

## **The role of green products in enhancing the quality of life: An empirical study of organic food consumption among students of marketing department**

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### **Abstract**

Improving quality of life is an important motivation for the consumption of organic foods. The aim of this study was to clarify the effect of organic food consumption on the quality of life. Questionnaire was adopted based on the literature review and distributed among the students of marketing department. The sample of the study consists 65 participated. The findings indicated that improving quality of life for the students is an important aspect for organic food consumption. The findings indicated that quality of life influenced by organic food consumption. This study provides information about the importance of organic food consumption in improve the quality of life for students especially in the places that used heavy usage of chemical fertilizers and harmful pesticides on the crops.

Keywords: Green Products, Quality of Life, Organic Food Consumption

### **Introduction**

In 1994; Norwegian Ministry of Environment suggested about the Sustainable Consumption that: it is referred as the consumption of the products that are required for the basic life necessities in order to improve the living standards and requirement of life; while controlling the high consumption of natural resources; minimizing the use of chemicals and hazardous materials that cause pollution and having damage to the environment which will be highly dangerous for the upcoming generations (Paul et al, 2016; De Moura et al, 2012). It is suggested about the environmental sustainability that it is the effectiveness to manage and contribute towards the environmental safety (Jones et al, 2011). In order to save the environment; the need of using the green consumption through the green technology increases the opportunities to sell green products and promote green marketing as well (Boini and Oppenheim, 2008). It is the important

feature that consumer and community should consider the environmental safety so make purchasing decision base upon green products (Chen and Peng, 2012); this will increase the use of products that are green and it is a future market as well. Currently; consumption of the green products is a emerging feature that will increase the quality of life and ensure the environmental sustainability (Dangelico and Pujari, 2010). The global warming is the case of the damaging the environment and it is the high focus is being given by the international level to focus upon the sustainability adequately; and has become one of the focuses of the international community. As an intermediary link between the life and green products which is considered as the unsinkable responsibility for the current ecological problems of human beings (Sun & Zhang, 2019).

The global population has reached one billion and six billion in the 19th and 20th centuries, respectively. These figures are expected to increase up to nine billion by 2050. Economic growth and increased consumption rates were virtually impossible to achieve prior to the industrial revolution and the advent of mass production. However, these advancements significantly affect the environment by inciting climate change, reducing biodiversity, and reducing the supply of both renewable and non-renewable resources. Different economies strive for growth by alleviating poverty and improving the quality of life. However, poverty and low living standards continue to plague several countries in Africa, Asia, and Latin America (Reutlinger, 2012). The increasing concern of individuals toward their environment has been driven by their belief that the planet is continuously being harmed by their activities. Green marketers casually address such concerns in their advertisements by featuring elements that are reminiscent of the past, such as babies, daisies, and planets. However, these marketers are slowly realizing the genuine concern of their consumers toward the low sustainability of the planet as well as its effects on their health and children. Consequentially, there are so many issues that are affecting the human health such as: water and air pollution, land filled, dumping of hazardous substances, changes in weather, high rate of population growth are having alarming situation for the environmental sustainability (Ottman, 2017). It is evident that green marketing is the promotion to protect the environment and increase the human quality of life that will create positive contribution towards the environmental safety. It is a fact that human and marketers are relying upon the environment and using the resources that do not damage the environmental safety (Polonshky, 2011).

The production of organic food is based upon the logic that these products should be economical, ecological safety, society for acceptable and effective for the environment (Dos Santos and Monteiro, 2004). In the past authors have suggested that organic food is not only associated with the agriculture but also in the industries as well but it is a fact that organic products are the only small segment of the agriculture sector. The organic agriculture is being initiated because the traditional agriculture is relying upon use of chemicals. It is evident that traditional agriculture is the highly risky for the human body and has also the adverse impact upon the environment as well (Dos Santos and Monteiro, 2004). Currently it is possible for the consumers to have the organic food in order to increase their quality of life and do not impact upon the overall income (Kirwy and Mecking, 2012). As consumers are awarded about the green products so they are able to make purchase because people are become aware towards health and environment as well. It is important that organic food should be having certification; they should be able to meet the right domain like; according to the law requirement, particular seed should be uses, chemical free production, manufacturing process and the final packaging of the products (De Fatima Cardoso et al, 2015).

Consumers are aware about their selection of the food whether they are focusing upon the healthy food then they have to bring organic products consumption in their daily routine life and change their lifestyle adequately. Consumer's perception is that organic food is expensive but it is healthy for the human body (Pech Lopatta, 2007). As far as the animal welfare is concern organic food is highly recommended to be used for the humans (Hughner et al, 2007; Lea and Worsley, 2005). It is also suggested that health issues are the important element to use the organic products that will motivate the others to use it (Arvola et al , 2003). There are number of studies findings suggested that health concerns are the motivating element for the humans to use the organic foods particularly (Chen, 2009; Haghiri et al, 2009). In the Middle East Region there are no much research done in the area of organic food influence upon the consumer in order to increase the quality of life. The purpose of conducting this research is to highlight the contribution of green product consumption (e.g., organic food) in enhancing the quality of life especially in Middle East region. This study is important because the level of pollution in this region is high due to chemical wars in Iraq and Syria and to heavy usage of chemical fertilizers and harmful pesticides on the crops.

## **Organic food**

As far as the organic food is concern they use the resources that are recycled and preserve the water and land which will be effective for the upcoming generation; this suggestion is being provided by the National Organic Standards Board of USDA. Organic products such as; meat, egg, milk and other products contain no chemical substances and have no use of medicine to get the high production. Organic food is free from the chemical fertilizers, pesticides and other toxic material that damage the fertility of land (Shaharudin et al, 2010). The generic or organic foods are having no indulgence of artificial substance or chemicals that decreases the freshness and nutrition of the products (Gad Mohsen and Dacko, 2013). Organic food consists upon the healthy features and having no substance of chemical in it (Suprpto and Wijaya, 2012). The past studies literature identified the organic food as the generic, pure, high quality and fresh (Chan, 2001). It is evident that organic food is highly addable features that are being cultivated by few farmers in the entire world (Canavari and Olson, 2007).

## **Methodology**

In order to collect the data quantitative approach is used. The use of the collected data will be used as the generalized findings over the whole population. This approach enables the research to develop the post positive statement on the basis of collected data or information through it. The research strategy should be selected from the choice of experiment or survey; one of them should be selected on the basis of theoretical perspective, observation and dimension of the research. In this researcher will be collected the data in the numbers and then analyzing the collected data through the use of statistical software (Creswell, 2009). The two main variables are highlighted in the study that are: Organic Food Consumption and Quality of life.

The survey questionnaire was distributed among the selected samples of the population in order to get the perception of the generalized opinion of the population (Creswell, 2009). The questionnaire sending strategy is used through the online administered to get the collected data. There are two parts of the questionnaire: Part A includes the questions regarding the demographic characteristics of the respondents while part B includes the question based upon the

both variables of the study. The selected sample for the study is based upon 65 respondents. The respondent has provided their opinion on the basis of personal experience in the organic food consumption.

The organic food consumption has analyzed with the help of five items and adopted from the source of Goetzke et al, (2014); the other variable quality of life has analyzed with the help of eight items and adopted from the source of Meiselman, (2016). The response scale is the liker scale on the base of six scores where high is considered as the high degree of acceptance.

## Analysis and results

The respondents' demographic profile is depicted in the following table 1. Total completed responses were 65 which were used to perform the data analysis. The percentage of male respondents is 29.2% while the percentage for the female respondents was 70.8%. Most of the respondents were between the age of 21–40 years (56.9%), the second percentage is the age between 41 to 60 years with percentage 20.0%, third percentage the age under 20 years 12.3% and the age 61 years and over 10.8%. Most of the respondent were having the income between 501 to 1000 USD (35.4%), while income Less than 500 USD were (32.3%), the income 1001 to 2000 USD with percentage 16.9% and more than 2001 the percentage is 15.4%.

**Table 1: Demographic Attributes of the Respondents**

	Respondents' profile	Frequency	Percentage (%)
<b>Gender</b>	Male	19	29.2
	Female	46	70.8
<b>Age</b>	Under 20 years	8	12.3
	21–40 years	37	56.9
	41–60 years	13	20.0
	61 years and over	7	10.8

<b>Income</b>	Less than 500 USD	21	32.3
	501 to 1000 USD	23	35.4
	1001 to 2000 USD	11	16.9
	More than 2001	10	15.4

### **Reliability**

The scale reliability of the construct was examined using Cronbach's alpha. The ideal threshold for the alpha is 0.7 (Pallant, 2011). The scale reliability test for all constructs shows the alpha value much greater than the minimum standard and all of them were found to be greater than 0.8. showing a high level of reliability (Table 2).

**Table 2 Reliability Analysis**

<b>Variable</b>	<b>Items</b>	<b>Cronbach's alpha</b>
Organic food	5	0.895
Quality of life	8	0.822

### **Hypothesis testing**

The results of hypothesis testing is presenting in the following analysis of regression. The regression analysis show model summary, anova and coefficient tables. They are explained as under.

#### **Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.337 <sup>a</sup>	.114	.100	6.51149

a. Predictors: (Constant), Organic

The above table of model summary show the value of R 0.337 showing the correlation between dependent and independent variable is 33%. Moreover the value of R-square shows 11.4% which depicts that the independent variable accounted for the 11.4% variance in the dependent variable. This value is low however there is only one independent variable in the model hence this value is still acceptable.

#### ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	337.665	1	337.665	7.964	.006 <sup>b</sup>
Residual	2628.773	62	42.400		
Total	2966.438	63			

a. Dependent Variable: Quality2

b. Predictors: (Constant), Organic

The above table of Anova shows the model fitness. If we look at the value of significance it shows 0.006 which is less than 0.05 showing that the model is fit and significant and it is suitable to look at the coefficient table as the model is valid to be assessed at the level of individual variables.

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	22.795	3.308		6.890	.000
Organic	.451	.160	.337	2.822	.006

a. Dependent Variable: Quality2

The above table of the coefficient show that organic food has a positive and significant impact on quality of life. The value of  $t$  is greater than 2 and the  $p$ -value is less than 0.05. Showing a significant impact of organic food and quality of life. Hence the hypothesis of the study is supported.

## **Discussion and Conclusion**

The purpose of using the organic food is to promote sustainability and eco friendly environment to the human and for the future generations (Ditlevsen et al, 2019). Those consumers that are highly concern over the environmental sustainability and health conscious prefer to have the organic food to increase their quality of life and preserve the environment for the generations. The basic requirement is to have the awareness in the market about the organic food and health issues then it will be possible for the marketers to conduct the green marketing of the organic products. It is analyzed that organic products are having high prices as compare to the other traditional agriculture products (Denver and Christensen, 2015). The entire world has observed that there is rise in the demand of organic food in order to have quality of life with the healthy requirements and avoid those ingredients that are based upon the chemical and toxic materials (Arbos et al , 2010). On the similar findings some other researchers of past suggested that trend showing the high demand of the organic food in the different markets (Retamales, 2011; Lobley et al , 2009; Loudon and Macrae, 2010;). By observing the current demand of the organic food among the consumer has raised the international market to bring the organic products for the consumers (Demiryurek, 2010).

The purpose of the research is to analyze the impact of organic food consumption on the quality of life for students. The quality of life refers to that the consumers looking for food that improve their healthy, make them strong, increased immunity, and Reduces disease.

The main findings of this paper indicated that consumption different types of organic food (e.g, Organic vegetables/salads, Organic fruit, General organic food consumption, Organic milk and dairy products , Organic bread and bakery goods, Organic meat and sausage products, Organic cereal , and Organic eggs) effect positively on the quality of life. The results of the study will be



motivating factor for the consumers that are intended to make purchase and consume the organic products in order to increase the quality of life.

## Limitations and future research

The sample of the study is only 65 students, thus, future research could be used a big sample. In addition, further researcher is suggested to examine how the objective of this study is applicable internationally. Along with this further researcher is suggested to identify the factors that could help in increasing the level of organic food consumption, can be a positive feature for the consumers to increase the quality of life through the use of organic products.

## References

- Arbos, K. A., de Freitas, R. J. S., Stertz, S. C., & Carvalho, L. A. (2010). Organic vegetables safety: Sanitary and nutritional aspects. *Food Science and Technology (Campinas)*, 30(1), 215–220.
- Bonini, S., & Oppenheim, J. (2008). Cultivating the green consumer. *Stanford Social Innovation Review*, 6(4), 56-61.
- Canavari, M., Centonze, R., & Nigro, G. (2007). Organic food marketing and distribution in the European Union (No. 368-2016-18863).
- Chan, R. Y. (2001). Determinants of Chinese consumers' green purchase behavior. *Psychology & marketing*, 18(4), 389-413.
- Chen, A., & Peng, N. (2012). Green hotel knowledge and tourists' staying behavior. *Annals of Tourism Research*, 39(4), 2211-2219.
- Chen, M.-F. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *British Food Journal*, 111, 165–178.
- Creswel, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. *Los angeles: University of Nebraska–Lincoln*.
- Dangelico, R. M., & Pujari, D. (2010). Mainstreaming green product innovation: Why and how companies integrate environmental sustainability. *Journal of business ethics*, 95(3), 471-486.
- deFátima Cardoso, J., Casarotto Filho, N., & Miguel, P. A. C. (2015). Application of Quality Function Deployment for the development of an organic product. *Food Quality and Preference*, 40, 180-190.
- Pinto de Moura, A., Cunha, L. M., Castro-Cunha, M., & Costa Lima, R. (2012). A comparative evaluation of women's perceptions and importance of sustainability in fish consumption: An

exploratory study among light consumers with different education levels. *Management of Environmental Quality: An International Journal*, 23(4), 451-461.

Demiryurek, K. (2010). Analysis of information systems and communication networks for organic and conventional hazelnut producers in the Samsun province of Turkey. *Agricultural Systems*, 103(7), 444-452.

Denver, S., & Christensen, T. (2015). Organic food and health concerns: A dietary approach using observed data. *NJAS – Wageningen Journal of Life Sciences*. <http://dx.doi.org/10.1016/j.njas.2015.05.001>

Ditlevsen, K., Sandøe, P., & Lassen, J. (2019). Healthy food is nutritious, but organic food is healthy because it is pure: The negotiation of healthy food choices by Danish consumers of organic food. *Food quality and preference*, 71, 46-53.

Dos Santos, G. C., & Monteiro, M. (2004). Organic system of food production. *Alimentos e Nutrição*, 15(1), 73-86 (in Portuguese).

Goetzke, B., Nitzko, S., & Spiller, A. (2014). Consumption of organic and functional food. A matter of well-being and health?. *Appetite*, 77, 96-105.

Haghiri, M., Hobbs, J. E., & McNamara, M. L. (2009). Assessing consumer preferences for organically grown fresh fruit and vegetables in Eastern New Brunswick. *International Food and Agribusiness Management Review*, 12, 81-100.

Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6, 1-17.

Jones, P., Comfort, D., & Hillier, D. (2011). Sustainability in the global shop window. *International Journal of Retail & Distribution Management*, 39(4), 256-271.

Kriwy, P., & Mecking, R. A. (2012). Health and environmental consciousness, costs of behaviour and the purchase of organic food. *International Journal of Consumer Studies*, 36(1), 30-37.

Lea, E., & Worsley, T. (2005). Australians' organic food beliefs, demographics and values. *British Food Journal*, 107, 855-869.

Lobley, M., Butler, A., & Reed, M. (2009). The contribution of organic farming to rural development: An exploration of the socio-economic linkages of organic and non-organic farms in England. *Land Use Policy*, 26(3), 723-735.

Louden, F. N., & Macrae, R. J. (2010). Federal regulation of local and sustainable food claims in Canada: A case study of Local Food Plus. *Agriculture and Human Values*, 27(2), 177-188.

Magnusson, M. K., Arvola, A., Hursti, U., Aberg, L., & Sjoden, P. (2003). Choice of organic food is related to perceived consequences for human health and to environmentally friendly behavior. *Appetite*, 40, 109–117.

Gad Mohsen, M., & Dacko, S. (2013). An extension of the benefit segmentation base for the consumption of organic foods: A time perspective. *Journal of Marketing Management*, 29(15-16), 1701-1728.

Meiselman, H. L. (2016). Quality of life, well-being and wellness: Measuring subjective health for foods and other products. *Food quality and preference*, 54, 101-109.

Norwegian Ministry for the Environment. (1994). Symposium on Sustainable Consumption. Norwegian Ministry for the Environment. Oslo

Ottman, J. (2017). The new rules of green marketing: Strategies, tools, and inspiration for sustainable branding. Routledge.

Pallant, J. (2011). SPSS Survival Manual. Retrieved from [www.allenandunwin.com/spss](http://www.allenandunwin.com/spss)

Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of retailing and consumer services*, 29, 123-134.

Pech-Lopatta, D. (2007). “Wellfood”. Healthy pleasures. In BVE (Ed.), *Consumers’ Choice ’07* (pp. 23–34). Berlin: BVE.

Polonsky, M. J. (2011). Transformative green marketing: Impediments and opportunities. *Journal of Business Research*, 64(12), 1311-1319.

Retamales, J. B. (2011). World temperate fruit production: Characteristics and challenges. *Revista Brasileira de Fruticultura* (special), 121–130 (in Portuguese).

Reutlinger, J. (2012). Sustainable Marketing: The Importance of Being a Sustainable Business.

Shaharudin, M. R., Pani, J. J., Mansor, S. W., Elias, S. J., & Sadek, D. M. (2010). Purchase intention of organic food in Kedah, Malaysia; A religious overview. *International Journal of Marketing Studies*, 2(1), 96.

Sun, W., & Zhang, L. (2019, May). Innovative Research on the Design Concept of Green Furniture Products. In *2019 International Conference on Management, Education Technology and Economics (ICMETE 2019)*. Atlantis Press.

Suprpto, B., & Wijaya, T. (2012). Intentions of Indonesian consumers on buying organic food. *International Journal of Trade, Economics and Finance*, 3(2), 114-119.

## Appendix

### Quality of life adopted from Meiselman (2016)

1. My life in relation to organic food is close to ideal
2. With regard to organic food, the conditions of my life are excellent
3. I am generally pleased with my organic food
4. Organic food give me satisfaction in daily life
5. Organic food is positive element

**Organic food consumption adopted from Goetzke et al (2014)**

How often do you generally eat the following organic products/foods with additional health benefits?

1. Organic vegetables/salads
2. Organic fruit
3. General organic food consumption
4. Organic milk and dairy products
5. Organic bread and bakery goods
6. Organic meat and sausage products
7. Organic cereal
8. Organic eggs