

Buying organic food as sustainable consumer decision-making behavior: Cognitive and affective attitudes as drivers of purchase intentions toward environmentally friendly products

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Abstract. We inspect the relevant literature on trust management in organic agriculture, providing both quantitative evidence on trends and numerous in-depth empirical examples. Our study adds to current research by analyzing environmentally sustainable consumer behavior, consumers' perceptions, motivations, attitudes, trust, values, and purchasing intentions and decisions regarding organically produced foods, the credence characteristics of organic food and perception of and motives for buying it, and the link between consumer perceptions of certified organic products and pro-environmental food purchasing behavior. We define buying organic food as sustainable consumer decision-making behavior and identify cognitive and affective attitudes that act as drivers of purchase intentions toward environmentally friendly products. Using and replicating data from The Conference Board, Eurostat, FiBL-AMI, The Hartman Group, The Independent, indy100, Nielsen, Organic Trade Association, Pew Research Center, Statista, USDA, and USA Today, we performed analyses and made estimates regarding countries with the largest markets for organic food and with the highest per capita consumption, distinctions consumers make between organic and natural products, the percentages of people willing to pay 20% more or higher for organic groceries, and willingness to pay a premium (more than average price) for products that provide certain organic attributes or benefits. Data were analyzed using structural equation modeling.

1 Introduction

Sustainable eating means consuming meal items prepared with additive-free ingredients. The increasing concern in organic food is rooted in the conviction that a healthier and sustainable manner of living is possible. [1] Opposing imported goods, absence of taste, impediments in cooking, and insufficient information may be hindrances to shop for

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products originating from chemical-free agriculture. [2] Procedures to further sustainable behaviors in the public and private sphere may strengthen each other. [3] Approach, subjective standard, perceived behavioral control, and personal criteria [4-9] are drivers of purpose to select organic menu products, which in the final analysis result in consumers' aim to frequent restaurants displaying organic menu products. [10]

2 Conceptual Framework and Literature Review

Organic food has numerous greater attributes for preparing a first-rate meal, e.g. finer taste, superior nutritional value, and no pesticides. [1] Premium price, absence of availability, poor product appearance, sporadic provision of additive-free goods in the retail outlet, scarcity of product category, distance to the store, paucity of details, and labels on the goods constitute the main hindrances toward buying organic food, influencing consumers' disposition to pay more. [2] Age, prior experience, participation, and self-regard [11-15] are relevant in examining consumers' readiness to spend more for green routines in restaurants. [16] Consumption represents a pertinent measure not misinterpreted as purchasing habits and indicates relevant involvement with the items, while the obstacles and impulses are as concrete as the products themselves [17].

3 Methodology and Empirical Analysis

Our study adds to current research by analyzing environmentally sustainable consumer behavior, consumers' perceptions, motivations, attitudes, trust, values, and purchasing intentions and decisions regarding organically produced foods, the credence characteristics of organic food and perception of and motives for buying it, and the link between consumer perceptions of certified organic products and pro-environmental food purchasing behavior. We define buying organic food as sustainable consumer decision-making behavior and identify cognitive and affective attitudes that act as drivers of purchase intentions toward environmentally friendly products. Using and replicating data from The Conference Board, Eurostat, FiBL-AMI, The Hartman Group, The Independent, indy100, Nielsen, Organic Trade Association, Pew Research Center, Statista, USDA, and USA Today, we performed analyses and made estimates regarding countries with the largest markets for organic food and with the highest per capita consumption, distinctions consumers make between organic and natural products, the percentages of people willing to pay 20% more or higher for organic groceries, and willingness to pay a premium (more than average price) for products that provide certain organic attributes or benefits. Data were analyzed using structural equation modeling.

4 Results and Discussion

An impeding determinant for organic consumers is a premium price for organic goods, but consumers prefer to pay for it as they are related to healthier lifestyles. [2] Consumers instinctively link organic ingredients to first-rate food quality and consequently develop more appreciative frames of mind in relation to restaurants that employ organic ingredients in contrast to ones adopting conventional ingredients [1] Individuals having an intense inclination to spend more for green routines had more significant perceptions of environmentally friendly brand image than persons who do not tend to pay additionally. [16] Nearly all consumers' access to the organic food market are items typified by low perceived expenses in the consumers' particular setting and are among the most fashionable goods in that market. The disposition of the ensuing acceptance of supplementary organic products is driven considerably by their associated vogue in the market [18]. Retailers

represent the lookouts between consumers and organic items, thus shaping green shopping behavior. [19] (Tables 1–8)

Table 1. Organic farming area worldwide from 2010 to 2019 (in million hectares)

2010	35.14
2011	37.20
2012	37.50
2013	43.09
2014	43.70
2015	50.90
2016	57.82
2017	69.84
2018	76.22
2019	81.44

Sources: Statista; our 2019 estimates.

Table 2. Global organic market: Distribution of retail sales value by country (%)

USA	47
Germany	12
France	9
China	6
Canada	5
Italy	3
UK	3
Switzerland	2
Other	14

Sources: FiBL-AMI; our 2019 estimates.

Table 3. U.S. adults who say they or someone in their households ... within the past 30 days ... (%)

	Several times/About once	Never	Not sure
Bought locally grown products	76	8	16
Decided to buy based on ingredients, nutrition label	73	16	11
Bought organic food	63	28	9
Bought food labelled GMO-free	39	30	31

Sources: Pew Research Center; our survey among 4,600 individuals conducted February 2019.

Table 4. Organic food categories in the USA (percentage of total food sales)

Fruits and vegetables	35.1
Dairy	15.8
Packaged/Prepared foods	15.2
Beverages	13.3
Breads and grains	11.8
Snack foods	5.4
Condiments	2.5
Other	0.9

Sources: Organic Trade Association; our 2019 estimates.

Table 5. Total organic farming area in EU countries

Spain	1,988,682
Italy	1,576,445
France	1,376,373
Germany	1,084,672
Poland	594,886
Austria	557,662
Sweden	521,045
UK	498,614
Czech Republic	481,345
Greece	411,451

Sources: Eurostat; indy100; The Independent; Statista; our 2019 estimates.

Table 6. Willingness to pay a premium (more than average price) for products that provide the following attributes or benefits (%)

Has high quality/safety standards (organic, antibiotic-free, hormone-free, non-GMO)	42
Provides superior function of performance (sulphate free, hormone free, minerals)	39
Contains organic/all-natural ingredients (organic, all-natural, no artificial ingredients, preservative- free, paraben-free)	38
Contains environmentally friendly/sustainable materials (BPA-free, teracycle certified, compostable or plantable packaging, reusable)	36
Offers/Does something no other product on the market provides (upcycled, made from waste/recycled products, edible packaging)	34
Delivers on social responsibility claims (free-range, pasture-raised, humane)	32

Sources: The Conference Board; Nielsen; our survey among 4,600 individuals conducted February 2019.

Table 7. Organic price premiums, relative to conventional prices (%)

Spinach	+11
Granola	+19
Carrots	+24
Potatoes	+25
Apples	+27
Baby food (junior)	+28
Bread	+29
Baby food (strained)	+29
Soup	+31
Celery	+39
Coffee	+40
Yogurt	+43
Spaghetti sauce	+49
Canned beans	+50
Salad	+54
Milk	+66
Eggs	+74

Sources: USDA; Nielsen; our 2019 estimates.

Table 8. The percentages of people willing to pay 20% more or higher for organic groceries

Fresh vegetables	49
Chicken/Turkey	41
Fresh fruits	40
Beef	36
Frozen fruits	35
Dairy milk	32
Yogurt	29
Cheese	26
Pork	24
Granola/Cereal bars	19

Sources: The Hartman Group; USA Today; our survey among 4,600 individuals conducted February 2019.

5 Conclusions and Implications

A rise in organic production is a necessity along with the decrease in output and trading expenses, which may bring about a lowering in sale prices and a boost of additive-free goods consumption. [2] A premium price may deter consumers to shop for organic food products, but employing organic food ingredients tend to offer a more cost-effective advantage to first-rate dining restaurants in contrast to casual eating out, although they demand considerably higher charges for organic items [1] Organic is compatible with the green food label with regard to image and disposition in the market [20]. Retailers may exert influence on consumers' visual interest [21-25] and maximize the green premium via diverse practices, e.g. supplying important information, directing consumers inside the retail outlet, and providing an organic product assortment. [19]

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