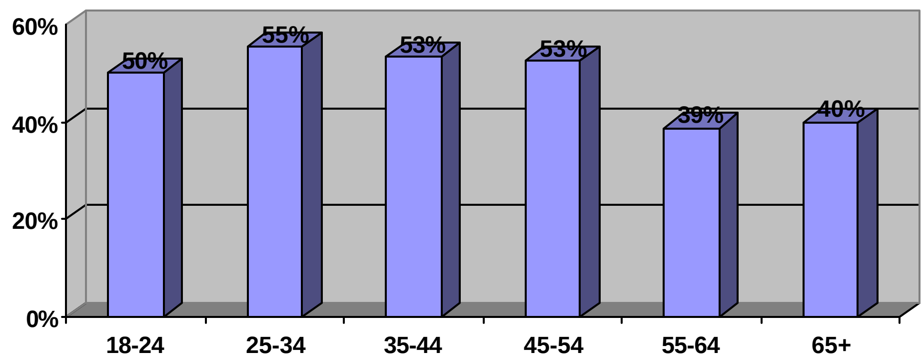
Respondents with children were more receptive to the National Organic Standards than those without children. Over half (54.7%) of respondents with children under age 18 reported increased likelihood of purchasing organic food as a result of the National Organic Standards, compared with 43.3% of those with no children.

Educational level is also associated with increased likelihood to purchase organic as a result of the National Organic Standards. Whereas two in five (39.6%) respondents with a high school degree or less reported increased likelihood of purchasing organic as a result of the National Organic Standards, that was true for over half (51.4%) of respondents with at least some college education.

Women also report greater likelihood of purchasing organic as a result of the National Organic Standards than men (50.3% vs. 43.6%). However, while that was true among respondents who have purchased organic in the past (59.0% vs. 47.4%), virtually no differences were found between women and men that have never purchased organic (39.7% vs. 37.7%).

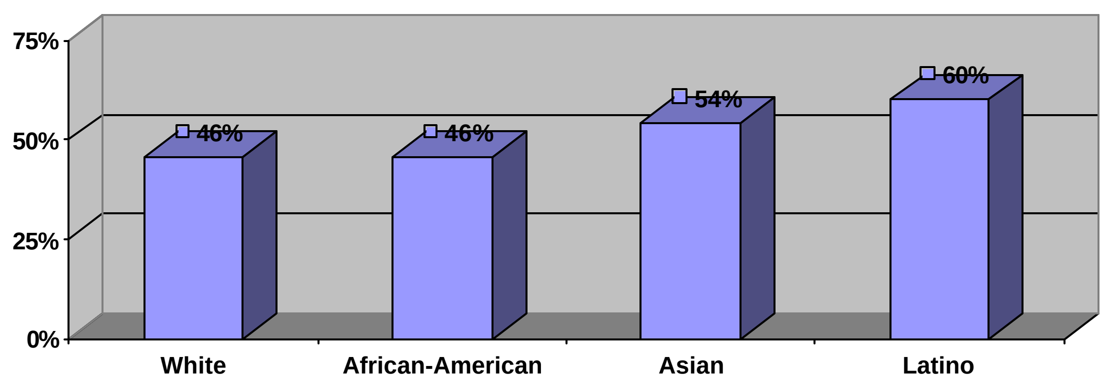
Respondent age is negatively associated with increased likelihood to purchase organic food as a result of the National Organic Standards. Whereas between 50.0% and 55.4% of respondents between the ages of 18 and 54 reported increased likelihood of purchasing organic food as a result of the National Organic Standards, that figure declined to approximately 40% for those over age 55.

Exhibit 10: Increased Likelihood of Organic Purchase by Age



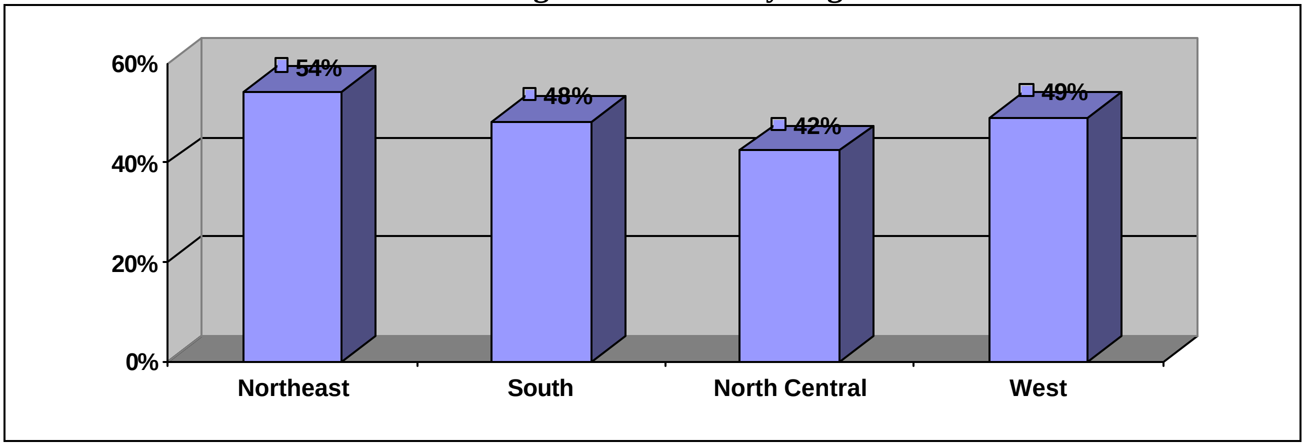
At 60.0%, Latino respondents were most likely to report increased likelihood of purchasing organic as a result of the National Organic Standards, followed by Asians (54.1%). At 45.5%, white and African-American respondents reported similar levels of increased likelihood of purchasing organic as a result of the National Organic Standards.

Exhibit 11: Increased Likelihood of Organic Purchase by Ethnicity



There were regional differences in this regard as well. Respondents in the North Central region were least likely to report increased likelihood of purchasing organic as a result of the National Organic Standards, while those in the Northeast were most receptive. As a focus group participant in Des Moines explained, "Once we're convinced, us Iowans, I think we go for it [organic], but we have to be convinced."

Exhibit 12: Increased Likelihood of Organic Purchase by Region



The relationship between awareness of the National Organic Standards and increased intent to purchase organic was borne out by comments from both survey respondents and focus group participants. Many focus group participants – including organic and non-organic consumers – reported increased intent to purchase organic as a result of the National Organic Standards. As survey respondents noted, “Now that I'm aware of it, I will check it out. And the word needs to get out more, especially here in Louisiana.” As another commented, “This will make me shop at Henry's [an organic purveyor in San Diego] more often now.”

Despite largely positive impacts, a number of focus group participants cited potential negative impacts associated with the lack of organic seals at farmers' markets, which is where many do much of their organic shopping. As a focus group participant in Iowa noted, “If you don’t see the seal at the farmers' market, their credibility goes down a bit.” Another participant in Iowa expressed similar concerns in that regard. “There’s not even a label at farmers' markets. There’s no accountability. If you know the farmer that lives across from your mom, that’s one thing, but usually you don’t.” The extent to which organic consumers will stop shopping at farmers' markets because of the general lack of the organic seal is unclear, however, it is an issue to be aware of.

The survey findings also indicate that understanding of the National Organic Standards is associated with impacts of the standards on attitudes and behaviors. An analysis of these two factors reveals a correlation of .267[7] between consumer understanding of the National Organic Standards and impacts including confidence in the integrity of organic products, likelihood of organic purchase and likelihood of seeking out the organic seal.

An educational campaign to increase consumer awareness and understanding of the National Organic Standards would likely have high dividends with respect to increased organic consumption. This was corroborated by survey and focus group comments, which revealed high levels of interest in information on organic products and the National Organic Standards.

Some focus group participants called for increased promotion of the National Organic Standards in that regard. As a non-organic consumer in Des Moines explained, “There needs to be not only

[7] Significant at the $p < .01$ level.

more promotion of the USDA Organic Standards, but more explanation of what it's about, like what we're doing here [in this focus group]. Now we know that it's a process that's overseen, it's controlled, and it has regulations." Similarly, an organic consumer in Albuquerque – who first learned about the National Organic Standards during the focus group – noted that, "It almost seems like it's been a secret. And now the secret is out."

Many survey respondents expressed high levels of gratitude for this information, and reported increased likelihood of learning more about the National Organic Standards and looking for the USDA organic seal as a result of the relatively minimal information provided during the course of the survey. As one survey respondent commented, "I want to thank you for calling, I was not aware of this until your call. Thank you for informing me." Similarly, another said, "Thank you for making me more aware. This will make me look into it more. I just shop, shop, shop. And you asked me really important questions that I never thought about before." Other respondents likewise commented that, "You made me very knowledgeable. I'll look for that label now," and "I'll be going shopping in a few minutes and I'll be looking [for the organic seal]."

Consumer Confidence

The National Organic Standards appear to be very effective in terms of increasing consumer confidence in the integrity of organic products, i.e., the belief that products labeled and sold as organic truly are organic. Seven of ten (70.5%) respondents reported increased confidence in the integrity of organic products as a result of the National Organic Standards. Respondents that had purchased organic food in the past were more likely to report increased confidence than "non-organic" consumers (76.7% vs. 62.6%).

Increased confidence in the integrity of organic products as a result of the National Organic Standards was corroborated by focus group findings as well. As a non-organic consumer in Albuquerque explained, "I have to say, I was real skeptical about organic food at first, because I'd pick something up, and it'd say 'organic,' and I'd be pretty skeptical. But, if I was to see that seal, then I'd be more trusting in believing that it was truly organic." As another commented, "Knowing what you just told us now, about the history of the USDA organic standards, I probably would be more trusting that food labeled organic really is organic."

Consumers noted that the National Organic Standards have helped allay eroded confidence in the term "organic," as happened with the term "natural." As an organic consumer in Albuquerque explained,

> There's a history in this country, like the natural foods movement. They would label everything as "all natural," and people really began to question what that meant. Organic would have stepped into that place, but now there's this certification process that determines what it means to be organic.

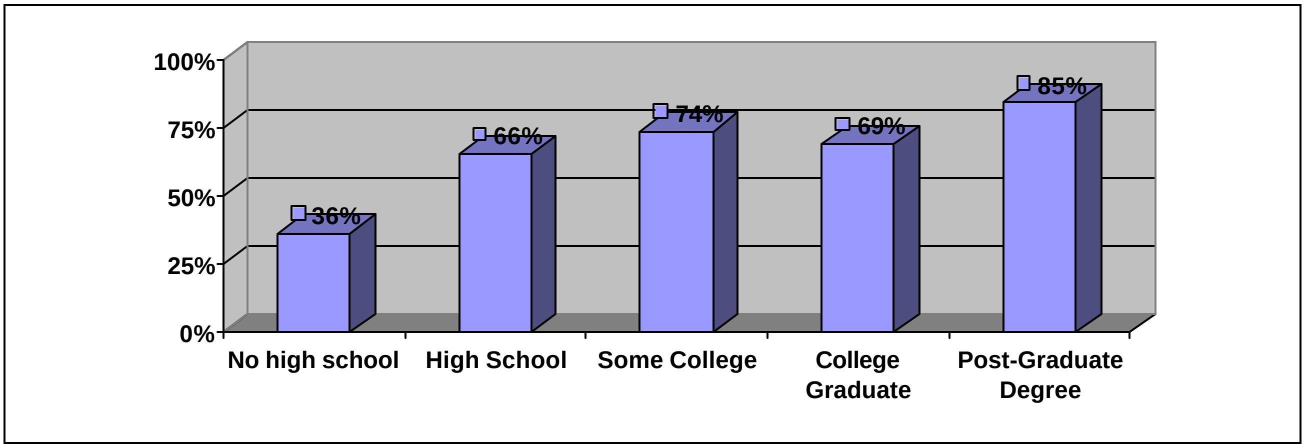
Increased understanding of the National Organic Standards and greater trust in the integrity of the organic claim may also be associated with a willingness to spend more for organic products. In response to that question, a focus group participant in Raleigh noted that, "Now that I know about the National Organic Standards, I would be willing to pay more for organic." Similarly, a non-organic consumer in Albuquerque commented that,

> Unless you were in California, organic didn't mean a lot. It meant that Mr. Montoya didn't spray his fields last week. That's all it meant. But now, knowing that there's certification, knowing what it means, and knowing that it actually means something – that makes it worthwhile spending more for organic.

As another focus group participant in Raleigh astutely noted, the National Organic Standards are good for growers and other organic businesses as well. "There's a strong interest among growers to set standards, so that people can say 'Yes, I trust those standards, and this is what they are.' In more ways than one, this is a step in the right direction."

Confidence in the integrity of organic products as a result of the National Organic Standards increases with educational level, from a low of 35.6% among respondents with no high school education, to a high of 84.5% among those with a post-graduate degree.

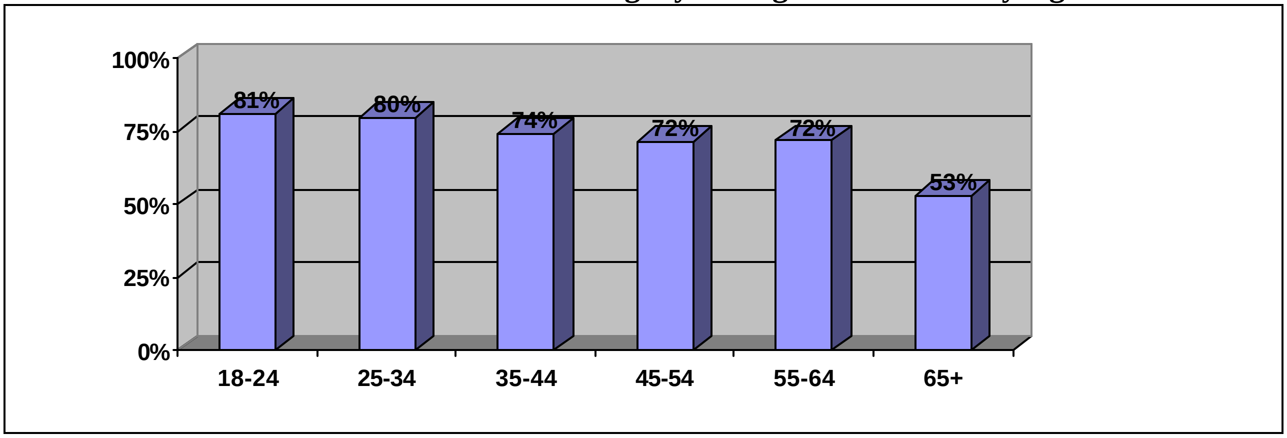
Exhibit 14: Increased Confidence in the Integrity of Organic Products by Educational Attainment



Households with children under the age of 18 were also more likely to report increased confidence (76.3%) in food labeled organic, than those with no children (66.5%).

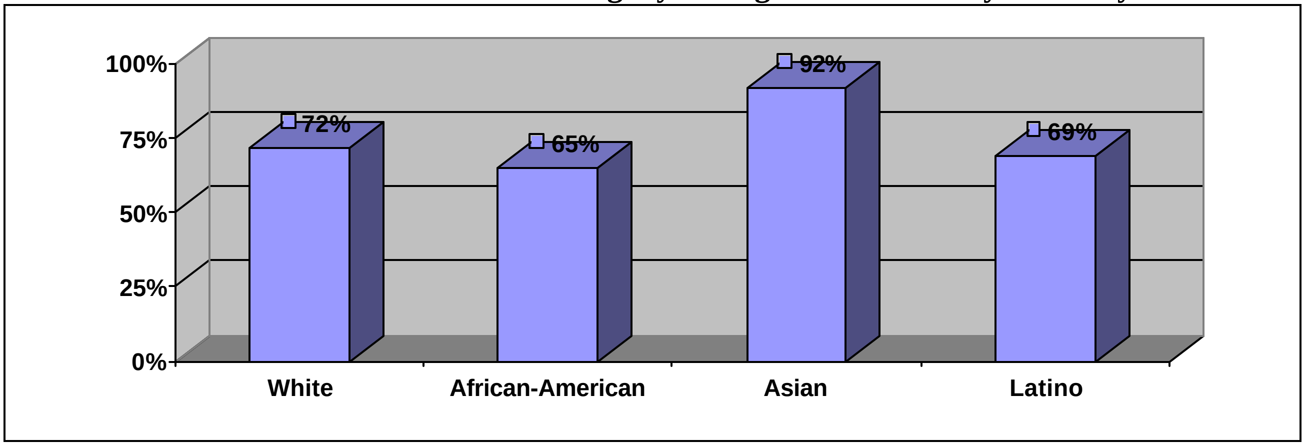
Conversely, increased confidence shows a steady decline with age. Whereas 81.2% of respondents between 18 and 24 reported increased confidence, that was true for only 53.1% of respondents age 65 or over.

Exhibit 13: Increased Confidence in the Integrity of Organic Products by Age



Asian respondents were most likely to report increased confidence in organic products as a result of the National Organic Standards, followed by whites and Latinos. Considering that familiarity with the National Organic Standards is lowest among Asians, this group might particularly benefit from increased information.

Exhibit 15: Increased Confidence in the Integrity of Organic Products by Ethnicity



Understanding of the National Organic Standards

Respondents reporting previous awareness of the National Organic Standards were asked a series of questions to gauge their understanding of those rules. As would be expected, levels of awareness were fairly high regarding some issues, and much lower for others.

Synthetic Pesticides

Given high levels of consumer association of organic with the absence of dangerous pesticides, it is not surprising that respondents showed the highest levels of awareness in this regard, with four in five (80.5%) aware that the National Organic Standards prohibit the use of synthetic pesticides. Virtually all Asian respondents reported awareness of that issue, followed by Latinos (93.8%), whites (82.3%) and African-Americans (59.5%). Educational level is also associated with that. Whereas 65.6% of respondents with no college experience were aware of the prohibition on pesticides, that was the case for 86.3% of those with at least some college education. Women (83.2%) were also more likely to be aware of this aspect than men (74.6%).

Artificial Hormones and Antibiotics

Respondents also displayed high levels of awareness regarding prohibited use of artificial hormones and antibiotics, the case for 80.4% of all respondents. Focus group participants cited high levels of concern regarding the health effects of hormones and antibiotics in meat and other animal products. As an organic consumer in Raleigh explained, “I try to buy organic meat – all those hormones they put in animals can’t be good for you.”

Asian respondents (84.6%) exhibited the highest levels of awareness regarding the prohibition on artificial hormones and antibiotics, followed by whites (82.0%), Latinos (78.1%) and African-Americans (68.4%). Respondents with at least some college education (85.4%) were also more likely to be aware of that than those with no college education (65.6%). Women (82.8%) reported higher levels of awareness in that regard than men (74.0%).

Synthetic Fertilizers

A somewhat lower percentage of respondents (69.1%) were aware that the National Organic Standards prohibits the use of synthetic fertilizers. Here too, Asian respondents exhibited the highest awareness in that regard (84.6%), followed by Latinos (78.1%), whites (72.4%) and African-Americans (50.0%).

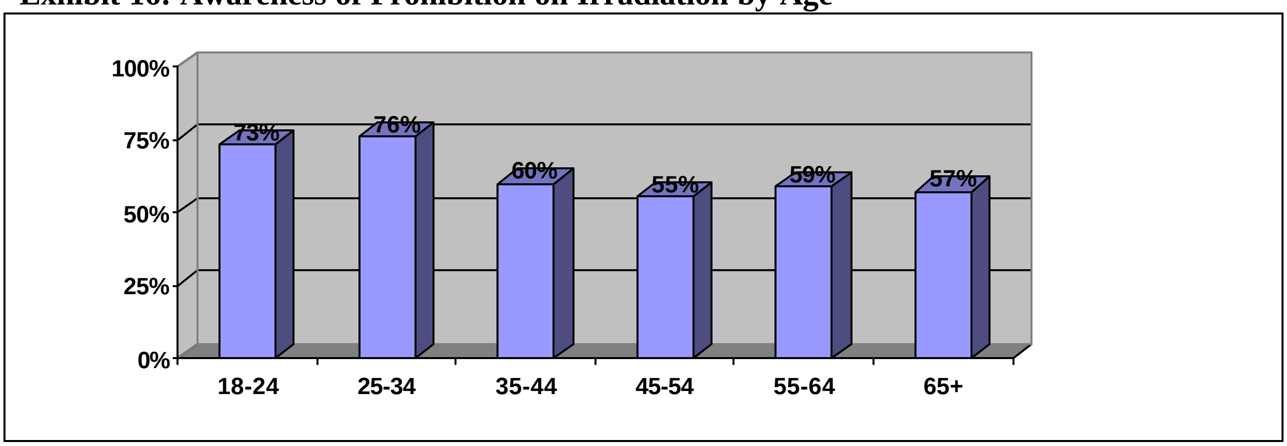
Genetically Modified Organisms

A still lower percentage (64.2%) of respondents reported awareness that organic food may not contain genetically modified organisms (GMOs). Once again, Asian respondents (75.0%) were the most well-informed in that regard, followed by whites (67.0%), Latinos (64.5%) and African-Americans (57.9%). Urban residents (70.6%) also displayed a higher awareness of the prohibition against GMOs in organic food than their rural counterparts (54.3%).

Irradiation

The lowest levels of awareness regarding the National Organic Standards were found with respect to the prohibition on irradiation, which 60.2% of respondents reported awareness of. Latino respondents also exhibited the highest degree of awareness regarding prohibited use of irradiation (87.1%), followed by whites (61.2%), African-Americans (52.6%) and Asians (50.0%). Awareness of this issue was also highest among respondents between the ages of 18 and 34.

Exhibit 16: Awareness of Prohibition on Irradiation by Age



Awareness of Different Categories for Processed Organic Food

Only 9.3% of respondents were aware that there are different categories for organic processed food (i.e., 100%, 95% and 70-95% organic). Frequent organic purchasers (15.9%) were more than twice as likely as infrequent organic consumers (6.6%) to be aware of those categories. Respondents in the Northeast (16.4%) were also most likely to be aware of that, followed by those in the West (9.7%), South (7.1%) and North Central states (7.0%).

Over half (53.1%) of respondents felt that knowledge of those categories might affect their decision to purchase products with the USDA organic seal, while 42.7% felt it would make no difference, and 4.2% were unsure. While this aspect of the National Organic Standards did not elicit much feedback from focus group participants, survey respondents offered numerous insights. Some felt that three categories for organic food were superfluous and potentially confusing. As one noted, “What is the purpose of three categories? One would be OK. I think people will just be confused. When people are shopping they would just see the organic label and pick it up. Either it is organic or forget it.” Similarly, another respondent claimed having three categories “is like being a little pregnant. Either you're pregnant or you're not. For me, it's either organic or it's not.”

One survey respondent called for clearer labeling in that regard, noting that, “most people don't know what these categories mean. Perhaps that should be in the labeling. When I purchase organic food, I expect it to be one hundred percent organic.” Some also felt these categories were misleading. As one commented, “I wouldn't trust it. If it's organic, it should be 100% organic, not 95%.” Some also expressed concerns about higher prices for products that are not entirely organic. “I don’t think people realize there are three categories. I don’t think people should pay the high prices for something that is not 100% organic.”

Conversely, some respondents expressed no concerns in that regard. As a non-organic consumer explained, “I don’t care if they're 75, 90, or 100 percent organic. I know they're better. It's just the prices that hold me back.” As another remarked, “If I'm going to buy something, I'm going to buy it. I'm not using organic now, so 95 percent or 100 percent isn't going to make a difference to me.” Some respondents were grateful that certified products contained at least 70 percent organic ingredients. As one noted, “If indeed the lesser amount is 70 percent I would still purchase it. I was afraid it was going as low as 30 percent.”

Respondents who had purchased organic food in the past were more likely (59.7%) to feel that knowledge of these three categories would have impacts on their purchasing decisions than those with no history of organic purchase (45.0%). Frequent organic purchasers (65.5%) also were more likely to report potential impacts on their purchasing habits than infrequent shoppers (52.7%). With respect to ethnicity, Latino respondents were most likely to report impacts on their organic consumption patterns (71.2%), followed by Asians (58.3%), whites (50.1%) and African-Americans (48.8%). Women (56.5%) were also more likely than men (45.8%) to report impacts on their purchasing patterns as a result of knowledge of these categories.

Awareness of Products That Can Display the Organic Seal

Slightly over one in ten (13.5%) respondents were aware that products with 95% organic ingredients can display the organic seal, in addition to products that are 100% organic. Two in five (40.3%) felt that knowledge would affect their decision to purchase products with the USDA organic seal, while over half (54.9%) felt it would not. Over half (52.3%) of frequent organic purchasers were likely to report impacts of that knowledge on their purchasing habits, compared with one in three (34.6%) infrequent shoppers. Women (42.2%) were also more likely than men (36.1%) to report impacts of that knowledge on their purchasing patterns.

Nonetheless, the focus groups and survey comments did not reveal strong feelings in that regard. Virtually none of the focus group participants seemed concerned by this distinction. As one offhandedly commented, “We’ll let them have the five percent margin.” Similarly, a survey respondent commented that, “I think that it is pretty close. I might scrutinize a particular brand more. A five percentage difference is not significant. I would just select brands more.” Some survey respondents did have questions in that regard. As one queried, “Will the seal state 95 percent organic or 100 percent organic? How will we know?”

Awareness of Third Party Certification

The survey also gauged consumer awareness that the organic certification process is conducted by independent third party certifiers, and not directly by the USDA. Only 8.3% of respondents reported knowledge of this. Respondents previously familiar with the National Organic Standards were significantly more likely to be aware of that (14.3%) than those previously unfamiliar with the National Organic Standards (4.7%). Respondents with children under the age of 18 were nearly twice as likely to be aware of that (11.8%) than those without children (6.2%).

Nearly one in three (32.2%) respondents felt that knowledge that organic certification is conducted by outside parties, and not directly by the USDA, would affect their decision to purchase products with the USDA organic seal. Those over the age of 65 (41.1%) were twice as likely as those between 18 and 24 (20.6%) to report impacts on their decision to purchase products with the organic seal. Asian respondents (45.9%) were also significantly more likely to report impacts than African-Americans (37.4%), Latinos (32.5%) or whites (29.6%). Respondents in the South (38.7%) were more likely to report impacts on their purchasing decisions, than those in the West (31.7%), Northeast (28.2%) or North Central (25.3%) regions.

Nonetheless, respondents were divided in this regard, and some preferred third party certification while others did not. Those against outside certification expressed concerns with the trustworthiness of third party certifiers. As one explained, “I would be concerned with who was paying to get a good rating. I think someone could be getting a better labeling for monetary reasons.” Similarly, another commented that “if it's not the USDA, I would not trust it.” Conversely, some respondents reported a preference for third party certifiers. As one explained, “I don’t necessarily think something is better because it is government regulated. Contractors give better service because they care more.” Another expressed a preference for outside certifiers “because I don't trust the USDA any farther than I can throw them.”

Focus group participants expressed high levels of concern regarding the integrity of imported organic products – particularly coming from less developed countries – and skepticism about the reliability of certification for those products. As a consumer in Albuquerque commented, “We can’t really control what the Argentinean farmer does. You know, he may be poor this week, so he’s gotta do what he’s gotta do.” As organic imports increase, this is also an issue meriting increased education, in order to address consumer concerns.

Perceptions of Food with the USDA Organic Seal

The survey also included a series of questions designed to gauge respondent perceptions about products bearing the USDA organic seal, in terms of health, food safety, nutrition and the environment.

Health

Approximately two in three (64.8%) respondents believe that food with the USDA organic seal is healthier than products without the seal, while one-fourth (23.0%) did not feel that way, and 12.2% were unsure. Respondents who had purchased organic food in the past were more likely to perceive of food with the USDA organic seal as healthier (69.6%) than non-organic consumers (59.4%). Similarly, frequent organic purchasers were more likely to feel that way (75.1%) than infrequent organic purchasers (62.3%). Latino respondents (87.2%) were most likely to perceive of organic food as healthier, followed by Asian (70.3%), African-American (65.6%) and whites (61.7%). Conversely, respondents in the North Central region (55.3%) were least likely to perceive of organic products as healthier, compared with those in the Northeast (69.1%), West (69.0%) and South (65.1%). This was corroborated by a non-organic focus group participant in Iowa, who felt that people in other areas needed to purchase organic “because there’s so much pollution there. Here in Iowa our food is very pure.”

Food Safety

Nearly three in four respondents (70.2%) felt that food with the USDA organic seal is safer than other foods, while 20.9% did not feel that way and 9.0% were unsure. Perceptions of increased safety of organic products followed similar patterns to those of increased healthfulness. Respondents with organic purchase history were more likely to feel organic food was safe (74.4%) than those with no history of organic purchase (65.2%). Frequent organic purchasers were also more likely to perceive of increased safety (80.1%) than infrequent organic purchasers (67.3%).

Latinos were most likely to perceive of organic products as safer (83.3%), followed by Asians (81.1%), African-Americans (70.7%) and whites (67.1%). Respondents with children under the age of 18 were also more likely to perceive of organic as safer (75.3%) than those without children in their households (66.8%). Women also reported higher perceptions of safety of organic products (73.1%) than men (63.6%).

Nutrition

Less than half of all respondents (45.9%) felt that food with the USDA organic seal is more nutritious than other products, while 35.7% did not feel that way and 18.4% were unsure. As with other attributes, respondents who had purchased organic food in the past were more likely to feel that way (50.4%) than those who had not (40.0%). Frequent organic purchasers were more likely to perceive of higher nutritional value (56.8%) than infrequent organic purchasers (43.4%). Latinos were also more likely to believe that organic food is more nutritious (67.2%) than African-Americans (56.9%), whites (42.9%) and Asians (41.7%).

Environment

Three-fourths (74.3%) of respondents feel that organic products are better for the environment, while 14.3% do not feel that way and 11.3% are unsure. Frequent organic consumers were more likely to perceive organic as being environmentally beneficial (80.7%) than infrequent shoppers (70.0%). Latinos were also most likely to feel that way (87.2%), followed by whites (73.5%), African-Americans (71.3%) and Asians (70.3%). Women (76.5%) were also more likely to feel that organic products are better for the environment than men (69.4%). As with other attributes, respondents in the North Central region (67.8%) were less likely to perceive environmental benefits than those in the Northeast (79.1%), West (77.0%) and South (73.9%).

Interest In Certification for Other Organic Products

Nearly half (46.2%) of all respondents expressed interest in a similar certification process for other food and non-food organic products.[8] Responding to an open-ended question, survey respondents indicated that they would like to see organic certification and regulation for products including shampoos and conditioners (31.8%), lotions and moisturizers (21.9%), cotton clothing (19.9%), cosmetics (14.4%), vitamins, food supplements and herbs (10.7%), household cleaning products (10.1%), toothpaste (3.9%) and deodorants (2.5%).

These findings were corroborated by focus group participants, who mentioned the above products, as well as others including hair dye, mosquito repellant, laundry detergent, and perfume – "anything that comes in contact with your skin." As a focus group participant noted, "If you're going to use skin care products, such as aloe, it would be nice to know that you're not putting pesticides on your skin." As another participant noted, "There are lots of petroleum products in shampoos, and you're putting that on your skin."

Focus group participants expressed very high levels of interest in regulation of herbs, vitamins and food supplements. As a non-organic participant in Albuquerque commented,

> They should be regulating vitamins that claim to be organic big time. We were taking some vitamins that were supposed to be organic and had them analyzed, and they were 99.9% synthetic. And I asked the guy that analyzed them, "How do they get to use the word organic?" And he said, "It's not regulated, so anyone can put organic on the label."

Focus group participants also expressed high levels of interest in organic oversight for fish and seafood. As a focus group participant commented, "I think fish is getting very scary. Why isn't the USDA regulating that?"

Over half (55.4%) of respondents who had purchased organic food in the past expressed an interest in a similar certification process for other organic products. However, of note is the fact that over one-third (36.4%) of non-organic respondents were interested in that as well. Frequent

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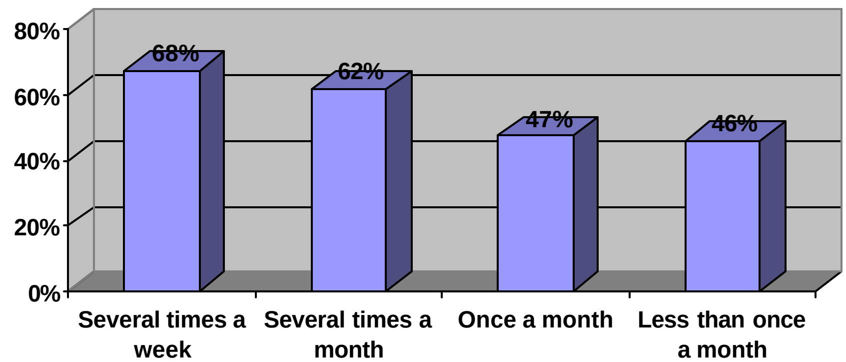
[8] As of August 2005, the National Organic Program has agreed to certify personal care products, which may display the USDA organic seal. Under the terms of this agreement, all personal care products may continue to display the term "organic" on their labeling, however, only certified organic products will be permitted to display the USDA organic seal.

organic purchasers were more interested in a similar organic certification process (62.3%) than infrequent organic purchasers (45.2%). Interest in a similar certification process increases with frequency of organic purchase.

Exhibit 17: Interest in Organic Certification for Additional Products by Frequency of Organic Purchase

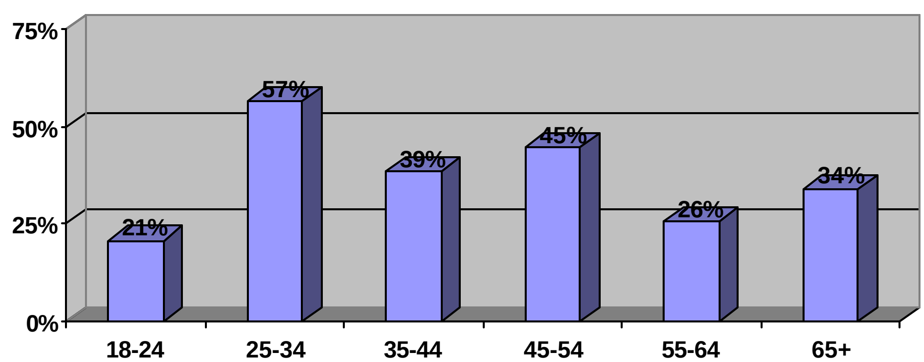


Impacts of the National Organic Standards on Non-Organic Consumers

As noted, 39.1% of non-organic respondents stated they would be more likely to purchase organic products as a result of the National Organic Standards. That finding raises the question of who those consumers are, in terms of attributes including age, ethnicity, education, presence of children and place of residence.

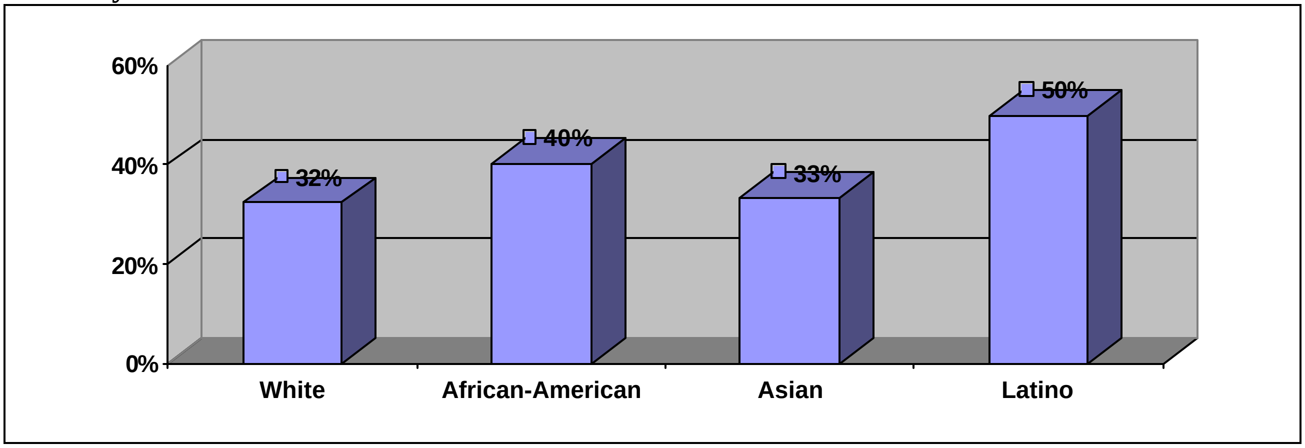
Non-organic respondents between the ages of 25 and 54 – particularly those in the 25 to 34 age range – were most likely to buy organic as a result of the National Organic Standards.

Exhibit 18: Increased Likelihood of Organic Purchase Among Non-Organic Consumers by Age



Latino and African-American non-organic consumers reported greater likelihood of purchasing organic as a result of the National Organic Standards than their white or Asian counterparts.

Exhibit 19: Increased Likelihood of Organic Purchase Among Non-Organic Consumers by Ethnicity

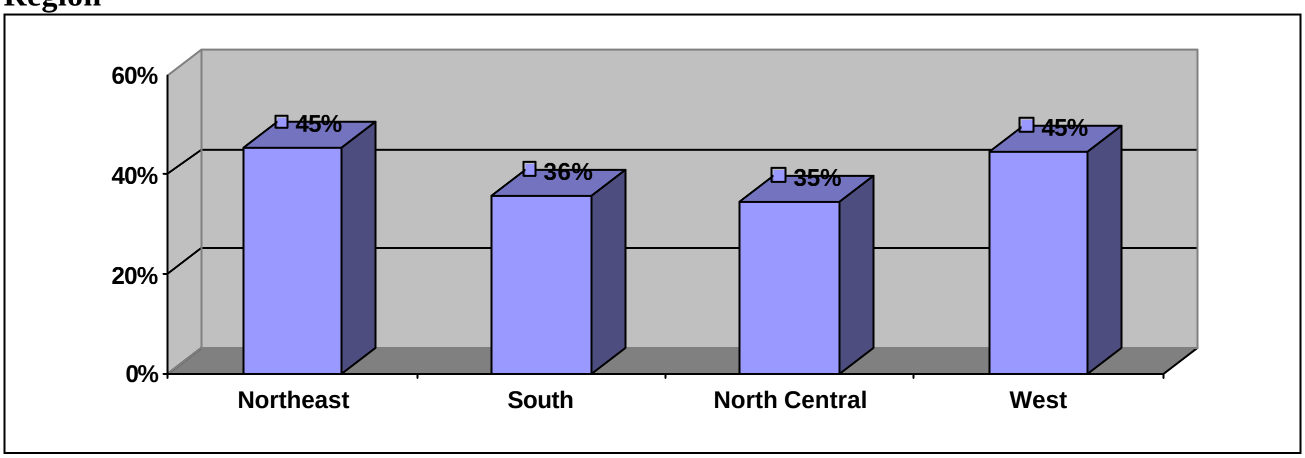


Non-organic respondents with children under age 18 reported greater intent to purchase organic as a result of the National Organic Standards than those without children in their households (46.2% vs. 32.2%).

Impacts of the National Organic Standards on organic consumption are associated with educational attainment as well. Non-organic consumers with some college experience are almost twice as likely (46.7%) as those with a high school degree or less (25.3%) to consider purchasing organic as a result of the National Organic Standards.

Non-organic consumers in the Northeast and Western states were also more likely to report intent to purchase organic as a result of the National Organic Standards than their counterparts in the South or North Central regions.

Exhibit 20: Increased Likelihood of Organic Purchase Among Non-Organic Consumers by Region



Conclusions

Three years after taking effect, the National Organic Standards have made tremendous strides. Nearly two in five consumers nationwide are familiar with the standards, while a similar number have seen the USDA organic seal. Survey respondents reveal high levels of awareness of what the National Organic Standards signify with respect to issues such as pesticides and hormones, and lower – but still fairly high – levels of knowledge with respect to issues such as synthetic fertilizers, irradiation and GMOs. The organic standards are clearly associated with increased consumer confidence in the integrity of organic claims. That, in turn, is associated with increased intent to consume organic products, as well as increased willingness to pay more for organic products.

Nonetheless, there is much work to be done. The survey and focus group findings reveal high levels of consumer interest in more information about organic products and the National Organic Standards, pointing to the need for a more vigorous consumer education campaign in that regard. The research findings indicate that an educational campaign would likely yield high dividends for the organic industry, with two in five non-organic consumers – a potential market of 50 million people – expressing increased interest in organic products as a result of even the minimal information provided through this survey. Nonetheless, mistrust of organic claims is high, and efforts to uphold the integrity of the organic standards must be maintained in order to foster continued and increased consumer confidence.

Organic and non-organic consumers alike expressed interest in oversight for other products with organic claims, including personal care items, cotton clothing and other products, vitamins, food supplements and herbs, seafood and household cleaning products.

Ultimately, the research findings make it clear that the USDA National Organic Standards have the potential to propel an already vibrant U.S. organic industry to even greater heights. As a survey respondent noted, “I will pay more attention to the organic section of the grocery now. I will buy an organic tomato.”

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