



A REVIEW OF ORGANIC FOOD CONSUMPTION FROM A SUSTAINABILITY PERSPECTIVE AND FUTURE RESEARCH DIRECTIONS

Chamila R. Perera¹⁺
Lester W. Johnson²
Chandana R. Hewege³

^{1,2,3} Swinburne Business School Swinburne University of Technology Cnr John
and Wakefield Streets Hawthorn VIC 3122 Australia

¹Email: chamilaperera@swin.edu.au Tel: +6192145832

²Email: lwjohnson@swin.edu.au Tel: + 61392143880

³Email: chewege@swin.edu.au Tel: +61392148842



(+ Corresponding author)

ABSTRACT

Article History

Received: 21 August 2018

Revised: 24 September 2018

Accepted: 5 November 2018

Published: 30 November 2018

Keywords

Organic food
Historical evolution
Sustainability movement
Critical literature review
Research gaps
Future research directions.

This paper reviews organic food consumption from a sustainability perspective with a view to suggesting future research directions. It gives an overview of historical evolution of organic food consumption as a sustainability movement and provides a critical review of a large body of previous research, which examines organic food consumption from various perspectives. The paper highlights some research gaps and suggests essential future research directions in the field of study: (1) a discourse analysis of the notion of organic food; (2) a systematic industry review of the multiple organic food certification systems; (3) a comparative study to examine consumers' confusion between scientifically proven health benefits of organic food and perceived value of organic food; (4) an examination of socio cultural aspects of organic food consumption; (5) an assessment of how the benefits of developing organic food markets transfer to developing countries and; (6) a development of a detailed profile of global consumers in the organic food market.

Contribution/Originality: This study contributes to the existing literature on organic food consumption by providing six future research directions. It provides a critical review of literature on organic food consumption from a sustainability perspective. The study highlights key issues and inconsistencies in the existing research findings pertaining to the research phenomenon.

1. INTRODUCTION

Originated in the early 20th century, organic food consumption is continually growing worldwide. According to the annual report of International Federation of Organic Agriculture movements (IFOAM), the existing organic market worldwide is significantly growing and worth USD billion 89.7 in 2017 (International Federation of Organic Agriculture (IFOAM), 2017a). According to previous reviews, health, product quality and environmental considerations were considered the three main antecedents of organic food consumption (Hughner *et al.*, 2007) mainly prevalent among European consumers (Thøgersen, 2009). However, considering the rapid growth of the market today, this field of research should move from focusing only on micro-behavioral aspects to macro-structural perspectives of organic food consumption.

Baker *et al.* (2004) find no association between environmental concerns and organic food consumption. In contrast, concerns over environmental, human, and animal wellbeing shared among organic food consumers are widely reported in more recent studies (e.g., (Fearne, 2008; Kearney, 2010; Thøgersen, 2010)) along with

sustainability concerns that are considered to be the prime reason for buying organic food (Monier-Dilhan and Bergès, 2016).

Sustainability is defined as the quality of not being harmful to the environment. It considers how we might live in harmony with the natural world around us, protecting it from damage and destruction (Environmental Science, 2018). Sustainable food consumption ensures the integrated implementation of patterns of food consumption and production, while respecting the carrying capacities of natural ecosystems (Food and Agriculture Organization of the United Nations (FAO), 2011).

Many consumers perceive organic food consumption as a life style choice (Schultz and Stieß, 2017; Thøgersen, 2017). Moreover, Smirnova (2012) argues that organic food consumption is a form of political action of consumers who are interested in building a sustainable society. Scalvedi and Saba (2018) also find several sustainable food consumption practices shared among organic consumers. A comprehensive review (Schleenbecker and Hamm, 2013) claims that organic food consumption is an emerging trend which is largely triggered from sustainability concerns of consumers. Thus, the researchers describe the trend as 'organic-plus' movement.

From the producers' end, IFOAM (2017b) reports that organic agriculture provides the producers in developing countries with many opportunities to win the global market. Organic Agriculture goes far beyond organic food certifications as it addresses the issues such as food insecurity, land degradation, poverty, and climate change (IFOAM, 2017a). Thus, it has become a strong contributor to sustainable development at a larger scale (Qiao *et al.*, 2016).

Based on this background, this paper argues that the phenomenon of organic food consumption should be investigated adopting a holistic approach with a sustainability perspective. It is essential to mark the important milestones in the area of organic food consumption research to extend the existing understanding of organic food consumption as a contributor to building a sustainable society. This paper, therefore, critically reviews previous literature on organic food consumption with a view to mapping the territory of the field of research and discover unmapped areas from a sustainability perspective.

This paper is organized into seven sections. Following this introduction section, the next section provides an overview of organic food consumption as a sustainability movement. A discussion on the notion of organic food is given in the third section. The fourth section discusses the issues of organic food labelling and certification systems. The fifth section details previous research on the antecedents of organic food consumption and highlights new developments in the field of research. Investigations into profiling organic food consumers are discussed in the sixth section. The final section concludes the paper suggesting several important areas of organic food consumption to be further investigated.

2. ORGANIC FOOD CONSUMPTION AS A SUSTAINABILITY MOVEMENT

Although some consumers in today's market find it difficult to know whether their food is grown organically without organic certifications, before industrialization, food was generally considered to be grown organically without using synthetic pesticides and chemical fertilizers. Considering the magnitude of the developments of the organic food market worldwide, it appears that organic food consumption has come through an evolutionary process.

Organic food consumption is one of the movements triggered from industrialization (Torjusen *et al.*, 2001). The first organized movement of organic food consumption was organized in Germany in the 1920s. The movement was centered on resisting using chemicals in farming practices. The work of Rudolf Steiner and Sir Albert Howard in the 1920s frequently appears in the historical records of the movement. Among them, according to Hall (2011) Rudolph Steiner delivered a series of lectures about the phenomenon in Poland in 1924. This is considered a landmark of the development of bio-dynamic farming which is a farming method built on the interrelationships of the soil, plants and animals.

The term of organic farming was coined by Sir Albert Howard, who marked another landmark of the organic agriculture movement by publishing a book entitled, *An Agricultural Testament* in 1943 (Heckman, 2005; Hall, 2011). This publication is considered one of the seminal works pertaining to the organic agriculture movement. Put simply, Sir Albert argued that all farm production should be based on *the Law of Return* whereby soil fertility is ensured. The argument of *the Law of Return* was built on criticisms of soil mismanagement and become central to organic farming.

In 1940, writing another influential book in organic agriculture entitled, *Look to the Land*, Walter Northbourne introduced the term *organic* as well as other agricultural practices such as managing a farm as an *organic whole*. In 1946, Lady Eve Balfour set up the Soil Association in the UK (IFOAM, 2017a). Lady Eve Balfour also produced a publication entitled, *The Living Soil*, a book that compared organic and non-organic farming methods. Further, in 1940, Jerome Rodale introduced the term *organic agriculture* along with some other organic agricultural practices in the USA. In 1962, the publication of *Silent Spring* by Rachel Carson also inspired many consumers to engage in organic food consumption.

During the decade of the 1990s, a considerable number of consumers had become interested in organic food, food safety, and environmental wellbeing. In 2017, according to IFAOM's records, 57.8 million hectares of organic agricultural land is available worldwide, 178 countries engage in organic food agriculture and the existing organic market is worth of USD 89.7 billion (IFOAM, 2017a). This indicates that the organic food market has clearly moved beyond being a niche which caters to a handful of consumers who seek personal benefits of organic food.

The majority of organic consumers are reported to be located in the European countries (e.g., Germany, Great Britain, Denmark, Italy, France and Austria) and the USA (Lockie *et al.*, 2006; Thøgersen, 2009; IFOAM, 2017a). The global demand for organic food also offers a great opportunity to improve lives of producers and consumers in developing countries (IFOAM, 2017a). Nevertheless, according to some critical research, whilst producers in developed countries can successfully meet some of the sustainability standards of organic food production, this is a huge challenge for those in developing countries (Minten *et al.*, 2015).

Chiputwa *et al.* (2015) argue that although consumers in the developed countries are willing to pay significant price premiums for organic food which meets sustainability standards, how effectively these benefits reach the producing countries especially the farmers in the poor countries (e.g., Uganda and Ethiopia) is unknown. According to Qiao *et al.* (2016) although the price premiums could compensate for some extra costs, among other factors, smaller plot sizes in poor countries inhibit gaining all the benefits of organic food production. This definitely indicates an area of further investigation.

3. THE NOTION OF ORGANIC FOOD

The term *organic* is rooted in *bio* from Greek *bios* meaning life or way of living (Essoussi and Zahaf, 2008). Generally, *organic food* connotes food that is produced without using synthetic pesticides and chemical fertilizers. In its simplest form, the term *organic* denotes the meaning of *natural*. Further, the term is widely used interchangeably with other terms such as *organic food*, *organic farming*, and *organic agriculture*.

Organic food is defined as food which is produced without using most conventional pesticides (United States Department of Agriculture, 2005). The definitions of organic farming are largely constructed around zero-chemical use in production systems (Honkanen *et al.*, 2006). Overall, it can be seen that the emphasis on biological, natural, environmental friendliness of and limited use of chemical in production systems is common in articulating the notion of organic food.

Consumers generally share an understanding of the term that is built on discourses such as natural, made without man-made fertilisers, pesticides, herbicides, additives or genetically modified ingredients, and fair-trade (Poulston and Yiu, 2011). Some consumers believe that *organic* is equivalent to *free-range* food (Harper and

Makatouni, 2002) tastes better (Van Loo *et al.*, 2013) and is more expensive than conventional food (Pearson *et al.*, 2011).

According to IFOAM, four principles guide organic farming; health (health of soil, plants, animals, humans and the planet), ecology (ensuring ecological systems), fairness (harmonious relationships with the environment), and care (wellbeing of current and future generations and the environment). These principles seem also to be the general focus of many organic food certification schemes. However, according to Aarset *et al.* (2004) most consumers are confused about the meaning of the term organic. Overall, contentious issues in defining organic food have not yet been resolved in organic food consumption literature (e.g., (Howard and Allen, 2006; Larceneux *et al.*, 2012)).

4. ORGANIC FOOD LABELLING AND CERTIFICATION SYSTEMS

Rudolph Steiner's work in promoting organic food production and consumption in Poland in 1924 is considered a landmark of organic agriculture. Steiner's bio-dynamic farming method set the foundation in establishing a formal system of certification and labelling for biodynamic farming in 1924, namely, Demeter, which was later coupled with the Demeter symbol. This certification system had become one of the largest organic certification and labelling systems.

However, consumers who are interested in purchasing organic food seem to find inconsistencies among multiple organic food labelling and certification schemes (Bonti-Ankomah and Yiridoe, 2006). Previous research finds several issues associated with organic labelling and certification systems in the context of organic food labelling. Pivato *et al.* (2008) find that although 38.5% of their survey respondents declare that they sought out organic food labels (e.g., EU organic label), only 12.5% of them are able to describe those labels. There is also a lack of trust in those certification schemes among consumers (Bhaskaran *et al.*, 2006). Previous research highlights the use of diverse terminologies such as organic, green and environmentally friendly (Zhao *et al.*, 2007) and multiple certification schemes (Bhaskaran *et al.*, 2006) are some of the reasons behind the consumer distrust.

According to McCarthy and Murphy (2013) although some consumers have knowledge to distinguish organic food from conventional food, they do not know about the requirements of organic food standards. Aprile *et al.* (2012) find that consumers are willing to pay a higher premium price for a product with a country of origin label than for a product carrying an organic farming label. Further, when brand equity is high (low), the organic label appears less (more) effective. However, it is also found that an organic label makes the environmentally friendly attribute salient, which has a positive impact on perceived quality (Larceneux *et al.*, 2012).

Ongoing debates on the impact of organic labelling and certification schemes on organic food consumption still appear in previous research (e.g., (Howard and Allen, 2006; Larceneux *et al.*, 2012)). Overall, this section of the review calls for further investigations into the impact of organic labelling and certification schemes on organic food consumption in the context of consumers' knowledge, perceptions and trust of them. Systematic industry reviews of the multiple organic food certification schemes are also necessary.

5. ANTECEDENTS OF ORGANIC FOOD CONSUMPTION

Informed by the theory of planned behavior, a large body of previous research identifies several antecedents of organic food consumption (e.g., (Chakrabarti and Baisya, 2007; Aertsens *et al.*, 2009; Guido *et al.*, 2010)). Among the antecedents of organic food consumption, attitudes (Oates *et al.*, 2012) health and safety concerns (Walley *et al.*, 2009; McCarthy and Murphy, 2013) environmental and animal wellbeing concerns (Pearson, 2012; McCarthy and Murphy, 2013) are often documented.

Despite several studies providing compelling evidence of strong association between consumer attitudes and organic food consumption (e.g., (Aschemann *et al.*, 2007; Kihlberg and Risvik, 2007)) some other studies claim that consumers do not convert those attitudes towards actual purchase or consumption of organic food (Sahota, 2009;

Schaack and Willer, 2010). This indicates an attitude-behavior gap in organic food consumption (Aschemann *et al.*, 2007; Kihlberg and Risvik, 2007; Sahota, 2009; Schaack and Willer, 2010; Smith and Paladino, 2010; Pearson *et al.*, 2011). Limited access to organic food (Lund *et al.*, 2013) skepticism towards the genuineness of claims of organic food producers (Bhaskaran *et al.*, 2006; Smed *et al.*, 2013) higher prices and not having scientific evidence of health benefits (e.g., (Lockie *et al.*, 2002; Brennan *et al.*, 2003; Dangour *et al.*, 2010; Kluger, 2010; Bezawada and Pauwels, 2013)) are found to inhibit transferring favorable attitudes toward organic food into actual consumption.

Contentious debates surrounding scientifically proven health benefits of organic food (Dangour *et al.*, 2010; Palupi *et al.*, 2012; Smith-Spangler *et al.*, 2012) also appear to distort consumers' understanding of and willingness to purchase organic food. Some other studies, however, find that consumers disregard those unfavorable factors and continue to purchase organic food based on an assumption that organic food is healthier and safer. Overall, consumers share higher perceived value of organic food (Gil *et al.*, 2000; Zanolli and Naspetti, 2002; Chang and Zepeda, 2005; Radman, 2005; Bonti-Ankomah and Yiridoe, 2006; Gil and Soler, 2006; Magkos *et al.*, 2006).

According to Pieniak *et al.* (2010) favorable attitudes towards organic vegetables are directly and positively associated with organic good consumption. As such, when encouraging organic food consumption, the researchers recommend to provide consumer with opportunities to have personal (subjective) experience of organic food consumption to reinforce developing more favorable attitudes towards organic food. To this end, Juhl *et al.* (2017) also confirm that subject to behavioral costs of adopting organic food consumption, consumers show a tendency to buy an increasing number of organic product categories over time.

Pointing a new direction of research which moves beyond the antecedents of organic food consumption, Thøgersen (2010) develops a comprehensive model including macro factors of organic food consumption (e.g., food culture, post-materialism and environmental concerns) and other structural factors (e.g., soil, conditions, distribution systems). Thøgersen (2011) argues that solely focusing only on the antecedents of organic consumption inhibits gaining a deeper understanding of the phenomenon. To this end, some researchers also suggest to incorporate moral attitude (a measure reflecting positive, self-rewarding feeling of doing the right thing) into the theory planned behavior to enhance the predictability of purchase intentions of organic products (Arvola *et al.*, 2008).

Adopting an alternative theoretical approach to extend the existing understanding of organic food consumption, Aertsens *et al.* (2009) find that values such as security, hedonism, universalism, benevolence, stimulation, self-direction, and conformity are positively associated with organic food consumption. Chryssohoidis and Krystallis (2005) also find that internal values, such as self-respect and enjoyment of life are the main motives for organic food consumption, corresponding to the motives of healthiness and better taste of the organic products.

Informed by a survey among a representative sample of approximately 4,000 respondents, Thøgersen (2011) also find that buying organic food is positively related to noble values (i.e., universalism) but not self-centered values (e.g., status, pleasure). Thus, the researcher suggests that whilst consumers at least start to buy these products for selfless reasons, eventually the consumers seek other self-centered benefits of organic food consumption (e.g., enhancing a self-image).

Pieniak *et al.* (2010) also investigate the relationship between subjective and objective knowledge about organic food, and organic food consumption. They find that consumer experienced based subjective knowledge is significantly associated with organic food consumption whereas objective knowledge is only indirectly associated with organic food consumption. Overall, it can be seen that organic food consumption is transferred to a life style choice of consumers as opposed to one particular activity.

Some research reports compelling evidence that consumers are aware of the favorable environmental effects of organic farming and hence environmental concern is positively associated with organic food consumption (Magnusson *et al.*, 2003; Pivato *et al.*, 2008; Chen, 2009). Further, perceptions of the relationship between humans

and the natural environment influence organic consumption. As such, consumers who do not believe in dominating nature tend to favor organic food than those who do (Tenbült *et al.*, 2008).

External values, such as belonging, corresponding to the motive of environmental protection through organic cultivation, are, however, reported to have weaker association with organic food consumption (Chryssohoidis and Krystallis, 2005). This is confirmed by another study which finds that altruistic motivation (moral responsibility for the environment) does not have an association with organic food consumption (Arvola *et al.*, 2008). It can be seen that previous findings on the association between environmental concerns and organic food consumption are inconsistent. However, more recent investigations claim sustainability concerns are widely shared among organic food consumers (Scalvedi and Saba, 2018) and organic food is the most successful product category within the growing ethical and sustainable products market (Juhl *et al.*, 2017). This development clearly warrants further investigations into the phenomenon moving beyond the personal benefits of organic food consumption.

6. PROFILING ORGANIC FOOD CONSUMERS

The rapid growth of the organic food market demands well-established consumer profiles of the market. They could be useful in segmenting the market and informing the best strategy developments to cater for each segment (Laing and Frost, 2010). To this end, most of the European countries have well-structured systems to cater for the consumers who are profiled as: less price-sensitive, more concerned with food quality (Krystallis *et al.*, 2006) highly educated (Gonzalez, 2009; Dimitri and Dettmann, 2012; Hamzaoui-Essoussi and Zahaf, 2012) earn high income (Gonzalez, 2009; Dimitri and Dettmann, 2012) health conscious (Hamzaoui-Essoussi and Zahaf, 2012) and females (von Meyer-Höfer *et al.*, 2015).

Aslihan and Karakaya (2014) perform a cluster analysis based on attitude toward organic food to classify three segments of the organic food market in a European city: favorable, neutral and unfavorable. They find that the favorable attitudes segment exhibits highest levels of health consciousness and socially responsible consumption behavior. Informed by major Danish retailer's panel scanner data of organic food purchases, Juhl *et al.* (2017) identify three segments of the organic food market: identifiable, accessible, and actionable dynamic customer segments.

It can be seen that most of the above studies are limited to specific countries and they mostly profile European consumers in the organic food market. Only a few investigations into consumer profiling can be found in non-European countries (e.g., (Jain and Kaur, 2004; Krishna and Qaim, 2008)). Given that organic food consumption has evolved as a movement decade ago and rapidly spreading in many other countries, a detailed profile of consumers who consume organic food in today's global market should also be developed.

7. CONCLUSION AND FUTURE RESEARCH DIRECTIONS

This paper reviews organic food consumption from a sustainability perspective with a view to suggesting future research directions. As discussed in the second section, organic food consumption clearly demonstrates the signs of a sustainability movement which has the potential to make substantial transformations toward a sustainable consumer society. However, the growth and sustainability of the movement depends on several micro and macro aspects. Followed by a critical review of existing literature, this section concludes the paper highlighting several research directions to be considered in future research in the field of study representing both aspects.

Despite the rapid level of acceptance of organic food consumption by consumers and organic agriculture shared among many countries, there seems to be no universally agreed definition of organic food. Consumers, producers, organic food advocates and other institutions in the market share only a general understanding that organic food is natural, made without man-made fertilizers, pesticides, herbicides, additives or genetically modified ingredients. A discourse analysis of the notion which explores its evolution corresponding to various social contexts in the global market could extend the existing understanding.

At a large scale, organic agriculture is considered to be providing many opportunities for developing countries in economic development and alleviating poverty. However, there has been limited empirical research regarding how effectively those developing countries yield actual benefits of certified organic production, particularly when organic agriculture is combined with organic food certification schemes. Some critical research argues that developing countries find it challenging to meet the international standards of organic food production. Considering the circumstances, the phenomenon clearly warrants further investigations from sustainability and free trade perspectives in the global marketplace. A systematic industry reviews of the various organic food certification schemes and their influence on organic food consumption and production practices are also necessary.

Previous research widely establishes the association between several antecedents of organic food consumption. Therefore, it is high time that researchers move beyond this macro level analysis of organic food consumption. There is, however, a clear research gap in the field of study to explore consumers' confusion between scientifically proven health benefits of organic food and perceived value of organic food. More importantly, other macro level aspects of organic food consumption (e.g., internal political systems and free trade agreements, legal definitions, standards and food labelling systems, financial support to farmers) should be given a priority in future research

The paper also highlights that more recent research which claims that organic food consumption has become a life style choice among consumers. Some consumers engage in organic food consumption as a form of resistance to environmentally unfavorable market practices. As such other macro factors, consumer cultural and boycott practices in the context of organic food consumption should be investigated.

Lastly, a detailed profile of consumers who consume organic food mostly in the European region can be seen in previous literature. However, there has been a little comparative research aiming at systematically examining the differences in organic food consumption across the countries and develop a detailed profile of global consumers in the organic food market.

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

Contributors/Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES

- Aarset, B., S. Beckmann, E. Bigne, M. Beveridge, T. Bjorndal, J. Bunting, P. McDonagh, C. Mariojouis, J. Muir and A. Prothero, 2004. The European consumers' understanding and perceptions of the "organic" food regime: The case of aquaculture. *British Food Journal*, 106(2): 93-105. Available at: <https://doi.org/10.1108/00070700410516784>.
- Aertsens, J., W. Verbeke, K. Mondelaers and G.V. Huylenbroeck, 2009. Personal determinants of organic food consumption: A review. *British Food Journal*, 111(10): 1140-1167.
- Aprile, M.C., V. Caputo and R.M. Nayga Jr, 2012. Consumers' valuation of food quality labels: The case of the European geographic indication and organic farming labels. *International Journal of Consumer Studies*, 36(2): 158-165. Available at: <https://doi.org/10.1111/j.1470-6431.2011.01092.x>.
- Arvola, A., M. Vassallo, M. Dean, P. Lampila, A. Saba, L. Lähteenmäki and R. Shepherd, 2008. Predicting intentions to purchase organic food: The role of affective and moral attitudes in the theory of planned behaviour. *Appetite*, 50(2-3): 443-454. Available at: <https://doi.org/10.1016/j.appet.2007.09.010>.
- Aschemann, J., U. Hamm, S. Naspetti and R. Zanolli, 2007. The organic market. *Organic farming: An International History*. Lockeretz, W., (Ed), Trowbridge: CAB International, Cromwell Press. pp: 123-151.
- Aslihan, N.V. and F. Karakaya, 2014. Consumer segments in organic foods market. *Journal of Consumer Marketing*, 31(4): 263-277. Available at: <https://doi.org/10.1108/jcm-01-2014-0845>.
- Baker, S., K.E. Thompson, J. Engelken and K. Huntley, 2004. Mapping the values driving organic food choice: Germany vs the UK. *European Journal of Marketing*, 38(8): 995-1012. Available at: <https://doi.org/10.1108/03090560410539131>.

- Bezawada, R. and K. Pauwels, 2013. What is special about marketing organic products? How organic assortment, price, and promotions drive retailer performance. *Journal of Marketing*, 77(1): 31-51. Available at: <https://doi.org/10.1509/jm.10.0229>.
- Bhaskaran, S., M. Polonsky, J. Cary and S. Fernandez, 2006. Environmentally sustainable food production and marketing: Opportunity or hype? *British Food Journal*, 108(8): 677-690. Available at: <https://doi.org/10.1108/00070700610682355>.
- Bonti-Ankomah, S. and E.K. Yiridoe, 2006. Organic and conventional food: A literature review of the economics of consumer perceptions and preferences. *Organic Agriculture Centre of Canada*, 59: 1-40.
- Brennan, C., K. Gallagher and M. McEachern, 2003. A review of the 'consumer interest' in organic meat. *International Journal of Consumer Studies*, 27(5): 381-394. Available at: <https://doi.org/10.1046/j.1470-6431.2003.00307.x>.
- Chakrabarti, S. and R.K. Baisya, 2007. Purchase motivations and attitudes of organic food buyers. *Decision*, 34(1): 1-22.
- Chang, H.S. and L. Zepeda, 2005. Consumer perceptions and demand for organic food in Australia: Focus group discussions. *Renewable Agriculture and Food Systems*, 20(3): 155-167. Available at: <https://doi.org/10.1079/raf2004103>.
- 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(2): 165-178. Available at: <https://doi.org/10.1108/00070700910931986>.
- Chiputwa, B., D.J. Spielman and M. Qaim, 2015. Food standards, certification, and poverty among coffee farmers in Uganda. *World Development*, 66(1): 400-412. Available at: <https://doi.org/10.1016/j.worlddev.2014.09.006>.
- Chrysosoidis, G.M. and A. Krystallis, 2005. Organic consumers' personal values research: Testing and validating the list of values (LOV) scale and implementing a value-based segmentation task. *Food Quality and Preference*, 16(7): 585-599. Available at: <https://doi.org/10.1016/j.foodqual.2005.01.003>.
- Dangour, A.D., K. Lock, A. Hayter, A. Aikenhead, E. Allen and R. Uauy, 2010. Nutrition-related health effects of organic foods: A systematic review. *The American Journal of Clinical Nutrition*, 92(1): 203-210. Available at: <https://doi.org/10.3945/ajcn.2010.29269>.
- Dimitri, C. and R.L. Dettmann, 2012. Organic food consumers: What do we really know about them? *British Food Journal*, 114(8): 1157-1183. Available at: <https://doi.org/10.1108/00070701211252101>.
- Environmental Science, 2018. What is sustainability and why is it important? Available from <https://www.environmentalscience.org/sustainability> [Accessed 10th October, 2018].
- Essoussi, H.L. and M. Zahaf, 2008. Decision making process of community organic food consumers: An exploratory study. *Journal of Consumer Marketing*, 25(2): 95-104. Available at: <https://doi.org/10.1108/07363760810858837>.
- Fearne, A., 2008. Organic fruit and vegetables—who buys what and why and do we have a clue. Canterbury, UK: Kent Business School, University of Kent.
- Food and Agriculture Organization of the United Nations (FAO), 2011. Sustainable food systems program. Available from www.fao.org/ag/ags/sustainable-food-consumption-and-production/en/ [http://www.fao.org/fileadmin/templates/ags/docs/SFCP/Flyer_EN_01.pdf] [Accessed 18th October, 2018].
- Gil, J.M., A. Gracia and M. Sanchez, 2000. Market segmentation and willingness to pay for organic products in Spain. *The International Food and Agribusiness Management Review*, 3(2): 207-226. Available at: [https://doi.org/10.1016/s1096-7508\(01\)00040-4](https://doi.org/10.1016/s1096-7508(01)00040-4).
- Gil, J.M. and F. Soler, 2006. Knowledge and willingness to pay for organic food in Spain: Evidence from experimental auctions. *Acta Agriculturae Scand Section C*, 3(3-4): 109-124. Available at: <https://doi.org/10.1080/16507540601127656>.
- Gonzalez, A.J.A., 2009. Market trends and consumer profile at the organic farmers market in Costa Rica. *British Food Journal*, 111(5): 498-510. Available at: <https://doi.org/10.1108/00070700910957320>.
- Guido, G., M.I. Prete, A.M. Peluso, R.C. Maloumy-Baka and C. Buffa, 2010. The role of ethics and product personality in the intention to purchase organic food products: A structural equation modeling approach. *International Review of Economics*, 57(1): 79-102. Available at: <https://doi.org/10.1007/s12232-009-0086-5>.

- Hall, S.B., 2011. Australia's organic trilemma: Public versus private organic food standardisation. Tasmania: University of Tasmania.
- Hamzaoui-Essoussi, L. and M. Zahaf, 2012. Canadian organic food consumers' profile and their willingness to pay premium prices. *Journal of International Food & Agribusiness Marketing*, 24(1): 1-21. Available at: <https://doi.org/10.1080/08974438.2011.621834>.
- Harper, G.C. and A. Makatouni, 2002. Consumer perception of organic food production and farm animal welfare. *British Food Journal*, 104(3/4/5): 287-299. Available at: <https://doi.org/10.1108/00070700210425723>.
- Heckman, J., 2005. A history of organic farming: Transitions from Sir Albert Howard's war in the soil to USDA national organic program. *Renewable Agriculture and Food Systems*, 21(3): 143-150.
- Honkanen, P., B. Verplanken and S.O. Olsen, 2006. Ethical values and motives driving organic food choice. *Journal of Consumer Behaviour: An International Research Review*, 5(5): 420-430. Available at: <https://doi.org/10.1002/cb.190>.
- Howard, P.H. and P. Allen, 2006. Beyond organic: Consumer interest in new labelling schemes in the Central Coast of California. *International Journal of Consumer Studies*, 30(5): 439-451. Available at: <https://doi.org/10.1111/j.1470-6431.2006.00536.x>.
- Hughner, R.S., P. McDonagh, A. Prothero, C.J. Shultz and J. Stanton, 2007. Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour: An International Research Review*, 6(2-3): 94-110. Available at: <https://doi.org/10.1002/cb.210>.
- IFOAM, 2017b. Launch of policy toolkit highlighting public support to organic agriculture in over 80 countries. Available from <https://www.ifoam.bio/en/global-policy-toolkit-public-support-organic-agriculture> [Accessed 8th Oct, 2018].
- International Federation of Organic Agriculture (IFOAM), 2017a. Cultivating change. Available from <https://www.ifoam.bio/en/search?find=cultivating%22+Change> [Accessed 8th October 2018].
- Jain, S.K. and G. Kaur, 2004. Green marketing: An attitudinal and behavioural analysis of Indian consumers. *Global Business Review*, 5(2): 187-205. Available at: <https://doi.org/10.1177/097215090400500203>.
- Juhl, H.J., M.H. Fenger and J. Thøgersen, 2017. Will the consistent organic food consumer step forward? An empirical analysis. *Journal of Consumer Research*, 44(3): 519-535. Available at: <https://doi.org/10.1093/jcr/ucx052>.
- Kearney, J., 2010. Food consumption trends and drivers. *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 365(1554): 2793-2807.
- Kihlberg, I. and E. Risvik, 2007. Consumers of organic foods—value segments and liking of bread. *Food Quality and Preference*, 18(3): 471-481. Available at: <https://doi.org/10.1016/j.foodqual.2006.03.023>.
- Kluger, J., 2010. What's so great about organic food? *Time Magazine*, 196(10): 30-32.
- Krishna, V.V. and M. Qaim, 2008. Consumer attitudes toward GM food and pesticide residues in India. *Review of Agricultural Economics*, 30(2): 233-251. Available at: <https://doi.org/10.1111/j.1467-9353.2008.00402.x>.
- Krystallis, A., C. Fotopoulos and Y. Zotos, 2006. Organic consumers' profile and their willingness to pay (WTP) for selected organic food products in Greece. *Journal of International Consumer Marketing*, 19(1): 81-106. Available at: https://doi.org/10.1300/j046v19n01_05.
- Laing, J. and W. Frost, 2010. How green was my festival: Exploring challenges and opportunities associated with staging green events. *International Journal of Hospitality Management*, 29(2): 261-267. Available at: <https://doi.org/10.1016/j.ijhm.2009.10.009>.
- Larceneux, F., F. Benoit-Moreau and V. Renaudin, 2012. Why might organic labels fail to influence consumer choices? Marginal labelling and brand equity effects. *Journal of Consumer Policy*, 35(1): 85-104. Available at: <https://doi.org/10.1007/s10603-011-9186-1>.
- Lockie, S., D. Halpin and D. Pearson, 2006. "Understanding the market for organic food" In *Organic agriculture: a global perspective*, edited by P. Kristiansen, A. Taji, and J. Reganold. Collinwood: CSIRO Publishing. pp: 245-258.
- Lockie, S., K. Lyons, G. Lawrence and K. Mummery, 2002. Eating 'green': Motivations behind organic food consumption in Australia. *Sociologia Ruralis*, 42(1): 23-40. Available at: <https://doi.org/10.1111/1467-9523.00200>.

- Lund, T.B., L.M. Andersen and K. O'Doherty Jensen, 2013. The emergence of diverse organic consumers: Does a mature market undermine the search for alternative products? *Sociologia Ruralis*, 53(4): 454-478. Available at: <https://doi.org/10.1111/soru.12022>.
- Magkos, F., F. Arvaniti and A. Zampelas, 2006. Organic food: Buying more safety or just peace of mind? A critical review of the literature. *Critical Reviews in Food Science and Nutrition*, 46(1): 23-56. Available at: <https://doi.org/10.1080/10408690490911846>.
- Magnusson, M.K., A. Arvola, U.-K.K. Hursti, L. Åberg and P.-O. Sjöden, 2003. Choice of organic foods is related to perceived consequences for human health and to environmentally friendly behaviour. *Appetite*, 40(2): 109-117. Available at: [https://doi.org/10.1016/s0195-6663\(03\)00002-3](https://doi.org/10.1016/s0195-6663(03)00002-3).
- McCarthy, B. and L. Murphy, 2013. Who's buying organic food and why? Political consumerism, demographic characteristics and motivations of consumers in North Queensland. *Tourism & Management Studies*, 9(1): 72-79.
- Minten, B.J., M. Dereje, E. Engeda and S. Tamru, 2015. Who benefits from the rapidly increasing voluntary sustainability standards? Evidence from fairtrade and organic coffee in Ethiopia. In *International Association of Agricultural Economists.*, edited by, pp. Milan, Italy: International Association of Agricultural Economists.
- Monier-Dilhan, S. and F. Bergès, 2016. Consumers' motivations driving organic demand: Between self-interest and sustainability. *Agricultural and Resource Economics Review*, 45(3): 522-538. Available at: <https://doi.org/10.1017/age.2016.6>.
- Oates, L., M. Cohen and L. Braun, 2012. Characteristics and consumption patterns of Australian organic consumers. *Journal of the Science of Food and Agriculture*, 92(14): 2782-2787. Available at: <https://doi.org/10.1002/jsfa.5664>.
- Palupi, E., A. Jayanegara, A. Ploeger and J. Kahl, 2012. Comparison of nutritional quality between conventional and organic dairy products: A meta-analysis. *Journal of the Science of Food and Agriculture*, 92(14): 2774-2781. Available at: <https://doi.org/10.1002/jsfa.5639>.
- Pearson, D., 2012. Consumer concerns: Is organic food important in an environmentally responsible diet. *Journal of Organic Systems*, 7(2): 49-60.
- Pearson, D., J. Henryks and H. Jones, 2011. Organic food: What we know (and do not know) about consumers. *Renewable Agriculture and Food Systems*, 26(2): 171-177. Available at: <https://doi.org/10.1017/s1742170510000499>.
- Pieniak, Z., J. Aertsens and W. Verbeke, 2010. Subjective and objective knowledge as determinants of organic vegetables consumption. *Food Quality and Preference*, 21(6): 581-588. Available at: <https://doi.org/10.1016/j.foodqual.2010.03.004>.
- Pivato, S., N. Misani and A. Tencati, 2008. The impact of corporate social responsibility on consumer trust: The case of organic food. *Business Ethics: A European review*, 17(1): 3-12. Available at: <https://doi.org/10.1111/j.1467-8608.2008.00515.x>.
- Poulston, J. and A.Y.K. Yiu, 2011. Profit or principles: Why do restaurants serve organic food? *International Journal of Hospitality Management*, 30(1): 184-191. Available at: <https://doi.org/10.1016/j.ijhm.2010.04.004>.
- Qiao, Y., N. Halberg, S. Vaheesan and S. Scott, 2016. Assessing the social and economic benefits of organic and fair trade tea production for small-scale farmers in Asia: A comparative case study of China and Sri Lanka. *Renewable Agriculture and Food Systems*, 31(3): 246-257. Available at: <https://doi.org/10.1017/s1742170515000162>.
- Radman, M., 2005. Consumer consumption and perception of organic products in Croatia. *British Food Journal*, 107(4): 263-273. Available at: <https://doi.org/10.1108/00070700510589530>.
- Sahota, A., 2009. The global market for organic food & drink. In *The World of Organic Agriculture*. Bonn, Frick and Geneva. ITC/FIBL/IFOAM, edited by H. Willer and L. Kilcher.
- Scalvedi, M.L. and A. Saba, 2018. Exploring local and organic food consumption in a holistic sustainability view. *British Food Journal*, 120(4): 749-762. Available at: <https://doi.org/10.1108/bfj-03-2017-0141>.
- Schaack, D. and H. Willer, 2010. Development of the organic market in Europe. *The World of Organic Agriculture. Statistics and Emerging Trends*: 141-144.

- Schleenbecker, R. and U. Hamm, 2013. Consumers' perception of organic product characteristics. A review. *Appetite*, 71: 420-429. Available at: <https://doi.org/10.1016/j.appet.2013.08.020>.
- Schultz, I. and I. Stieß, 2017. Linking sustainable consumption to everyday life. New York: Routledge. pp: 288-303.
- Smed, S., L.M. Andersen, N. Kærgård and C. Daugbjerg, 2013. A matter of trust: How trust influence organic consumption. *Journal of Agricultural Science*, 5(7): 91-106. Available at: <https://doi.org/10.5539/jas.v5n7p91>.
- Smirnova, M., 2012. Organic food. *The Wiley-Blackwell Encyclopedia of Globalization*.
- Smith-Spangler, C., M.L. Brandeau, G.E. Hunter, J.C. Bavinger, M. Pearson, P.J. Eschbach, V. Sundaram, H. Liu, P. Schirmer and C. Stave, 2012. Are organic foods safer or healthier than conventional alternatives? A systematic review. *Annals of Internal Medicine*, 157(5): 348-366. Available at: <https://doi.org/10.7326/0003-4819-157-7-201210020-00021>.
- Smith, S. and A. Paladino, 2010. Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal*, 18(2): 93-104. Available at: <https://doi.org/10.1016/j.ausmj.2010.01.001>.
- Tenbült, P., N.K. de Vries, E. Dreezens and C. Martijn, 2008. Intuitive and explicit reactions towards "new" food technologies: Attitude strength and familiarity. *British Food Journal*, 110(6): 622-635. Available at: <https://doi.org/10.1108/00070700810877924>.
- Thøgersen, J., 2009. Consumer decision-making with regard to organic food products. In *Traditional food production and rural sustainable development: An European challenge*, edited by T. D. N. Vaz, P. Nijkamp, and J.-L. Rastoin. Farnham: Ashgate Publishing Ltd. pp: 173-194.
- Thøgersen, J., 2010. Country differences in sustainable consumption: The case of organic food. *Journal of Macromarketing*, 30(2): 171-185. Available at: <https://doi.org/10.1177/0276146710361926>.
- Thøgersen, J., 2011. Green shopping: For selfish reasons or the common good? *American Behavioral Scientist*, 55(8): 1052-1076. Available at: <https://doi.org/10.1177/0002764211407903>.
- Thøgersen, J., 2017. Sustainable food consumption in the nexus between national context and private lifestyle: A multi-level study. *Food Quality and Preference*, 55: 16-25. Available at: <https://doi.org/10.1016/j.foodqual.2016.08.006>.
- Torjusen, H., G. Lieblein, M. Wandel and C.A. Francis, 2001. Food system orientation and quality perception among consumers and producers of organic food in Hedmark County, Norway. *Food Quality and Preference*, 12(3): 207-216. Available at: [https://doi.org/10.1016/s0950-3293\(00\)00047-1](https://doi.org/10.1016/s0950-3293(00)00047-1).
- United States Department of Agriculture, 2005. Regional coverage: Beijing. [Accessed 17th October, 2018].
- Van Loo, E.J., M.N.H. Diem, Z. Pieniak and W. Verbeke, 2013. Consumer attitudes, knowledge, and consumption of organic yogurt. *Journal of Dairy Science*, 96(4): 2118-2129. Available at: <https://doi.org/10.3168/jds.2012-6262>.
- von Meyer-Höfer, M., V. von der Wense and A. Spiller, 2015. Characterising convinced sustainable food consumers. *British Food Journal*, 117(3): 1082-1104. Available at: <https://doi.org/10.1108/bfj-01-2014-0003>.
- Walley, A.J., J.E. Asher and P. Froguel, 2009. The genetic contribution to non-syndromic human obesity. *Nature Reviews Genetics*, 10(7): 431-442. Available at: <https://doi.org/10.1038/nrg2594>.
- Zanoli, R. and S. Naspetti, 2002. Consumer motivations in the purchase of organic food: A means-end approach. *British Food Journal*, 104(8): 643-653. Available at: <https://doi.org/10.1108/00070700210425930>.
- Zhao, X., E. Chambers IV, Z. Matta, T.M. Loughin and E.E. Carey, 2007. Consumer sensory analysis of organically and conventionally grown vegetables. *Journal of Food Science*, 72(2): S87-S91. Available at: <https://doi.org/10.1111/j.1750-3841.2007.00277.x>.

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Management and Sustainability shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.