

**Czech University of Life Sciences Prague**

**Faculty of Economics and Management**

**Department of Humanities (FEM)**



**Bachelor Thesis**

**Consumers' values and motives driving organic food  
consumption**

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## BACHELOR THESIS ASSIGNMENT

Igor Muravyev

Economics and Management  
Economics and Management

Thesis title

**Consumers' values and motives driving organic food consumption**

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### Objectives of thesis

The thesis is focused on the issue of organic food and the consumers demand. Goal of the paper is to explore different motives of consumers of organic food. Basic assumption of the work is that the meaning of organic is socially constructed and therefore a subject of negotiations of different actors engaged in the sector of organic farming (including the consumers). The thesis will explore motives of organic food consumers with respect to different cultural background of the consumers.

### Methodology

Empirical part of the thesis deals with approaches of consumers and their reasons for buying organic products with the use of selected research methods. The attitudes of consumers will be explored with the use of the qualitative research approach.

## The proposed extent of the thesis

30-40 pages

## Keywords

organic eco bio food, organic certification and labeling, impacts, motives, price premium, agriculture

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## Recommended information sources

Aertsens, J., Verbeke, W., Mondelaers, K., & Van Huylenbroeck, G. (2009). Personal determinants of organic food consumption: A review. *British Food Journal*, 111(10), 1140-1167.

doi:10.1108/00070700910992961

Holt, G. C. and Reed, M. *Sociological perspectives of organic agriculture*. Oxfordshire: CABI, 2006.

Reed, M. (2010). *Rebels for the soil. The rise of the global organic food and farming movement*. London, UK: Earthscan.

Vogt, G. (2007). The origins of organic farming. In William Lockeretz (Ed.), *Organic Farming: An International History* (pp. 123-151). Oxfordshire: CABI.

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## Expected date of thesis defence

2018/19 SS – FEM

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### **Declaration**

I declare that I have worked on my bachelor thesis titled "Consumers' values and motives driving organic food consumption" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 18.03.2020

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## **Acknowledgement**

I would like to thank my supervisor doc. Mgr. Ing. Lukáš Zagata, Ph.D. for supporting and helping me during the thesis and giving valuable advice throughout the period of my research. Also, I would like to thank all the eight participants of the research.

# **Consumers' values and motives driving organic food consumption**

## **Abstract**

The thesis will be focused on the difference in the certification process and the organic labelling between Europe and Russia, and the motives of the consumers from these countries when it comes to purchasing eco and organic labelled food.

The literature review will give an explanation of the terms of conventional and organic farming. It will provide information about the certification process of organic food products, their differences in the EU and Russia with examples of organic labels. It will also reveal the potential negative consequences of organic production.

The practical part of the thesis will consist of a thorough study of consumers' opinions and motives by the means of a detailed interview and will try to make appropriate research based on them. It will identify whether the organic logo is something to be trusted and how aware the consumers are of the entire certification process of the goods that they are purchasing. The important question is whether people trust the quality of bio food. In addition, there will be figures on how economically consumers are willing to support organic production.

The conclusion will identify possible improvements in the organic movement, how the place of birth affected the perception of organics and what problem areas need to be corrected.

**Keywords:** organic eco bio food, organic certification and labelling, impacts, motives, price premium, agriculture

# Hodnoty a motivy spotřebitelů ovlivňující spotřebu ekologických potravin

## Abstrakt

Bakalářská práce bude zaměřena na rozdíl v certifikačním procesu a ekologickém označování mezi Evropou a Ruskem, a také na motivy spotřebitelů z těchto zemí k nákupu ekologicky označených potravin.

Teoretická část vysvětlí podmínky konvenčního a ekologického zemědělství. Poskytne informace o procesu certifikace ekologických potravinářských výrobků, jejich rozdílech v EU a Rusku s příklady ekologických značek. Rovněž odhalí možné negativní účinky ekologické produkce.

Praktická část bakalářské práce bude spočívat ve zkoumání názorů a motivů spotřebitelů pomocí podrobného rozhovoru a výzkumu výsledků. Zjistí, zda důvěřovat ekologickému logu a kolik spotřebitelů ví o celém procesu certifikace zboží, které kupují. Důležitou otázkou je, zda lidé věří kvalitě bioproduktů. Kromě toho se budou objevovat údaje o tom, jak spotřebitelé jsou ekonomicky ochotni podporovat ekologickou výrobu.

Závěr bude identifikovat možná zlepšení v ekologickém pohybu, vliv místa narození na vnímání ekologických produktů a problémové oblasti, které je třeba opravit.

**Klíčová slova:** biopotraviny, ekologicky nezávadné potraviny, ekologické certifikace a označování, vlivy, motivy, hodnota příplatku, zemědělství



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## **List of abbreviations**

EU European Union

GMO Genetically Modified Organism

IFOAM International Federation of Organic Agriculture Movements

OF Organic Farming

PN Participant Number

# 1 Introduction

In our modern developed society, consumers make increasingly stringent demands on purchases, they often think about what they are buying, how it affects their health and environment. Buying organic, ecological and biological products, consumers find as one of the ways to solve this problem. These three terms mean one phenomenon, but have different names.

According to the well-known law of the market: if there is a demand, there will be a supply. More and more companies are considering opportunities to enter this market of eco-products. We could say that organic production is a new branch of the evolution of agricultural development. Where producers can not only participate in environmental protection, but also receive a significant increase in margins.

Now organic farming is developing very rapidly, but in the industry there are enough problems that need to be solved before it becomes mature and widespread. The organic market is built on the strong beliefs of consumers and, most importantly, on their trust. The future of organic agriculture is closely connected with the attitude of buyers, their willingness to support the organic movement and the reputation of producers.

This thesis attempts through the practice to understand more deeply how consumers see this industry and potential inhibitory problems. In the theoretical part there are also differences between conventional and organic farming, the mismatch between certifications in Europe and Russia, and the additional potential negative effects of organic farming. And next in the practice part, to understand not only how consumers familiar with eco-labelling and perceive organic products, but also how economically they are ready to support them.

The results of the thesis can serve as an additional source of inspiration for buyers and manufacturers. Buyers will find reasons to join the consumption of organic products. And manufacturers can try to enter this market with some of the already resolved issues and problems.

## **2 Objectives and Methodology**

### **2.1 Objectives**

The main goal of the research is to explain the fundamental concepts of organic agriculture and their differences from conventional agriculture, to describe the certification process in Europe and Russia, identifying the main differences in the systems and finding out the direction of the legislation of these countries regarding organic products. It is also important to understand the negative consequences of the production of organic products, to determine the most important motives and reasons for the acquisition of organic products.

The practical part of the thesis reveals the opinion of residents of the Czech Republic and Russia and determines the main differences in the choice of organic food. Four Czechs and four Russians were interviewed, while one Russian now lives in the Czech Republic. The main goal of this work was to find out the basic value of organic products and the motives of participants to buy this product, and as one of the indicators that confirm this, the size of the surcharge to the price of an eco, bio, organic product. An additional goal was to find out what can slow down the organic market from the point of view of the buyer, what improvements can be made.

### **2.2 Methodology**

Since the purpose of the thesis is a deeper explanation of the value of organic products for consumers and the motives for their consumption, the attitudes will be explored with the use of the qualitative research approach. The questions were designed to create an open discussion with each of the participants. People were interviewed to capture their answers and thoughts. The topics discussed during the interview could vary depending on the course of the dialogue.

The analytical part of the research work consists of a thorough explanation and interpretation of the results obtained during the discussion. The interview results were proved by quotes from the responses of the respondents.

### **3 Literature Review**

Literature review will give an explanation of the terms of conventional and organic farming and will give some basic information on the topic. The first section will examine the main differences between conventional and organic farming related to productivity, profitability, costs, product quality, pollution, biodiversity and others.

The second section will focus on the certification process of organic food products, their differences in the EU and Russia with examples of organic labels. In addition, the thesis presents the main ways of developing organic legislation in these countries.

The last section of the literature review reveals the potential negative consequences of organic production: gas emissions, energy consumption during production, land use, consequences of non-use of pesticides, herbicides and insecticides, lack of evidence of increased product value for the consumer, and the cost of certification.

#### **3.1 Organic versus conventional agriculture**

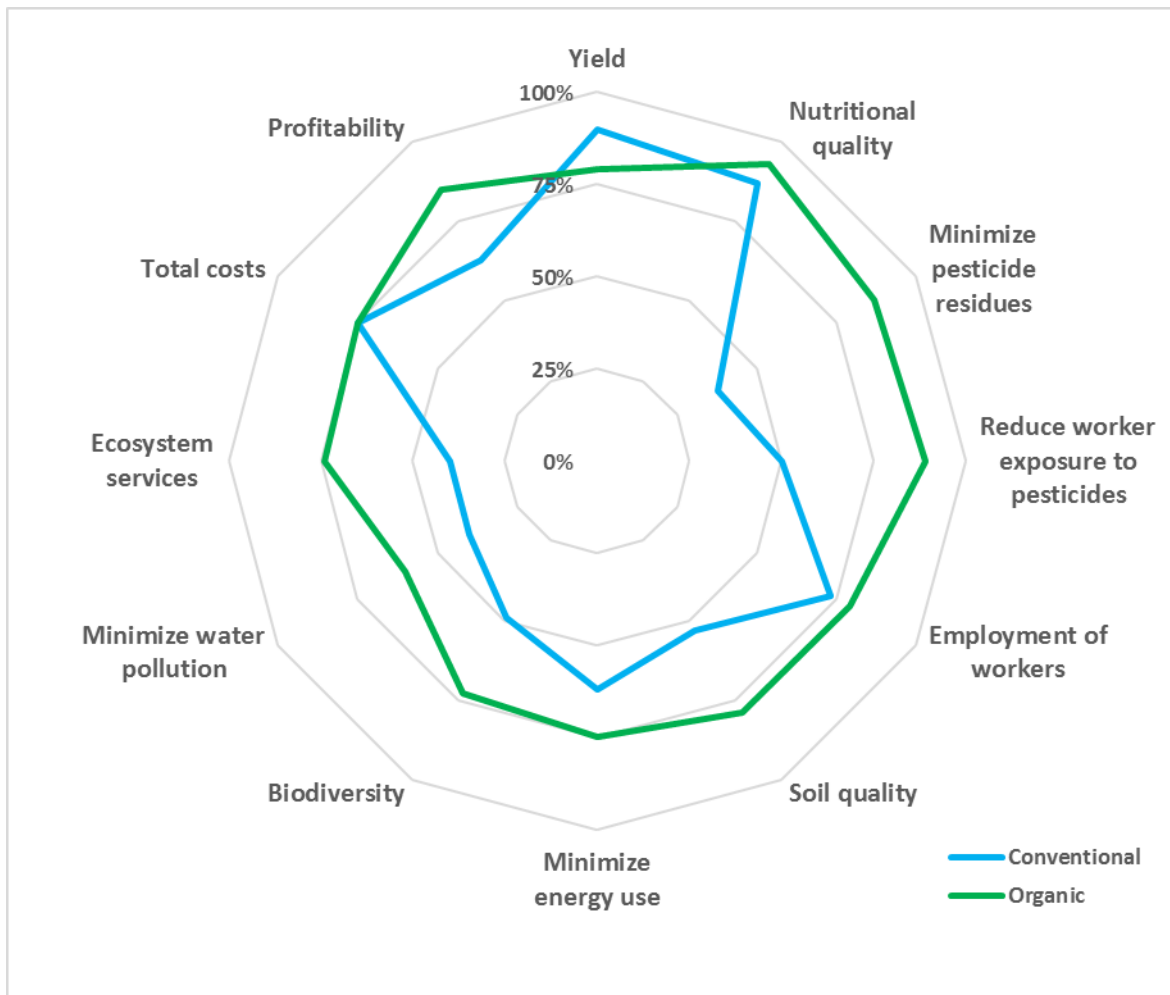
First of all, it is necessary to define the concept and essence of organic farming (hereinafter OF). There are many definitions, which, however, have a common basis. OF, sometimes also bio-agriculture, or organic agriculture. It is based on a holistic concept of the environmental, economic and social aspects of agricultural production, both global and local. It can be defined as a balanced agroecosystem that operates on local and renewable sources. This modern form of agricultural production dates back to the early 20's. century. It produces healthy and quality food in a sustainable way. It works with modern scientific knowledge combined with best practices (Shorrocks, 2017).

The Czech Bioinstitut characterizes OF as a very prudent agricultural method, with a positive attitude towards animals, soil, plants and nature without the use of artificial mineral fertilizers, synthetic drugs to protect plants, hormones and other synthetic substances. The goal is an agricultural system that is sustainable, environmentally balanced, protects the permanence of natural resources and the environment, and prevents developments that lead to environmental disasters and the transmission of today's environmental problems to future generations (Bioinstitut, 2008).

The IFOAM definition characterizes organic agriculture as a combination of tradition, innovation, and research to improve the common environment and promotes fair

relationships and a good quality of life for all participants (Ministry of Agriculture of the Czech Republic, 2016).

In conclusion, it can be summarized that OF uses natural processes, renewable resources, but also modern methods. It has a positive attitude to the environment, does not use chemical and other pollutants and does not affect the surrounding systems.



**Figure 1 Comparative evaluation of conventional and organic agriculture**

Source: Reganold, Organic agriculture in the twenty-first century, 2016

### 3.1.1 Conventional agriculture

For part of conventional agriculture, which is characterized in particular by the use of artificial fertilizers and chemical plant protection products, has led, at the same time to a huge increase in income (Gangurde, 2016), but also to environmental pollution, a threat to the soil as a result of erosion, its depletion and destruction of the landscape (Mukhopadhyay, 2005).

The main feature of intensive agriculture is the cultivation of a limited number of types of crops in order to reduce costs and, consequently, the prices of agricultural products in the market. Especially the problem is pests that are attracted to the area sown with one type of crop, and their disposal uses a large number of biocides. In addition, growing the same plant species unilaterally depletes the soil and therefore increases the consumption of industrial fertilizers.

The main goal and at the same time the advantage of conventional agriculture is maximum production and maximum profit. In principle, this is the type of agriculture that prevails in most cases as the main method of growing crops. It uses chemical fertilizers, antibiotics, pesticides and herbicides, growth hormones for animals and plants. All these substances could have a negative effect on people and the natural environment. Most chemicals do not directly affect plants and end up in the soil, negatively affecting other organisms. The use of heavy machinery causes the destruction and gradual erosion of the soil, which leads to a significant decrease in the quality and fertility of the soil. Then the soil loses its fertility and its texture (Shorrocks, 2017).

### **3.1.2 Organic agriculture**

In contrast to intensive agriculture, organic farming pays special attention to the environment and its individual components. It is characterized, in particular, by a ban on the use of substances and procedures that burden and pollute it.

OF especially cares about animal breeding - animal welfare and natural living conditions. Animals are fed organic food of their own production or certified bio products. Embryo transfer and the use of hormones are prohibited in the organic production of animals, as well as keeping animals in cages, the use of leash and electric shocks.

The basis of the economy is a healthy soil, which properly nourishes the cultivated crops, and therefore has a positive effect on our health. In organic agriculture, through the use of a variety of seeding procedures, organic fertilizers and careful soil management, it achieves natural soil fertility. A large variety of soil microorganisms is formed, thanks to the ban on the use of artificial fertilizers, which are necessary for the formation of humus.

Key symbols of organic farming include the taboo on the use of industrial fertilizers, synthetic pesticides and herbicides. The use of GMOs in organic production is

prohibited worldwide. However, a limit of not more than 0.9% is allowed, which is considered as random (The European Parliament And The Council EU, 2003)

Organic products are represented by a wide range of products, from food to, for example, biological cotton, which is used in the manufacture of textiles.

There is an overproduction of food that is common in developed countries like Europe and the United States, and increasing consumer awareness of organic agriculture is leading more farmers to adopt an environmental management approach. This is mainly due to economic reasons, such as the growing interest in organic products and financial subsidies.

But all of the above does not mean that there are only two sides - organic agriculture, and on the other hand, conventional agriculture, which causes damage to the area. There are also a certain number of farms and farmers who do not have organic certification and do not strive for it, but still try to be attentive to nature and animals and adhere to certain environmental principles.

### **3.2 Organic Food Certification**

The desire to produce organic products arises from manufacturers for various reasons. But everyone will have the same question of implementation and therefore it is necessary to decide at the very beginning of the requirements of what standard "organic" to choose and follow them in the future. For example, in the USA the standard is "USDA Organic", on the markets of the European Union is the EU standard "Euro-leaf", in Switzerland – "Biosuisse Organic", in Japan – standard "JAS". Depending on the market, you choose the necessary standard or several together. Most often they do not have mutual recognition. These standards differ in some ways, but the main aspects are the same for everyone.

In all organic standards, without exception, certifying companies must be accredited. This means that the company's employees have been trained and regularly improve their skills in accordance with the changes taking place and accepted for this standard. Employees of certifying companies are informed about all these changes during regular training sessions. In addition, certifying companies are checked annually by their



accrediting bodies, usually in the framework of inspections of customers-producers of "Organic" (Shorrocks, 2017).

From the point of view of farmers, the production of organic food has special costs and takes a lot of time and effort. In order to be entitled to be called "organic" and to recognize product quality, farmers should pass several stringent certification procedures. An important point, organic food can be considered as such only if it meets a number of requirements and characteristics in accordance with the established standard. For organic certification, products are required to meet the following conditions:

- Verified by nationally accredited organizations eligible for organic certification;
- It is made only using restricted permitted substances;
- Produced without GMO (European Commission, 2019).

Certified organic foods do not necessarily contain pesticides; some standards have specific authorized pesticides. [\[2\]](#)

Currently, there are more than 460 eco, bio, organic standards in 199 countries that cover 25 industries. Among the listed there are at least 73 organic standards (Big Room Inc., 2020).

### **3.2.1 Organic Certification in the European Union**

The European logo for organic products was created in 2010 and is now mandatory for all organic food products produced in the EU. It contains information about the place, method and company of production. Farmers are not allowed to use the label if they do not follow strict rules and requirements aimed at supporting the environment and animal welfare.

Products can only be labelled organic if at least 95% of the ingredients are organic. To receive Euro-leaf, the farmer must contact the accredited organization responsible for organic control in its country. An inspector from the organization visits the farm and checks all requirements. Further, the organization gives the farmer a confirmation certificate and the ability to use the European organic logo on the products. At least once a year, the certifying organization conducts regular inspections.

In addition to organic marking on the product packaging, it is necessary to indicate the name, address of the manufacturer, all additives and ingredients, the code of the certification organization.

The EU organic legislation is constantly striving to improve the regulatory system, reduce the cost of certification and inspections, in order to increase attractiveness to farmers. Now certification is quite a risky and expensive process. Thanks to support from the EU government and the use of its own obligatory logo, it makes the EU organic certification system the potentially most effective regulatory system in organic agriculture (European Commission, 2019).



**Figure 2 European Union's logo "Euro-leaf"**

Source: European Commission, 2019

### **3.2.2 The future of organics certification in the EU**

From January 1, 2021, the current organic rules will be checked. New rules will have to reflect the changing nature of this rapidly growing sector. The new regulation aims to ensure fair competition for farmers, while at the same time preventing fraud and maintaining consumer confidence. All this will be achieved through the following important steps:

- Production rules will be simplified by phasing out a number of exceptions and norms.
- The control system will be strengthened through tougher safeguards and robust checks throughout the supply chain. organic rules will cover a wider list of products (e.g. salt,

cork, beeswax, maté, vine leaves, palm hearts) and will have additional production rules (e.g. deer, rabbits and poultry).

- Organic certification will become easier for small companies by introducing a new group certification system.
- It will develop a more uniform approach to reduce the risk of accidental contamination by pesticides (The European Parliament and of the Council, 2018).

### **3.2.3 Organic Certification in Russia**

In Russia, eco, bio and organic products and certification are divided into three different systems.

In accordance with the local standard GOST R 52738-2007, the label "bio" can only label dairy products containing beneficial microorganisms (probiotics) and / or special substances that stimulate the human microflora (prebiotics).

According to another standard GOST R 51074-2003, no product can have the label "ecologically pure" (Muravyev, 2018). Eco certification is carried out in the form of voluntary certification. Voluntary certification can be carried out on compliance with national standards, standards of organizations, systems of voluntary certification.

The organization that created the voluntary certification system, establishes a list of objects of certification, their characteristics and requirements. Voluntary certification is carried out for compliance with these conditions. The rules of verification and payment procedure are determined by the participants of this voluntary certification system. The voluntary certification system may provide for the use of its own mark of conformity. After that, the producers will be able to call its products as eco (Russian Committee, 1994).

The following national standards have been introduced in Russia — the basis for the production, identification and certification of organic products:

- GOST R 56104-2014 "Organic food products. Terms and definitions";
- GOST R 57022-2016 "Organic production. The procedure for voluntary certification of organic production";
- Interstate standard adopted by the Eurasian Inter-state Council for Standardization, Metrology and Certification (EASC);

- GOST 33980-2016 “Organic production. Rules for the production, processing, labeling and sale. NEQ CAC / GL32-1999 ”(the list of feed additives, fertilizers and other substances allowed for the production of organic products).

The market for organic products in Russia is still very small. According to analysts forecasts, in 2020 the market of organic products will double to 225 million euros (Muravyev, ECO marketing as a new way to promote goods, 2019) despite the economic situation in the country, problems having only two accredited inspection companies (The Federal accreditation service, 2019) and gaps in legislation.

### 3.2.4 The future of organics certification in Russia

The Federal law of 03.08.2018 N 280-FZ "Standards of organic products" comes into force from 01.01.2020. Only the interstate standard GOST 33980-2016 "Organic products: rules for production, processing, labeling and sale" will be recognized in Russia. The standard will cover a large number of vague questions on organic products.

Before this law, there were too many gaps in organic law that manufacturers abused using organic logos without certification. It has severely affected the trust in this type of product, it will take time to return it.

In general, the Russian organic standard is similar to the organic standard in Europe. At the same time, the legality of organic standards from other countries is still unclear. There is a danger that they will remain outside the legal field.

In addition, the standard introduces the official label organic products in Russia.

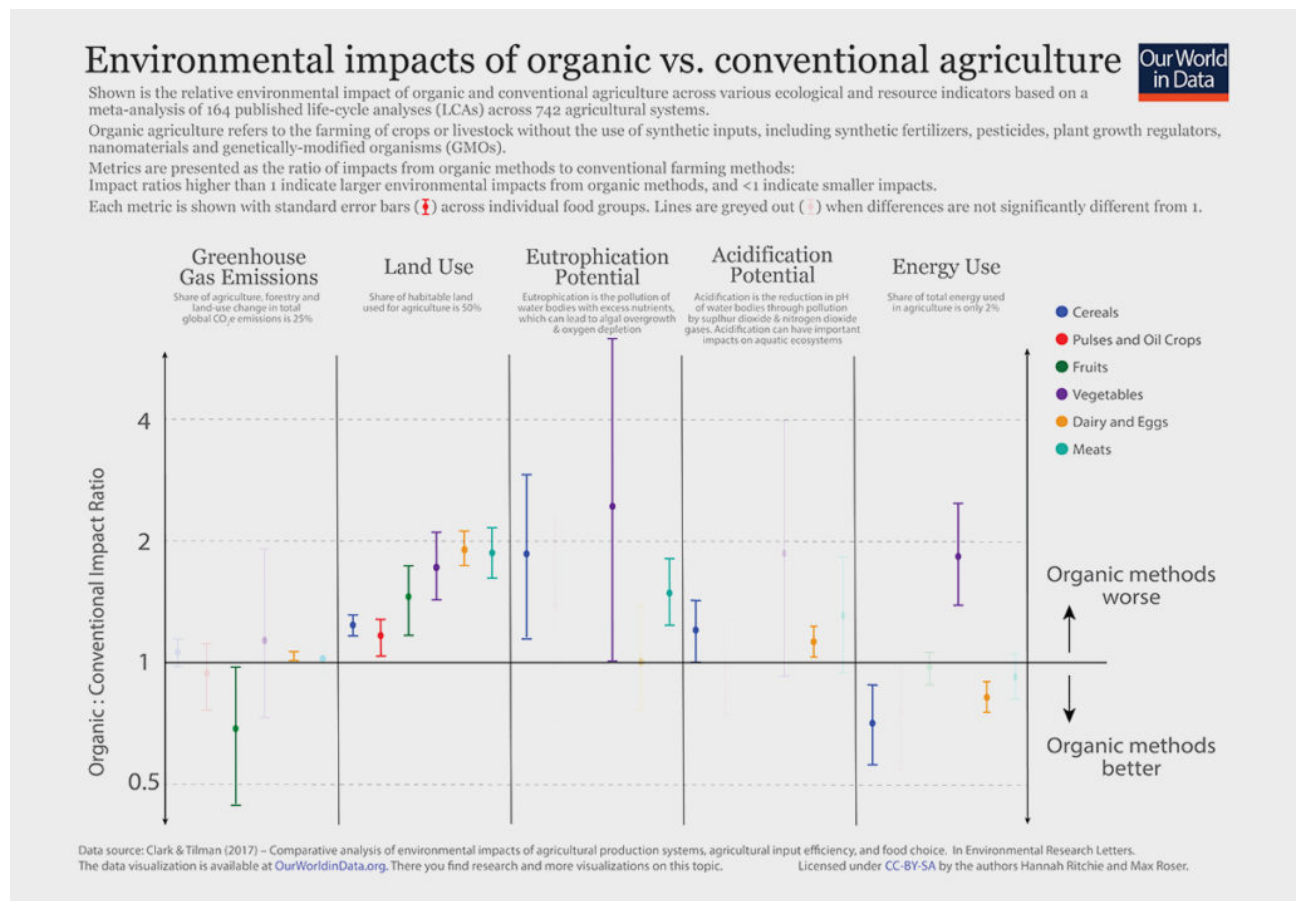


**Figure 3 Organic Label in Russia**

Source: Federal Law of Russia 03.08.2018 N 280-FZ “Organic Products”, 2018

### 3.3 Contested aspects of organic farming

Organic systems always need more land and energy to produce the same amount of output as inorganic systems. And OF contributes more to global warming than traditional farming (Clark, Tilman, 2017). In Figure 4, “Environmental impacts of organic versus conventional agriculture”, all divisions above the horizontal line are the zone where organic methods lose, divisions below are the zone where the organics wins. The colours of the dashes are responsible for the types of industry (crop production, livestock, etc.).



**Figure 4 Environmental impacts of organic versus conventional agriculture**

Source: Comparative analysis of environmental impacts if agricultural production systems, agricultural input efficiency, and food choice (Clark, Tilman, 2017)

From the above data, it follows that organic agriculture is not able to feed everyone in the world (Krebs, 2015).

There is another study on the meta-analysis of the difference in the yield of agricultural systems for growing corn, rice, wheat and fruits. The difference can vary from 6-10% in the case of corn and rice to 25-37% in the case of wheat and fruits (Reganold, 2016).

There is a general misconception that organic products are grown without pesticides, herbicides and insecticides. In some OF there are actually fewer of them, but still some are allowed (Government Publishing Office US, 2019).

Organic farming uses very limited amounts of fertilizers, pesticides, herbicides and most of them are very inefficient. For example, organic farms actively use copper sulphate, which is one of the few pesticides allowed in OF. However, it is three times more toxic than the "inorganic" used in conventional farms (Porterfield, 2018).

Due to the fact that the limited permitted pesticides are usually less effective, they are required even more, which leads to an increased content of them in the product. There were found cases when they were even more than the permitted norm (US Department of Agriculture, 2012).

Taking into account the concentration, volume and frequency of use of these substances, the damage to nature from organic farming can be *3-10 times* higher than from conventional farming. Organic pesticides can accumulate in the soil and be dangerous to soil fertility (Dahan, Babad, Lazarovitch, 2014).

There is no evidence of the beneficial effects of organic food on health. There is also no evidence that there is a difference in nutritional value between organic food and food produced by traditional methods (Crystal Smith-Spangler, 2012). The difference most often comes from the variety of culture. Research confirms that the value of organic food is no different from traditional (E.Lester, 2006). This means that only processes within the company are certified and verified, not the end result. Apart from the absence of a difference in the value of organic products, there is no difference in the risks to human health (Bourn, 2002).

Thanks to blind research of greens and vegetables, the superior taste of organic products was also not confirmed. Respondents often do not feel the difference (Zhao, 2007).

Similar results were obtained regarding the taste of meat: it is very difficult for consumers to find differences. Taste tests show a slight difference. Preferences also depend on the variety of the product (Napolitano, Girolami, Braghieri, 2009).

The quality of the crop in OF largely depends on the skills and knowledge of a particular farmer. Organic farmers need to know deeply about growing systems. The farmer must monitor the growth of crops at each stage of ripening. If the farmer is not able to recognize the problems that may arise, then the yield may decrease. In exceptional situations, the farmer may lose the entire crop. Farmers should also have narrow knowledge of meteorology, ecology, soil systems, and other important factors that can influence the growth of certain crops.

It should also be noted, in addition to the costs of the organic process on a farm, there are costs for a certification process, which is quite expensive. The total cost includes a one-time payment for checking all organic processes, but also often an annual fee for using a label of an organic system. Therefore, it is economically extremely unprofitable to be somewhere in the middle between traditional and organic farming. Farmers who care about nature but cannot afford to risk a significant amount of income for certification, lose out. This does not motivate farmers to take care of nature. And as a result, nature and people lose.

## 4 Results and Discussion

The research work was carried out in the form of a detailed interview, which consisted of 12 topics. The interview included questions about the age of the participants, education, country of birth and current place of residence. These topics were followed by open discussions about the organic idea, the process of organic certification, the organic logo, the quality and value of organic food, the motives for buying or not buying eco, bio, organic products and the perception of the price premium for such products. Some questions were changed during the interview depending on the responses of the participants.

An interview was conducted with residents of the Czech Republic and Russia about what they think is an organic product, how often they buy it and what they think about it. The purpose of this interview was to understand the interest and motives for the consumption of organic products, what is an organic product for society and additionally try to assess the difference between the situation between countries.

Participant Number (PN) and coded name	Year	Education	From	Currently live
1. Natasha	53	Higher education	Russia	Russia
2. Artem	25	Higher education	Russia	Czech Republic
3. Olga	18	Secondary education	Czech Republic	Czech Republic
4. Dmitriy	24	Higher education	Russia	Russia
5. Tanya	35	Higher education	Czech Republic	Czech Republic
6. Lucia	28	Higher education	Czech Republic	Czech Republic
7. Petr	42	Secondary education	Czech Republic	Czech Republic
8. Nikita	26	Secondary education	Russia	Russia

**Table 1 Basic description of interview participants**

Source: own table



#### **4.1 Different definitions of organic products from a consumer perspective**

Questions about organic products began with asking for an opinion on the concept of dividing products into organic and conventional, understanding the meaning and necessity for such a division. What pros and cons do they see in organic?

Opinions about the viability of the organic and conventional product separation models differed. In general, everyone accepts the idea of such a separation, but usually adding conditions. When these conditions are met, the market expects only positive benefits for consumers. And for producers and farmers, these are new growth points.

At the same time, you need to find a balance between customer requests and the cost of implementing these requests. Organic products should become more affordable and the final cost plays a big role in this issue.

*“... it is great that there is a choice for those who would like to take care of themselves and their loved ones. The integrity of farmers, their organic policy meticulousness and thoroughness of inspections during the certification period are questionable” PN 1*

*“Positive attitude. New products on the market create additional competition, and competition has a positive effect on the buyer's attitude and choice” PN8*

*“This is a good opportunity to reduce the human impact on the environment, ecology and at the same time products are more valuable” PN3.*

Interviewee 5 stated that the idea of organic production is very good, but now it looks more like a marketing tool and does not inspire confidence.

Participants of the organic movement should be more convincing, they need to provide more facts about the positive side. Make organic production more open with the possibility of excursions or online visits.

*“The idea of organic agriculture is very remarkable because of the growing environmental problems, but the implementation is disappointing, we do not get really healthy products, in fact, they do not differ from ordinary ones. It looks like a way to divide products by a wider range of pricing, which applies specifically to marketing tools” PN5*

## 4.2 Label trust

The quality and information content of product packaging plays a very important role in sales. Different target groups use and evaluate the information on the package in different ways. Someone is only interested in the packaging design, production date and expiration date, but there are also consumers who read into the internal composition of products, take into account what labels are applied (Kumar, 2017). Therefore, the appearance and information on the label of eco-organic products is an extremely important factor of trust and recognition of products. It is important for certification companies to use high-quality labels, monitor their use and conduct advertising campaigns to increase awareness.

An organic logo is what helps consumers distinguish organic and bio products in stores. The results of this interviews show that not all consumers base their decision on labels. For some people, ingredients play a more important role when choosing foods.

Below are the organic labels used in the interview:



**Figure 5** European Union’s logo “Euro-leaf”

Source: European Commission, 2019



**Figure 6 Japan Organic Label**

Source: Ministry of agriculture, forestry and fisheries of Japan, 2019



**Figure 7 Swiss Organic Label**

Source: The federation of Swiss organic farmers, 2019



**Figure 8 United States Organic Label**

Source: U.S. Department of Agriculture, 2019



**Figure 9 Label bio products in the Czech Republic “Biozebra”**

Source: International directory of organic food wholesale and supply companies, 2019

All interview participants reported that, on the whole, they are poorly oriented in labels on packages of goods and only know some of them that they accidentally learned about. This indicates a lack of sufficient awareness for buyers. Therefore, the label must necessarily have a letter designation, at least hinting at the meaning. And only in the future it is possible to remove the written designation.

Residents of the Czech Republic from the interviews generally trust organic logos. All this indicates a reliable system of control and certification of products. Certification centres and manufacturers need to continue to adhere to the set high standards.

*“I do not know every certification standard, but if I see a product with such a label, I believe that it is an environmentally friendly product” PN3.*

*“Most likely, such things are very closely monitored, and the fines for fake I heard are quite high. I think manufacturers do not need to take this risks” PN6.*

And respondents from Russia for many reasons do not trust labels. The reasons are related to the long absence of regulation of this issue, widespread forgery by manufacturers and lack of confidence in the certification system and control of production due to a large number of scandals and corruption.

Organic market participants should start informing potential customers about their work and the system of checks of manufacturers in order to increase trust and build reputation. And lawmakers should legislate to regulate nearby labels (green, farm) that can harm the credibility of organic production.

*“Most often, manufacturers do not want to spend money on additional product research and for no reason call their product “green”, “farm”, or something like that... There is more confidence in European products, but it’s not always possible to verify the manufacturer and the legality of the «badge»” PN8.*

Or trust only the familiar logos that are often seen on store shelves. Again, the lack of faith in the local control system and the expectation of reliability from foreign authorities. Despite the fact that in the local market they may not have legal force.

*“"Eurolist" began to appear more often on products. As far as I know, this is an organic label from the European Union. If you buy organic products, then only with this sign” PN1.*

### **4.3 Certification Knowledge**

It is important when buying organic products to know how they are produced, how they received the organic logo and what is included in the certification process. Respondents were asked if they knew about the certification process, the rules of verification, and how much they studied this issue.

In general, awareness of the process of certification of organic products among respondents is weak. Six respondents did not know the details of the process. They owned generalized information obtained from the media that these products are more environmentally friendly and valuable; the production process is much more complicated and therefore the products are more expensive.

The certification process must be made open and understandable for anyone to review. The openness of the system can attract new participants to this market and gain trust.

*«I don't really understand exactly how organic products are made and how exactly they differ from the usual ones. I heard that farmers do not use chemicals in the fields, special fertilizers are used, and animals are fed high-quality food. Moreover, I do not know anything about the certification process» PN2.*

*“I don’t own the details. I know that organic farms apply the principle of welfare to animals, do not use chemicals on plants and generally give more attention when growing” PN6.*

PN 4, 8 said that in Russia this issue is not regulated in any way. Any manufacturer can self-declare that it has organic, eco, bio, green, etc. products. At the same time, organic products from Europe inspire much more confidence, but not in all cases.

Such statements are related to the long absence of any kind of legislative control. The situation should normalize over time. It is extremely important for manufacturers to keep track of their reputation and disclose the details of checking enterprises.

*“Most often, manufacturers do not want to spend money on additional product research and for no reason call their product “green”, “farm”, or something like that. Responsibility for a fake or fraudulent label is minimal or not even punished. This situation tempts to take risks in the pursuit of profit” PN8*

*“As far as I know, the organic certification system is just being introduced and the main law will begin to work seriously from the beginning of 2020. All organics before this date cannot be taken seriously. This is an uncontrolled matter, where at best a private company checks, but there is no trust in it and of course no one has cancelled corruption” PN4.*

#### **4.4 Motives for consumption or avoidance**

Among the most frequent motives for buying organic products in the Czech market are: health care, lack of chemical additives, product quality, environmental friendliness knowledge of the growing process, it is modern, guarantee of origin and others (Poc, 2006).

Health care is the main and most popular motive for consuming organic food. This is a belief in its usefulness, healthier and environmentally friendly, without harmful

additives. Participants in organic production should focus on this advantage in comparison with conventional products.

*“In the production of these products do not use chemistry or other toxic substances and are more carefully grown, which means they are more valuable”* PN1.

*“Potentially healthy products, health care”* PN2.

Indirect proof of the reason for buying organic products is the purchase of baby food. One of the participants PN5 noted that often people choose baby food for themselves, because they believe baby food is made of better ingredients and is more controlled. Caring for the environment has also been mentioned as a reason to buy eco-friendly products. People think more often about the environment and see the results of nature pollution, they want to resist these trends and take part in nature protection

*“I’m vegan and eat not only eco, bio food, but also one that does not harm animals and plants in any way... Buying organic is a good way to support conscientious farmers to reduce the burden on the environment”* PN3.

*“Buying organics would be a good way to help the environment, all other things being equal ...”* PN5.

Other motives for buying organic products are also noted - this is a social motive and advertising. Wealthy and high-status people can afford to buy only organic products, which means that buyers of such products can consider themselves to belong to these groups.

*“I admit, many people can buy eco and bio products to emphasize their social status and / or under the influence of advertising, but it doesn’t affect me ...”* PN4.

The economic reason is central to avoiding consumption. In a particular case PN8, due to the lack of an adequate budget for food, the choice is often given to cheaper options

and the price is the main factor in the choice. Buyers of this type are outside the target group for organic sales.

The second reason is the lack of visible benefits of organic consumption PN4, 6, 7. Consumers need more information about benefits and value from organic products and agriculture. Clearly show the difference in consumption and the consequences of their choice. Make it possible to see at any time how the production and growing process is going. Better yet, implement it online.

*“I choose products according to the principle of taste and appearance. In the case of organics, there is no difference in taste and appearance, I see no reason to overpay”*

PN6.

*“Because of the sports diet, I’m more concerned with specific ingredients, so I’m studying the composition of the product in detail. More often I do not see such a big difference in compositions between conventional and bio products”* PN7.

## **4.5 Organic Food Quality**

Since the main motivation in buying organic products is its usefulness and health care, it is logical to expect that people see such products to be of higher quality and valuable. It is important for every person who is interested in their health and takes care of themselves that the product is grown “without GMOs, steroids, chemical technologies and without harmful inclusions”. And thanks to the special conditions of production, these expectations find evidence PN1.

But there are no practical facts that this is the case. For example, one respondent notes this can be seen by the difference in taste between organic and ordinary products.

*“When comparing regular and organic foods, I see no difference: the taste is about the same, the appearance, too. Then can you be sure that the products are more valuable in the case of organic”* PN5.



Opponents emphasize precisely the lack of real advantages in the consumption of this product.

*“There is no documented evidence of better organic products, except for independent statements by manufacturers and certification organizations. Is the premium worth the benefits they provide? If you remove the organic label and compare the products, you will not see the difference” PN4.*

People still believe more in numbers and would like to see just such evidence in the scientific research of organic products.

*“If organic products really would be more valuable, then there would be a lot of research and evidence about this. Ideally, if we could understand exactly how much certified products are better and we could understand whether it is worth overpaying for it” PN 4.*

More research needs to be done to identify the benefits specifically for the user of organic products. Consumers want more benefits for themselves, for their health. The benefits for the environment are still in second place.

## **4.6 Price premium**

As a result of certification and complicated production process, eco products require more costs and, accordingly, the final price is higher than traditional products.

The majority of respondents agreed that the surcharge is necessary or appropriate, but the purchase will depend on their income (PN 1, 2, 3, 7, 8). Theoretically, and some practically, they are ready to pay even 2 times more for organic products.

*«My income allows me to pay up to 100% extra» PN2.*

*“If there was a sufficient budget, I would prefer organic products only, now I can allow an overpayment of 10%” PN1.*

*“If I see the components I need in organic products, I’m ready to pay up to 25%” PN7.*

*“ If such products are tastier, I can pay 30-50% depending on the product category” PN6.*

In the current situation, the spread of the surcharge was 10-50%, on average, which is confirmed by studies of this issue (Smith, 2008). Over time, increasing the popularity of organic products and increasing its production will reduce the cost and make it available to a larger circle of the population.

The industry needs to strive to reduce the final price in order to increase market coverage and increase the number of adherents. One of the ways to reduce costs can be achieved by automating the certification process and reducing costs on the part of regulatory authorities. State assistance to such producers will also help develop the market.

One respondent said she was prepared to cut other expenses, but would not change her more serious vegan diet. Vegan production also has potential for development, and it can become the next stage of development of the economy. However, it is not the object of this thesis.

*“I’m vegan ... and I can’t change my diet. In my case, I’d rather give up on other expenses so that I could buy environmental friendly products” PN3.*

## 5 Conclusion

Market development allows consumers to meticulously choose products. More and more often, buyers think about what they are buying, how it affects them, their health and the environment.

However, awareness of the details of the work of organic farming is still quite low and more often the consumer is guided by a ready-made cliché about organic.

The country of birth of the participants and the culture in which they were brought up had a great influence on the interview results. Russian consumers are more restrained in the matter of organics and try such products with caution. In Europe, the development of the organic market has gone much further ahead and already has a certain reputation and trust.

In many ways, organic products remain “not for everyone” products with a significant price premium, which slows down market penetration and the speed of the appearance of new organic products. In general, people are willing to pay extra for such products.

An important breaking point is the belief in the marketing history of creating organic products, where buyers do not see for themselves the practical value in choosing organic products.

Based on the results of the interviews, we can conclude that organic products will find their fans and the volume of the Russian and especially European market will grow. Awareness and responsibility of consumption among the population is growing. Customers are increasingly aware how their choice of products in the store can affect the environment and the economy as a whole. But this is only the beginning of a long journey, questions remain for organic products regarding proven value and the possibility of a complete transition to the consumption of only organic products.

## 6 References

- Bourn, D. (2002/01). A comparison of the nutritional value, sensory qualities, and food safety of organically and conventionally produced foods. *Critical Reviews in Food Science and Nutrition*, 42(1), pp. 1-34.
- Bowden, T. (2020/01). *All ecolabels matching 'organic'*. Retrieved from Ecolabelindex: [http://www.ecolabelindex.com/ecolabels/?search=organic&as\\_values\\_03=](http://www.ecolabelindex.com/ecolabels/?search=organic&as_values_03=)
- Clark, Tilman, M. (2017/06/16). *Comparative analysis of environmental impacts of agricultural production systems, agricultural input efficiency, and food choice*. Retrieved from IOPscience: IOPscience
- Crystal Smith-Spangler, M. M. (2012/9/4). *Are Organic Foods Safer or Healthier Than Conventional Alternatives?: A Systematic Review*. Retrieved from American College of Physicians: <https://annals.org/aim/article-abstract/1355685/organic-foods-safer-healthier-than-conventional-alternatives-systematic-review>
- Dahan, Babad, Lazarovitch. (2014). Nitrate leaching from intensive organic farms to groundwater. *Hydrology and Earth System Sciences*, 18, pp. 333–341. Retrieved from Nitrate leaching from intensive organic farms to groundwater
- E.Lester, G. (2006/04). Organic versus Conventionally grown produce. *HortScience* Vol.41(2), pp. 296-300.
- European Commission. (2019). *Legislation for the organics sector*. Retrieved from European Commission: Legislation for the organics sector
- Gangurde, S. (2016). *Dark Side of Conventional Agriculture*. Retrieved from [www.researchgate.net](http://www.researchgate.net): [https://www.researchgate.net/publication/306259861\\_Dark\\_Side\\_of\\_Conventional\\_Agriculture](https://www.researchgate.net/publication/306259861_Dark_Side_of_Conventional_Agriculture)
- Government Publishing Office US. (2019). *NATIONAL ORGANIC PROGRAM*. Retrieved from Electronic Code of Federal Regulations: [https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=9874504b6f1025eb0e6b67cadf9d3b40&rgn=div6&view=text&n ode=7:3.1.1.9.32.7&idno=7#se7.3.205\\_1601](https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=9874504b6f1025eb0e6b67cadf9d3b40&rgn=div6&view=text&n ode=7:3.1.1.9.32.7&idno=7#se7.3.205_1601)
- Hilgertova, M. (2008). *Organic farming and GMO-coexistence issues*. Bioinstitut.
- Krebs, L. (2015). Organic farming not always best for environment. *Oxford Farming Conference*. Oxford. Retrieved from <https://www.theguardian.com/environment/2015/jan/07/organic-farming-environment-lord-krebs>
- Kumar, N. a. (2017). Do labels influence purchase decisions of food products? Study of young consumers of an emerging market. *British Food Journal*, 218-229.
- Ministry of Agriculture of the Czech Republic. (2016). *Action plan for the development of organic farming in 2016-2020*.
- Mukhopadhyay, K. (2005). *Moderin Agriculture and Environmental Pollution*. Retrieved from [www.researchgate.net](http://www.researchgate.net): [https://www.researchgate.net/publication/320101362\\_Moderin\\_Agriculture\\_and\\_Environmental\\_Pollution](https://www.researchgate.net/publication/320101362_Moderin_Agriculture_and_Environmental_Pollution)
- Muravyev, I. (2018/09/27). *The cost-effectiveness of eco-marketing*. Retrieved from New Retail - online magazine for retail and e-Commerce: [https://new-retail.ru/marketing/ekonomicheskaya\\_effektivnost\\_eko\\_marketinga7989/](https://new-retail.ru/marketing/ekonomicheskaya_effektivnost_eko_marketinga7989/)
- Muravyev, I. (2019/07/02). *ECO marketing as a new way to promote goods*. Retrieved from [vc.ru](http://vc.ru) - Internet magazine about business, start-ups, innovation, marketing and technology: <https://vc.ru/marketing/73507-ekologicheskij-marketing-kak-novyy-sposob-prodvizheniya-tovara>

- Napolitano, Girolami, Braghieri. (2009). Organic meat: Market development and consumer willingness to pay. *Organic farming: methods, economics and structure*, 2-12.
- Poc, I. (2006). *Potential of organic food in the Czech market, marketing study for Ministry of Agriculture*. Retrieved from SYNERGY MARKETING: <https://slideplayer.cz/slide/12267024/>
- Porterfield, A. (2018/11/16). *Organic fungicide copper sulfate poses dangers to humans, animals, insects—how does it compare to conventional pesticides?* Retrieved from Geneticliteracyproject.org: <https://geneticliteracyproject.org/2018/11/16/organic-fungicide-copper-sulfate-poses-dangers-to-humans-animals-insects-how-does-it-compare-to-conventional-pesticides/>
- Reganold, J. P. (2016/02). *Organic agriculture in the twenty-first century*. Retrieved from Researchgate.net: [https://www.researchgate.net/publication/293014068\\_Organic\\_agriculture\\_in\\_the\\_twenty-first\\_century](https://www.researchgate.net/publication/293014068_Organic_agriculture_in_the_twenty-first_century)
- Reganold, J. P. (2016/02/03). *Organic agriculture in the twenty-first century*. Retrieved from Nature research journal: <https://www.nature.com/articles/nplants2015221>
- Russian Committee , f. (1994/09/21). *Resolution of September 21, 1994 N 15 "On Approval of the Procedure for Certification of Products in the Russian Federation"*. Retrieved from Kontur. Normativ. Legal reference service: <https://normativ.kontur.ru/document?moduleId=1&documentId=7455>
- Shorrocks, V. M. (2017). *Conventional and Organic Farming: A Comprehensive Review through the Lens of Agricultural Science*.
- Smith, T. A. (2008). Organic Premiums of U.S. Fresh Produce. *Proceedings of the NCCC-134 Conference* (pp. 208-216). Cambridge : Cambridge University Press.
- The European Parliament and of the Council. (2018/06/14). *Regulation (EU) 2018/848 of the European Parliament and of the Council*. Retrieved from Eur-lex.europa.eu: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L\\_.2018.150.01.0001.01.ENG](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2018.150.01.0001.01.ENG)
- The European Parliament And The Council EU. (2003/10/18). *Regulation (EC) No 1830/2003*. Retrieved from Eur-lex.eu: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:268:0024:0028:EN:PDF>
- The Federal accreditation service. (2019/10/08). *Accreditation of the certifier of organic products*. Retrieved from The Federal accreditation service: <https://fsa.gov.ru/press-center/press/9726/>
- US Department of Agriculture. (2012/11). *Pesticide Residue Testing*. Retrieved from The Agricultural Marketing Service (AMS): [https://www.ams.usda.gov/sites/default/files/media/Pesticide%20Residue%20Testing\\_Org%20Produce\\_2010-11PilotStudy.pdf](https://www.ams.usda.gov/sites/default/files/media/Pesticide%20Residue%20Testing_Org%20Produce_2010-11PilotStudy.pdf)
- Zhao, X. (2007/03). Consumer sensory analysis of organically and conventionally grown vegetables. *The Journal of Food Science* 72 (2), pp. 87-91.

## 7 Appendix

### List of questions

1. What's your gender?
2. How old are you?
3. Where are you from and where do you currently live?
4. What is your highest reached level of education?
5. Do you believe in the "organic" concept? Do you know anything about the organic certification process?
6. Do you trust the organic logo when you see it in the store?
7. Do you purchase organic food? If yes, how often? If no, why?
8. How would you describe your main motives for purchasing or avoidance organic food? (This question was modified depending on whether participants bought organic products or not)
9. What are the main obstacles keeping you from purchasing more organic products and why?
10. Do you think that organic food is of a better quality? Explain your opinion.
11. How much are you willing to pay extra for organic products?
12. What is important to you in choosing a food product?

### Interview example

PN 2

1. Male.
2. 24.
3. I am from Russia, currently living in the Czech Republic.
4. Bachelor's degree.
5. I don't really understand exactly how organic products are made and how exactly they differ from the usual ones. I heard that farmers do not use chemicals in the fields, special fertilizers are used, and animals are fed high-quality food. Moreover, I do not know anything about the certification process.
6. I don't know how the signs differ. More often I look for words on products, such as "organic" or "eco". Rather trust than not.
7. I keep track of what I eat and what I buy, so I try to buy just such products as possible.
8. Potentially healthy products, health care.
9. Very limited assortment in stores or markets.
10. Most likely, these products are of higher quality, because they are given so much attention during production. I don't know exactly, but I want to believe it.
11. My income allows me to pay up to 100% extra.
12. Quality, usefulness, taste, habit.