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Alternative Foods — New Consumer Trends

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Abstract

Increased globalization of food systems, large-scale production and distribution, and retail sales have changed the way food is produced and consumed. The dis-embedded globalized system is characterized by "industrial food" and not well-informed food choices. This has also created many concerns with respect to food safety, food security, health, and sustainability. Food alternatives are developing leading to embedded localized systems. These "alternative food" options include labels such as local, natural, pesticide-free, ecologically friendly, slow food movement, and localvores. The traditional marketing approach and specifically consumer marketing theory are not sufficiently prepared to handle the advent of new types of consumers. These consumers are looking for more than a product, i.e., value products. The objective of the current study is to understand the motives and concerns, product preferences, and consumption patterns of alternative food consumers in both developed and developing countries. To this end, a survey was administered in two countries. The population targeted for this study is alternative food shoppers. Results show mitigated differences between developed country consumers and developing country consumers in terms of food culture and food importance, perception of organic versus local foods, and foods channels of distribution.

Keywords: Organic food, local food, consumer behaviour, distribution

1. Introduction

1.1. New food market realities

The last two decades were driven by two major trends in the agriculture industry: an increase in the use of genetically modified food (GMF) and an increase in food-related diseases, such as mad cow, bird flu, and more recently the horsegate [33]. Emerging efforts to provide food safety and quality has led to a grown number of quality assurance schemes both at national and international levels. To this end, several "new" alternatives eliminate a number of concerns

towards industrial food production and distribution. These "alternative foods" options include labels such as local, natural, organic, and more recently, paleo. Advocates of these movements are against any industrialization of the food chain, its production, and distribution. This system is based on two major elements, namely: (i) food mileage and carbon footprint and (ii) non-industrialization of the food chain. It is obvious that support for the local economy and country of origin are by-products of such system.

The organic market moved from a niche market to a mainstream market in the last two decades. This trend originated in the nineties, following a number of food scares in the conventional sector. The global market for organic products was approximated at US $18 billion in 2000, then US $23 billion in 2002, then increased by 43% reaching US $33 billion in 2005, and US $50 billion in 2008 [40, 36]. In the last decade, double-digit growth rates were observed each year [41]. Further, there are 633,891 farms managing 31 million hectares of "organic" land [40]. Although organic agriculture is now going mainstream, its credibility might be jeopardized as the production methods and processes are being industrialized [4]. Padel and Foster [26] claim that "*Although demand for organic food is still buoyant, there are signs that markets are maturing and growth rates over the last years have slowed to below 10%*". The main critics are not related to the key elements in the current definition of organics. On the contrary, these concerns are directly related to some economic, environmental, and social ideals such as production systems, size of the operations, distribution systems and channels, and capital intensity. The by-product of this situation is what Bean and Sharp [4] call alternative food systems (AFS). These systems are sustainable and economically, socially, and environmentally more viable. Concepts such as local, fair trade, and paleo come into play here.

2. Alternative foods

2.1. Variety and food labels

Aside from hardcore consumers that are very knowledgeable, others are still not well educated about the meaning of alternative food labels. Although there is a lack of a widely accepted single definition of these new alternative food concepts, there are serious attempts to provide clear bounds to this label. In fact, radial distance, such as 100 miles, replaced ambiguous characteristics such as political lines of distinction [39] or distinct characteristics of people and places [3]. In addition, Geographical Indication Labels (GIs) provide a clear signal to identify a local product. The European Union, for instance, recognizes two basic categories of GIs: the Protected Designation of Origin (PDO) and the Protected Geographical Indications (PGI). These labels help consumers not only recognize where the product comes from but also the production methods used [15].

The use of the term "organic" is restricted to farms, products, processors, and other interme‐ diaries in the value chain between production and consumption, which have been certified by Certifying Bodies. The USDA[1] provides organic labeling to "*products raised without the use of most conventional pesticides, petroleum or sewage-based fertilizers, or genetically engineered materi‐ als*", in addition to the use of renewable resources and conservation. "Transitional organic" is

also a restricted label and describes farms which have made the commitment to move toward organic certification. According to an FiBL[2] survey on organic rules and regulations, there are 82 countries with organic regulation and 16 countries in the process of drafting legislation [10]. In the same report, the organic sector is considered as the linchpin to face the challenges of food security, climate change, poverty alleviation, hunger, health, and biodiversity stewardship. Since the principles of organic agriculture include issues of social justice, Browne et al. [7] noted that sustainability and organics are closely linked and that ethical and organic trading are beginning to overlap.

Besides ensuring no use of genetic engineering, pesticides, additives, or fertilizers, local food labels should provide the consumer the value related to operation size, as well as distribution. In other words, buying local food should contribute to protecting the local farming economy, as well as the environment by reducing "food miles". In addition, culture is another important dimension which might be considered in defining local foods. Besides associating terroir and local food products with PGI, PDO, TSG (Traditional Specialty Guaranteed), food baskets, distributor's own label, or slow food, Bérard and Marchenay [5] underline the concept of localized food, which is based on the cultural dimension [20]. Consumers, particularly locavores, are becoming considerate not only about where their food comes from and production processes but also the way the food is made and creative versions of regional food classics of each season [12]. That said, it is important to consider what consumers qualify as "locally grown" since it determines differentiation patterns and, consequently, profits [9].

Labels like "local", "natural", "paleo", "pesticide-free", and "ecologically friendly" are not regulated and tend to be used by small farms catering to local or regional clientele. With the exception of marketing board-regulated products like dairy or chicken, production and handling of foods sold under these labels are for the most part not monitored or regulated, except by governmental agencies and district health units, and then only in terms of health/ safety inspections and only as required by law. As a result, information on farms operating outside of the organic certification system is scattered and incomplete. Lastly, "organic" foods have to be differentiated from "functional" foods [35]. Organic foods tend to be regulated and are based on supply side value while functional foods are not very regulated and are based on demand side value. While both types of product are marketed to achieve the same objective (i.e., healthy products), the market positioning is very different.

2.2. Motivations and reasons to buy

Studying what determines consumer preferences for local food, as well as organic food, has been the concern of numerous studies in different countries [26, 6].

Aprile et al. [2] piloted a segmentation analysis of olive oil consumers in order to analyze consumers' attitude towards local produce in Naples, Italy. They identified four clusters of local food consumers: local traditionalist, local ecologist, local fans, and local health conscious. Results show that seven factors explain consumer attitudes towards local food consumption:

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1 United Stated Department of Agriculture.

2 The Research Institute of Organic Agriculture (FiBL)

health concerns, altruism, environmental concerns, local habitual, local origin, certification, and specialties. Willingness-to-pay for PDO and PGI labels and other quality signals vary across the different identified segments. Similarly, Aguirre [1] conducted a comparative synthesis of the organic consumer profile in four different locations, US, Canada, Europe, and Costa Rica, based on three criteria: socio-demographics, purchase motivations, and main concern. The results indicate important similarities among the US, Canada, and Europe organic consumer with the Costa Rican consumer. Particularly in the four locations, the purchase motivations relate to health, environment, no-use of chemical, some concern about ethical issues, and helping farmers. Despite some differences in the barriers to purchase, consumers in all four locations state factors such as price and availability or unstable supply.

The importance of consuming local food is increasingly converging across different countries and cultures. Green et al. [16] conducted a study in four European countries (Finland, Germany, Italy, and UK) and the results of the study reveal the relative importance of risk associated with consuming conventional industrialized food, as well as the issue of provenance of food as a key element of the cultural framework in all countries. This highlights the fact that consumers seek alternative food as a way to reduce this risk and the importance of trust to facilitate choices in complex choice situations. Consequently, in making complex decision choices, consumers tend to use "pragmatic decision aids" rooted in cultural frameworks, as well as "craft skills", in order to assess food quality [16].

When it comes to understanding the main reasons for organic food consumption, Tarkiainen and Sundqvist [34] suggest that it is a way of life connected to a particular value system that affects attitudes, and consumption behavior. Padel and Foster [26] tried to ascertain those underlying values taking into account differences among consumers in terms of frequency of purchase and demographics (gender, marital status, number of children, etc.). Those values include enjoyment, unity with nature, respect for nature, taking care of family, benevolence, etc. More specifically, organic food-sales volume increase is due to consumers' self-interest motives that are predominant (e.g., personal health, high food quality, and taste). These are widely cited in the literature as the key factors to explain consumers' purchasing decision of organic food [24, 42]. However, it has been argued that organic food consumers might also have altruistic motives (e.g., environmentally friendly, animal welfare, fair trade). In Canada, organic food consumers mainly identify health and the environment, as well as support of local farmers, as main motives for their food consumption [19]. In the same vein, the Norm Activation Theory [29] explains altruistic behavior by feelings of moral obligation to act on one's personal internalized norms. This theory is particularly relevant in explaining consumers' attitudes towards organic food as an ethical food choice, which is based on political, ecological, and religious motives [21]. These political motives confirm Weber's [37] statement that human behavior is a way to affirm oneself and differentiate social status and belonging to groups.

Overall, growing consumer demand for alternative foods has been attributed to consumers' concerns regarding nutrition, health, the environment, and the quality of their food [14, 23, 31]. Further, various studies conducted in Europe and the US have explored consumer behavior and have tackled the issue of determining consumers' motivations and preferences

for organic products [42, 38]. Although some consumers are environmentally conscious, most studies confirm the predominance of egocentric values like health, attitude towards taste, and freshness that influence alternative food choices [13, 42]. That said, Padel and Foster [26] show that motives and barriers may change with the purchasing frequency and across product categories. They distinguish between regular consumers who are generally families with at least one child suffering from asthma or food allergies and non-buyers who are more skeptical about organic food benefits and more sensitive to price premiums. They also highlight that consumers consider fruits and vegetables as the "key entry points" to the "organic experience", followed by other categories such as eggs and dairy, grocery products, meats, and soft drinks. In addition, their study reveals that trust appears as an important factor in deciding where to buy. In fact, consumers trust more specialist organic or local shops rather than supermarkets and large corporations.

On the other hand, the main reasons that prevent consumers from buying alternative foods are expensiveness, limited availability, unsatisfactory quality, lack of trust, lack of perceived value, poor presentation (packaging, display) and misunderstanding of the production processes, and lack of information [13, 14, 23]. In fact, the lack of information is related to the ability of consumers to locate organic products, to learn about the organic certification process, in addition to their ability to identify an organic product. The easiest way is to look for the word "organic" on the label. However, some consumers are familiar with various organic labels and might choose based on other features such as "natural". Conversely, previous research on the recent growth of consumer interest in local food shows that it is attributed to increased concerns with safety and accountability about food, in addition to a desire to support regional farmers, the local economic and natural environment. Consumers want to know where their food comes from and how it is grown or raised.

2.3. Global versus local production and distribution

With the rapid growth of the organic supply, producers moved from traditional production methods to more industrialized production methods. Industrial farming addresses efficiently and effectively the challenges related to the cost and logistics of moving produced foods to national and global markets. Conventional food value chain applies an important downward pressure on price leading to the issues of profitability and productivity. This has resulted for some small farmers - concerned with the philosophical aspects of organic production – in diminished credibility of the organic standard and in a refusal to industrialize. These key contradictions lead to a "bifurcation" between market- and movement-oriented organic distribution systems since dedicated consumers continue to support alternative organic networks [28]. It has also hardened the value chain against entry by these small farmers. Hence, the challenge that the alternative food system is facing is a gap that spans between the consumerism/producerism system in place, the current food chain, and the alternative value delivery network/value chain.

Furthermore, this gap is broader between developed and developing countries. It is interesting to shed the light on similarities and differences between developed and developing countries in terms of the variables that might shape the buying behavior of organic foods consumers

versus local foods consumers. As a matter of fact, there were almost 1.9 million organic producers in 2009, an increase of 31% since 2008, mainly due to a large increase in the production in India. Further, 40% of the world's organic producers are in Asia, followed by Africa (28%), and Latin America (16%). In North America, Canada allocates 0.7 million hectares to organic production while the United States has 2 million hectares. This represents 7% of the world's organic agricultural land.

One could infer that developing countries are increasingly concerned about providing food safety and all the ecological, social, and economic motivations behind adopting this option. However, some studies proved that "*the main aim of several developing countries' policies and/or legislative approaches for organic agriculture is income generation through the promotion of certified organic food*" [30]. In Tunisia, for instance, the Tunisian government developed policies, established a National Commission for Organic Agriculture and a certification authority, assigned a budget to cover 30% of investments of organic farmers and 70% of certification costs over five years to encourage farmers' conversion to organic production to comply with EU Regulation since 1999. Those incentives made Tunisia ranked 35th worldwide, and the 1st among African countries, in terms of certified area (87,000 hectares). An interesting aspect to grasp is the role of these institutions in promoting and educating Tunisian consumers about organic food.

3. Conceptual framework

The approach of the current study is based on an integrative production-distribution-consumption model (cf. Figure 1). There are three layers of decision in this model: (i) supply chain related to certification and production methods; (ii) value delivery network related to the channels of distribution broken down into three main categories, long or standard channel, short channels, and direct channels; and finally, (iii) the consumer behavior related to the psychographics influencing the consumption of alternative food.

The tri-Party model shows the alternative food value that will be assessed in this study. Basically, consumers are assumed to have a certain *food culture* that is directly related to the degree of economic development. This in turn sets the current standard of food production that leads ultimately to food concerns. These concerns will—again—influence the way consumers perceive and eat food (food culture). Consequently, these perceptions give rise to food preferences and, more importantly, reasons to buy and requests regarding food quality, freshness, environmental and economic impacts, and healthiness. This is assumed to depict a certain size of operations (large versus small). This in turn will impact the type of channel members involved in these operations. It is assumed here that the distribution channels are very short, counting a maximum of two members: one producer/farmer and one distributor (if there are any). These channels create values that are logically different depending on the point of sale. Lastly, depending on the market coverage and the channel size, farmers, producers, or distributors will have a marketing approach adapted to the value offered to the target market.
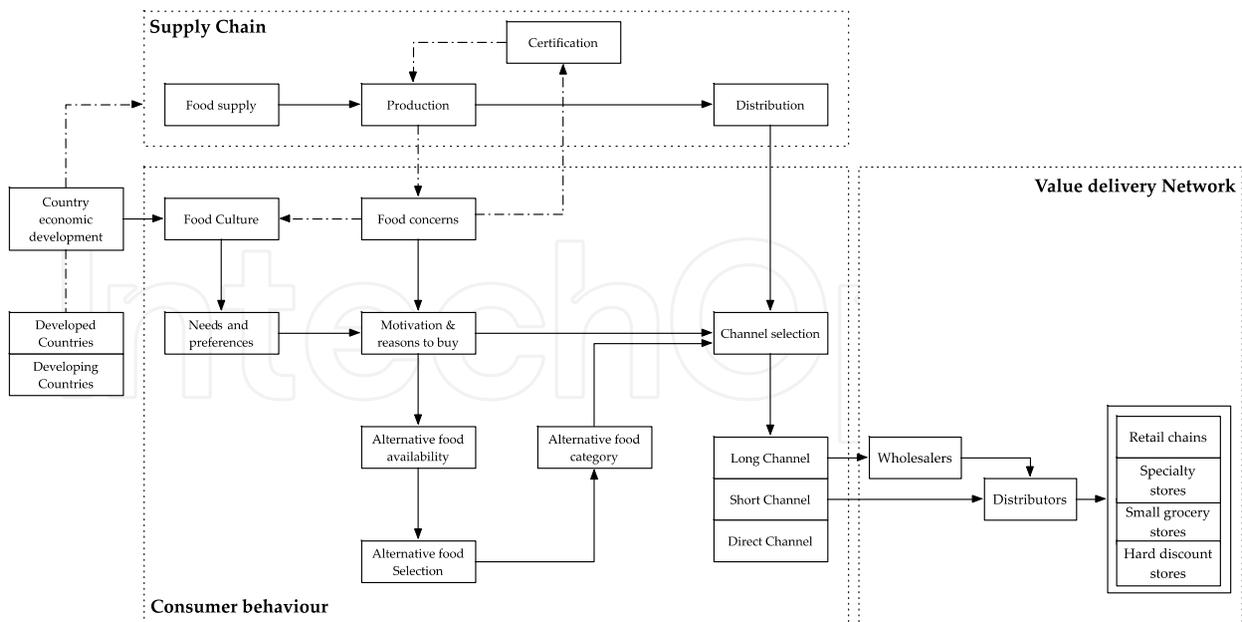
Figure 1. Integrative Production-Distribution-Consumption Model

4. Research design

4.1. Objectives

The current study aims to uncover the demand and supply side factors that affect the alternative foods supply chain and how value is created through the distribution channel and perceived by the final consumers. This value needs to be determined and estimated at the demand side level. Further, the logistics of the value delivery network need to be investigated. This will lead to an in-depth understanding of the value added in the alternative food distribution system, the current market structure, as well as its determinants. Further, building trust in the organic food (OF) supply requires more than just ensuring product quality and product knowledge, or labeling and setting proper pricing and communication strategies, as actually trust is missing at various levels of the marketing value delivery system and the food supply chain. The dimensions of trust necessary to achieve market growth have to be integrated to the OF product positioning and the distribution strategies. Moreover, this will provide a detailed assessment of the actual purchasing situation in the current distribution system, e.g., superstores, specialty stores, and farmers' market. This analysis is done taking the perspective of both a developed country (Canada) and a developing country (Tunisia). This will help to understand the importance of the value delivery network in creating value added to the target market. Hence, the second objective is to explore the market responsiveness to the different distribution strategies used in developed and developing countries. In order to target more efficiently consumers, we need to provide a more precise and useful profile of these consumers, who they are, what they eat, how they buy, where they buy, and why they eat alternative foods. This will lead to an in-depth understanding of the major forces shaping the current market structure, as well as an understanding of the challenges faced by the main players of the alternative food industry.

Hence, our objectives can be summarized as follows:

1. Determine alternative food consumers' purchasing behavior in terms of how consumers buy, where they buy, reasons to buy, attitudes, expertise, and trusted channels of distribution;

2. Compare consumers' purchasing patterns of developed and developing countries; and

3. Cluster alternative food consumers with regard to their psychographics in both country types.

4.2. Operational framework

This operational model shows the alternative foods value that will be assessed in this study. Basically, as it is shown in Figure 2, consumers are assumed to have requests and preferences regarding food quality, freshness, environmental and economic impacts, and healthiness. This is assumed to depict a certain size of operations (country economic development). This in turn will impact the expertise and familiarity of these consumers with regard to alternative foods. These elements are the foundation of the motivation to buy alternative foods.
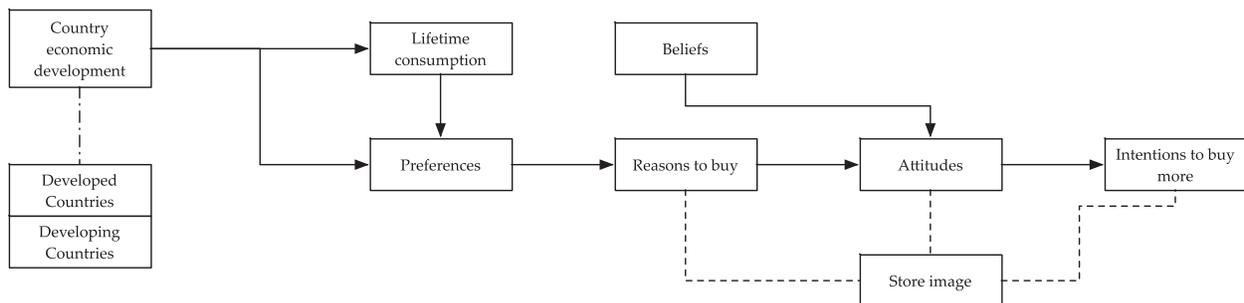

Figure 2. Operational Framework

Preferences will drive the motivation to buy alternative foods. It is assumed that beliefs, motivation, and attitudes are prerequisites to intentions to buy. Lastly, store image as defined above plays a moderating role here.

4.3. Measurement and scaling

To address the study objectives, a quantitative design is required. The design will help profile consumers by country and their purchasing patterns. The conceptual framework depicted in Figure 1 has been developed to assess the alternative food consumption schemes. This in turn is expected to lead to the development of a second model that also takes into account the key factors shaping this new market. The former model has been tested using a structured questionnaire. Prior to developing the survey, secondary data was collected in Canada and Tunisia using major sources of information, as well as informal interviews with industry key players (experts, certifiers, and government representatives). These gatekeepers can provide the most recent and accurate information about the alternative food market and industry.

Information obtained from these key players, while fairly comprehensive within its scope, is not necessarily accurate. This is illustrated by the example that in order to reach various target export markets, some farms, products, and businesses are certified by multiple bodies simultaneously.

The output of these interviews helped design the questionnaire. This latter is structured into three sections. The first section deals with consumers' general opinion about organic food, consumption and shopping habits, and reasons for buying organic products (measured on a 5-point Likert scale). The second section of the survey measures consumers' psychographics in terms of trust, beliefs, and attitudes (all measured on a 5-point Likert scale). Finally, the third section is structured to design a socio-demographic profile of our respondents. The survey was developed by selecting other case study questionnaires on the topic of alternative food marketing [27, 11, 32, 13, 17]. Prior to administering the survey, a pre-test was done and minor modifications were made. Quantitative data for this study has been analyzed using the Statistical Package for the Social Sciences (SPSS). A total of 500 questionnaires were collected, and 480 questionnaires were usable. Data was cleaned and missing values were replaced using the mean. All variables were tested to check their internal consistency. Further, all reliability tests were coupled to a series of factor analyses to determine the structure of the data. Factor analyses also helped to test if the items were measuring the right constructs. Results from factor analysis and reliability analysis show good levels for an exploratory study [18].

4.4. Sampling design

To address the abovementioned objectives, alternative food consumers have been surveyed to assess their consumption behavior/patterns. Hence, a survey was administered to consumers in a developed country (Canada) and a developing country (Tunisia). The population targeted for this study is alternative food shoppers (organic food, certified organic food, local food, and fair trade food). For the purpose of gaining a good representation, respondents needed to fit within a specific profile. The idea was to randomly select alternative food consumers that make their purchase mainly at small producers' farm gates, community farmers, farmers' market, community groceries, specialty stores, and community chain stores. Further, they had to consume at least one of the following product categories: fruits, vegetables, dairy, bread, meat, and prepared food. They also had to be in charge of household grocery/food purchases. This being said, countries have been selected based on the stage of alternative food product's life cycle. Further to this, it is well known that food is culture in developing countries while in developed countries, this is not the case [5].

The point of contact of data collection—point of respondent interception—was selected according to the value delivery network. It is obvious that developing countries present different marketing distribution patterns than developed countries. More precisely, the delivery chain differs as per (i) channel size and type, (ii) alternative food products variety, and (iii) channel position—number of layers in the distribution system. Developed countries align all types of channels of distribution while developing countries have limited distribution channels embodied mainly in the direct channels (producers) and, to a limited extent, in short channels (specialty stores). Lastly, there is a two-prong challenge related to surveying some

of these distribution players: (i) limited availability of some alternative food, and (ii) the limited size of the population requires a large sample size sufficient enough to ensure consistency of the results without reaching any saturation.

5. Results

5.1. Overall consumers profile

Consumers have been profiled using the data collected from the respondents who indicated that they currently purchase alternative foods (mainly organic and local). Overall, the typical alterative food consumers are aged 25 to 35 years old (30.1%); single (63.3%); household composed of 4 to 5 persons (38.6%); have at least an undergraduate degree (51.5%); buy at least two organic food products (90.8%); eat mainly national country-based organic (32.1%); buy organic food mainly from supermarkets; and finally, consider price as the major determinant when buying alternative foods.

5.2. Lifetime consumption: Familiarity and expertise

Consumers have been regrouped using their lifetime consumption. As per Cunningham's [8] work, if respondents have been buying alternative foods on a regular basis, then they are classified as regular alternative food consumers (RAFC); while if they haven't been consuming alternative foods for a very short period of time, then they are tagged as non-regular alternative food consumers (non-RAFC). It is important to note here that alternative foods have been defined in broad terms of consuming either organic foods (certified, fair trade, local) or local (foods). Accordingly, respondents are distributed as follows: 63.1% of RAFC and 36.1% of non-RAFC. This means that a third of the consumers has been consuming alternative foods for more than a year while the rest of the sample have shorter experience with the product. Lastly, RAFC and non-RAFC are almost equally distributed on the Canadian sample, while in the Tunisian sample there are more non-RAFC (76.9%) than RAFC (23.1%).

Lifetime consumption could serve as a proxy to several indicators such as experience with the product, knowledge about the points of sales and price differentials, and level of trust. To corroborate this, several ANOVAs were run to check if there are significant differences between RAFC and non-RAFC in terms of their familiarity and expertise with regard to alternative foods. Results show that RAFC are more familiar than expert when compared to non-RAFC. These findings are summarized in Table 1.

	RAFC	Non-RAFC	Significance level
Familiarity with alternative foods	4.68	3.21	0.000*
Expertise	3.76	2.40	0.000*

Table 1. Familiarity and Expertise of RAFC and non-RAFC

5.3. Purchasing pattern

5.3.1. Purchase criteria and preferences

Given that the survey did not clearly define what alternative food is, it is assumed that respondents understand this concept. Further, there was no differentiation between local, local organic, fair trade organic, and certified organic. This is also evidenced by how respondents addressed the question related to alternative food preferences. In terms of local food consumption, 21.9% of respondents indicated they do purchase local organic food, 32.1% purchase national organic (Nationally produced – Canada or Tunisia), 7.3% buy certified organic, 4.3% buy fair trade organic foods, and 33.8% have no specific preference.

Attributes	Canada	Tunisia
National organic	11.9%	20.9%
Certified organic	2.3%	5%
Local organic	15.4%	6.5%
Fair trade organic	0.8%	3.8%
No preference	21.3%	12.3%

Table 2. Cross Tabulation: Country versus Product Preferences

Table 2 shows that RAFC and non-RAFC are mainly looking for the national and/or local food dimension. This downgrades certification and fair trade to lesser importance. These consumers are more hardcore alternative food consumers looking for good value products.

Further, when classifying these results by country, it is clear that consumers in developing countries do not clearly differentiate between the different types of alternative foods. This is mainly due to cultural food factors; the agricultural sector is not industrialized yet in developing countries. Consumers tend to associate agricultural production to local/national production. Imports are not as important as for developed countries. This is evidenced by the Chi-square test. It shows that there is an association between the country and alternative food preferences (χ^2=53.88, p=0.000).

Furthermore, a simple mean analysis[3] shows that the three most important criteria when buying alternative foods are: healthiness (4.79), quality (4.79), and support to the local economy (4.81). Taste and environmental friendliness do not seem to be important purchasing criteria (mean lower than 1). Moreover, RAFC show higher means on the five dimensions than the non-RAFC. However, the only significant differences are related to taste and environmental friendliness. This shows again that regardless of their familiarity and expertise, the most important factors for consumers are intrinsic attributes (healthiness and quality) and extrinsic attributes (support to the local economy).

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3 On a five-point Likert scale.

5.3.2. Point of purchase

Question 10 of the survey measures consumers' perception of the store offering and value. This is a very important indicator of the store impact on consumers' choices. Table 3 shows that all dimensions are relatively important to all consumers; quality, convenience and services being the most important factors. Price is moderately important and presents the lowest score (3.51). The mode for all dimensions is 4 on a scale of 5. Hence, all criteria are considered by consumers but to different extents when buying alternative foods.

	Mean	Mode
It is convenient to do my shopping in this store	3.68	4
It offers a wide variety of products	3.60	4
It offers good quality products	3.82	4
It offers the services I am looking for	3.67	4
It offers good prices	3.51	4

Table 3. Store Choice Mean Analysis

To complement these analyses, bivariate correlations were run to show that store choice is related to intentions to buy, attitudes, and reasons to buy. This proves the homogeneity and structure of the purchase behavior.

Lastly, an ANOVA was run to check if there are differences between developed and developing countries in terms of store choice. Results are not conclusive. However, even though there is no significant difference between both countries, it is interesting to note that consumers in developed countries have higher scores on all dimensions than developing countries. This clearly shows that the former countries have a stronger store image than the latter countries. This is mainly related to the degree of economic development and the structure and maturity of the value delivery network.

5.3.3. Buying process

In the current study, the buying process is measured with a multi-step sequence starting with motivations, beliefs, reasons to buy, and ending with intentions to buy more alternative foods. This latter variable is dependent on attitudes that is, in turn, dependent on beliefs and reasons to buy. Attitudes are considered as a proxy for the final purchasing behavior. Two simple linear regressions were run to test the buying process. Before running the first regression, a factor analysis was run to determine the number of dimensions of the variable beliefs towards alternative foods. Results show two dimensions: one related to the intrinsic attributes such as taste and healthiness, and another one related to the extrinsic attributes such as price and the meaning of alternative foods.

Regression 1 tests the influence of the reasons to buy and beliefs (intrinsic and extrinsic) on attitudes (cf. Table 4).

Independent	Sig.	Beta
Reasons to buy	0.000*	+0.394
Intrinsic beliefs	0.000*	+0.305
Extrinsic beliefs	0.069	-0.049

Table 4. Regression 1: Reasons and Beliefs on Attitudes

Reasons to buy and intrinsic beliefs are determinants of attitudes. Both explain 33.5% of the variance of this latter variable and both have a positive influence on attitude. It is important to note that consumers do not consider extrinsic beliefs when building their attitudes. This shows clearly that such consumers look more for a value rather than a product. Regression 2 tests the last link in the process, namely the influence of attitudes on the intentions to buy more alternative food products (cf. Table 5).

Independent	Sig.	Beta
Attitude	0.000*	0.699

Table 5. Regression 2: Reasons and Believes on Attitudes

As expected, attitudes have a positive effect on intentions to buy more alternative foods (R^2=32.1%). To recapitulate, Regressions 1 and 2 show that there is a linear relationship between reasons to buy, beliefs, attitudes, and intentions to buy more alternative foods.

It is important to test whether these results hold true for both countries. Several ANOVAs have been run to test differences and similarities between Canada (developed country) and Tunisia (developing country). All results are depicted in Table 6. It is obvious that there is no significant difference between both countries in terms of reasons to buy, attitudes, and intentions to buy. However, there is a difference in terms of intrinsic and extrinsic beliefs. It is also important to note that Canadians score higher than Tunisians on all variables except for extrinsic beliefs. This is in line with the previous regression results.

Variable	Mean Tunisia	Mean Canada	Sig.
Belief – Intrinsic	3.70	3.89	**0.000***
Belief – Extrinsic	3.61	3.36	**0.007***
Reasons to buy	3.87	3.90	0.661
Attitudes	3.97	4.00	0.285
Intentions to buy more	3.72	3.77	0.543

Table 6. ANOVA Inter-country Tests

Further, all consumers score relatively higher on attitudes and reasons to buy. As expected, the lowest scores are for extrinsic beliefs. As stated in the literature review, extrinsic beliefs do make more sense for developed countries than developing countries.

5.4. Clustering consumers

Since the main focus is to classify consumers with regard to their motivation, attitudes, beliefs, expertise, and their intentions to buy more alternative foods, various analyses were run. Therefore, cluster analysis and discriminant analysis are natural techniques to segment the alternative food market and discriminate between consumers. This approach is best suited to identify consumption and behavior patterns and create a consumer typology. Specifically, we are more interested in exploring differences in behavior between the segments than predetermining the number of segments.

Different combinations of socio-demographic indicators and psychographic variables have been implemented to determine with minimal bias an optimal segmentation strategy. The idea is to maximize intra-group homogeneity and intra-group heterogeneity. This allows for more robust profiling, as consumers behave in the same way when they belong to the same segment and behave differently if they belong to different segments. Note that homogeneity and heterogeneity are defined with regard to the segmenting variables. A good segmentation is defined as a segmentation strategy that maximizes both the inter-group homogeneity and intra-group heterogeneity. Conversely, a broad segmentation is defined as a segmentation strategy that minimizes both the inter-group homogeneity and intra-group heterogeneity.

Different combinations of socio-demographic indicators and psychographic variables have been used to segment the market. Several of these combinations show problems with either the intra-group homogeneity or the inter-group heterogeneity. Alternatively, for the purpose of having a good measure of intra-group heterogeneity, several ANOVAs were run to make sure that consumers in different segments have different profiles. All tests were conclusive.

5.5. Intentions to buy more alternative foods

Our aim here is to classify respondents based on their intentions to buy more alternative foods. Question 8 prompts respondents to rate their willingness to buy more alternative foods in the future. This has been done using a five-point itemized scale, with a median point of 3. A two-step cluster analysis was run. Results show that we have a good segmentation strategy with three distinct segments (cf. Table 7).

Segments	Percentage	Mean
High intentions to rebuy	27.8%	4.86
Moderate intentions to rebuy	58.7%	3.63
Low intentions to rebuy	13.6%	2.01

Table 7. Cluster Analysis for Intentions to Buy More

Half of the consumers have moderate intention to rebuy alternative food in the future while a third of the respondents are more than willing to rebuy alternative foods in the future. Further, cross tabulations between the cluster membership and the type of alternative food consumers (RAFC–non-RAFC) show that there is an association between the type of consumers and their intentions to rebuy alternative foods. As expected, most of the high intentions to rebuy consumers are RAFC while most of the low intentions to rebuy consumers are non-RAFC.

5.6. Reasons to buy alternative foods

The two-step cluster analysis shows one cluster with high scores on the five dimensions of reasons to buy, namely healthiness, taste, environmental friendliness, quality, and support for the local economy. Factor analysis confirms one dimension for reasons to buy. A simple mean analysis[4] was run and results corroborate this finding (cf. Table 8).

	Mean	Mode
Healthiness	4.01	4
Taste	3.59	3
Environmental Friendliness	4.02	4
Quality	3.79	4
Support for the Local Economy	3.91	5

Table 8. Mean Analysis of Reasons to Buy

To investigate this finding more, several statistical checks were performed. One last cluster analysis was run to explore the effect of the country on the reasons to buy. It is interesting to see that there are two clusters intimately related to the country classification (cf. Table 9). These clusters are composed of consumers that have moderate to high reasons to buy.

	Cluster 1	Cluster 2
Cluster size	52%	48%
Clustering variable: Country	100% Canada	100% Tunisia
Clustering variable: Reasons to buy	3.90	3.87

Table 9. Cluster Analysis for Country and Reasons to Buy

5.7. Beliefs toward alterative foods

It is clear from Table 10 that true believers have positive extrinsic and intrinsic beliefs; while skeptics have the opposite beliefs. The third segment is a hybrid segment that has high intrinsic beliefs and low extrinsic beliefs.

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4 Measured on a five-point Likert scale.

	Intrinsic Attributes	Extrinsic Attributes	Size of the Cluster
Segment 1: Skeptics	Low	Medium	29.6%
Segment 2: True believers	High	High	45.7%
Segment 3: Hybrids	High	Medium	24.7%

Table 10. Cluster Analysis for Beliefs Toward Alternative Foods

To investigate these findings more and to get plausible explanations, cross-tabulations with the type of consumers have been run (cf. Table 11). A third of the respondents are true believers and new RAFC (non-RAFC) 14.4% are RAFC. Further, there are almost three times more non-RAFC skeptics than RAFC skeptics. Lastly, there is an even distribution of non-RAFC hybrids and RAFC hybrids. These findings are in line with the results presented above. There is a strong association between the segments and the type of consumers (x^2=14.97, p=0.000*).

	Non-RAFC	RAFC
Skeptics	17.6%	6.9%
True believers	31.2%	14.4%
Hybrids	15.3%	14.6%

Table 11. Cross-tabulations of Type of Consumers and Belief Clusters

5.8. Combined clusters: Country-based clustering

Combining country and familiarity to beliefs leads to the following segments (cf. Table 12):

Segments	Acronym	Familiarity	Intrinsic beliefs	Extrinsic beliefs
Cluster 1	Tunisia	Medium	Medium	Medium
Cluster 2	Canada 1	Low	Medium	Medium
Cluster 3	Canada 2	High	High	Medium

Table 12. Cluster Analysis for a Combination of Variables

This clustering strategy shows that extrinsic beliefs are not important regardless of the country. Further, results show that there is only one cluster in Tunisia that scores medium on all variables. This could be explained by the fact that the food culture is not based on food concerns. As mentioned above, there is not industrialization of the agricultural sector. Conversely, Canada presents two opposite profiles: (i) consumers familiar with alternative food products and have expertise to assess these products,-these consumers have moderate to high beliefs; and (ii) consumers that have limited expertise regarding alternative foods, and have negative beliefs.

6. Discussion

This exploratory study has academic and practical implications to both producers/distributors and consumers. Even though alternative food has not been clearly defined in the study, results show that consumers buying local foods and fair trade or local/national organic have a purchasing behavior slightly different from what is known in the current literature. Using familiarity and expertise (lifetime consumption) as a segmentation variable provides several insights on the current behavior of RAFC. Results show that RAFC are hard-core consumers. As a matter of fact, lifetime consumption has been used as a proxy of several other psycho-graphic indicator such as trust, reasons to buy, beliefs, and intentions to buy more. Further, this adds to the classical segmentation strategy that has been used so far in the literature. For instance, compared with [22], our clustering strategy provides more insight into the why, who, and what alternative consumers buy.

Each segment exhibits a separate and distinct behavior from the other segments. RAFC are habitual purchasing consumers and non-RAFC are variety-seeking consumers. First, when buying alternative food products, RAFC are making straight habitual purchases and have their own purchasing scheme. They are characterized as consumers who are motivated by intrinsic and extrinsic attributes but only by intrinsic beliefs. This explains why these consumers have strong principle-oriented lifestyles as they also look for locally produced products and/or purchases that might help the local economy. They also care about the product quality and the healthiness. As expected, these consumers are 18 to 35, single, and educated. Gender is not determinant here; males and females exhibit the same behavior. Further to that, they buy all types of OF products ranging from fruits, vegetables, and dairy to meat. Second, non-RAFC buy alternative foods occasionally; for less than a year. For these consumers, the main reason to buy alternative foods is healthiness. However, there is a significant difference between RAFC and non-RAFC in terms of taste and environmental healthiness of alternative foods. These consumers do not perceive significant differences between alternative food and conventional food. Non-RAFC seem to have a basic trust structure. This is in accordance with [32, 19]. For instance, non-RAFC base their trust on the information available at the point of purchase because they do not collect information to build their knowledge based on OF. These consumers are not fully principle oriented.

One of the main forces that affect the current state of the market is food culture. As per Figure 1, food culture is dependent on the economic development of the country. In the context of the current study, food culture is a by-product of the industrialization or non-industrialization of the agricultural sector. In developing countries, the agricultural sector is using basic production techniques leading to the production of small quantities. These findings need to be related to the product life cycle. For instance, the organic market is driven by conventional marketing strategies and is consistently looking to standardization of the supply. This defeats the intrinsic sustainability objective of such products. This study shows the importance of the production operations and the distribution logistics. There is a clear differentiation between developed countries (using all possible distribution channels) and developing countries (using less complex distribution schemes and shorter channels). The channels reflect a certain market

reality. Consumers buy from long channels because of convenience and price. They offer a local value targeted toward a certain consumer profile; these are customers that buy alternative foods for health reasons. Conversely, short channels are production method driven. These channels serve consumers that have a principle-oriented lifestyle; thus, the support of the local economy is the main drive of this market demand. Price is not an issue here.

One of the limitations of the study has been that consumers might not *fully* understand what alternative food means. Further, the analyses performed in the current study did not focus—on purpose—on the type of alternative foods. Rather, it focused mainly on (i) difference between the expertise of the consumers and (ii) differences between developed and developing countries. It would have also been interesting to study the importance of the frequency of purchase as well as price premiums. Further, the typical alternative food consumer in Canada and Tunisia is not consistent with previous research that indicates a female with a higher-level education. Having profiled this consumer, however, it is noted that consumers in both countries are very similar in terms of demographics. It is important to recognize that consumers may not fully understand the meaning of alternative foods, and thus demographics alone are not sufficient to explain the purchase behavior. Future research should be undertaken to assess the effects of different marketing ideas and also to examine if consumers understand the meaning of locally produced food.

To recapitulate, the starting point of the marketing model depicted in Figure 3 starts with the market needs. Depending on the degree of consistency of the need and the knowledge level of the target market, there are two schemes: habitual consumers (RAFC) and variety seeking consumers (non-RAFC). The more the consumers know about their needs, the more they will look for an enhanced value capturing mainly intrinsic beliefs. These consumers will look for basic channels offering quality, convenience, and services. Conversely, if consumers have limited knowledge but are driven by social consciousness (sustainability and helping the local economy), then they will buy from longer channels (specialized, community grocery stores) under the impression that food is local.
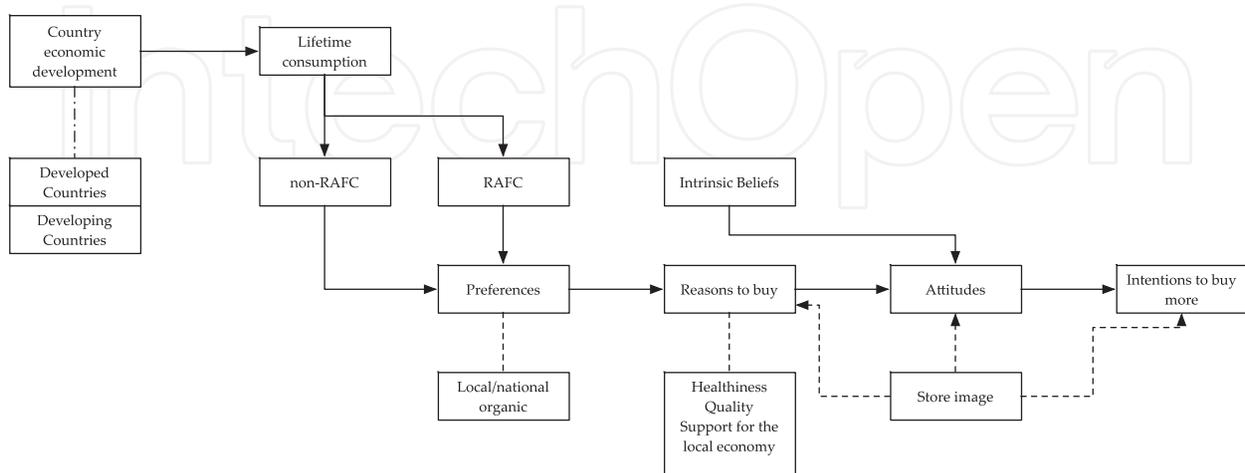

Figure 3. Final Model

7. Conclusion

Alternative food research is an area of study with a vast number of possible areas of future research. Local farmers will find value in knowing that market potential does exist for their product, and consumers are expressing an interest in purchasing locally produced food in short channels of distribution. Their motivation to buy local food products is not driven by fear and concerns over food products but rather by quality, healthiness, and support for the local economy. In terms of channels of distribution, it is obvious that convenience and service are key for the channels choice. These two factors are a proxy for trust. This result is consistent with the findings from the study conducted in Ontario [25], which also found a willingness to buy local food products if available in more conventional stores.

Although consistent with other research that has profiled a typical local food consumer, farmers should not solely target the typical demographic profile (well-educated woman with above average income and family) but should consider the importance of product attributes to all consumers when creating their marketing approach. For example, knowing that a product is locally produced, and promoting it based on quality indicators (e.g., nutrition, health benefits, taste, and reduced food mileage) might be a better strategy than just focusing on the typical local foods consumer. Contrary to the existing literature on sustainability, and the concept of embeddedness, this study did not indicate that the consumer's concerns and/or fears changed the consumer's decision to buy local. While the study does reveal that concerns have altered the purchasing patterns and behaviors of consumers, these concerns about foods might relate more to the Bovine Spongiform Encephalopathy (BSE) crisis for example than the fear of the globalized food system. Further exploration of the reasoning behind the decision to buy local could be explored in order to determine if social theory and the desire to purchase sustainable products plays a role in consumers' decision-making.

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