

College Students' Perceptions of Organic Foods in the United States

Oluwafunmilola Akinbode^{1*}, Nahid Sistani¹, Srinivasa Mentreddy², Salam Khan³

¹Department of Family and Consumer Sciences, College of Agriculture, Life, & Natural Sciences, Alabama A&M University, 4900 Meridian Street N Huntsville, AL 35811 U.S

²Department of Natural Resources and Environmental Sciences, College of Agriculture, Life, & Natural Sciences, Alabama A&M University, 4900 Meridian Street N Huntsville, AL 35811 U.S

³Department of Physics, Chemistry, and Mathematics, College of Engineering, Technology & Physical Sciences, Alabama A&M University, 4900 Meridian Street N Huntsville, AL 35811 U.S

*Corresponding author: Oluwafunmilola Akinbode | Received: 03.03.2026 | Accepted: 22.04.2026 | Published: 13.05.2026 |

Abstract: Organic food consumption is on the rise and becoming a trend in the United States. This may be attributed to increased awareness of its perceived nutritional, health, and environmental benefits. Understanding organic food perceptions of young adults in college is of significance in promoting the health and nutritional benefits of organic food products. A survey of 184 participants was conducted to understand the perception of organic foods among college students and its association with their socioeconomic factors. Data were analyzed using descriptive statistics and bivariate correlations ($P \leq 0.05$). Results indicated that most students have a positive perception of organic foods. Furthermore, there was a negative association between family income and the perception of a high nutritional value. At the same time, other socioeconomic factors had a positive association with various perception indicators such as *tastier*, *free from chemicals and pesticides*, *environmentally friendly*, and *certified label*. With this growing awareness and positive outlook, organic food market producers must strategically address this increasing demand as college students are potential consumers of organic foods.

Keywords: Organic Foods, College Students, Perception, Young Adults Consumer.

INTRODUCTION

The production and consumption of organic foods have been growing phenomenally in recent years due to an increase in awareness. In a USDA's National Agricultural Statistics Service survey, organic was confirmed to be the fourth-largest food and feed commodity in the U.S., with over 6.2 billion in 2015 farm-gate sales, up 13 percent since 2014 (USDA NASS, 2017). Organic food constitutes agricultural food products grown without using any synthetic chemicals, including fertilizers, pesticides, herbicides, etc., in its production, processing, and storage (Mie, Andersen, Gunnarsson, Kahl, *J.et al.*, 2017). The organic system prohibits the use of genetically modified organisms and growth hormones, antibiotics, and other chemicals generally adopted to augment the development of farm animals (Mohamed, Cordelia, Mohd, Hafezali, & Milad, 2015). The consciousness of the detrimental consequence of these chemical-treated food products is expanding among the consumers. As a substitute for

these products, more people are trending towards organic food products (Basha, Mason, Shamsudin, Hussain, & Salem, 2015). In the last thirty years, studies on organic food purchasing, consumer understanding of, and intention for buying organic food have matured inconsistency with the organic food market (Hemmerling, Hamm, & Spiller, 2015).

An industry survey by the Organic Trade Association in 2017 and 2018 confirmed that 14.1 percent of all fruits and vegetables and 8 percent of all dairy products bought by U.S. consumers are organic (OTA, 2018). It is well documented that consumer awareness is a build-up that impacts consumers' purchase decisions. People's perception is altered by the nature of the information accessible to them. Broadcasts, processing, information on certifications, and labels are all critical in knowledge enrichment. Therefore, knowledge and perception are evaluative in consumers' behavior (Sangkumchaliang & Huang, 2012).

Quick Response Code



Journal homepage:
<https://www.easpublisher.com/>

Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

Citation: Oluwafunmilola Akinbode, Nahid Sistani, Srinivasa Mentreddy, Salam Khan (2026). College Students' Perceptions of Organic Foods in the United States. *Cross Current Int J Agri Vet Sci*, 8(3), 64-71.

Demand is determined by consumer perceptions that organic farming is more sustainable and supports ecology, biodiversity, the wellbeing of animals, food quality, and security benefits compared to chemical-based conventional cultivation. Also, it has become increasingly accepted that there may be differences in relevant nutritional composition between organic and conventional foods. There is supporting evidence for the potential health benefits of consuming organic foods (Baranski, Rempelos, Per, & Carlo, 2017). However, Curl *et al.*, (2013) stated that even though the health benefits of consuming organic food remain ambiguous, increasing evidence suggests that eating organic food decreases the risk of health hazards related to pesticide exposure. The consciousness of the detrimental consequence of these harmful food products is expanding among the consumers. As a substitute for these products, more people are trending towards organic food products (Basha, Mason, Shamsudin, Hussain, & Salem, 2015).

The interest in organic foods, along with a sense of responsibility for the environment, is growing among younger people, specifically college students, who are likely to identify issues that will influence their attitudes and activities in the future (Dahm, Samonte, & Shows, 2009).

In a study on eco-friendly attitudes towards organic food among college students, Dahm *et al.*, (2009) concluded that students buy and eat organic food based on their beliefs. A study by Curl *et al.*, (2013) reported that typical features of the community's food environment, such as availability of food, correlate with the determination sometimes to eat organic food. Still, the exact determinants of organic food consumption are not implicit because previous research portrayed an inconsistent illustration of the social position and statistics of people who consume organic food.

The ability to understand organic food perceptions of young adults in college is of significance in promoting the health benefits of organic food products and essential to note that youths at the undergraduate level specifically are of nutritional concern, which is a basis for the concentration of health experts (Banna, Gilliland, Keefe, & Zheng, 2016).

Consequently, there is a need to assess the younger generation's perceptions and factors influencing their perceptions of organic foods. Multiple studies have investigated consumer perceptions, consumer behavior and purchase intentions, and willingness to pay for organic food across various age groups, but only a few focused on young consumers such as college students. Given this, it is essential to examine the perception of organic food among college students and how it affects its association with their socioeconomic status. Therefore, this study aimed to investigate the perception of college students and its association with their

socioeconomic factors with regard to organic food products.

Organic products have moved from being a style of living for some consumers to being rarely consumed by most Americans. National surveys organized by the Hartman Group and Food Marketing Institute during the early 2000s discovered that two-thirds of surveyed shoppers bought organically grown foods (USDA: Economic Research Service, 2017). Eleven states in the U.S accounted for three-fourths (77 percent) of 2019 sales. With over \$200 million sold in organic products, California continued to lead the nation accounting for 36 percent of the total U.S. value of certified organic agricultural products sold (USDA NASS, 2020).

Product labeling plays a vital role in the organic food market because organic standards regulate the processes involved in production rather than the characteristics of end products (Janssen & Hamm, 2014). The recent U.S. market for organic food is standardized by the United States Department of Agriculture (USDA) National Organic Program (NOP), housed in the Agricultural Marketing Service, which sets the standard for organic goods production and labeling. (Mosier & Thilmany, 2016). Notwithstanding, the organic food market is in an exclusive position because its supply chain is linked with organic certification policies that are handled by state and federal policymakers (Onyango, Hallman, & Bellows, 2007).

Organic agriculture differs from conventional agriculture using various approaches. The application of synthetic pesticides is, for instance, restricted, the adoption of antibiotics is not allowed and subjected to total regulation, animal compost is ultimately adopted as fertilizer, and animals are granted access to outdoor forage (Hoogenboom *et al.*, 2008). The nutritional content slightly varies between organic and conventional products, alongside reasonably high "contents of phenolic compounds in organic fruits and vegetables" p.15 (Mie *et al.*, 2017). In a study on Romanian organic food consumers, 87% believed that organic food is healthier, and 75% believed that it is instrumental in environmental protection than conventional foods (Petrescu & Petrescu-Mag, 2015). However, with conflicting sensory evaluations, studies have shown that the majority of organic consumers are still of the opinion that organic foods taste better than conventionally grown produce (Zhao, Chambers, Matta, Loughin, & Carey, 2007; McEachern & McClean, 2002; Roitner-Schobeserger, Darnhofer, Somsok, & Vogl, 2008).

The underlying aim of buying organic food is probably the perception that it is highly nutritive than conventional food. Despite insufficient proof that organic and conventional foods are different with regards to the combinations of the various micronutrients (vitamins, minerals, and trace elements), organically

grown leafy vegetables and potatoes appears to have a little higher level of ascorbic acid (Magkos, Arvaniti, & Zampelas, 2003). According to a fact sheet by Dietitians of Canada, some studies showed that organically produced vegetables and fruit may be higher in phosphorous, vitamin C, and phytochemicals (natural plant compounds such as anthocyanins, flavonoids, and carotenoids that may have health benefits), and lower in Nitrogen and Protein. Studies on nutrient differences between organic and non-organic farmed meats, milk, eggs, and poultry have found some nutrients may be slightly higher in organically farmed products (Dietitians of Canada, 2014).

Food analyses tend to promote the concept that organic foods may have some health benefits and that consumers of organic food have a comparatively low dietary exposure to pesticides. Not only have repeated studies shown that organic foods have lower levels of insecticides, but clear evidence also indicates reduced pesticide exposure levels in consumers of organic foods (Crinnion, 2010). A study of elementary school-age children in Seattle through urinary biomonitoring concluded that organic diets provide a protective mechanism against Organophosphate (O.P.) pesticide exposure in young children whose diets regularly consist of fresh fruit and vegetable, fruit juices, and wheat-containing items (Lu, Toepel, Irish, Fenske, Barr, & Bravo, 2006). This finding was consistent with another study on Australian adults in which consumption of a largely organic diet resulted in a statistically significant reduction in O.P. pesticide exposure (Oates, Cohen, & Braun, 2014). These findings confirm the growing consciousness and awareness of the long term effect of pesticide residue on health and the environment amongst consumers.

Apparently, studies on consumers' perceptions of organic food indicate a substantial difference in perspectives, centered on a distinct mix of factors, such as taste, price, healthiness, ethical issues, trendiness (being fashionable, a fad), and availability, reporting diverse situations among countries and cultures (Petrescu & Petrescu-Mag, 2015). In general, the intention to purchase organic decreases with a limitation of knowledge and awareness of those products, with many factors affecting consumers' perceptions and attitudes (Sangkumchaliang & Huang, 2012). A study on organic food consumers in Huntsville, Alabama (Oluwoye, 2017) suggested an association between age and consumers' knowledge of where to buy organic food products and an association between the education of the respondents and consumers' knowledge of where to buy organic food products. A similar study on Nigerian organic consumers suggested that age, income, and ethnicity have a positive and significant effect on consumers' perception of organic vegetables (Phillip & Dipeolu, 2010).

Consequently, consumers may not have equal access to organic food, and therefore may not have the same capacity to make these choices (Curl, *et al.*, 2013). Organic food attracts a price premium due to the labor intensity of organic food production, thereby making it more pricey than conventional foods (Bhavsar, Baryeh, & Tegegne, 2018). The USDA's 2009 report, *Marketing U.S. Organic Foods: Recent Trends from Farms to Consumers* states that organic food is now available in over 80 percent of all supermarkets. Given this high proportion of supermarkets in which organic food is available, it is reasonable to assume that areas with more supermarkets are also more likely to provide greater access to organic food (Curl *et al.*, 2013). The two top organic food sales categories at the retail level receive significant price premiums over conventionally grown products. Economic Research Service also analyzed the prices for 18 organic fruits and 19 organic vegetables using 2005 data on produce purchases and found that the organic premium as a share of the corresponding conventional price was less than 30 percent for over two-thirds of the items. Prices for organic products continue to be higher than their conventional counterparts (USDA, 2017).

MATERIALS AND METHODS

Sample

In this study, the participants were college students from the Alabama Agricultural & Mechanical University, Alabama, USA. These individuals are emerging adults undergoing several life changes, including decisions that involve food and permanent healthy or nutritional lifestyle choices. Also, they are the potential future organic consumers who will soon start their families.

Alabama Agricultural and Mechanical University is a public, historically black, land-grant university located in Huntsville, Alabama, United States.

Instrument

Organic food awareness, consumption, and perception of the college students were investigated using standardized organic food questionnaires as a guide to assess how differently they view organic food, their perception of organic food, and how it affects their consumption of organic food products. The survey instrument was a 12-item questionnaire such as demographic information, knowledge about organic foods, frequency of purchase, perception of organic foods (healthy, expensive, tastier, free from pesticides, high nutritional value, environmental friendly, certified label), none of the questions contained personal identifiers as it was carried out anonymously. Responses were measured using a six-point Likert-type scale consisting of Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1), and Not Sure (0). The inclusion of a "Not Sure" option allowed respondents without sufficient knowledge to provide accurate responses, thereby reducing response bias. The

six-point structure also enabled greater sensitivity in capturing variations in perception while distinguishing between neutrality and uncertainty. The survey instrument was administered following review and approval by the Institutional Review Board (IRB) at the Alabama A&M University in Alabama.

Data Collection

A cluster sampling technique was employed, in which academic courses offered for the semester were treated as clusters. A list of all courses offered during the semester was compiled, and courses were randomly selected using a ballot method to ensure representation across different academic levels. The Course instructors for the classes selected were contacted, and a date for administering the questionnaires during class was fixed. Along with the questionnaires were consent forms with general information about the research and its purpose. Students were verbally addressed so as to give a clear understanding of how to complete the questionnaires. Questionnaires were then administered to students from Alabama A&M University by the researcher.

Two hundred and fifty (250) participants were randomly selected, but one hundred and eighty-four (184) participants responded to the questionnaire with complete information. This process was carried out during the Summer and Fall Semesters, 2019.

Data Analysis

Different statistical analysis was used to test the questionnaire response in this study; these data were coded and scored. Answers were organized in a tabular form as well as graphical representations such as bar charts and histograms. Also, all statistical analyses were performed using Statistical Package for Social Sciences

(IBM SPSS statistics 20) with $p \leq 0.05$ considered statistically significant. Descriptive statistics such as frequencies and percentages were majorly used to analyze the demographic data and perceptions for the sample. The spearman's rho correlation was further used to test for associations between the socioeconomic factors and college students' perception of organic foods.

RESULTS AND DISCUSSION

Sample Demographics

A total of 184 college students completed the survey. Participants ranged in age from 17 to 61 years, with a mean age of 22.9 years (SD = 7.3). This indicates that the sample was largely composed of traditional college-aged young adults, while also including a meaningful proportion of older students. The relatively moderate standard deviation of 7.3 reflects variability in respondents' ages, suggesting that the study captured perspectives from a diverse age range within the college student population. The age group with the highest participation was 18 – 24 years (73.9%), while 25-29 years represented 12.5%, >35 years (6.5%), 30-35 (5.4%), and <18 represented 1.6%. There were 58 males (31.5%) and 126 females (68.5%), the classification of the students was 33.7% freshmen, 9.8% Sophomore, 7.6% Junior, 13% Senior, and 35.9% graduates. A total of 160 participants (87.5%) was single, while 23 (12.5%) are married. The employment status showed that 42.4% of the participants have part time jobs, 15.8% are employed full time, and 41.8% are unemployed. Table 1 also shows the family income with 25% earning between \$19,999 and below, 33.2% (\$20,000 - \$39,999), 16.8% (\$40,000 - \$59,999), 14.1% (\$60,000 - \$79,999), and 10.9% earning \$80,000 and above.

Table 1: Participant's demographic distribution

Variable	Classification of Variable	Frequency	Percentage(%)
Age(years)mean±SD	22.9±7.3		
Gender	Male	58	31.5
	Female	126	68.5
Student Classification	Freshman	62	33.7
	Sophomore	18	9.8
	Junior	14	7.6
	Senior	24	13.0
	Graduate	66	35.9
Marital Status	Single	161	87.5
	Married	23	12.5
Employment Status	Part time	78	42.4
	Full time	29	15.8
	Unemployed	77	41.8
Family Income	< \$19,999	46	25
	\$20,000-\$39,999	61	33.2
	\$40,000-\$59,999	31	16.8
	\$60,000-\$79,999	26	14.1
	>\$80,000	20	10.9

Perception of Organic Foods

This is the view of participants about organic food products and was assessed by asking the participants to indicate their opinion on how they perceive organic foods. The statements or variables include healthy (HLTHY), high nutritional value (HNV), expensive (EXP), free from chemical pesticides and fertilizers (FREEPST), tastier than conventional foods (TSTIER), environmentally friendly (ENV), has certified label (CERTLAB). The responses were recorded on a six-point scale of S.A. (Strongly agree), A (Agree), N (Neutral), D (Disagree), S.D. (Strongly Disagree), N.S. (Not sure), which were 5, 4, 3, 2, 1, and 0, respectively.

The majority (49.5%) of the U.S college students perceive organic foods as healthy, while 0.5% are not sure (Fig 1). The majority also perceived organic foods to be of high nutritional value, with 47.8% strongly agreeing with the statement while 1.1% strongly disagree. For the variable *expensive*, 60.3% strongly

agreed, while 0.5% disagreed. Participants' perception of organic foods as free from chemical pesticides and fertilizers showed that 38.6% strongly agreed with this statement, while 4.9% are not sure. There was a mixed perception for the variable *tastier than conventional foods* as 48.4% were neutral, and 8.2% were not sure (see Figure 1). Participants' perception of organic foods as environmentally friendly indicated that 39.7% agreed, while 0.5% strongly disagreed. The majority of participants also perceived organic foods to have certified labels, with 34.2% agreeing and 1.1% disagreeing. This result suggests an overall positive perception of organic foods among U.S. college students apart from being perceived as expensive. With the majority of participants being female (See Figure 1) and young adults, this result is consistent with an exploratory study in India which suggests that women and younger organic consumers showed a positive attitude to organic foods and perceived organic foods to be healthier (Mehra & Ratna, 2014).

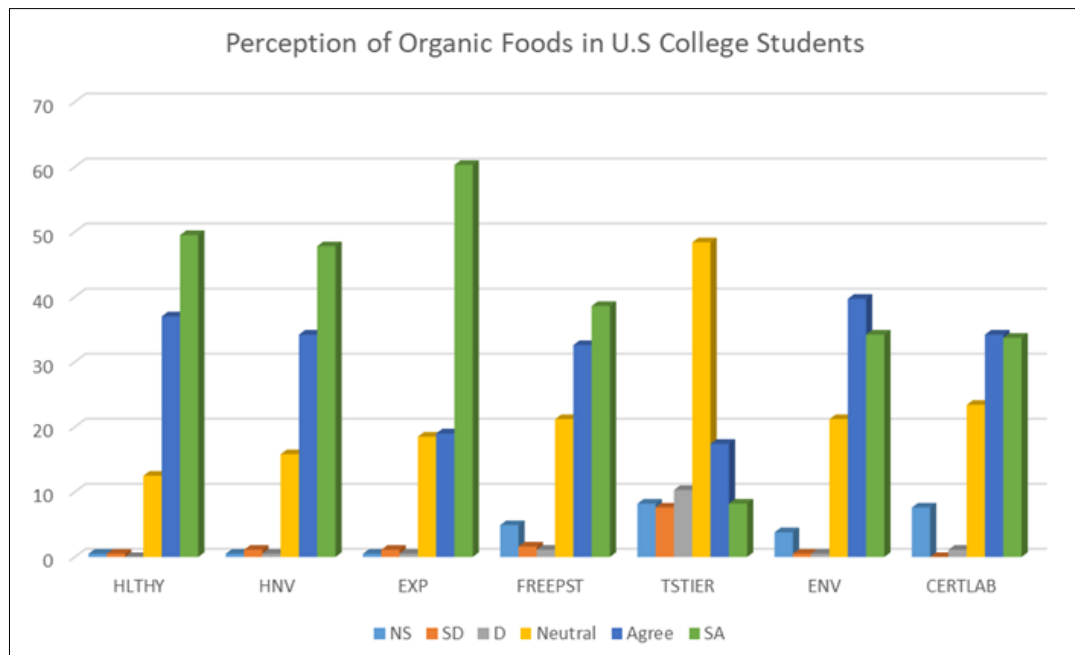


Figure 1: Perception of organic foods in the U.S.

Associations between Socioeconomic Factors and Students' Perception of Organic Foods

The analysis for the variables under perceptions showed a positive association between age and the perceptions that organic food is *free from chemicals and pesticides* and *tastier* (Table 2). Values of $r = 0.181$ and $r = 0.275$ were observed respectively and were

significant at $P < 0.05$ and $P < 0.01$. This suggests that the older an individual, the higher the consciousness of eating healthy and probably tastier foods. This result is consistent with a study in Southwest Nigeria which showed that age was positively associated with the perception that organic vegetables are healthier, tastier, and costlier (Phillip & Dipeolu, 2010).

Table 2: Significant correlations for socioeconomic factors and perception of organic foods

Demographic Variable	Perception Dimension	r (Correlation Coefficient)	P value	Direction
Age	FREEPST	.181	.014	Positive
Age	TSTIER	.275	<.001	Positive
Income	HNV	-.177	.016	Negative
Marital Status	TSTIER	.209	.004	Positive

Demographic Variable	Perception Dimension	r (Correlation Coefficient)	P value	Direction
Student Classification	FREEST	.176	.017	Positive
Student Classification	TSTIER	.295	<.001	Positive
Student Classification	CERTLAB	.155	.035	Positive
Gender	FREEST	.180	.015	Positive
Gender	ENV	.158	.033	Positive
Employment	FREEST	.203	.006	Positive
Employment	CERTLAB	.149	.043	Positive

r = correlation coefficient. Only statistically significant correlations ($p < .05$) are presented.

There was also a significant positive association between gender and the perception that organic food is *free from chemicals and pesticides, environmentally friendly* with values $r = 0.180$ $r = 0.158$, both significant at $P < 0.05$. This result suggests that women perceive organic foods as free from chemicals and pesticides and environmentally friendly. This finding is consistent with multiple studies that younger women tend to attach importance to the health and safety of the environment and therefore perceive that organic foods are safe (Stobbelaar *et al.*, 2007).

Furthermore, there was a positive correlation between marital status and the perception that organic foods are tastier (see table 2). This suggests that married participants perceive organic foods to be tastier than conventional foods. This is consistent with a study in Bangkok suggesting that married consumers perceive that organic produce tastes better than conventional produce (Roitner-Schobeserger, Darnhofer, Somsook, & Vogl, 2008). It was also found that there is a positive association between employment and perception that organic foods are free from chemicals and pesticides ($r = 0.217$, $P < 0.01$), suggesting that the part-time and fully employed participants strongly perceive organic foods to be free from chemicals and pesticides. This result could be due to other influencing factors such as accumulated familiarity with and high awareness of organic foods and probably increased income over years of working. This is consistent with a study in Southwest Nigeria that suggests an association between work experience and perception that organic vegetables are not harmful (could be interpreted as safe or free from chemicals and pesticides) (Phillip & Dipeolu, 2010).

The analysis for income showed a negative association between income and the perception that organic foods are of high nutritional value with values $r = -0.177$, which was significant at $P < 0.05$. This suggests that individuals with higher income perceive organic foods not to be of higher nutritional value than conventional foods; there was no literature on such association. However, this association could be due to various factors, such as conflicting views on the difference in the nutritional content of organic and conventional foods. The conflicting views are due to a lack of substantial scientific evidence of major differences in nutritional content and nutrition-related health benefits from consuming organic foods (Dangour, Allen, Lock, & Uauy, 2010).

Furthermore, there was a positive association between student classification and the perceptions that organic foods are free from chemicals and pesticides, tastier, and have certified labels (Table 2). Since this study is mainly based on a research gap of college students, and as such, literature on such associations is either limited or not available. However, limited studies on the relationship between educational level and perceptions of organic food have shown that consumers with higher academic levels have a positive perception and are more likely to purchase organic foods (Roitner-Schobeserger, Darnhofer, Somsook, & Vogl, 2008).

In conclusion, the study indicates a positive perception of organic foods among college students. Furthermore, these positive perceptions suggest that the perception of organic foods as tastier and safe increases as they age; females are more likely to perceive organic foods as safe and environmentally friendly; the taste is likely more associated with the married, and the employed are more likely to perceive it as free from chemicals and pesticides.

IMPLICATIONS

The findings of this study provide insight into the perception of organic foods among college students. The finding in this study showed that students have a generally positive perception of organic foods. As this generation is becoming more aware of healthy food choices, this could be a reason why there is a growing awareness of organic foods and its benefit. With this growing awareness, it is important that organic food market producers must address this growing demand strategically as college students are present and potential future consumers of organic foods. The positive attitude towards organic foods among college students, especially the perception of organic food as healthy and nutritious, can help health professionals (nutritionists/dietitians) provide tailored advice to their clients in this category with respect to nutrition and cost issues. Overall, this study has contributed to the emerging literature by increasing the information generated on young adults, further informing researchers, policymakers, and organic food marketers as the industry progresses.

Limitations

This study was conducted only within Alabama A & M University students, which is limited to a particular geographic area with predominantly African

Americans. Therefore, these results cannot be generalized. All survey data collected were self-reported and may, therefore, present discrepancies in participants' understanding of the concepts examined. Also, the data was collected from both consumers and non-consumers of organic food. Race/ ethnicity was not included in the demographic parameters. Future research can focus on organic food consumers by race/ethnicity among college students to fully understand other factors that influence organic food consumption. A much larger sample size with participants across other states may have produced a more valid and generalizable result.

Acknowledgements

Oluwafunmilola Akinbode planned and conducted the research, including data analysis and writing of the manuscript, as part of her graduate thesis. Dr. Sistani supervised the study and contributed to revising the manuscript for publication, Dr. Mentreddy contributed to revising the manuscript for publication, and Dr. Khan contributed to the analysis of data.

REFERENCES

- Banna, J. C., Gilliland, B., Keefe, M., & Zheng, D. (2016). Cross-cultural comparison of perspectives on healthy eating among Chinese and American undergraduate students. *BMC Public Health*, 16(1). <https://doi.org/10.1186/s12889-016-3680-y>
- Barański, M., Rempelos, L., Iversen, P. O., & Leifert, C. (2017). Effects of organic food consumption on human health; the jury is still out! *Food & Nutrition Research*, 61(1), 1287333. <https://doi.org/10.1080/16546628.2017.1287333>
- Basha, M. B., Mason, C., Shamsudin, M. F., Hussain, H. I., & Salem, M. A. (2015). Consumers attitude towards organic food. *Procedia Economics and Finance*, 31, 444–452. [https://doi.org/10.1016/s2212-5671\(15\)01219-8](https://doi.org/10.1016/s2212-5671(15)01219-8)
- Bhavsar, H., Tegegne, F., Baryeh, K., & Illukpitiya, P. (2018). Attitudes and willingness to pay more for organic foods by Tennessee consumers. *Journal of Agricultural Science*, 10(6), 33. <https://doi.org/10.5539/jas.v10n6p33>
- Crinnion, W. J. (2010). Organic foods contain higher levels of certain nutrients, lower levels of pesticides, and may provide health benefits for the consumer. *Environmental Medicine*, 15(1), 4-12.
- Curl, C. L., Beresford, S. A., Hajat, A., Kaufman, J. D., Moore, K., Nettleton, J. A., & Diez-Roux, A. V. (2013). Associations of organic produce consumption with socioeconomic status and the local food environment: Multi-ethnic study of atherosclerosis (MESA). *PLoS ONE*, 8(7). <https://doi.org/10.1371/journal.pone.0069778>
- Dahm, M. J., Samonte, A. V., & Shows, A. R. (2009). Organic foods: Do eco-friendly attitudes predict eco-friendly behaviors? *Journal of American College Health*, 58(3), 195–202. <https://doi.org/10.1080/07448480903295292>
- Dangour, A. D., Lock, K., Allen, E., & Uauy, R. (2010). Nutritional composition and health benefits of organic foods - Using systematic reviews to question the available evidence. *Indian Journal of Medical Research*, 478–480. <https://doi.org/10.3945/ajcn.2010.29269>
- Dietitians of Canada. (2014). Are organic foods better for my health? Retrieved from file:///F:/canada%20organic%20foods%20dietitians.pdf
- Hemmerling, S., Hamm, U., & Spiller, A. (2015). Consumption behavior regarding organic food from a marketing perspective—A literature review. *Organic Agriculture*, 5(4), 277–313. <https://doi.org/10.1007/s13165-015-0109-3>.
- Hoogenboom, L. A. P., Bokhorst, J. G., Northolt, M. D., van de Vijver, L. P. L., Broex, N. J. G., Mevius, D. J., Meijs, J. A. C., & Van der Roest, J. (2008). Contaminants and microorganisms in Dutch organic food products: A comparison with conventional products. *Food Additives & Contaminants: Part A*, 25(10), 1195–1207. <https://doi.org/10.1080/02652030802014930>.
- Janssen, M., & Hamm, U. (2014). Governmental and private certification labels for organic food: consumer attitudes and preferences in Germany. *Food policy*, 437-448. <https://doi.org/10.1016/j.foodpol.2014.05.011>.
- Lu, C., Toepel, K., Irish, R., Fenske, R. A., Barr, D. B., & Bravo, R. (2006). Organic diets significantly lower children's dietary exposure to organophosphorus pesticides. *Environmental Health Perspectives*, 114(2), 260–263. <https://doi.org/10.1289/ehp.8418>.
- Magkos, F., Arvaniti, F., & Zampelas, A. (2003). Organic food: nutritious food or food for thought? A review of the evidence. *International Journal of Food Sciences and Nutrition*, 54(5), 357–371. <https://doi.org/10.1080/09637480120092071>.
- McEachern, M. G., & McClean, P. (2002). Organic purchasing motivations and attitudes: Are they ethical? *International Journal of Consumer Studies*, 26(2), 85–92. <https://doi.org/10.1046/j.1470-6431.2002.00199.x>.
- Mehra, S., & Ratna, P. A. (2014). Attitude and behavior of consumers towards organic food: An exploratory study in India. *International Journal of Business Excellence*, 7(6), 677. <https://doi.org/10.1504/ijbex.2014.065503>.
- Mie, A., Andersen, H. R., Gunnarsson, S., Kahl, J., Kesse-Guyot, E., Rembiałkowska, E., Quaglio, G., & Grandjean, P. (2017). Human health implications of organic food and organic agriculture: A comprehensive review. *Environmental Health*, 16(1). <https://doi.org/10.1186/s12940-017-0315-4>.
- Mohamed, B. B., Cordelia, M., Mohd, F. S., Hafezali, I. H., & Milad, A. S. (2015). Consumers attitude towards organic food. In *International*

Accounting and Business Conference (pp. 444–452). Elsevier S. V.

- Mosier, S. L., & Thilmany, D. (2016). Diffusion of food policy in the U.S.: The case of organic certification. *Food Policy*, 61, 80–91. <https://doi.org/10.1016/j.foodpol.2016.02.007>.
- Oates, L., Cohen, M., & Braun, L. (2014). Organic diets reduce exposure to organophosphate pesticides. In *Building organic bridges: Proceedings of the 4th ISOFAR Scientific Conference at the Organic World Congress 2014*, 13-15 October 2014 in Istanbul, Turkey. Braunschweig; Johann Heinrich von Thünen-Institut.
- Oluwoye, J. O. (2017). The association between consumers' socioeconomic factors and knowledge of organic food products in Huntsville, Alabama: A pilot study. *International Journal of Agricultural Research, Sustainability, and Food Sufficiency (IJARSFS)*, 202-210.
- Onyango, B. M., Hallman, W. K., & Bellows, A. C. (2007). Purchasing organic food in U.S. food systems. *British Food Journal*, 109(5), 399–411. <https://doi.org/10.1108/00070700710746803>
- Organic Trade Association (OTA). (2018). *Organic Market Overview*. <https://ota.com/resources/market-analysis>. Retrieved on 01/24/2019.
- Organic Trade Association. 2021. U.S. organic sales soar to new high of nearly \$62 billion in 2020. <https://ota.com/news/press-releases/21755>. Retrieved on 11/6/21.
- Petrescu, D., & Petrescu-Mag, R. (2015). Organic food perception: Fad, or healthy and environmentally friendly? A case on Romanian consumers. *Sustainability*, 7(9), 12017–12031. <https://doi.org/10.3390/su70912017>
- Phillip, B., & Dipeolu, A. O. (2010). Willingness to pay for organic vegetables in Abeokuta, Southwest Nigeria. *African Journal of Food, Agriculture, Nutrition and Development*, 10(11). <https://doi.org/10.4314/ajfand.v10i11.64282>
- Roitner-Schobesberger, B., Darnhofer, I., Somsook, S., & Vogl, C. R. (2008). Consumer perceptions of organic foods in Bangkok, Thailand. *Food Policy*, 33(2), 112–121. <https://doi.org/10.1016/j.foodpol.2007.09.004>
- Sangkumchaliang, P., & Huang, W.-C. (2012). Consumers' perceptions and attitudes of organic food products in Northern Thailand. *International Food and Agribusiness Management Review*, 87-102.
- Stobbelaar, D. J., Casimir, G., Borghuis, J., Marks, I., Meijer, L., & Zebeda, S. (2007). Adolescents' attitudes towards organic food: A survey of 15- to 16-year-old school children. *International Journal of Consumer Studies*, 31(4), 349–356. <https://doi.org/10.1111/j.1470-6431.2006.00560.x>
- United States Department of Agriculture, National Agricultural Statistics Service. (2017, October). *2016 Certified organic survey highlights - USDA*. Retrieved from https://www.nass.usda.gov/Publications/Highlights/2017/2016_Certified_Organic_Survey_Highlights.pdf
- United States Department of Agriculture. (2020, October 22). USDA. Retrieved from https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Organic_Production
- USDA NASS. (2017). Organic market overview. Retrieved June 21, 2018, from <https://www.usda.gov/media/blog/2017/10/24/thats-wrap-new-certified-organic-data-released-during-national-organic/>
- Zhao, X., Chambers, E., Matta, Z., Loughin, T. M., & Carey, E. E. (2007). Consumer sensory analysis of organically and conventionally grown vegetables. *Journal of Food Science*, 72(2). <https://doi.org/10.1111/j.1750-3841.2007.00277.x>