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The importance of studying consumer behavior in supporting local food production

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# THE IMPORTANCE OF STUDYING CONSUMER BEHAVIOR IN SUPPORTING LOCAL FOOD PRODUCTION

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**Abstract:** This study objective was to highlight the importance of studying consumer behavior and set up a methodological framework for such a study with applicability in encouraging the production of protein plants in order to diversify local production. Understanding consumer behavior is an important step for building strategies towards promoting local food production. Consumer behavior insights may be able to help in creating targeted marketing strategies that emphasize the benefits of local products, such as freshness, quality, and community support, thereby fostering a responsible consumption model and ensuring food security. The importance of studying consumer behavior in supporting local food production has a threefold importance: for promoting a responsible consumption model, for supporting local economies and reducing the environmental impact associated with transporting food over long distances.

**Keywords:** vegetal protein, local production, sustainable consumption, consumer's expectations, methodological framework

JEL classification: D11, M31, O33

## INTRODUCTION

As the global population continues to grow rapidly, the food industry is currently facing challenges related to nutrition and food security. Together with changing socio-demographic factors, this growth will inevitably put pressure on global resources to meet the demand for nutritious food. Furthermore, the increasing need for protein resulting from population growth is primarily influenced by socioeconomic changes such as urbanization, higher incomes, and an aging population. Therefore, it is important to study the awareness of the role of protein in promoting healthy aging and a well-balanced diet. Organizations such as the World Cancer Research Fund (WCRF) and the World Health Organization (WHO) are now advocating plant-based diets because of their many benefits.

In recent decades, globalization has transformed the entire food market, exerting pressure on the local producers and on the sustainability of the supply chains. The study of consumer behavior is a key element when trying to understand the dynamics of the market. It can also be useful in the design of strategies to support local food production.

This study objective was to highlight the importance of studying consumer behavior with applicability in encouraging the production of protein plants in order to diversify local production. This has a threefold importance: for promoting a responsible consumption model, for supporting local economies and reducing the environmental impact associated with transporting food over long distances.

## LITERATURE REVIEW

Behavioral economics combines psychology with economics to understand how psychological, cognitive, emotional, cultural, and social factors influence the economic decisions of individuals and institutions. This approach contradicts classical economic theory, which assumes that people make rational and well-informed decisions. In contrast, behavioral economics recognizes that decisions are often influenced by biases and emotions.

Relevant traditional theories in consumer psychology and behavioral economics include the prospect theory, cognitive dissonance theory and the theory of planned behavior. Newer theories such as Value-Belief-Norm (VBN) theory developed by Stern and Attitude-Behaviour-Context (ABC) theory described by Guagnano, Stern & Dietz are further explaining the factors influencing the consumer's attitude and behavior (Stern, 2000; Guagnano, Stern & Dietz, 1995).

The prospect theory was developed by Daniel Kahneman and Amos Tversky and analyzes how people make decisions under conditions of uncertainty, focusing on how they value gains and losses. For example, consumers may perceive the benefits of buying local products differently depending on how they are presented. A practical example in this sense is the emphasis on the health benefits of consuming protein products and local vegetable sources versus reducing the carbon footprint (Kahneman, 1979).

Leon Festinger studied mass communication from the perspective of cognitive consistency theories, developing a new theory, of dissonance. This theory suggests that there is an inherent tendency among individuals to seek a correlation between their attitudes and behaviors. Dissociations can lead to changes in attitude or behavior to reduce psychological discomfort (Festinger, 1958). For example, consumers who are aware of the environmental and health benefits of locally sourced plant-based protein products, but who continue to eat meat out of habit or convenience, may experience cognitive dissonance. Reducing this dissonance may involve changing behavior towards the consumption of local vegetable products or rationalizing meat consumption through various justifications. By educating consumers and promoting the benefits of local, plant-based foods, marketers can help reduce cognitive dissonance and encourage more sustainable and healthy choices.

The theory of planned behavior was first introduced by Ajzen (Ajzen, 1991). Interpreting according to our objective of study, according to this model, the intention of the consumer to buy local products is likely to be influenced by three main factors: i) attitudes towards behavior, ii) subjective norms and iii) perceived behavioral control. According to the attitudes towards behavior, if a consumer believes that local products are healthier, more affordable and better for the environment, he will have a positive attitude towards purchasing these products. The subjective norms can be linked to the following situation: if a consumer perceives that family, friends or his close social community value local products and support their consumption, this will positively influence his own purchase intention. Lastly, if a consumer believes that they have easy access to local products and that the price is more affordable than for other products, perceived behavioral control will be high, and this will facilitate the purchase intention.

The Value-Belief-Norm VBN theory suggests that personal values influence beliefs, which in turn shape norms that guide behavior (Stern, 2000). This model is suggesting that the environmental and ethical values of the consumer are able to lead to a stronger commitment to sustainable and responsible consumption practices. For example, a consumer who is appreciating the actions towards protection and conservation of the environment will possibly be aware of importance of reducing carbon footprint, and this belief may become a personal norm that leads to purchasing

environmentally friendly products such as organic food, locally sourced and produced goods and services.

The Attitude-Behaviour-Context (ABC) theory is describing the relationship between attitudes, behavior and contextual factors (Guagnano et al., 1995). In this context, the consumer behavior is considered to be determined by the individual attitudes and the context in which this is generated. For example, even if a consumer has a positive attitude towards buying local products, his conscious purchasing decision might be constrained by factors such as availability, price, and accessibility of these products. Therefore, a consumer who prefers to buy locally produced food, can change his behavior in contrast with the supposed attitude, if such products are not readily available or are too expensive for his expectations.

A research by Brown (2003) in Southeast Missouri analyzed consumer preferences for local foods through a mail survey. The results showed that quality, freshness, and price were critical factors in purchasing decisions at farmers' markets (Brown, 2003).

Merlino et al. explored the consumer perceptions of local food and how these perceptions influence their purchasing decisions. Their study indicated that consumers associate the local food with positive environmental impacts, community development and higher product quality, which can lead to successful local food production initiatives (Merlino et al., 2022).

Another study conducted in Denmark examined consumer preferences for organic versus local meat products. The authors concluded that consumers place significant value on geographical proximity in meat production, and a high share of the respondents stated that they were willing to pay higher prices for locally produced organic meat (Denver et al., 2019).

In the paper entitled "Consumers' expectations and willingness-to-pay for local animal products produced with local feed" Profeta & Hamm analyzed the German consumer willingness to pay more for locally produced animal products that use local feed. The paper highlighted a significant preference for products from local production, from feed to final meat product (Profeta & Hamm, 2018).

The consumer ethnocentrism on the market for local products and determinants of consumer behaviors was recently studied by Wojciechowska-Solis. The sample included 1,009 respondents who indicated economic motives for consumer ethnocentrism as a factor in their purchase decisions. The results of this research showed that respondents valued local products such as eggs, dairy, and groats. The key features associated with local food were producer identification, freshness, good taste, and affordability. The study concluded that the local product market supports the local economy, and authorities should promote its development (Wojciechowska-Solis, 2022).

Another study demonstrated that health-conscious behaviour can provide a support for the regional economy. Attitude toward local food and subjective norm, but not perceived behavioral control, were found to have a significant effect on intention to purchase local food (Kumar and Smith, 2017). Other authors (Jefferson-Moore et al, 2014) found that consumers considered that purchasing local foods would be an assurance of the fact that the food was produced in safety conditions, and it is highly qualitative. Moreover, the respondents pointed that they were willing to pay higher prices for locally produced products because of the health benefits that these may bring.

In general, studying consumer behavior is essential for several reasons, as detailed in figure 1.



Figure 1. Reasons for studying consumer behavior

## METHODOLOGY STEPS

Several key elements were identified as being important in the design and implementation of the study on the importance of consumer behavior in supporting local food production (figure 2).

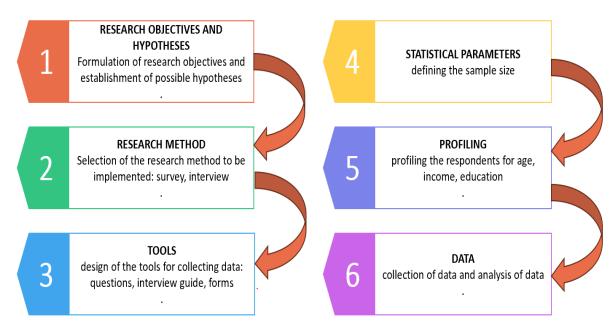


Figure 2. Key elements for study of consumer behavior

First of all, we formulated research hypotheses based on a review of the existing literature and our own objectives of the research. The hypotheses are meant to guide our research and will help focus on key variables. The proposed objectives of the research might take the form of:

- Determining consumers' perception of the consumption of protein foods of vegetable origin and the products obtained from them;
- Determining the consumption behavior and characteristics of consumers of plant-based protein foods and derived products: frequency of consumption, reasons for consumption, the form in which it is consumed, the period in which it is consumed, the price they are willing to pay;
- Determining the determining factors in the consumer's purchase decision: which characteristics and attributes of plant-based protein foods are of major importance in the purchase decision, subject to the analysis of indicators such as: product type, price, packaging, quality, method of preparation, provenance and others;
- Determining consumer preferences regarding the types of plant-based protein foods consumed frequently or occasionally;
- Determining the reasons why consumers choose to consume plant-based protein foods and derived products;
- Determining the frequency with which consumers choose to purchase plant-based protein foods Depending on the occasion or period (diet, fasting, consumption of alcoholic beverages);
- Determining the reputation of manufacturers from whom consumers choose to purchase plant-based protein foods
- Establishing the type of plant-based protein foods mainly consumed and the reasons why this happens;

The stated research hypotheses were based on different possible correlations that may exist between the independent variables of the current research (the socio-demographic characteristics of

the respondents: age, gender, education level, income level) and the independent variables that are the subject of the research. The existence of these correlations, as well as their degree of intensity, will be established and calculated with the help of statistical formulas, using indicators such as the hi<sup>2</sup> test, as well as the values of the contingency coefficient.

For example, we can suggest testing the following hypotheses:

- ➤ Consumers with a higher level of awareness of the ecological impact of their choices are more likely to buy local food products;
- Most of the time, the respondents are not looking for a minimum price, in the buying process, they are looking for the best ratio between the price and the quality of the products. In these cases, quality could be defined by several coordinates, such as freshness, healthy eating and taste. Consumers may also prefer products that are labeled "high in protein." Purchase criteria, such as taste or price, are more important than health or dietary benefits in the consumer's decision to purchase plant-based protein products.
- Respondents believe that a high protein content is positive for weight management, healthy bones and muscles, and disease prevention.
- The main factors that discourage respondents from purchasing plant-based protein foods are related to taste, price, unnatural ingredients, time-consuming preparation and lack of variety. It is also possible that the gender of the respondents has a large impact on the preference for meat-based meals, as meat consumption is considered masculine.
- Respondents' main motivations for consuming plant-based protein foods are: environmental impact, animal welfare and health improvement.

In the next step, the research method was selected. The research method may include surveys, interviews, case studies, or a combination of them. Surveys are typically used to obtain quantitative data from a large number of respondents, while interviews can provide in depth qualitative insights. For surveys, it will be necessary to create a questionnaire that includes questions about consumption habits, preferences for local products, perceptions of their quality and accessibility, and motivations for purchase choices. For interviews, an interview guide is to be developed with topics and questions that will stimulate in-depth discussions. Regarding the sample size, it should be representative of the target population (eg. a specific geographical area, age range, income category, etc.). This can be done through probability sampling techniques such as simple or stratified random sampling to ensure that the results are generalizable. The sample size should be large enough to allow relevant statistical analyses.

It is also important to collect demographic data about respondents, such as age, gender, education level, geographic location, and income. This data will help to analyze and interpret the different behavior of consumer groups and to identify specific patterns.

Moving forward, the collection of data will be done according to established research tools, ensuring the accuracy and reliability of the data collected. Informed consent of participants will be assured.

In the final step, after data collection, statistical and interpretive analysis followed. Quantitative analysis could include descriptive statistics, correlation tests, regression analyses, etc., while qualitative analysis could involve thematic coding of open-ended responses.

### **CONCLUSION**

This study is highlighting the importance of consumer behavior analysis in promoting local food production, with a specific objective to encouraging the cultivation of protein crops. By understanding consumer behavior, targeted marketing strategies can be developed that will highlight the benefits of locally produced food that brings about freshness, health benefits and community support. In the same time, the literature overview has highlighted the fact that the study of consumer behavior has a threefold importance: it promotes a responsible consumption pattern, supports local economies and reduces the environmental impact associated with transporting food over long distances. Further research will include transfer into practice of the designed methodology, by the development of a survey among consumers related to their attitudes towards locally produced vegetal based protein food finalized with the quantitative and qualitative analysis of the results generated by this survey.

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