

Who are organic food consumers? A compilation and review of why people purchase organic food

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• This paper integrates and synthesizes the findings of published research on organic food consumption. We identify several themes that reflect the various rationales used by consumers when deciding to purchase organic food. The literature clearly indicates that the word "organic" has many meanings, that consumers of organic foods are not homogeneous in demographics or in beliefs, and that further research could help better describe the various constituencies that are often lumped together as "organic food consumers". The organic and broader food industries must better understand the variety of motivations, perceptions, and attitudes consumers hold regarding organic foods and their consumption if their own long-term interests, as well as those of other stakeholders of food marketing, are to be best served. We conclude with implications and suggestions for further research. Copyright © 2007 John Wiley & Sons, Ltd.

Introduction

Interest in organic food has grown remarkably as consumers and marketers react to popular media about health and environmental effects of pesticides, genetically-modified organisms, and food safety. This gradual evolution of attitudes toward the origins of the food we eat has not been sufficiently captured in most of the published literature about food-purchasing

behavior. Indeed, the rising popularity of organic foods – a multi-billion dollar global industry with accelerating growth – raises important questions of interest to governments, growers, distributors, retailers, industry planners, and marketers. Among those questions are: (1) Who is the organic food consumer? (2) What are the forces and factors driving organic food consumption? (3) What will the organic market look like in the future? (4) What, if any, policies should be implemented to abet this market and consumer welfare? The purpose of this paper is to synthesize the findings of published studies and thereby to begin answering these questions.

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Answering such questions requires recognition of the complexity and diversity of consumer decision-making vis-à-vis organics. One must first understand that individuals interpret the term organic in a variety of ways and in a multitude of contexts. Consumer purchase decisions are based on subjective experiences and perceptions of organic foods. Therefore, in this paper we compile findings from extant studies to extract the themes that can serve as the foundation for more in-depth research on organic food consumption. We identify several themes that reveal individuals' perceptions of organic food. We also identify specific advances needed in our understanding of the topic to provide a guide for future studies. Our goal is to provide lessons about organic food consumers to the various stakeholders - growers, retailers/marketers, policymakers, and special interest groups - such that their strategies better reflect consumer interests and perceptions.

The global organic market

Published findings have produced commonalities and contradictions and so it is difficult to say with confidence what the size of the global organic market actually is. It is possible, however, to make a number of observations. Firstly, and perhaps most importantly, the organic market is growing; it has increased considerably in recent years and is frequently regarded as one of the biggest growth markets in the food industry. The global market for organic food was estimated at US\$ 20 billion in 2002 (Fitzpatrick, 2002). In the United Kingdom, sales increased from £100 million in 1994 to £ 605 million in 2000 (Palmer, 2001). In 2005 UK consumers spent over £1.5 billion GBP on food and drink, an increase of 30% on 2004 spending figure (Murphy, 2006). In Europe, more broadly, it has been estimated that sales of organic food will increase at a rate of 20 per cent per annum.

The U.S. market has grown similarly. Sales increased from \$78 million in 1980 to approximately \$6 billion in 2000 (e.g., McDonald, 2000; Miller, 1996), with an average

annual increase of 24 per cent during the 1990s (Organic Trade Association, 2001). In 2003, U.S. organic food sales grew by approximately 20 percent to reach \$10.38 billion (Organic Trade Association).

Despite this global growth in consumer demand and sales, the organic food market is still relatively small. Organic farming globally constitutes a very small percentage of overall farming, as little as one per cent of farming in most OECD countries. However, organic farming is generally on the rise. In the United States, while conventional farming is decreasing, organic farming is increasing by 12 per cent annually. Organic farmers are also beginning to receive more government aid - a trend that is expected to increase in the future (McDonald, 2000). Given the rapid and accelerating growth of the organic food market, an assessment of organic food consumers seems imperative.

Procedures

The focus of this research is twofold: one, to review and synthesize the research concerned with identifying organic consumers and two, to identify the reasons why consumers purchase and fail to purchase organic food. The volume of research in recent years pertaining to understanding organic consumers and consumer attitudes toward organic food has been immense. As organic food continues to permeate the grocery landscape, it is important that researchers are mindful of what has been learned, as well as the areas that have yet to be understood.

Several steps were used in selecting the literature to be reviewed. First, we conducted a broad, interdisciplinary search for research related to organic food published in the last 20 years (1985-2005). Databases such as ABI Inform Global Edition, AGRICOLA, Sociological Abstracts, PsychInfo, and EBSCO provided hundreds of citations published since 1985, most since 1990. Following Hart's (1998) review guidelines, we then narrowed the focus to include only empirical studies identi-

fying consumers' beliefs about and/or behaviors toward organic food. This means we eliminated all non-empirical - conceptual and editorial - articles. We also eliminated research focused on associated topics (e.g., GMO foods, animal welfare), as well as research related to organic farming and production methods. Although conclusions vary substantially across the sample of studies identified (see Table 1 for an overview), we sought common themes that transcended study method or population sampled. Fifteen themes that related to consumers' opinions, feelings, intentions, and/or consumption behavior concerning organic food were identified. Table 2 provides an overview of the themes identified.

Organic food consumers

Considerable confusion surrounding the term 'organic' still exists (Chryssochoidis 2000). While many consumers have heard of the term and are aware of its central features - namely, that it is chemical-free - most are unfamiliar with organic farming standards and practices (Davies et al., 1995; Harper and Makatouni, 2002; Hill and Lynchehaun, 2002). Furthermore, variables such as the level of market development, the use of other positively associated food terms (e.g., 'cage-free' and 'natural') and the product category (e.g., farmed salmon) can serve to heighten consumer confusion (Hutchins and Greenhalgh, 1995; Fotopoulos and Krystallis, 2002; Aarset et al., 2004).

While findings across research studies using demographic profiling are sometimes contradictory, there have been some consistent results that have emerged across studies. In general, consumers of organic food are female (Davies *et al.*, 1995; Food Marketing Institute, 2001), have children living in the household (Thompson and Kidwell, 1998) and are older (Roddy *et al.*, 1996; Schifferstein and Ophuis 1998; Cicia *et al.*, 2002). Interestingly, younger consumers have been found to hold more positive attitudes toward organically grown

food (Magnusson *et al.*, 2001), yet older consumers are more likely to be purchasers. One explanation is that the price premiums on organic food may be more affordable by older respondents. Hill and Lynchehaun (2002) note that families are often introduced to organic food with the arrival of a baby. "Parents take a huge interest in the food they buy for their family and increasingly many new parents are buying organic baby food. This is dramatically changing family eating habits" (p. 530).

Attempts to classify organic food purchasers by income and education have been mixed. Studies have found both negative and positive relationships between these demographic variables and organic food preference (Wilkins and Hillers, 1994; Chinnici *et al.*, 2002; O'Donovan and McCarthy, 2002). In other research, results have been inconclusive (Jolly, 1991).

Research has also focused on identifying a more comprehensive, psychographic profile of the regular consumer of organic foods (RCOF). For RCOFs, "organic food consumption is part of a way of life. It results from an ideology, connected to a particular value system, that affects personality measures, attitudes, and consumption behavior" (Schifferstein and Ophuis, 1998, p.119). The values of altruism (relationship with others), ecology (harmony with the universe and sustainable future), universalism (protection of the welfare of all people and nature), benevolence (enhancing the welfare of people with whom one is in frequent personal contact), spirituality (innerharmony and unity with nature), and selfdirection (independent thought and action) have all been connected to regular consumers of organic foods (Grunert and Juhl, 1995; Makatouni, 2002; Zanoli and Naspetti, 2002; Fotopoulos, Krystallis and Ness, 2003).

Consequently, organic food consumption is often related to an alternative lifestyle that includes active environmentalism, vegetarianism, and/or alternative medicine (Cicia *et al.*, 2002). Research has found that RCOFs are high internal locus of control individuals who believe in self-responsibility for health and are more likely to undertake preventative

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References	Country of research	Method and findings
Aarset et al. (2004)	Germany Norway UK France Spain	Group panel discussions—explored consumers' perceptions of 'organic', 'organic salmon', and the role of regulatory authorities. Found considerable confusion as to what constitutes organic salmon and differences in opinion with respect to the role regulatory agencies
Fotopoulos et al. (2003)	Greece	should play. Qualitative interviews—related wine choice to consumers' value structures. For buyers of organic wine, attributes led to values of searching for pleasure in life, healthiness-long life, and the pursuit of quality. Other product attributes satisfied needs for information and ethnocentrism. Healthiness, quality, information, attractiveness, and good taste were the main motivational benefits of wine purchase; distinction between organic and non-buyers
Magnusson et al. (2003)	Sweden	is in order of importance. Mail Questionnaire—self-report purchase of organic foods was most strongly related to perceived benefit for human health. Performance of environmentally friendly behaviors were good predictors of purchase frequency. Egoistic motives are better predictors of the
Canavari <i>et al.</i> (2002)	Italy	purchase of organic roots than are attrustic motives. Survey—examined attitudes towards organic apples and consumer WTP. Most willing to pay a premium to eliminate pesticides; those not cited skepticism over ability to eliminate pesticides or believed consumers should not have to pay for food safety. Three covariates impact WTP: higher education, amount of fruit consumed, and perceived environmental
Chinnici <i>et al.</i> (2002)	Italy	errect of organic agriculture. Questionnaire — reasons consumers try organic food: health, curiosity, and environment. Four segments of organic consumers: 'pioneers' (purchase at the supermarket out of curiosity); 'nostalgic' (associate organic produce with the past); 'health conscious' (regularly purchase organic produce due to health concerns; prefer specialized retailers
Cicia <i>et al.</i> (2002)	Italy	and expect to pay a premium), and 'pragmatist' (are knowledgeable, but price-sensitive). Survey questionnaire—RCOF are part of a homogeneous segment, often related to alternative lifestyle. Include active environmentalists, vegetarians, and alternative medicine practitioners. Other findings: organic food bought in specialty shops, most willing to pay
Fotopoulos et al. (2002)	Greece	price premiums, and certification boards are not equally trusted. Questionnaire — examined attitudes and behaviors of buyers and non-buyers of organic food. Found three consumer groups: the Unaware; the Aware non-buyers; and Buyers of organic food. Psychographic patterns were identified for these segments. Organic buyers were further segmented into four groups: the "Explorers", "Greens", "Motivateds", and "Price sensitives".

References	Country of research	Method and findings
Soler <i>et al.</i> (2002)	Spain	Experimental auction market—examined consumers' willingness to pay for organic olive oil. Format of information (personally communicated vs. written) affected WTP. Decision to buy organic rests upon two steps: one, individuals' environmental or food
Makatouni (2002)	U.K.	safety concerns and two, amount to pay was associated with socio-economic variables. Interviews—RCOFs perceive organic food as a means of achieving individual and social values. Most significant motive for choosing organic is centered on the health factor.
Harper and Makatouni (2002)	U.K.	values centered on the environment and annual wellare also important. Focus group—consumers tend to confuse organic and free-range products. Health and food safety concerns are the main motives for purchasing organic food. Animal welfare is used as an indicator of other product afterbures, such as safety and health.
Hill and Lynchehaun (2002)	U.K.	Focus groups and secondary data—developed a model that positive of organic milk. Purchase depends upon a variety of factors: knowledge factors, personal factors, intrinsic factors cultural and social factors, uncontrollable factors, and extrinsic factors.
Canavari et al. (2002)	Italy	and any and interview questionnaire—explored consumer attitudes towards organic applies by analyzing the price-quantity-quality relationship. The first in a series of research to be conducted finds further research needed
Zanoli and Naspetti (2002)	Italy	Interviews—used means-end chain models to link process. Interviews—used means-end chain models to link process. accomplishment and pleasure" and "to get the most from life". RCOFs are guided by the values of "altruism/relationship with others" and "ecology, harmony with the mixerse and sustainable future".
O'Donovan, and McCarthy (2002)	Ireland	Interview questionnaire—examined Irish consumers' perceptions of organic meat. Organic meat purchasers placed more importance on food safety and health and believed organic meat superior in terms of quality, safety, labeling, production methods, and value. Availability and price were identified as deterrents, higher socio-economic groups more willing to correct an expense.
Torjusen et al. (2001)	Norway	whing to purchase. Survey—food quality traits such as freshness and taste, termed "observation traits", were important to all consumers. Organic food purchasers were more concerned about ethical, environmental, and health issues, termed "reflection traits". Three consumer organizations were identified, remotival local and social
Squires et al. (2001)	Denmark New Zealand	A cross-cultural study of organic food consumption. Relationships between health and diet concern, environmental concern, confidence in the food industry, demographic characteristics, and intensity of organic food consumption of consumers from mature and novice organic food industries were investigated. Conceptual frameworks evaluated to predict priority of concerns related to the level of organic market development

Table 1. (Continued)

(Continues)

Copyright © 2007 John Wiley & Sons Ltd	Magnusson et al. (2001) Loureiro et al. (2001) Chryssochoidis (2000) Thompson and Kidwell (1998) Schifferstein and Ophuis (1998) Huang (1996) Roddy et al. (1996) Davies et al. (1995)	Sweden United States Greece United States United States Voetherlands Ireland Ireland	Mail survey — most respondents held positive attitudes toward organic, but rarely produced. Most important criterion, "good taste"; least important, "organically produced". Organic foods perceived to be more expensive and healthier than conventionally produced food, but high price a deterrent. Survey — looked at consumers' apple choices. Finds the presence of children under 18 in the household, higher food safety, and environmental concerns increase the likelihood a consumer will choose organic apple. Questionnaire — explored attudes toward organic food products. Variables not significant in organic purchase intention: ecological consciousness, purchasing in a thoughtful manner, food's appearance, and respondent age and income. Respondents think there are differences between organic and conventional products, but consider the actual differences to be insignificant. Actual choices in specialty and co-op retail outlets. Store choice' affects the probability of purchasing organic. Propensity to purchase organic and 'level of income' predicted store choice. Higher income households more likely to choose specialty grocer (less likely to purchase organic). Households with children more likely, higher- educated consumers less likely, to purchase organic food buyers to general population. Organic buyers believed themselves more responsible for their health and were more likely to undertake preventive health action. Reasons organic food buyers to general population. Organic buyers believed themselves more responsible for their health and were more likely to undertake preventive health action. Reasons organic foods purchased included: wholesomeres, absence of chemicals, environmental friendliness and taste. Suggests organic food actitudes. Mail survey—consumers who are nutritionally conscious and concerned about pesticide use have a higher propensity to perfer organically grown produce. Testing and certification, sensory qualities and competitive propries and environment. Neutral or negative artitudes related to the q
our Mar-Iun	Hutchins and Greenhalgh (1995)	United Kingdom	purchasing: availability and price. Gender (female), level of disposable income, and presence of children indicate higher likelihood of organic food purchase. Environmental concern does not necessarily inform organic purchasing behavior. Survey—considerable confusion existed concerning organic among organic purchasers, health, and children were most important reasons. All respondents desired organic food to be available in supermarkets. Respondents' willing to pay higher premiums for organic meat than for produce
2			

Table 1. (Continued)		
References	Country of research	Method and findings
Grunert and Juhl (1995)	Denmark	Written survey—respondents with strong environmental attitudes were more likely to buy organic foods. The top values for respondents holding strong environmental
Roddy <i>et al.</i> (1994)	Ireland	autitudes were, protecting the participants had bought organic food; but held favorable Focus group—none of the participants had bought organic food; but held favorable beliefs about organic foods' attributes. Negative attitudes arose with regard to price, availability, promotion and packaging. The need for more marketing and promotion
Wilkins and Hillers (1994)	Washington, U.S.	to increase awareness was expressed. Questionnaire—compared to general population, members of a food co-op had stronger attitudes about food and environmental issues, and a higher preference for, and more frequent consumption of, organic food. Pesticide residue concern was an explanatory variable for organic food preference in both groups; however, environmental concern
Tregear et al. (1994)	United Kingdom	was not an explanatory variable for either group. Mail and telephone surveys—organic produce perceived to be healthy, environmentally friendly, and better tasting than conventional. Appearance not a disincentive to
Byrne et al. (1992)	U.S. Delaware	Survey—freshness, flavor, and nutrition were most influential in consumer food purchase decisions. Revealed consumers' confusion pertaining to organic produce. Majority of consumers satisfied with conventional fresh produce. Education was inversely correlated with organic purchases; females more likely to purchase organic produce and; availability
Goldman and Clancy (1991)	U.S. New York	Surveyed food co-op shoppers—explored relationship between organic produce purchases and attitudes related to pesticide use and food costs. Regular purchasers of organic produce had higher levels of concern about food safety and were less concerned about price, insects, and surface blemishes. No relationship between income and frequency of organic purchases
Ott (1990)	U.S.	Questionnaire survey—surveyed all consumers; half expressed concern about pesticide use. Two-thirds were WTP higher prices to obtain certified pesticide-free produce, but were unwilling to accept cosmetic defects. Shoppers preferred certification by independent aboratories. White, college-educated, middle-to-higher income shoppers identified as
Jolly (1991)	U.S. California	potential target market. Mail survey—found safety, freshness, general health benefits, nutritional value, environmental effect, flavor, and appearance of product were important in choosing organic foods

Table 2. Themes identified among buyers and non-buyers of organic food

I. Co	nsumers' pui	chasing motives
Th	eme 1.	Health and nutritional concern
Th	eme 2.	Superior taste
Th	eme 3.	Concern for the environment
Th	eme 4.	Food safety, lack of confidence
		in the conventional food industry
Th	eme 5.	Concern over animal welfare
Th	eme 6.	Support of local economy
Th	eme 7.	More wholesome
Th	eme 8.	Nostalgia
Th	eme 9.	Fashionable/Curiosity
II. De	eterrents	•
Th	eme 10.	High price premiums
Th	eme 11.	Lack of organic food availability,
		poor merchandising
Th	eme 12.	Skepticism of certification boards
		and organic labels
Th	eme 13.	Insufficient marketing
Th	eme 14.	Satisfaction with current food source
Th	eme 15.	Sensory defects

health action (Makatouni, 2002). In general, RCOFs strongly associate health with diet, believe that eating healthily is more effective than medication in managing illness, and strive to stay abreast of the latest advancements in health and nutrition research (Schifferstein and Ophuis, 1998; Squires et al., 2001). Zanoli and Naspetti (2002) found health to be the most important motive in the purchase of organic foods among both regular and occasional consumers of organic food. For regular purchasers, health attributes were found to be associated with the transcendental values of altruism and ecology; occasional consumers, in contrast, were motivated by personal goals of 'pleasure' and 'getting the most from life'.

In addition, RCOFs are characterized by environmental and animal welfare concerns (Schifferstein and Ophuis, 1998), hold positive attitudes towards cooking and grocery shopping, and have a tendency to be less religious (Wilkins and Hillers, 1994).

Motives for the purchase and non-purchase of organic food

Fifteen themes integrate the results of studies explaining consumer attitudes toward organic food. These themes are classified into two broad areas: consumers' purchasing motives and hindrances to purchasing.

Consumers' motives

Theme 1: Is bealthier

The overwhelming majority of studies find 'health' to be the primary reason consumers buy organic foods (Tregear et al., 1994; Huang, 1996; Hutchins and Greenhalgh, 1995; Schifferstein and Ophuis, 1998; Chinnici et al., 2002; Zanoli and Naspetti, 2002). Consumers buy organic because of their desire to avoid the chemicals used in conventional food production (Ott, 1990; Jolly, 1991; Wilkins and Hillers, 1994). The use of pesticides is perceived to be associated with long-term and unknown effects on health (Hammit, 1990). Perceived healthiness of organic food is a parameter of quality for many consumers (Wandel and Bugge, 1997; Magnusson et al., 2001). Some studies have found that consumers believe organic food to be more nutritious (Jolly, 1991; Hill and Lynchehaun, 2002). Noteworthy, to date there has not been conclusive evidence that organic food is more nutritious (Williams, 2002). Magnusson et al. (2003) find that health concern is a better predictor of the purchase of organic food than concern for the environment, and conclude that egoistic motives are better predictors of the purchase of organic foods than are altruistic motives.

Theme 2: Tastes better

Several studies have found 'taste' to be among the most important criteria in organic food purchases (Roddy *et al.*, 1996; Schifferstein and Ophuis, 1998; Magnusson *et al.*, 2001). Hill and Lynchehaun (2002) suggest that because of the high prices associated with organic food, consumers perceive organic food to be higher quality than conventionally grown food, which informs their perceptions of taste. Interestingly, Fillion and Arazi (2002) con-

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ducted a series of blind taste-tests between organic and non-organic orange juice and milk. They found that organic orange juice was perceived as tasting better than conventional orange juice; however, no differences were found between organic and conventional milk. The authors concluded that the global claim 'organic food tastes better' is thus not valid for all organic food categories. Nonetheless, consumers of organic food do perceive taste advantages over conventional alternatives.

Theme 3: Environmental concern

Many studies have found environmental concern to be a factor in consumers' attitudes towards organic foods (Roddy et al., 1996; Wandel and Bugge, 1997; Squires et al., 2001; Soler et al., 2002). Organic consumers view the chemicals and pesticides used in conventional food products as being environmentally harmful, while organic foods are perceived as being environmentally friendly (Ott, 1990; Jolly, 1991; Wilkins and Hillers, 1994). Though environmental concern has been demonstrated to have a favorable influence on consumer attitudes, many studies have found that it is not a driving factor of organic food purchase. Rather, perceptions of good health, nutrients, and taste are more important in the purchase of organic food (Mitsostergios and Skiadas, 1994; Tregear et al., 1994; Shifferstein and Ophuis, 1998; Zanoli and Naspetti, 2002; Magnusson et al., 2003).

Theme 4: Concern over food safety

Concern about food safety has also been identified as a reason for the purchase of organically-produced food (Jolly, 1991; Schifferstein and Ophuis, 1998; Soler *et al.*, 2002). Recent food scares such as BSE (mad cow disease), foot and mouth, salmonella, and *Escherichia coli* 0157 outbreaks have contributed to increasing concerns about conventional food production methods. One study even found that after the September 11 terrorist attacks in the United States, American

respondents reported increased intention to purchase organic food (Organic Consumers Association, 2001). Some research has suggested that consumers view organic farming methods to be safer than conventional intensive farming (Lacy, 1992; Kouba, 2003). Of note, many studies did not clearly define the 'food safety' construct (e.g., Squires *et al.*, 2001), leaving it to the respondent to develop their own interpretations.

Theme 5: Concern over animal welfare

Expectations of better animal welfare in organic production systems also motivate organic buyers, though to a lesser extent than do health and environmental concerns (Hill and Lynchehaun, 2002; Aarset *et al.*, 2004). Animal welfare is a multi-level construct which contains both nutritional and social components; it is used by respondents as an indicator of food quality, food safety, and humane treatment of livestock (Torjusen *et al.* 2001; Harper and Makatouni, 2002).

Theme 6: Supports local economy and helps to sustain traditional cooking

Some research has found that people have favorable attitudes toward and/or buy organic food because they believe it supports the local economy. This most probably reflects a belief that organic food is locally grown, perhaps by smaller, family-owned farms. Somewhat related, Fotopoulos and Krystallis (2002) note that Greek organic food buyers have strong ethnocentric tendencies in food-related matters and use this as a purchase criterion.

Themes 7 through 9: Is wholesome, reminiscent of the past, and fashionable

Themes 7 through 9 are discussed briefly in one paragraph since these findings have either not been widely found and/or elucidated. Schifferstein and Ophuis (1998) found that consumers perceived organic food to be more wholesome. It is unclear, however, what

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respondents meant by 'wholesome'. Hill and Lynchehaun (2002) suggest that some people now perceive organic food to be fashionable because of the considerable coverage in the media it has received, the recent promotional campaigns and the high prices associated with organic food. Chinnici *et al.* (2002) found one segment of consumers whose purchase of organic food is motivated mainly by curiosity. Lastly, Chinnici *et al.* (2002) identified a "nostalgic" segment of respondents who "associate the consumption of organic produce with the genuineness and tastes of the past" (p. 194).

The rankings of the aforementioned reasons consumers buy organic foods may differ among countries and may change over time (Davies et al., 1995). Squires et al. (2001, p. 9) note that appropriate ranking "requires an understanding of macroenvironmental elements such as health care and public educational programs, as well as market characteristics". While this may be, the findings of the dozens of research studies reviewed for this paper revealed that health was consumers' primary reason for the purchase of organic food. Taste (quality) and environmental concerns usually followed as top-ranked reasons. Denmark is a notable exception to this finding, where one's environmental concern seems to be the primary motivator among respondents.

Closing in on the attitude-behavior gap—deterrents to purchase

Despite the generally favorable attitudes consumers hold, research has illustrated a discrepancy between consumer attitudes towards organic food and actual purchase behavior (Roddy *et al.*, 1996). As an example, Magnusson *et al.* (2001) found that between 46 and 67 per cent of the population, depending upon the food category, held positive attitudes toward organic food; however, only four to ten per cent of the same consumers indicated an intention to purchase those foods. The following section is a synthesis of the factors

which dissuade consumers from purchasing organic foods.

Theme 10: Rejection of high prices

The high price of organic food has been found to be the main obstacle in its purchase (Byrne et al., 1992; Tregear et al., 1994; Roddy et al., 1996; Magnusson et al., 2001; Zanoli and Naspetti, 2002). As a result, willingness to pay (WTP) has been the focus of several studies. Research has found that consumers are willing, at least hypothetically, to pay a premium for organically grown food; however, many are not willing to pay as much as the current market price premiums (Millock 2002).

Few studies have looked at the factors that influence WTP. Soler *et al.* (2002) found that WTP increases when consumers are presented with information on reference prices for their conventionally produced counterparts. They also found that when consumers were given information about organic products verbally, as opposed to in a written leaflet format, WTP increased. WTP a premium price for organic products has been found to decrease with age and increase with strongly held attitudes towards the environment, food safety, and the presence of younger children in the household (Canavari *et al.*, 2002; Soler *et al.*, 2002).

The high price premiums associated with organically produced food result in ambiguous consumer signals. While consumers indicate the high price of organic food to be prohibitive in their purchasing behaviors, they use price to form opinions about the quality and taste of organic food items. Hill and Lynchehaun (2002) suggest that the mixed opinions they found about whether organic milk tasted different from conventionally produced milk was based on consumers' perceptions that high price meant better quality, which cued them to believe this should lead to a difference in taste. While WTP research has mainly focused on consumers' WTP higher retail prices, Canavari et al. (2002) found that 30 per cent of consumers surveyed in a conven-

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tional Italian supermarket favored paying price premiums directly to farmers.

Theme 11: Lack of availability

The lack of availability and/or inconvenience associated with purchasing organic food presents a further obstacle to its purchase (Zanoli and Naspetti, 2002).

Theme 12: Skepticism of certification boards and organic labels

Another setback in the purchase of organic food is the level of consumer skepticism surrounding organic food labels. Some European studies have found that consumers tend to distrust certification bodies, leading them to question the genuineness of organic products (Ott, 1990; Canavari *et al.*, 2002; Aarset *et al.*, 2004).

Theme 13: Insufficient marketing

Several studies seem to indicate that organic food has been insufficiently promoted and merchandized. Consumers' lack of organic food knowledge, the dearth of organic food promotion, and ineffective retailing strategies (merchandising and displays) have negatively influenced consumers (Roddy et al. 1996; Chryssochoidis 2000). Interestingly, Hill and Lynchehaun (2002) found that location of organic milk was very important to both regular and infrequent organic food purchasers. "All of the consumers agreed that they would prefer organic milk to be positioned beside standard organic milk - reasons include for making price comparisons, habitual shopping behavior" (p.537). Respondents also stated that they found organic milk packaging to be subdued and liked the more "bright, modern, and colorful" packaging (p.537). Finally, the finding that some consumers fail to perceive any benefits or value to purchasing organic food may point to the paucity and/or ineffectiveness of organic food promotion (Latacz-Lohmann and Foster, 1997).

Theme 14: Satisfaction with current food source

Roddy et al. (1994) found consumer satisfaction with conventional food to be a key reason for not purchasing organic food. Further, Magnusson et al. (2001) found that Swedish consumers' most important purchase criterion for food was 'taste' and that 'organic' was the least important criterion. Byrne et al. (1992) also found that organic criteria and criteria related to food safety, were not among the top factors influencing consumers' food purchasing decisions.

Theme 15: Cosmetic defects

Some researchers have found that consumers are unwilling to accept the blemishes or imperfections often present in organic produce. Such cosmetic defects tend to deter consumers from purchasing organic produce (Ott, 1990; Thompson and Kidwell, 1998).

Discussion

The preceding literature review sheds light on several key issues and elucidates our current state of knowledge pertaining to consumer attitudes and buying behavior towards organic food. In addition, it points to gaps in our understanding. In the following section, a discussion of the key issues that arise from the themes identified is presented.

Future research needs

The OCOF—occasional consumer of organic food

Much research has examined the demographic characteristics of organic food purchasers; far fewer studies have investigated the psychographic characteristics of these consumers. Demographically, there have been mixed findings. In addition, consumers vary in the emphases they place on attributes of organic food, production methods, and in their view on market factors, such as price premiums. A more psychographic approach focusing on

Journal of Consumer Behaviour, Mar.-Jun. 2007 DOI: 10.1002/cb values, attitudes, and lifestyles could reveal profiles of organic food consumers that are able to be more widely generalized.

A few studies have attempted to develop profiles and descriptions of the *regular* consumer of organic food; those 'hard core' consumers who shop mainly from local food co-operatives and account for a relatively small percentage of organic food purchases. Yet, many organic products have become commonplace in conventional supermarkets. Little knowledge exists pertaining to the motivations and characteristics of the *occasional* organic food consumer—those consumers who purchase select categories of organic foods (such as milk) or occasionally purchase organic products from large grocery chain retailers.

That there is no single description of an organic food consumer and his/her motivations could be a partial explanation for why consumers express everything from confusion about organic food to frustration about product availability. With the provision of a greater understanding of both current and incipient purchasers and their motivations, the industry could begin to address consumer needs more effectively and one could theorize more meaningfully about how people use organic food in their daily lives.

The distinction between consumers and purchasers

Of the many studies selected for review, not one differentiated between purchasers and consumers of organic products. Consumers living in households with young children have a higher likelihood of purchasing organic products. Is the organic food purchased only for their children or is it bought for the entire family's consumption? Are there identifiable patterns that reflect the adoption process of organic food by various households members? Certainly, these answers are of importance to marketers.

Information sources

Very little research has examined the sources of information that inform consumers' organic food knowledge. The current environment presents the potential to inform consumers in a variety of ways—internet, print advertising, television, word-of-mouth, retail outlets, etc. Are there differences or similarities among regular, occasional, and infrequent organic food purchasers in the information sources they seek and/or consider credible?

Methodological perspectives

Survey methods characterize most of the studies reviewed here. While such methods facilitate the collection of data from larger sample sizes and enable greater predictive capability, they are not sufficient in understanding the complexity inherent in consumers' organic food beliefs and consumption behaviors. Traditional survey questionnaires are too simplistic to fully understand the connections between value systems and More psychographic or holistic research could reveal greater depth and meaning and thereby better describe consumer motivations. For example, "food safety" was a construct found to be a motivator in the purchase of organic food. However, in most cases, we were unclear as to the meaning consumers attributed to this term. Do consumers believe organic food to be safer due to the absence of chemicals, the perception that organic food it is not mass-produced, or the actual security measures governing the growing of the crops? Without careful consideration of how the term is understood, it is impossible for researchers to understand the underlying motives driving the decision making process.

Future research needs to incorporate more interpretative types of research methods in order to provide richer insight into consumer motivations and interpretations of the organic food purchase and consumption experiences. At the beginning of this paper we quote Schifferstein and Ophuis (1998) who talk about buying organic food as being "a way of life" for RCOFs. However, we have no real sense of what this way of life actually involves. Thus, interpretative research which considers

the lived experience of organic consumers is needed to further our knowledge and understanding of organic food consumption and the organic food consumer.

Move to the mainstream—the business of organic food

For years, organics were the exclusive province of small independent farmers. In the last decade, however, many large food companies have entered the organic marketplace. Some have overtly created their own brands of organic foods (e.g., Frito-Lay's Naturals product line; Tesco's organic range in the UK and Ireland), while others have been considerably more discreet (e.g., Odwalla, makers of organic orange juice, is owned by Minute Maid, a division of Coca Cola). The entrance of mass organic-food producers and retailers carries with it an inherent tension between the principles of sustainable farming and the imperatives of big business. Noteworthy, is the paucity of research that has dealt with the above described move to the mainstream. From farming to retailing practices, organic food production, and marketing processes are rapidly changing. It is logical to believe that for some consumers this information would influence their attitudes and subsequent behavior toward organic food. The question is how, and to what extent.

Solving the paradoxes

Two paradoxes become apparent: the health paradox and the price paradox. Consumers buy organic food primarily due to its perceived health benefits. This is interesting, as there has been no evidence that organic food *is* actually healthier (Williams, 2002). Does the growth of the organic food market hinge upon health claims? Will there be repercussions should it be proven that there is no health advantage to organic food?

Additionally, to many consumers the high prices characteristic of organic food constitute a deterrent to its purchase; they do not believe the value of organic food to be worth the high premiums often times charged. Yet, research has noted that when organic food is priced lower, consumers tend to infer the lower-priced organic food is of lower quality and has fewer benefits. If quality translates to 'health', then the lowering of prices reduces organic food's differentiating feature – perceived healthfulness. Striking the balance between these two forces is an important challenge for the industry.

Implications

The themes identified in this review suggest that the stakeholders of organic foods have much to do if the industry is to grow and to serve the varied consumer interests. Even the basic understanding of what 'organic' means is not universal. If consumers cannot distinguish organic from conventional food on reasonable criteria, it is not surprising that they do not purchase organics at greater rates. It is incumbent on marketers, retailers, and producers to better convey relevant information to consumers. Appropriate educational materials that could broaden the organic food consumer base need to be developed. Marketers need to include information pertaining to production methods, environmental benefits, positive contributions to local economies, etc. By not engaging in proactive, strategic marketing, the industry has left consumers to figure it out on their own.

The themes also revealed that some consumers are concerned about food safety, have a tendency to distrust government agencies, and yet are not fully educated about organic food. As a result, it is imperative that growers recognize their own stake in the image of organic food as the image is generated by others in the value chain. As large corporations extend their own offerings to include organic lines – along with conventional foods – even educated consumers may begin to doubt the authenticity of the 'organic' label. Growers must remain active participants in the value chain through which their products move in

Journal of Consumer Behaviour, Mar.-Jun. 2007 DOI: 10.1002/cb order to protect the investment they have made.

Concluding thoughts

Our study shows the need for further research to better understand the organic consumer, whilst also recognizing that current consumers, both regular and occasional, are confused on many fronts. As the global production of organic food is expected to grow substantially, what appears clear from our research is that marketing academics have an important role to play in generating further insights into understanding the organic consumer and the marketing system in which they must make purchase decisions and consume organic products. This information may then be utilized to aid consumers, the food industry (growers and retailers alike), policy makers, and special interest groups. Such research also will be useful in helping consumers, retailers, and producers better understand what organic means in the public sphere and the impact of media in its representation. Research can also inform the industry and policy makers on what marketing strategies will be useful in educating and informing the public on the one hand; whilst also providing tactical advice on packaging, communications, pricing strategies, and so forth. To this end, marketers might help produce a 'convergence of interests' strategy for all interested parties in the production and consumption of organic food, as well as advise on policy which elucidates rather than obfuscates the organic question.

A recent special issue on "the representation of food in everyday life" (McDonagh and Prothero, 2005) recognized that the study of food in the 21st century "is filled with paradoxes, confusion, and dilemmas". At the same time a recent review of 20 years of consumer research (Arnold and Thompson, 2005) found that studies which have led to "a distinctive body of theoretical knowledge about consumption and marketplace behaviors" have been largely sociocultural, experiential, symbolic, or ideological in nature. Thus,

it seems consumer research into organic food consumption, by focusing primarily on demographic issues, is in its infancy theoretically. Future research in the area is now needed to move beyond what we have seen over the past 20 years and embrace some of the themes being identified in the consumer research field generally, and the food consumption field, specifically. Consequently, consumer researchers, producers, retailers, and policy makers will then benefit from a richer understanding of the organic food consumer, than that which has been offered to date. Thus, the next research question for researchers in this field, we would argue, should ask, not who is the organic food consumer; but moreover bow do organic food consumers use the products in their everyday lives? What are her/his lived experiences and how can our understanding of these experiences aid consumption knowledge to facilitate a richer understanding of consumption and marketplace behavior?

Biographical notes

Renée Shaw Hughner, PhD, is an Assistant Professor of marketing at Arizona State University. In addition to the organic food industry, her research focuses on policy issues related to the marketing of children's food products. She has also published research on the understanding of lay health behaviors. She received her doctorate at the Arizona State University and taught in the Food Marketing Department at St. Joseph's University before joining the Morrison School of Management and Agribusiness at Arizona State University.

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