

UNIVERSITY OF LJUBLJANA  
SCHOOL OF ECONOMICS AND BUSINESS

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MASTER'S THESIS

**CONSUMERS' ATTITUDES TOWARDS ORGANIC FOOD  
PRODUCTS IN CANTON SARAJEVO**

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## AUTHORSHIP STATEMENT

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## **LIST OF ABBREVIATIONS**

**B&H** - Bosnia and Herzegovina

**BAM** - Bosnia and Herzegovina Convertible Mark

**CEFTA** - Central European Free Trade Agreement

**EC** - European Commission

**EU** - European Union

**FB&H** - Federation of Bosnia and Herzegovina

**FiBL** - The Research Institute of Organic Agriculture

**FIPA** - Foreign Investment Promotion Agency of Bosnia and Herzegovina

**GMOs** - Genetically Modified Organisms

**IFOAM** - International Federation of Organic Agriculture Movements

**IOAS** - International Organic Accreditation Service

**JAS** - Japanese Agricultural Standard

**NOP** - National Organic Program

**OK** - Organska Kontrola

**ÖLG** - Organic Farming Act

**RS** - Republika Srpska

**SPSS** - Statistical Package for the Social Science

**UK** - United Kingdom

**US** - United States

**USDA** - United States Department of Agriculture

**VIF** - Variance Inflation Factors

**WTO** - World Trade Organisation

## INTRODUCTION

In the 20<sup>th</sup> century, technological advancements led to different approaches to agriculture and land cultivation, which left a great impact on rural landscape and population. Improvements in machinery and technology, and an increase in the use of pesticides, herbicides and chemical fertilizer consumption resulted in higher food output while disregarding the effect which it had on the environment. As the effect of industrialized agriculture on the environment grew, governments with the help of different organizations have successfully implemented different policies by demanding the controlled seasonal organic production. Since the early '90s, as the consumers' interest in the organic food products grew, changes in consumers' nutrition and core values modified as well. In today's society, consumers are giving great attention to their health, the wellbeing of their children, and the safety of the environment. The organic food market has grown substantially around the world, with European Union (hereinafter: EU) countries being one of the leaders of organic food production and consumption.

The organic food market in Bosnia and Herzegovina (hereinafter: B&H) is investigated since the term "organic" is used more often in the neighboring countries and well-known in EU markets. Regarding this field of research in B&H, the literature is scarce, with a limited number of studies. The main focus of this thesis is on public policy and development of the organic food market in B&H, meaning that we try to contribute to the literature by investigating current organic food trends in B&H. To the best of our knowledge, the research on the organic food market in B&H, while taking into account the data gathered from the questionnaire, has not been previously conducted.

The purpose of this master's thesis is to investigate the relationship between the perceived intrinsic and extrinsic quality cues and the purchase intention for organic fruit in Canton Sarajevo. Additionally, the thesis will look into the effects of healthy consciousness and healthy lifestyle on purchase intention for organic fruit in Canton Sarajevo. Through this research, we aim to achieve the following objectives:

- To make an overview of organic farming on a global scale;
- To determine to what length are organic food markets developed in both EU and B&H;
- To provide an overview of public policy towards organic food, more specifically the legislation adopted in EU and B&H;
- To collect data on organic food consumers in Canton Sarajevo;
- To investigate whether health consciousness and/or healthy lifestyle cues influence consumers' attitudes towards organic food products.
- To investigate whether intrinsic and/or extrinsic quality cues influence consumers' attitudes towards organic food products.

Therefore, referring to the problem and purpose of this master's thesis, we state below the main hypotheses of our research:

- **H<sub>1</sub>**: Health consciousness influences purchase intentions for organic fruit.
- **H<sub>2</sub>**: Healthy lifestyle influences purchase intentions for organic fruit.
- **H<sub>3</sub>**: Perceived intrinsic quality cues influence purchase intentions for organic fruit.
- **H<sub>4</sub>**: Perceived extrinsic quality cues influence purchase intentions for organic fruit.

The narrative part of the thesis is based on the pre-existing theoretical and empirical literature. The empirical part of the thesis is based on the data which was gathered in Canton Sarajevo from May to August, 2015. Following the relevant literature and previous research, we decided to analyze the influence of perceived intrinsic and extrinsic quality cues on purchase intention for organic fruit in Canton Sarajevo, through an online questionnaire and in-depth interview. Statistical Package for the Social Science (hereinafter: SPSS) was used to calculate and draw conclusions for the consumers' purchase habits, health consciousness, healthy lifestyle and intrinsic and extrinsic quality cues of organic fruit. Moreover, multiple regressions analysis was used to determine whether relationship exists between the health consciousness and healthy lifestyle on one side and purchase intention for organic fruit on another.

The thesis is organized in the following way. In the "Introduction" problem of our research, the main hypotheses, and the purpose and goals of our research are defined. The first chapter "Organic Agriculture" provides definitions of organic food and organic farming based on theoretical views and gives insight into organic food markets in B&H and EU. The focus of the second chapter "Public Policy towards the Organic Food Market" is on different characteristics and preconditions that lead to the development of organic food legislation in both EU and B&H. An in-depth interview with Organska Kontrola's labelling executive (hereinafter: OK) will help the reader understand more clearly the organic food situation in Canton Sarajevo and B&H in general. Next, literature review is presented in the third chapter "Consumers Attitudes towards Organic Food Products" regarding existing theoretical and empirical research since the mid-20<sup>th</sup> century until recent years. In the fourth chapter "Empirical Analysis", selected variables for our research are introduced, and the obtained empirical results are presented. "Conclusion" section presents the main findings of our analysis.

# **1 ORGANIC AGRICULTURE**

From the ancient times, people have struggled to get food and fought over it. The lack of food and possibility to preserve it was the problem since the beginning of the humankind. According to the research conducted by California Education and the Environment Initiative (2010), one of the earliest foods that have been cultivated were located in Mesopotamia, around 9400 BCE. On the shores of rivers Tigris and Euphrates there were planted fig-trees, barley, different kinds of wheat and other wild plants. People have also tamed animals that were used on their farms as a source of food, but also to help them with their work in fields. These favourable conditions were a reason why that land was known as Fertile Crescent, but also they were a reason why new civilization was created.

According to the law of B&H food is every matter or product that has been processed, partially processed or not processed at all, and used for consumption by the people, or can be expected to be consumed by the people (Zakon o hrani, Sl. glasnik BiH, no. 50/2006). Food is regarded as anything that is consumed for the provision of nutritional support for the organism. There are different classifications of food, but usually they are classified as plant or animal origin which provide much-needed nutrients such as carbohydrates, fats, proteins, minerals and vitamins (European Food Safety Authority, 2015, p. 18). In ancient times, food was obtained through hunting, gathering, and agriculture. An abundance of food was at disposal to be harvested at the time, but people still experienced problems with its preservation. Unlike today, food couldn't be processed and stored for later use. Scarcity of food was and still is a common issue. Before, it was because it couldn't be stored, and today because the food distribution isn't equal so many people are facing one of the biggest world problems - hunger. One of the solutions to the problem of food scarcity was the start of genetically modified organisms (hereinafter: GMOs) food production during the mid '90s. Following and contrary to the trend of GMOs production, interest in organic food products has been increasing over the years as people have increased concerns about negative externalities and their health concern.

## **1.1 The Global Growth of Organic Agriculture**

In September 2005 in Australia, after almost three years of hard work, the definition of organic agriculture was acquired by the General Assembly of International Federation of Organic Agriculture Movements (hereinafter: IFOAM). Following is the definition of Organic Agriculture (IFOAM EU Group, n.d.):

“Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture

combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.”

Through organic farming, human impact on environment is minimized and several objectives and principles are met (EC, n.d.):

- Crops are rotated so that on-site resources are used efficiently;
- Chemical pesticides, synthetic fertilisers, antibiotics and other substances are severely restricted;
- Genetically modified organisms are banned;
- On-site resources are put to good use, such as manure for fertilizer or feed produced on the farm;
- Disease-resistant plant and animal species adapted to the local environment are used;
- Livestock are raised in a free-range, open-air environment and are fed on organic fodder;
- Animal husbandry practices are tailored to the various livestock species.

Today, more than 120 countries in the world are practicing in organic farming and production of organic food products, with a daily increase in many farms and utilization of agricultural land (Mutlu, 2007, p. 3). One of the organizations that are contributing to collection and analysis of data is The Research Institute of Organic Agriculture (hereinafter: FiBL) with centers in Switzerland, Germany, and Austria. They are an independent non-profit organization which has a task to improve conditions for farmers that want to increase their productivity while paying attention to environment and health. In close collaboration with IFOAM and other international organizations, FiBL has started numerous projects in Eastern Europe, India, Latin America, and Africa.

According to Willer and Lernoud (2016, p. 24), there were 43.7 million hectares of organic agricultural land worldwide in 2014. Three of the highest organically managed regions are Oceania (17.3 million hectares or 40% of the world’s organic agricultural land), Europe (11.6 million hectares or 27%) and Latin America (6.8 million hectares or 15%). They are followed by Asia (3.6 million hectares or 8%), North America (3.1 million hectares, 7%) and Africa (1.3 million hectares or 3% of the world’s organic agricultural land). Global demand for organic food products is experiencing a yearly increase (Thompson, 1998, p. 1113). More than 2.3 million producers, which include companies, small businesses, and farmers were dealing with organic agricultural land in 2014. Almost 500.000 more hectares of organic agricultural land were put in use and processed compared to 2013. The distribution of organically managed lands can be found in Appendix 2 - Figure 1.

Organic Monitor is a research and consulting company which focuses on collecting and analyzing data related to the organic food industry. According to the research, global retail sales of organic food products in 2014 were over 80 billion United States (hereinafter: US) dollars, and its growth from 1999 to 2014 can be seen in Appendix 2 - Figure 2. Most organic food products were sold in North America and Europe, as these two regions include around a third of global organic farmland, but they comprise over 90% of organic food sales (Sahota, 2016, p. 134).

## **1.2 Defining Organic Food Products**

People have knowingly or unknowingly consumed organic foods for many years, but only recently the concept of organic food has been defined. A general confusion still exists about conventionally produced foods and foods of organic background. Even though general guidelines existed in organic production, it was necessary to define the entire process of production and verify that it satisfies necessary criteria. Generally speaking, the term organic is applied to agricultural products that were carefully inspected and regulated in order to meet specific requirements before, during and after production. Food is labelled as organic if the product doesn't contain synthesized fertilizers, pesticides or other additives (Jia, Liu, Wang & Liu, 2002, p. 61).

According to Chen (2009, p. 166) organic foods contain less harmful additives and more primary and secondary nutrients than conventional food, and they carry no additional risk of food poisoning. Therefore, consumers perceive organic farming as a healthier alternative to conventional foods in that they contain more nutrients (Tregear, Dent & McGregor, 1994; Magnusson, Arvola, Koivisto Hursti, Åberg & Sjöden, 2001; Baker, Thompson, Engelken & Huntley, 2004; Lockie, Lyons, Lawrence & Grice, 2004; Lea & Worsley, 2005; Padel & Foster, 2005) which, as a final outcome, enhances personal well-being (Williams & Hammitt, 2001). Most frequently purchased organic food products include fruits, vegetables, grains, or meat. Nowadays, organic food products don't include only products obtained from farming, but also they can be drinks, sweets, cereals, and many more.

Organic food organizations exist in order to protect the interests of farmers, small businesses and companies through organic labels, which should result in overall improvement of the stability of the organic food sector. Many countries make it obligatory for producers to provide special certification in order to sell products both locally and internationally. In this context, organic food products have to be produced according to standards which are created by national governments and implemented through international organizations, such as European Commission (hereinafter: EC).

### **1.3 Market Overview of Organic Agriculture**

In order to understand more about organic products, organic agriculture and its market share should be explained. Organic agriculture in the EU has been present for couple of decades now which means that consumers are familiar with products and market has already been formed. Contrary to that, the term organic is still much unfamiliar with consumers in B&H. Although organic food products don't have a specific place on the market, that doesn't mean that there aren't positive sides to that story. The organic food market has unlimited potential to grow in B&H, and as trend is slowly catching up in this area, it means that consumers still need to adjust to a new way of thinking. The research will later conclude that consumers are willing to purchase organic food products, but they are inadequately and insufficiently informed about it. One of the main reasons that it hasn't gained popularity and increase in purchase is the fact that the market of organic food products in B&H isn't completely regulated.

#### **1.3.1 Organic Agriculture in EU**

The consumers didn't immediately adopt the organic way of living when it was first introduced. Beginning of the 1990s was the turning point for organic agriculture in Europe, as every country was willing to participate in it. Currently, there are around 185.000 farms across entire Europe, while most of them are located in the states of the EU. According to Eurostat data from 2015 (EC, 2016, p. 5), EU-28 had an area of around 11.1 million hectares of organic agricultural area, which compared to 5 million in 2002 is a big improvement on land cultivation. It is estimated that the area for organic growth and production is increasing at approximately 500.000 hectares per year. This means that in the EU, the organic area represents around 6% of the total agricultural area.

EU is constantly trying to improve production and stabilize trade between countries that import and export organic food products. It is interesting to notice that most of the organic land (78%), and organic farms (81%) are situated in the countries which joined the EU before 2004 (EU-15). These countries today are leaders in organic production and next to it environmental perseverance in terms of clean energy production or production through renewable sources (EC, 2016, p.5).

#### **1.3.2 Organic Food Market Overview in EU**

The organic sector in EU has huge potential to improve sustainable growth and increase investments in all countries that are trying to be a part of this movement. EU is on a good path to achieve this potential, as records show that they are experiencing annual market growth, increase in production of organic food products and EU Organic Vision 2030 is still a focus of all organic activities. However, the problem might arise if the organic sector

in Europe doesn't reduce the gap between the supply and ever-growing demand of organic food products (IFOAM EU Group, 2016, p. 12). Organic sector sustainable growth can be capitalized through domestic and foreign investments that aim to increase market potential and provide a higher payout to all players that are involved in organic food trade. Countries are investing time and resources into organic action plans that are beneficial for the development of organic farming.

Each year the world organic food market is experiencing growth, and the same trend is happening in EU as well. In 2014, the value of EU organic food market was 23.9 billion euros, which is an increase of 7.6% compared to 2013. Every country has reported an increase in sales of organic food products, but the growth of the organic market is different when it comes to each EU Member States. Retail sales have more than doubled in Sweden and France, while Belgium and United Kingdom (hereinafter: UK) underperformed, as their sales didn't reach expected quota. Sales are highly dependent on per capita consumption, with Luxembourg and Denmark leading in that area, and Slovakia and Bulgaria consume the least from Member States. Even though there are differences in sales and consumption of organic food products between Member States, EU consumers are spending more on organic food on average. Current trends in EU organic market are (IFOAM EU Group, 2016, p. 13):

- Dynamic retail market - It was mentioned before that organic market is expanding and growing worldwide, and that trend is the same for EU. The average annual growth rate from 2006 - 2012 in grocery retail markets was around 2% - 3%;
- Consumers spending more on organic food - Individuals are spending more money on organic food products, and that is clearly seen from the data which shows that from 2005 - 2014, consumption of organic products per capita increased by 110%;
- Consumer demand for high quality produce - As it is the case with regular products, certain organic product groups have a higher demand than the rest. For example, organic eggs are very popular product in Austria, Belgium, Finland, France, Germany and Netherlands where they have 11% - 22% market share. Dairy products have up to 10% market share in Austria and Germany, while fruits and vegetables represent around a fifth of organic food markets for major countries of EU, like Italy, Ireland, France, etc.

These trends are very important for the position of organic foods on the market because the situation was different a few years before. The financial crisis in 2008 took a heavy toll on organic markets, as these foods were among the first ones to be substituted. Reason for that is consumers wanting to save money and cut back on weekly shopping bills. Research conducted at that time showed that the majority of people would reduce or even stop purchasing organic food in the following years to come.

In 2014, the four biggest markets in EU were Germany (7.9 billion euros), France (4.8 billion euros), UK (2.3 billion euros), and Italy (2.1 billion euros). The first market data available for 2015 show that growth continues in these large markets (Appendix 2 - Figure 3). In a global context, the US is the largest market (27.1 billion euros with a per capita consumption of 85 euros in 2014), followed by Germany. The countries with the highest per-capita organic consumption in 2014 were Switzerland; at 221 euros in 2014, followed by Luxembourg, Denmark, Sweden, Liechtenstein, Austria, and Germany (Appendix 2 - Figure 4). The organic share of the total food market is highest in Denmark (7.6%), Switzerland (7.1%) and Austria (6.5%) (Willer & Lernoud, 2016, p. 23).

### 1.3.3 Organic Agriculture in Bosnia and Herzegovina

B&H is among many things an agricultural land with a lot of potential for developing further in that area. According to Zurovec, Vedeld and Sitaula (2015, p. 245), B&H is grouped with other countries for which it is considered to be influenced a lot by a change in the climate. This change has influenced farmers and the overall agricultural production, which has led to variations in the percentage of land that is suitable for farming, so the data related to it isn't exact. Out of the total area of the country, it is believed that 47% is agricultural land, with approximately 20% being suitable for farming.

The agricultural sector includes mostly a large number of small-sized family farms, with the rest of the land being used by state firms which are much larger. The main problem of the agricultural sector includes low productivity. It takes into account the unit of output and the number of individual farms. However, a gradual increase in productivity would lead to an increase in farms' and households' income and result in a boost of production (Federal Ministry of Agriculture Water Management and Forestry, 2018, p. 19). There are many reasons that result in low productivity, such as farms operating with low or no technology at all, unfavorable weather conditions and lack of government presence and guidance.

Crop and livestock production represents less than one-third of the total output. Production of fruits and vegetables is an important sector in agriculture which faced an increase in production in the last decade. This increase is a direct result of investments which occurred in different areas across B&H. Many consumers in B&H aren't aware of investments in this sector and improvements in final products. According to Foreign Investment Promotion Agency of Bosnia and Herzegovina (hereinafter: FIPA) from the research conducted in 2011, many producers introduced latest technologies to their production which improved both intrinsic and extrinsic cues of products. Comparison between agricultural statistics between B&H and EU28 can be seen below (Table 1).

*Table 1: Comparison of Agricultural Statistics between B&H and EU28*

<b>Economic Importance of Agriculture (2011)</b>	<b>B&amp;H</b>	<b>EU28</b>
Agricultural Land (km <sup>2</sup> )	21,510	1,878,817
Agricultural Land (proportion of land area %)	42.20	44.03
Arable Land (% of land area)	19.70	25.60
Permanent Cropland (% of land area)	2.00	2.80
Employment in Agriculture (% of total employment)	20.50	5.00
Agriculture, Value Added (% of GDP)	8.50	1.60

*Source: Adapted from European Commission (2014).*

B&H has the potential to upgrade organic production to a level which could compete with the production of the developed countries. Large-scale cultivation isn't possible due to the small farms and hilly/mountainous land conditions. Out of the country's total budget, less than 2% is invested in agriculture which is lower when compared to other developing countries and considerably lower than the allocated budget for agriculture of developing countries (World Bank, 2010, p. 23). Nevertheless, small scale production could be achieved through cultivation and breeding techniques that preserve ecological balance.

Organic production could be improved with increasing the current capacities of the industry. Also, increase in exports and reducing imports would benefit local production of organic foods. Areas which can be processed and used for farming aren't completely utilized. It is important to do all of the above mentioned things, as one of the most important industries for B&H is food industry because it will raise revenues and provide jobs for a lot of people. A lot of the business infrastructure (around 70%) and livestock (around 60%) was lost in many areas, which has caused processing industry to run at the capacity of approximately 10% (FIPA, 2011, p. 14).

The influence of previous socio-political system in combination with the present complex political system have a negative influence on agricultural development. Detailed strategic planning and influx of money are of high importance for the agricultural sector of B&H. This should result in overall increase of knowledge, development of the farmable area, and finding proper resolutions to cope with climate change. The change cannot come from agricultural sector alone, but from all other actors as well, such as government, economic, social and other institutions (Zurovec, Vedeld & Sitaula, 2015, p. 261). Currently, Bosnian and Herzegovinian companies that process foods and beverages, including meat, milk, fruit, vegetable, sugar, oil, and tobacco are the pillars of the food industry. Low industry capacity is unable to satisfy local needs, which means that there are a lot of improvements to be achieved in this sector.

### 1.3.4 Organic Food Market Overview in Bosnia and Herzegovina

B&H has been a member state of the Central European Free Trade Agreement (hereinafter: CEFTA) since September 2007. This agreement defines obligations that a country has when it comes to trade of all goods. CEFTA removes restrictions and customs on import and export between the countries in the region. All of the CEFTA members are taken into consideration to be a part of EU, which should allow smaller producers to enter the EU markets more easily. After the break-up of Yugoslavia, almost all of the former countries are unable to attract foreign capital and investment. Due to lack of funding, proper management and government support, but also well-established legislation, countries (especially Ex-Yugoslavia countries) are unable to enter foreign markets easily (Mostetschnig, 2011, p. 61). The producers need to put additional effort into entering new markets with one product at the time and making sure the products remain on shelves across EU markets.

B&H is not a member of the World Trade Organisation (hereinafter WTO), meaning that there is no mediator to promote free trade and act as a negotiator or independent arbiter when trade disputes arise. One of the main benefits of WTO is, in fact, the free trade which should provide lower prices for all consumers, encourage competitiveness, increase economic welfare, etc. The local markets are overflowing with an abundance of quality domestic products, but retailers are still importing large quantities of beverages, tobacco, sugars, other dairy products, etc. B&H mostly exports beverages, fruits, and vegetables, nuts, rawhides, and skins.

The organic food market in B&H is still in the early stages of development. The situation is the same with Canton Sarajevo as there is a limited number of places where organic food can be purchased. The organic producers, unable to place their products on local markets' shelves, are exporting products on the EU markets. Most demanded type of organic vegetables, which have a B&H background, are different types of mushrooms. Organic fruits which are cultivated in B&H can be found more often on the EU markets. Most demanded are plums and different types of berries. Raspberries were most demanded organic food, and tones were exported until recent years. However, due to the inability to meet all of the producers' needs, the yield of this fruit is decreasing from one season to another. It will still take some time for organic production in B&H to reach its potential as an organic market isn't developed. Offered products are limited in diversity and quantity, and only a few of them can be found in supermarkets (Bingo, Mercator, DM) and specialized organic stores. The long-term consumption of organic food products and a better understanding of their benefits should increase the scale of the production. As a result, more products will find their place on market shelves in B&H.

#### **1.4 Comparison of Conventionally-Produced Food with Organic Food**

Food can be produced in different ways and contain different attributes that consumers might find attractive for purchase. Origin of food is diverse and it can be categorized into a food of animal origin, plant origin, non-organic or mineral origin, food from microorganisms, and other types of food. People usually consume food of animal origin which comes mostly from farmed animals, or plant origin which is cultivated and processed for consumption. Minerals, in the context of nutrition, usually depict dietary elements which are essential to life processes (Gleeson, 2006). Another classification of food is according to the degree of processing, and in that case, food can be natural and unprocessed, natural and processed and synthetic. Natural and unprocessed food is used daily as it includes fresh fruits and vegetables, while natural and processed food include juices, canned food, etc. Finally, synthetic food has been produced using new methods in combination with technological advancements. Examples of synthetic food are saccharin, hydrogenated plant oil, etc.

The science of agriculture evolved to keep up with the increasing human population. Since the current population is higher than 7.7 billion and rising, the most important question which needs to be addressed and answered is what can be done to feed the world's population in a sustainable and cost-effective way. The main goal which conventional agriculture tries to achieve is to maximize the crop yield by any means necessary. Reaching this goal is possible with the use of synthetic chemicals, GMOs and other different industrial products (Carpenter, 2011, p. 7). Conventional farming can negatively affect the biodiversity of the ecosystem, soil fertility, and environmental health. Conventional farms need to be monitored constantly, but investing in conventional farming is beneficial to the country's economy as it maximizes the crop yield (Gabriel, Sait, Kunin & Benton, 2013, p. 361).

Organic farming or sustainable farming focuses on different goals compared to conventional farming. Many health and environment benefits are associated with organic farming, but the production capacity is limited. It can be said for certain that sustainable agriculture fails to deliver as high of output as conventional agriculture in terms of production. Organic agriculture uses tradition, but also science and innovation to promote the good quality of life for everyone involved in production and consumption (Gomiero, Pimentel & Paoletti, 2011, p. 96). Sustainable agriculture produces food through natural actions which have a lot of social, economic, and environmental benefits.

Most of the consumers purchase organic food products because of their perception that these types of products are generally better than conventionally grown alternatives. However, consumers will not purchase organic food products if they don't perceive them as better or they don't acknowledge the effects they have on the entire ecosystem and

general wellbeing. Consumers generally know the pros and cons of different types of food, and they take all of it into consideration when they are shopping (Vindigni, Janssen & Jager, 2002; Jolly, Schutz, Diaz-Knauf & Johal, 1989). Generally, comparison can be made in terms of production and profitability on one side and nutritive values and food safety on other (Bonti-Ankomah & Yiridoe, 2006).

The first comparison between organic and conventional production systems can be made in terms of production and outputs they can yield. Most of the farming systems are small as it is easier to control the entire process of production. Conventionally produced foods have experienced a big change over previous decades. It is considered that people have produced mostly natural foods until the era of the green revolution that happened in the late '60s (Rekha, Naik & Prasad, 2005, p. 12). Introduction of nitrogen, phosphorus or potassium fertilizers and chemical pesticides to protect food from insects, pests, and different diseases have changed the natural foods as we know it. Uncontrolled use of fertilizers, pesticides, herbicides, or other agrochemicals made a big impact both on the health of people, but also the wellbeing of the environment and entire ecosystems. This is the reason why many producers have turned to alternative organic production, to keep up with the trends that many consumers follow, but also because they bring higher price premiums than conventionally produced alternatives.

Overall, organic production yields fewer outputs than conventionally produced alternatives. The main reason for this is that organic production is strictly monitored and numerous legislations need to be followed before, during, and after production. For example, some studies for Canada show that for many fruits and vegetables, organically produced outputs are even 50% - 60% lower than conventionally produced alternatives (Entz, Guilford & Gulden, 2001, p. 354).

Lower outputs from organic production are compensated with increased producer prices. Increased prices usually have a negative effect on consumers purchase intentions. Average price premiums are different for each product, but they also vary from one country to another. For example, in 2010, research that was conducted in EU has concluded that producers on average had around 100% price premiums for organic cereal, where in Greece it was lowest of 30%, and in Luxemburg highest of 281% (Hamm, Gronefeld & Halpin, 2002). Producers in US have experienced the annual increase in price premiums for organically produced foods as well. For example, in the US, at the beginning of this millennium, price premiums for organic oats, corn, and wheat were between 70% and 100% higher than premiums for conventionally grown alternatives (Bertramssen & Dobbs, 2001). As the demand for organic food products increases, and as the organic sector grows, prices will most likely decrease (Bonti-Ankomah & Yiridoe, 2006).

In general, organic food production is going to have less impact on the environment and human wellbeing than conventional production. Reason for this is that organic production is heavily regulated, which prevents producers from using fertilizers, pesticides, and herbicides, all of which are allowed and used by producers of conventional food. This means that in a case when producers of conventional food would use chemical fertilizers to boost their production and growth, producers of organic foods would use manure or compost, which are natural, chemical-free fertilizers. For the organic food products to pass regulations and receive the organic logo, environment, or areas of land where this food is grown need to be well-maintained, not contaminated, and regularly checked for imperfections. Producers of organic food need to prove that they are taking care of and protecting natural resources, taking into consideration biodiversity. According to Food and Agriculture Organization of the United Nations (n.d.), some of the environmental benefits of organic agriculture include:

- Sustainability over the long term - Environmental changes from conventional agriculture are mostly occurring in the long-run, so organic agriculture aims to prevent medium and long-run changes and produce food while maintaining balance;
- Preservation of soil;
- Keeping water clean and without toxic waste;
- Maintaining the biodiversity;
- Positive effect on climate change.

According to Bourn and Prescott (2002, p. 1), consumers are looking for attributes such as nutritive values, sensory and food safety when choosing between products of organic background or those that are conventionally produced. Consumers often take into consideration potential threats to their health when choosing between organic and conventional foods. It is essential to pick the right food that will satisfy our basic needs and not carry any risk, but consumers worry about acute and chronic health effects, such as bacterial food poisoning and cancer (Hammit, 1990, p. 367). Buyers of organic food products will most often claim that one of the main reasons they purchase these types of products is because they care about their wellbeing, but also the health of those close to them. Many of these buyers will also claim that organic food products are more nutritious than conventionally produced foods because of the absence of chemicals that might affect the nutrients. On the other hand, consumers of conventionally produced foods don't believe that pesticides and herbicides would affect agriculture and production much. The main argument they have is that governments and producers would protect their health, so without worrying much, they usually shop at what they perceive as "high-quality" markets (Hammit, 1990, p. 369).

## **2 PUBLIC POLICY TOWARDS THE ORGANIC FOOD MARKET**

When producers decide to start making any new products, they have to carefully plan the entire process of production in order to pass all the inspections necessary for successful placement on the market. The same applies to organic food products; only, in this case, the monitoring is more strict and conducted more regularly. Process of production can be separated into different actions, where completion of one action needs to get a green light before another one can begin. Organic food producers need to plant organic seeds in organic soil and use organic fertilizers and water during growth. Machinery for processing and packaging of the products need to be done according to laws provided by certification bodies. If the producer has fulfilled all of the required criteria, then they are free to sell their final product to the consumers. Certification bodies verify products, which allow producers to sell them for higher revenue, but also they help consumers identify them more easily.

Countries across the world didn't adopt legal regulations on organic farming at the same time. First regulation was passed in 1973 in state Oregon, USA, and it was one of the first indicators that more attention needs to be given to organic foods and farming. It has been a struggle from the beginning to define organic food products, to determine the production process and to establish labelling procedures. It was very difficult for US government and agencies to oversee organic production as only 22 states have defined their guidelines and regulations with every state following its own. On December 21, 2000, United States Department of Agriculture (hereinafter: USDA) issued final rule on organic food farming and products, which obliged every farmer, livestock producer, handler and processor, which wanted to categorize their products as organic, to follow new guidelines (Ellsworth, 2001, p. 7).

### **2.1 Development of Organic Food Legislations in the EU since 1991**

European Council of Agricultural Ministers, on 24<sup>th</sup> June 1991, created and implemented first legislation on organic farming in EU. Council Regulation (EEC) No 2092/91 was characterized as one of the most important driving forces for the development of organic farming and organic labelling. The extent of the importance of this regulation can be seen in the fact that it has also influenced and shaped organic markets in North America and Asia. Nevertheless, more than 15 years later, it was time to make revisions and improve the original guidelines in accordance with new organic production and labelling standards. In 2004, EC laid a foundation for the development of future policies. Review of previous legal framework has begun in 2005, and two years later on 28 June 2007 Council Regulation (EC) No 834/2007 was implemented. This revision has been very important because it outlined new objectives and principles of organic agriculture and improved the

entire production process. In following period two additional regulations have been adopted: Commission Regulation (EC) No 889/2008 which provided in more detail production rules, labelling rules and control requirements and Commission Regulation (EC) No 1235/2008 which enforced new import regime (IFOAM EU Group, 2012, p. 6).

Council Regulation (EC) No 834/2007 included a number of objectives and principles. Most important objectives outlined in this regulation are (EC, 2013, p. 26):

- Creating and managing sustainable agricultural system;
- Providing high quality organic products;
- Producing different types of organic foods and products in order to satisfy consumers' needs, while minimizing the negative effects on environment, human, plant and/or animal wellbeing.

Important principles which organic farming is based on are (EC, 2013, p. 26):

- It is important to use natural resources in biological processes when managing ecosystems;
- It is prohibited to use external inputs during production;
- It is important to regulate and limit the use of chemically synthesised inputs;
- It is necessary to adapt rules of organic production in different regions due to changes in local conditions, development processes and/or climate conditions.

Previously mentioned objectives and principles represent a foundation for a strong and healthy relationship that needs to exist between the government, non-governmental organizations, certification bodies, producers, and consumers. In-depth and extensive communication and information sharing are key aspects which should be achieved. This will lead to positive results which should benefit the organic food sector. Organic certification bodies carry an important role since the credibility of organic food depends on the quality of provided certifications. In further text, the importance of organic certification bodies and certifications which they provide will be discussed in more detail.

### 2.1.1 Organic Certification Bodies in EU

Organic certification bodies have an important task in maintaining trust between producers and consumers of organic food products. The certificates they provide validate producers and guarantee that every step of the process has been closely monitored. In most of the countries, certification systems have been established, meaning that there is one organization controlling and monitoring the work of others. Organic certification bodies exist in developed countries, but lately, the trend has gained a lot more attention which has

led to an increase in interest in governments of developing countries as well. Today, there are close to 400 organizations worldwide which offer different services related to organic certification. When we break down this number to continents, Europe has the highest count of certification bodies or 160 (Willer and Yussefi, 2017, p. 11). This data shows remarkable dedication Europe has made in becoming a leading advocate of this movement when taking into consideration US was the pioneer in the organic industry. Following Europe is Asia with 93 certification bodies and North America with 80. Most of the certification bodies are located across the world, in US, Japan, China, and Germany, but that hasn't decreased the strength and communication between them.

In the US, a regulatory program called National Organic Program (hereinafter: NOP) has been started by USDA Agricultural Marketing Service, with the purpose to develop and enforce standards for organic products such as cotton, tobacco, dairy products, livestock, seeds, etc. According to their 5-year review of activities that spanned from 2009 - 2014, they managed to complete the tasks which they set before. This way, National Organic Program published several amendments which were important for further development of USDA organic regulations, increased transparency, supported organic trade, etc. This is just one of the examples of how unified body can help improve the situation of organic food producers and consumers in one country (NOP, 2015, p. 2).

Other examples of world organic food control bodies which have positive stories to tell are Japanese, Chinese, or German control bodies. In Japan, the Ministry of Agriculture, Forestry and Fisheries have developed a regulatory program named Japanese Agricultural Standard (hereinafter: JAS) which has a mission to monitor production and preserve characteristics of organic agricultural products. They have strong support from both the government and the consumers. However, further development of JAS program was made difficult due to incidents, such as the Fukushima incident. Even though this program was monitored more closely, that hasn't stopped them to overcome the difficulties and prepare for Tokyo Olympics 2020, where they plan to promote their organic products. In China, International Organic Accreditation Service (hereinafter: IOAS) was founded by IFOAM in 1997. Since then, their mission has stayed the same, and that is to build trust between certification bodies and work on improving the markets both nationally and internationally. In Germany, Organic Farming Act (hereinafter: ÖLG) has been established in order to control annually all of the 18 registered certification bodies. Their obligation is to monitor and implement changes in EU legislation, but also to inspect records and the certificates of organic certification bodies. EU has approved around 40% of certification bodies, 32% have obtained ISO 65 accreditation which approves the marketing and distribution of certified organic agricultural products and 28% are accredited by US NOP (Willer & Yussefi, 2007, p. 11). The primary focus of this paper is on two certification bodies IFOAM and OK, which are the most important ones in EU and B&H respectively.

### 2.1.2 The Role of International Federation of Organic Agriculture Movements (IFOAM) in Organic Food Sector

IFOAM was founded in France on 5<sup>th</sup> November 1972 during a congress on organic agriculture. National organizations of five countries have come together to discuss the topic concerning organic food which resulted in creation of a new international organization including: Nature et Progrès from France, Rodale Press from USA, Soil Association from UK, Soil Association South Africa from South Africa, and Swedish Biodynamic Association from Sweden (Paull, 2010, p. 95).

IFOAM was created for the purpose of becoming a unified voice for organic food, with an important task of controlling true information flow on different principles and practices of organic food worldwide. Their four core principles are of health, ecology, fairness and care. Nowadays, IFOAM has helped shaped markets across the globe by opening more than 800 affiliations in 100 countries. In order to keep a vast number of activities in check and be sure that operations are conducted accordingly, a general assembly is held every three years. During one of those meetings, IFOAM vision for 2030 was created, which they use as a guideline when going forward with their activities.

One of the most important challenges that IFOAM faces is that organic production is ever-changing and it moves beyond the niche, which means that at all times it has to be clear what organic was, what it has become and what future does it have. As it is with all the products, in the world of organic agriculture and production, end consumers are most important. The movement has to be prepared for all obstacles it might face, such as societal, economic, political, technological and environmental changes. These changes are inevitable and can potentially impact the organic industry as a whole, but preparations such as IFOAM vision for 2030 should prevent the negative side effects of before-mentioned changes (IFOAM EU Group, 2015, p. 6). The biggest factor that can impact the organic industry is people in general because their preferences change sometimes on a daily basis (e.g. if they purchase something one day, they can dislike the product and find the substitute for it the next day). This is why producers are trying to keep up with consumers needs by preparing for changes with questionnaires, interviews, and surveys. They are reshaping their approach and the way products are designed.

It is important to note that organic farming is an activity that strongly reflects to the state of the environment, food consumption, and the use of natural resources. IFOAM focuses on the preservation of animals, efficient management of energy and materials, and protection of living ecological systems, landscapes, climate, habitats, biodiversity, air, and water. Achieving smart and sustainable growth are important factors that EU requires from organic producers as those factors are at the heart of the strategy. European institutions are in charge of allocating funding, and distribution of resources will shape the agricultural and

food sectors in Europe. Organic farming provides organic food products that are highly sustainable and desirable, while the market for these products is constantly expanding. IFOAM has started programs and academies all around the world, so under IFOAM, now exist IFOAM EU group, IFOAM Euro-Asia, IFOAM France, IFOAM Japan, etc. IFOAM EU has been in charge of dozens of different projects over the years, but their main activities currently are directed to projects that include countries of mountain agro-ecosystems (Nepal, Pakistan, Peru), countries in East Africa (Tanzania, Uganda, Kenya), and development of organic agriculture in DPR Korea and Republic of Korea.

### 2.1.3 Labelling of Organic Food Products in EU

EC adopted EU organic food logo, often named “Euro-leaf”, on July 1<sup>st</sup> 2010 which obliges producers to use this logo on all products which they label as organic. The organic label isn’t the only indicator of organic products; there are also code numbers of the control bodies that provide product certificates and geographic indicators of the place where organic ingredients were grown. Products can be labelled organic if they contain at least 95% of organic ingredients, which makes them eligible to receive organic food logo. Countries around the world use different logos which they have developed, but in the EU there is one universal logo. One version of the logo can be seen in a further text in Figure 2, while the remaining two variations can be found in Appendix 3 - Figure 5 and Appendix 3 - Figure 6. Variations of the same logo are used for different types of packaging which results in the logo being always easily visible and recognizable. EC decided not to remove all previously created organic food logos because they believe that it would confuse the consumers of organic food products. Their solution was to add a new EU organic food logo next to other ones so consumers gradually get used to the new logo (IFOAM EU Group, 2012, p. 9).

One of the most important goals that producers try to achieve is to build a trustworthy relationship in the long run between the brand and the consumers. It is not impossible to achieve that specific goal, but it is a difficult process that has its ups and downs. The best example of consumers’ trust can be seen in the real-life case that happened in Italy in the period from 2007 to 2011 called “Gatto con gli stivali” or translated as “Puss in Boots”. More than 20 companies were involved in providing fake certification or defrauding national VAT systems for several million euros. Even though event was detected in Italy, it is recognized as a fraud on European level (EC, 2013, p. 26). This recognition is important for all EU member states because it shows that now they know to be better prepared or even prevent similar situations like this in the future. A major issue in the aforementioned fraud was the lack of communication because consumers and other companies found out about it from the media. This shows that preservation and sharing of information is necessary to prevent frauds in the future. In the end, consumers suffer the most in these situations, so their loyalty and confidence in organic food products without a doubt

shouldn't be tested (IFOAM EU Group, 2012, p. 22). Council Regulation has envisioned to use the organic logo to improve recognition of organic food products in EU, but also in other countries around the world. The understanding of the logo shows that consumers have some knowledge about organic farming and that they trust producers of organic food products. Over the years, studies have been conducted in order to see to what extent logo is understood by consumers. According to EC (2013), evaluations have concluded that consumers understand better the concept of organic farming than they do understand or recognize EU organic logo. Most of the consumers understand the benefits and issues of organic farming, while some consumers have wrong impressions about it. The main issue with organic logo is that many consumers aren't familiar with it. According to survey participants, around 25% know about the new EU organic logo, while less than 13% use it into consideration when purchasing organic food products. This might lead to a bigger issue in the future, which is an increase in a number of consumers who don't perceive the organic logo as an indicator of quality. It is important to educate consumers and reintroduce them to the organic logo because it might change their attitudes towards organic food products.

## **2.2 Organic Legislation in Bosnia and Herzegovina**

The organic food sector in B&H is still in the early stages of development. The trend that has been present in US and EU for more than 30 years now is just getting its momentum in B&H. Reason for this is the complex structure of government which prevents producers from taking bigger steps than they actually make. B&H doesn't have a governing body on a national level which should control the organic food sector. The central government is highly decentralized and consists out of two autonomous entities: Federation of Bosnia and Herzegovina (hereinafter: FB&H), and Republika Srpska (hereinafter: RS), and third region Brčko District which is locally governed.

FB&H consists of 10 cantons, out of which focus will be on consumers from Canton Sarajevo. On September 14<sup>th</sup> 2016, FB&H has adopted legal framework for organic production (Zakon o poljoprivrednoj organskoj proizvodnji, Sl. novine FBiH, no. 72/2016). This document should be the starting point for all producers or handlers of organic food products in FB&H. Implementing this document and all regulations is a problem because there is no governing body on the level of FB&H. Since 2007, there has been only one local certification body acting in B&H called Organska Kontrola.

The procedure of certification of organic production on farm confirms that during the production, storage, processing, and distribution of products, everything is done accordingly with organic standards. This allows for a producer to sell, label and promote their products as organic and entitles them to use logos which are associated with the term

organic. In B&H there are several different certification categories which depend on the legal framework and market. According to OK (n.d.), most represented categories include:

- Herbal production (herbs which are grown and gathered as food, animal food, and fibres);
- Cattle (Animals which can be used as food or for the purpose of food production, fibres or animal food);
- Products (Products which have been processed and packaged or refined and packaged);
- Spontaneous crops (secondary forest crops, natural-grown herbs, and mushrooms).

### 2.2.1 The Beginning of Organic Certification in B&H

Organska Kontrola, sometimes referred as OK is the first accredited certification body in B&H. The idea started in 2003 when founders wanted to experiment and provide new agricultural products that have an organic background. At that time, the organic frenzy has been present in US and EU, but it wasn't present in Balkan countries. Main reasons for this are the lack of public funding, as it is expensive to regulate the entire process of production and inability to create a government organization that will be in charge of this sector and adopt necessary legislation (Vittuari, 2011).

In the starting years of OK, they have managed to educate and gain trust of many consumers that recognize their logo and all benefits associated with it. In 2007, IFOAM had signed a contract with OK until 2020, and provided them with accreditation which is accepted on international markets. It took a few more years for OK to synchronize its standards with EU organic standards. Through cooperation with EU and Switzerland, OK provides certificates to its clients which allows them to use OK logo on their products. The logo is registered and protected, and the use of the logo is explained in detail OK's rulebook on using OK logo. First logo variation can be found in the further text as Figure 1, while the other variation can be found in Appendix 3 - Figure 7. Certification of organic production is done in accordance with NOP Standard, JAS, Swiss standards called BIO SUISSE, etc. In 2011, OK has certified 39 Bosnian organic farmers, and since that year, they have collaborated with KRAV (Swedish certification body) and ICEA (Italian Institute for Ethic and Environmental Certification). Despite difficulties such as lack of public funding, the organic sector can name more than a few success stories (Api-Med Cooperative in Sanski Most, Admir Halilović in Sarajevo, Elmar d.o.o. Trebinje, etc.).

### 2.2.2 Interview with the Labelling Executive in Organska Kontrola

Interview with Mrs. Bernisa Klepo was conducted in order to understand better the importance of organic legislation and organic logos in general, and what does organic food

production mean from B&H. The interview should provide more detailed insight into organic legislation in B&H and we will try to determine what should be done in order for consumers to increase the consumption of organic food products. Bernisa Klepo is a labelling executive in OK, and her day-to-day activities are never the same. Her job description includes communication with organic producers, evaluation of reports and preparing them for inspectors, analysing applications they receive from different producers and determining whether applicants are on a correct path of receiving the organic status.

The interview was conducted in OK offices in Sarajevo and it lasted approximately 40 minutes. During this time, Mrs. Bernisa Klepo provided general insight into organic farming and products in B&H and Canton Sarajevo, and she shared her ideas on how the organic food production could improve over time and benefit B&H producers and consumers. The questions and answers are outlined below.

**Q: How would you define organic foods?**

A: There are many definitions of organic foods, but in our situation and in my opinion, organic foods are the ones that have obtained certification which is provided by the organic certification body. OK as an association, also me included, doesn't recognize any food as organic if the producers didn't obtain the necessary certification and used organic logos in labelling. It is hard to obtain the certification, and even though it doesn't bring many benefits locally, it allows the consumers to enter foreign markets and export their products. Certification needs to be in accordance with clearly defined legislation and standards.

**Q: Do you consume organic food products and can you specify where can you purchase them in Canton Sarajevo?**

A: Organic foods are present in Canton Sarajevo, but there aren't a lot of organic producers. Only a few of producers have obtained organic certification in Canton Sarajevo, and their products can be found in local markets. The offer of organic foods is scarce in Canton Sarajevo, and B&H as a whole, so we import a lot of products.

There are several shops which declare themselves as organic shops, but in case of organic products, it is necessary to follow the legislation from the beginning of the production to the shelves where products will be displayed. Shops which are selling organic products need to be certified, but none of them are. This brings the question of how much the organic food products are controlled and are they indeed organic. I try to consume as much organic food products as possible. Due to their scarcity, I mostly consume herbs, spices and different seeds as additives to my regular meals.

**Q: How do you grant a certification to a firm? What are the criteria?**

A: OK is accredited and approved by EC, and because of that OK is eligible to provide the certification to firms if they meet the necessary criteria. When a firm applies to receive accreditation, the progress over the period of one year is closely monitored. Employees who work here gather the samples of soil, water, seeds and fertilizers, and their origin is tested so it could be verified that there are no traces of harmful chemicals, pesticides, etc. The verification is conducted several times a year, and only after all of the criteria are met, a certification can be provided. If I should explain it in stages after we receive the producer's application and predetermined fee, several steps need to be taken in order for a producer to receive organic certification:

Step 1: The authorized certification body verifies the producer's application and compares the provided information with the organic legislation standards;

Step 2: Field examination is conducted to determine whether the producer is operating accordingly and to confirm the previously provided information;

Step 3: The certification body grades the field inspector's report to affirm whether the production follows the organic legislation standards;

Step 4: Depending on the production, a transition period duration is determined, during which the producer needs to obey all of the organic legislation standards, and the certification body needs to monitor the producer at least once a year.

Organic food producers which we provide with necessary organic accreditation don't have the same status in B&H as they would receive in other European countries. In other countries, an organic certification is an important tool which firms use to boast and rise above the competitors. Here, the consumers aren't educated enough about the benefits of organic food farming and production so the producers invest less effort into their own production. However, this certification is important for organic food producers to be recognized by organic legal bodies in other countries which in most cases provide local organic food producers with much needed financial support.

**Q: Is consumer education important when talking about improvements in organic sector? Would you recommend to another person to consume organic food products?**

A: Consumer education is very important, but also legislation needs to be implemented in order to stop producers from illegally presenting themselves and their certifications. Many foreign organizations are present in the organic sector in B&H, and their activities aren't always controlled by local governments. Organic food products will always have a special place on markets, but in order for their share to grow, this entire industry needs to be regulated more. Producers can't operate alone without government assistance and encouragement. After strengthening legal regulation, help in the field of certification is

important because it is an expensive process. It is expensive for certification bodies to be accredited, but it is also expensive to provide certificates to the producers. I would recommend to another person to consume organic food products, but in the end, it depends on their willingness to buy and whether they understand the benefits of organic food products, such as the lower impact on human health and environment.

**Q: To conclude this interview, would you say there is a bright future for organic food products in Bosnia and Herzegovina?**

A: In my opinion, there is a bright future for organic food products if steps for achieving this future are taken seriously. To put it simply, everyone needs to come together so that organic food production and consumption increase in B&H. The government needs to help the producers through legislation and stimulation, there needs to be an increase in foreign investments, producers need to be willing to change their production and consumers need to put more thrust into organic food and broaden their horizons. I believe that if everyone gives their best, the future for the organic food market in B&H is bright and it will grow enough to be recognized by other countries which are leaders in organic food production.

The aim of this interview was to understand better the way organic food legislation works, and get a clearer picture of what the future brings for organic food in B&H. Workshops and seminars are important to broaden the horizons of consumers, and they should help increase the use of the term organic in daily conversations. Also, the producers still don't see the long-term benefits of switching from conventional to organic production, and by changing that mind-set it is certain that the number of organic producers will increase. The organic movement is still in the early stages in B&H, and it will probably take a couple of years and hard work to grow enough for it to be called an organic market.

### **2.3 Promotion of Organic Food Products**

Over the course of several decades, the production and consumption of organic food products have increased, but it is still not close to the production and consumption of conventionally produced food. Almost all of the countries in the world are devoting resources to improving organic farming and boosting the production of organic food products. However, according to Pearson and Henryks (2008, p. 96), the sales of organic food products are still low, or less than 1%. This number is rather small, given the fact that most of the consumers are already familiar with organic food production, farming, and logos to some extent. In general, firms should focus on the promotion of organic food products so that consumers already want to purchase them, and not to educate them during the shopping. One way producers could increase the sales of organic food products is through multi-unit price promotions, or to offer more than one product for one price (Akaichi, Nayga & Gil, 2015, p. 15).

Consumers can purchase a range of organic food products nowadays as they are becoming increasingly popular and distributed throughout the supermarkets, shops, food markets, etc. This wasn't always the case. The organic food industry is established on the idea that these types of foods are chemical, pesticide, and herbicide-free (Pearson & Henryks, 2008, p. 97). At first, the consumers only had a limited supply of organic food products to choose from. The consumer's image of these products was also poor because of their appearance. The pest holes, markings, and deformed shapes indicated that food was produced without additional chemicals, however because of the outer look they weren't desirable. Producers were facing additional difficulties such as high production costs, insufficient knowledge and inability to switch with ease from the production of conventional to organic food products (Štefanić, Štefanić & Haas, 2001; Gil, Gracia & Sánchez, 2000). The organic food is very seasonal, and availability, assortment, and price vary from one season to another (Squires, Jurić & Cornwell, 2001, p. 405). These factors influence a firm's marketing activities, meaning that it is challenging for many firms to implement correct promotion of their products. However, with an increase in farming and processing knowledge, and the establishment of modern organic supply chains, firms found a way to promote their organic food products, and they made sure that the organic food products are available on the market shelves throughout the year.

One way to distinguish conventional food products from organic is through certification, which most of the organic food producers try to obtain. However, not every producer ends up obtaining the certification. It is a lengthy process, wherein some cases, the entire process of production needs to be pesticide or herbicide free for up to three years (Hall, 2008, p. 2). Some producers don't want to wait that long to place products on market shelves. On top of this, organic certification is an expensive process, and it requires a hefty investment to protect the certification once it is obtained. The term organic represents the brand since it defines the product, and consumers can identify with it. It also reflects the product form, meaning that for example if the product class is meat, it can have two distinct forms, organic and non-organic. Gardner and Levy (1955, p. 35), claimed that the brand has a public image that the producers need to build and strengthen for the sake of the consumer. That being said, the brand will influence the sales of a product. The long-term success of the brand is based on a precise definition of the brand meaning, creating a brand image and maintaining that image over a longer period (Park, Jaworski & MacInnis, 1986, p. 135). One of the most important firm's marketing activities should be to reach the target audience through strengthening the consumer's perceived brand image. Consumers purchase organic food products for different reasons, including the effect of organic farming on the environment, taste, lifestyle, animal welfare, absence of pesticides and herbicides, etc. (Hall, 2008, p. 6).

The consumer's experience has been diminished with the use of organic with products which don't have an organic origin. That is why consumers are searching and consuming

products which are denoted as certified organic. Firms are taking different approaches to promote and increase the sale of certified organic food products. The most common approach is to personalize the product, so it stands out from all of the competitors' substitutes (Lockeretz, 2003). One of the most important issues that producers need to address is to make organic food products available in almost every food point of sale, such as supermarkets, shops, food markets, etc. To address the existing issues, several themes or indicators of purchasing motives and purchasing deterrents taken from Hughner, McDonagh, Prothero, Shultz II and Stanton (2007, p. 101) are outlined below in Table 2. The relationship of these themes is complicated as every consumer faces a different combination of motives and deterrents.

*Table 2: Purchasing Motives and Deterrents of Buying Organic*

<b>Motives and Deterrents of Buying Organic</b>	
Purchasing Motives	Purchasing Deterrents
Health and Nutritional Concerns	High Price Premiums
Superior Taste	Lack of Availability
Concern for the Environment	Scepticism of Certification Boards and Labels
Food Safety	Insufficient Marketing
Concern over Animal Welfare	Satisfaction with Current Food Source
Support of Local Economy	Sensory Defects
Nostalgia	
Fashionable/Curiosity	

*Source: Adapted from R. S. Hugner, P. McDonagh, A. Prothero, C. J. Shultz II & J. Stanton (2007).*

Different themes show that producers need to pay attention to keep the industry growing and to meet the consumers' needs. During the promotion of organic products, producers need to pay attention to consumer's understanding of the term "organic". If consumers can't distinguish between conventional and organic products, they will probably choose to purchase a cheaper alternative than spend more money. It is up to producers, marketers, and retailers to better convey the message (Hughner, McDonagh, Prothero, Shultz II & Stanton, 2007, p. 106). Producers can take different approaches through carefully planned strategies to promote organic products to the current consumer base and to attract new consumers. The first approach which should become the focal point of all communication with consumers is keeping it simple. There are different levels of consumer awareness, and because of the unaware consumers, it is important to speak so that everyone can understand what is being said. This means that in all of the promotional activities, the message should be achieved by using as little words as possible. The next approach which organic producers could take is to differentiate from the competitors and to stand out as the best alternative to conventional producers. The producers could come up with different

ways of selling products, key values, charity work, and many other points of differentiation, which are important to organic consumers. Finally, it is important to tell stories with a happy ending, which are important to humanize one's brand and connect with the listeners or consumers on a deeper level. Producers decide for themselves what stories they wish to tell, but consumers in general love to hear brand-based stories and user-experience stories.

The situation in B&H is a bit specific since there is a limited supply of organic food products to the local market. As the retailers only import organic food to sell, and hence, it is not their product, they aren't too much interested in the consumer's knowledge about this topic. The reality is much harsher than expected. B&H consumers are not educated enough about the organic production and benefits of their consumption. It is up to producers, retailers, and governments to engage more in the education of the consumers. The relationship teacher-student is missing here, since a lot of people, being sceptic or reluctantly willing to spend more money on organic food, will not purchase organic foods on their own. One of the first and probably easiest steps which could be taken is for government and non-government organizations to provide free education and samples of organic food to consumers who are showing interest in changing their dietary habits a bit. It could be said that first step was taken already, as in other Cantons (Tuzla Canton, Zenica-Doboj Canton, Herzegovina-Neretva Canton, and most importantly for this research Canton Sarajevo), it is possible to see producers from the local areas displaying their products during promotional events, food gatherings and so on.

Without a doubt, people are showing more interest in organic food products after they can interact with them and consume the samples. The second step, an important step which retailers need to take, is through visible displays and samples which consumers might notice during shopping. When we enter the store, all of our senses are targeted to make sure we choose one product over another. Due to an increased price of organic food products, more energy and resources need to be invested in the promotion of these products at the point of sale. Educated personnel, free samples, and open communication might interest consumer enough to try the product. Finally, promotion through media should be used more often as well (Radman, 2005, p. 272). Nowadays, it is easy to reach a large number of audience through online marketing activities. Impression count or a number of people who are reading new articles, visiting sites, and watching videos should be producers' most important aspect of a promotional campaign. They want to inform and provide facts to consumers, who will end up being their future organic consumers. In the end, it is up to consumers to decide whether they want to purchase organic food products or not, but before they make any decisions, they need to gather all of the information about organic farming, products and industry as a whole, or at least gain some knowledge about it.

### 3 CONSUMERS' ATTITUDES TOWARDS ORGANIC FOOD PRODUCTS

Together with the evident growth in popularity of healthy lifestyles, this fact represents one of the potential reasons for why the organic food market has grown substantially over recent years across the globe (Lockie, Lyons, Lawrence & Grice, 2004; Padel & Foster, 2005; Gifford & Bernard, 2006), becoming interesting for both academics and practitioners in different disciplines. In their attempt to identify the main motivators for organic food consumption, scholars have stressed the role of health consciousness as one of the most important predictors of the consumption of organic food (Schifferstein & Oude Ophuis, 1998; Michaelidou & Hassan, 2008). However, there are still gaps in the literature which arise from the conflicting studies where different results were obtained. Previous studies (Mai & Hoffmann, 2015; Magnusson, Arvola, Koivisto Hursti, Åberg & Sjöden, 2003, 2001) have confirmed that consumers have become more conscious of their health, and of the nutrition and quality of the food they eat, and that healthiness has become an important criterion for food purchase. On the other hand, Honkanen, Verplanken and Olsen (2006, p. 426) concluded that attitudes of some consumers might be formed based on environmental and animal motives. Nevertheless, although consumers may be health-conscious, as a result of unbalanced life situations, may be unwilling or unable to undertake any action in this regard. That is why this thesis will try to examine consumer's lifestyle that is shaped by life equilibrium, which further enhances the willingness of consumers to engage in organic food consumption (Gil, Gracia & Sánchez, 2000, p. 211).

Apart from the intangible and personality-related consumption drivers such as health consciousness and balanced lifestyle, the quality of organic food is still a major attribute with regard to purchase decision-making. Achieving quality in the case of organic food products is a formidable and challenging task. This is because quality stems from a highly complex and subjective process, and consumers, in general, have a very limited and fuzzy conception as to how specific characteristics contribute to quality *per se* (Alonso, Paquin & Mangin, 2002, p. 31). Therefore, in this thesis, a clear distinction is established between the intrinsic and extrinsic quality cues that consumers perceive and their respective role in terms of consumer purchase intentions in the case of organic food. The aim of this section of the thesis is to help us understand health-conscious consumers' behavior in a more comprehensive and holistic way, but also to examine whether the consumer's lifestyle influences the purchase intention for organic food. Also, we will try to examine whether purchase intention is influenced through two dimensions of food quality perception: (1) the intrinsic food quality dimension and (2) the extrinsic food quality dimension. Rather than observing food quality as an integrated concept, we will use two concepts established within the food quality literature, and observe how food quality dimensions guide the consumer characteristics' impact on purchase intentions.

### 3.1 Health Consciousness

According to Becker, Maiman, Kirscht, Haefner and Drachman (1997, p. 350), health consciousness represents the individual's willingness to engage in healthy actions. A consumer is health-conscious if he or she is familiar with their overall health and the state of well-being. However, more than being familiar, they should be ready to undertake any action maintaining or improving their health. To prevent the deterioration of health, one must be ready to take part in healthy behaviors and increase the health self-consciousness (Gould, 1988; Newsom, McFarland, Kaplan, Huguet & Zani, 2005). According to Kraft and Goodell (1993, p. 18), in most cases, the health-conscious individuals practice healthy nutrition and are involved with physical fitness. An increase in individual's health interest leads to an increase in purchase of organic food products (Lockie, Lyons, Lawrence & Mummery, 2002, p. 33). Some of the consumers are more willing to purchase organic food products than conventionally produced products since they value the organic foods more, and they believe that organic food products are a healthier alternative which improves their health (Schifferstein & Oude Ophuis, 1998, p. 129).

Consumer's attitudes are formed through their health consciousness, while attitudes in return form consumer's purchase intention of organic food products (Magnusson, Arvola, Koivisto Hursti, Åberg & Sjöden, 2001, p. 211). Individuals form their positive attitudes through engagement in health activities and being prepared to increase the number of health actions on a daily basis. According to Wandel and Bugge (1997, p. 20), many consumers are influenced by healthiness when they engage in food shopping, as it became a standard or an indicator of quality. Since the same consumers associate organic food products with quality, that resulted in increase in purchase of organic food products. Over the course of decades, the health care process experienced a slow change. For a long period of time, consumers had a passive role in shopping and consumption of products. Influenced by marketers and product selection on the marketplace, they didn't take into consideration the impact of those products on health and overall well-being. With the emergence of 'health care consumer', a more active role was taken, which led to improvements in health consciousness and healthy lifestyle.

Nowadays, consumers, in general, believe that organically produced products provide more benefits than conventional alternatives, including healthiness, food safety, environmental safety, and so on. Interest in health increased as consumers became more aware of food safety risks and started doubting the quality of conventionally produced food (Jolly, Schutz, Diaz-Knauf & Johal, 1989; Rozin, Fischler, Imada, Sarubin & Wrzesniewski, 1999). As the number of health care consumers increased, their influence increased as well, meaning they helped improve health promotion plans, protect the environment and increased the presence of organic food products in the marketplace (Gould, 1988, p. 97). The choice which consumers make when opting for organic or

conventional food products influences not only their well-being and health but also the food marketplace. That is why, through this thesis, we will try to examine whether there is a potential for further development of organic food marketplace in Canton Sarajevo, and how marketers should approach current and future consumers down the road.

All consumers don't have the same approach to the health care process. To some consumers it represents a major aspect of life, while others aren't involved in the process as much. Typically, the degree of participation is related to segmentation based on demographics, lifestyle, and socio-psychological differences (Kirscht, 1983; Feick, Herrman & Warland, 1986) or to patterns of the use of health care services (Andersen & Newman, 1973; Becker, Maiman, Kirscht, Haefner & Drachman, 1977; Bush & Osterweis, 1978; Catalano, Dooley & Jackson, 1985; Sharpe, Smith & Barbre, 1985; Wan, 1982; Wolinsky, 1978). The consumer's perception of health is constantly changing, but even if the consumers are health aware, they aren't actively trying to maintain their health. Health-conscious consumers are thought to be more open to new ideas relating to health improvement, will try new health care methods which others might think aren't useful and will engage in health actions more which might change the perception of those around them.

Understanding health-conscious consumers isn't an easy task as they are all guided by different motives and care about different benefits which organic food products provide. The literature is not consistent concerning the assessment of the importance of health consciousness as a driver of organic food consumption. For example Schifferstein and Oude Ophuis (1998, p. 128) identified health consciousness as the main motivator with regard to organic food consumption. Michaelidou and Hassan (2008, p. 164) focused on health consciousness, aiming to clarify its value in predicting attitude and purchase intentions towards organic food. Similar results were presented by Magnusson, Arvola, Koivisto Hursti, Åberg and Sjöden (2003, p. 115) who identified health consciousness as a predictor of attitude, intention, and purchase of organic food. However, Tarkiainen and Sundqvist (2005, p. 815) show that health consciousness is not a significant predictor of attitude in terms of buying organic food. In this model, health consciousness is represented by a Likert scale created by Fenigstein, Scheier and Buss (1975, p. 524), but was later restructured, so it includes dimensions taken from research by author Gould (1988, p. 98). The dimensions which are included in this thesis are: health self-consciousness, health involvement, health alertness, and health self-monitoring dimension.

### **3.2 Healthy Lifestyle**

According to Chen (2011, p. 111), lifestyle represents an attempt to adapt an individual's behaviours, so that basic life values are achieved, even though the environment is changing. Lifestyle doesn't change randomly and frantically, but much contrary to that, it

changes slowly, trying to balance the changes in environment and individual's value system. Marketers are paying a lot of attention to consumers' lifestyle, trying to predict the next move, in order to better position products on the market. Nowadays, the consumers have a greater disposable income than they had before, which means that their purchasing power increased as well. Also, individuals are leading a busier lifestyle than they did several decades ago. All of this led to changes in dietary lifestyle, mainly because consumers wanted to improve and take care of their health and environment. In order for an individual to lead a healthy lifestyle, first they need to be health-conscious and be prepared to engage in health-related behaviour.

Consumers take different approaches to practicing a healthy lifestyle, as not every consumer perceives and cares about health the same way. In general, consumers mostly care about natural food consumption, health care, and life equilibrium (Gil, Gracia & Sánchez, 2000, p. 212). A healthy lifestyle is influenced mostly by health consciousness, which forms the attitudes towards organic food products. According to Eagly and Chaiken (1995), an attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour. Strong attitudes are formed through values and beliefs. However, that doesn't mean that health-conscious consumers which uphold their values and beliefs will lead a healthy lifestyle. Some people might be ready to improve their health, while others might want to help preserve the environment and reduce negative externalities. Even though they are health or environment-conscious, their lifestyle won't change if they don't engage in healthy activities. For example, some people might be health-conscious, but due to their busy lifestyle, they are unable to attend to their health as much as they would like to, so they can't exercise as much or do regular health checks. Some might want to consume organic food products, but because of the increased prices, they still end up purchasing conventionally produced food (Krystallis and Chryssohoidis, 2005, p. 323). It is evident that a certain correlation exists between health consciousness and healthy lifestyle, but nonetheless, an individual can be health conscious even though they have an unhealthy lifestyle. We can say that a person will form strong attitudes towards organic food products if they are health conscious and as a result of that, they lead a healthy lifestyle.

Organic food-based lifestyle is becoming increasingly popular lately with people different ages practicing it. Main reasons why consumers choose to eat organic food products is because they have a sense of belonging, meaning they identify themselves with other organic consumers, or they want to be perceived differently by those around them (Bisogni, Connors, Devine & Sobal, 2002, p. 128). This is why many argue that it is difficult to change one's lifestyle, simply being influenced by the surrounding environment. Sometimes the positive benefits such as vitamins and physical fitness aren't enough to intrigue consumers enough for them to change their values and beliefs. The

concept of health consciousness should be introduced in early life so that an individual grows up practicing healthy habits.

According to Van Raaij and Verhallen (1994, p. 52), lifestyle should be restricted to certain life domains. The main reason why consumers choose to shift from conventionally produced food to organically produced one is because they believe they are healthier and provide environmental benefits. An individual will then try to reduce the health inequalities and engage in healthy behaviour such as take part in exercise habits, change their smoking and drinking behaviour, follow different diets, etc. This means that the main reason why there are health inequalities is that there are differences in how one leads their lifestyle (Sacker, Bartley, Firth & Fitzpatrick, 2001, p. 779). However, some consumers think that there is nothing beneficial for health in consuming organic food products, as they don't believe in the benefits which they provide. They even consider that organic foods are inferior to conventional foods and that they are there so producers could make more money. In other words, they don't believe that organic food is produced without synthetic fertilizers and pesticides (Chen, 2009, p. 174).

The main task of marketers is to monitor the lifestyle trends, and based on that knowledge approach the consumers through carefully thought advertising messages, social media, and events. This should help marketers not only maintain the current consumers base but also attract potential new consumers. The market for organic food is small. The marketers should increase consumer knowledge as that is the key to helping the organic food market grow. More evidence should be provided to consumers so they believe that organic food products are more superior to conventionally produced alternatives. For example, in B&H, there is an increase in events for the purpose of providing new information to consumers and educating them about organic farming and benefits of organic food products. Events in Sarajevo, Tuzla, Visoko, Banja Luka, Brčko and so on are becoming increasingly popular with hundreds of consumers visiting them. Many consumers are willing to start practicing healthier lifestyle; they just need to be educated properly and give them enough product options so they can choose for themselves. Once the consumer starts practicing healthy lifestyle, their food choices will depend on how they perceive the products which they intend to purchase. The following part of the chapter will focus on consumer's perceived intrinsic and perceived extrinsic cues.

### **3.3 Intrinsic and Extrinsic Quality Cues**

Purchase behaviour differs between individuals, and in today's society consumers tend to continuously compare products, brands, and services (Alonso, Paquin & Mangin, 2002, p. 32). The entire process of comparing and making judgments is based on all of the information that is available to the consumer. In this case, information can be characterized as cues, which are linked to products, brands and services. After the cues are identified,

evaluation and integration proceed, and together they form judgment (Szybillo and Jacoby, 1974, p. 74). While the consumers are gathering information about the products, firms are gathering information about the consumers. This led to an increase in market competitiveness, as every firm is fighting to strengthen their competitive advantage. Achieving this is no easy task, and some experts believe that it is more beneficial to create positive long-term rather than short-term relations with the consumers (Morgan and Hunt, 1994, p. 33). The strategy is implemented through constant fulfilment of short-term objectives such as increasing the consumer satisfaction and strengthening the consumer confidence in the products (Berry, 1983). A good indicator that the firm is implementing correct strategy can be seen in growth of consumer loyalty which should be the firm's final objective. However, Evans and Laskin (1994, p. 443) argue that the firm should not only aim to achieve the final objective with any means necessary, but it should utilize its resources to satisfy the consumer needs.

The most common approach firms use to conduct market research is through surveys, where the respondents are directly questioned about the firm's products with an accent on brand awareness, product prices, packaging, etc. (Enneking, Neumann & Henneberg, 2007, p. 134). The questions are usually formulated so that the data is collected on specific product features. This could provide a problem in further data analysis, because the consumers tend to overestimate the product. When respondents evaluate features separately, according to Teichert (2000), they tend to provide wrong answers. In order to please the interviewers, consumers tend to provide answers which they believe are acceptable and desirable. Thus, qualitative data will be obtained if the researchers provide well-structured questionnaires which will examine all of the product attributes, but also compare the products with competitor alternatives. The same approach can be implemented on all products, which means that organic food products are no exception. The market for these types of products is small, so that is, even more, the reason why the obtained results from questionnaires need to be precise and complete. However, in many cases the answers depend on the quality of the products which is being evaluated, so the firms must strive to always improve the consumer perception of the quality and the quality of the products itself. The quality provides characteristics which are desired by the consumers, and they must be related to consumers' perceived quality. The technical product specification are indicators of objective quality, so the goal of the many firms is to improve the physical part of the product. By meeting the consumers' demands, they will make sure to improve the consumers' perception about the objective quality of the product. However, some argue that the evaluation of the product will always be influenced by the consumer's subjective approach.

According to Alonso, Paquin and Mangin (2002, p. 45), it is believed that the quality of the product cannot be explained objectively through the physical attributes or specifications. The main reason for this is the consumer perception since the consumers are evaluating the

products subjectively. That being said, the firms, during the formulating and creation of their marketing strategy, must take into account the consumers' subjective perceptions of what they believe is important in a quality product. Many statistical analysis have been conducted so far to show the importance of product quality in the overall success of a firm's strategy.

Product quality should be considered as a critical factor in the formation of a firm's marketing strategy. Every consumer perceives the quality of the food products subjectively and rates the experience based on quality expectations. The food is consumed on a daily basis, and with that in mind, one might believe that every consumer is expert when it comes to finding and appreciating the food with the highest quality. Based on all the previous experiences, it could be said that every consumer has personal expertise when it comes to identifying quality food products (Alonso, Paquin & Mangin, 2002, p. 30). In reality the situation is much different. Studies that examined the consumer behaviour show that in terms of product quality, consumers don't have a lot of knowledge about the quality attributes or cues. The consumers need help in obtaining specific information so that they could devise own search strategies.

The specific information is the best way obtained through interaction with products and its quality cues. Products on first look are different in packaging, price, shape and so on, but even if we look at the two same products from different producers, they will be different in their own set of cues. The same can be applied to organic food products. Every piece of fruit and vegetable is characterized by cues which differ from one another. A lot of research was conducted in order to identify product cues from a theoretical point of view. Each cue provides a basis for developing various impressions of the product itself (Alonso, Paquin & Mangin, 2002; Niraj Dawar & Parker, 1994; Jacoby, Olson & Haddock, 1971; Richardson, Dick & Jain, 1994; Zeithaml, 1988).

According to Fandos and Flavián (2006, p. 649), information or cues which a consumer perceives during the shopping greatly influence the perceived quality of the products. The consumers constantly evaluate the products, and choose the one which they believe would satisfy their needs the most.

There are three categories of quality based on product attributes (Becker, 2000, p. 158):

- Search quality or quality at the shop includes intrinsic and extrinsic cues which the consumers perceive at the point of purchase. These cues are the most important indicators of quality selection;

- Experience quality or eating quality is the type of quality when the consumer experiences only when he or she consumes the product. This type of quality is obtained through organoleptic consumption of the product;
- Credence quality represents quality with encompasses both intrinsic and extrinsic attributes that consumers care about, but it is not influenced during purchase or consumption. The consumer is influenced by media, word of mouth, etc.

According to Acebrón and Dopico (2000, p. 230), quality can also be classified as expected and experienced quality. To a consumer, expected quality represents the quality which is perceived at the point of purchase. During this, consumer evaluates both intrinsic and extrinsic cues of the products. Depending on the visual impressions, consumer will decide whether or not he/she will consume the product. On the other hand, experienced quality occurs later during the consumption process. Based on the gathered data, the consumer will decide if the product meets their needs, and are the benefits outweighing the costs. The consumer is more likely to purchase and consume the product again in the future if they are satisfied with the expected and experienced quality of the product.

Based on the above mentioned, it can be said that that the factor deciding on the purchase of the product is the moment of purchase where the consumer evaluates all of the information about the product. Out of all the information, the biggest impact on the consumer have intrinsic cues and extrinsic cues (Fandos & Flavián, 2006, p. 647). It is difficult to precisely define the quality of the product and avoid being subjective about it. The degree of quality of each product is different because of the rudimentary differences between both intrinsic and extrinsic attributes. As it is with all of the products, organically produced food is a category where the purchase and the consumption of the product depend greatly on both intrinsic and extrinsic cues of the product.

Fandos & Flavián (2006, p. 648) continue their research based on previous research by other authors, and claim intrinsic cues are specific to each product and they disappear when consumed. They also can't be changed without changing the nature of the product itself. In the case of organic food products, which by the nature are perishable, intrinsic cues are the ones which "*cannot be changed or manipulated experimentally without at the same time modifying the physical characteristics of the product itself*" (Olson & Jacoby, 1972, p. 5). According to Zeithaml (1988, p. 5), a consumer is most likely evaluating the product through evaluation of its cues during the shopping. However, when a consumer can't rely only on intrinsic cues, he/she must include the extrinsic cues in the decision making process. We can thus say that the purchase intention of organic food products depends on both intrinsic and extrinsic cues of a product.

According to Enneking, Neumann and Henneberg (2007, p. 133), in today's fast growing markets, consumers can't rely solely on the traditional sensory analysis, meaning that consumers can't take only intrinsic cues into personal product evaluation. The firms tend to influence the consumer's decisions through extensive marketing campaigns, re-branding, prices, opening hours, etc. This being said, extrinsic cues are "*related to the product, but do not form part of the physical product*" (Olson & Jacoby, 1972, p. 5). The extrinsic cues are also known as image variables, and they are an important part of the product characteristic evaluation (Fandos & Flavián, 2006, p. 648). Researchers such as Jacoby, Olson and Haddock (1971), Valenzi and Andrews (1971) greatly contributed to better explaining the intrinsic and extrinsic cues. The change in the nature of intrinsic cues directly changes the physical products itself, while the change in the extrinsic cues influence the consumer's perception of price, store image, etc. The research further indicates that intrinsic cues have a larger impact on quality perception than the extrinsic cues. This is mainly because the research on perception of quality hasn't brought consistent results, but rather the results vary based on the product which is studied and the consumer's quality assessment.

In order to develop long-term purchase behaviour of organic food products, consumers need to make rational short-term decisions. The buying intention over time will lead to a change in consumer's attitudes, which are formed through the learning process. In most cases, individuals want to belong to social groups which tend to influence the personality and the information which is received. Additional information influences the consumer's perception of the product's quality, which as a result of it, changes over time. The firms should invest time and resources to monitor the dynamic nature of quality and adjust their marketing strategies to meet the ever-changing consumer's needs. It is difficult to create a positive relationship between the firms and consumers if the latter aren't educated enough on the product and perception changes. Information is best conveyed through advertisements, workshops, events, and enhancing the visible cues, which should help the consumers understand the origin and the quality of the products (Zeithaml, 1988). According to Sharp and Sharp (1997, p. 475), consumer's loyalty should be one of the most important long-term tasks which firms should try to achieve. Loyalty has an effect on consumer's perception of product quality, but it can't exist without previous product consumption or experience. It will emerge when consumer's attitudes about the brand are strong and positive, and in return that will result in repeated buying behaviour.

#### **4 EMPIRICAL ANALYSIS**

In this chapter, we present the scales which were used to analyze the obtained results from the questionnaire and introduce selected variables for our research: the dependent variable, independent variables, as well as standard set of control variables. Through all this, we

should be able to create a model which will explain the influence of perceived intrinsic and extrinsic cues on purchase intentions for organic fruit. Also, we will take into consideration the effect which health consciousness and healthy lifestyle have on purchase intentions.

#### **4.1 Research Methodology**

In the period from May to August 2015, a research was conducted through an online survey as the main research instrument, with the purpose of analyzing the influence of perceived intrinsic and extrinsic cues on purchase intentions for organic fruit in Canton Sarajevo. Survey data was collected via an Internet-based self-reported questionnaire. The questionnaire was administered in a developing European country. The participants, 250 grocery retail consumers with active residence in Canton Sarajevo, were recruited and randomly selected by an online access panel provider. Finally, after two reminders, a total of 222 usable questionnaires were returned, achieving a response rate of 88.8%. The respondents provided the answers individually to all the questions which were set up in the questionnaire. Approximately 15 minutes were needed to complete the questionnaire.

The questionnaire was created in a way that it is understandable, and not lengthily, meaning that 14 questions were used. Questionnaire in English language can be found in Appendix 4, while the questionnaire in local language can be found in Appendix 5. The consumers are most likely to come across organic fruit during the purchase process in Canton Sarajevo, so this was taken into consideration during the formulation of questionnaire. First several questions are related to the consumers' purchase habits, and to determine the responsible person in the household which is usually in charge of shopping. Also, we try to determine the purchase frequency of organic food products or the number of times person in charge of shopping purchases organic food products. Finally, to determine where consumers search and buy organic food products, for the purpose of our research we asked respondents to specify the point of purchase of organic food products, and whether they recognize during this process the organic food logos which are most commonly associated with organic food products.

Respondents' demographic characteristics such as age, gender, household size, education degree, socio-economic status, and the household average monthly income are presented in the final six questions of the questionnaire. Firstly, we will analyze the respondents' demographic characteristics to get a clearer image of our organic fruit consumer. Afterwards, we will approach the analysis of obtained results from Likert scales for each question. Finally, multiple regression analysis will be used:

- to determine the influence of health consciousness and healthy lifestyle on purchase intentions for organic fruit;

- to determine the influence of perceived intrinsic and extrinsic cues on purchase intentions for organic fruit.

## **4.2 Research Instrument**

Four different scales adopted from authors through the years were used in formulating the research questionnaire. For the purpose of examining the respondents' health consciousness, standardized Likert scale by author Gould (1988, p. 102) was used. It was implemented on nine different statements, where respondents could choose between five levels of agreement (1 - doesn't describe you at all; 2 - describes you a little; 3 - describes you about fifty-fifty; 4 - describes you fairly well and 5 - describes you very well). The scale includes four distinctive dimensions, where each one is tested by two or three statements: health self-consciousness (3 statements), health involvement (2 statements), health alertness (2 statements), and health self-monitoring (2 statements).

In the remaining Likert scales, the respondents could choose between 7 levels of agreement, meaning that the 7-point Likert scale was used. It ranged from 1 to 7, where 1 meant that consumers believe a statement isn't important, while 7 meant that consumers thought the specific statement was very important. For the purpose of measuring the respondents' affinity towards the healthy lifestyle, a standardized Likert scale by authors Gil, Gracia and Sánchez (2000, p. 212) was used, and it contained 11 statements.

During the purchase process, consumers tend to evaluate products based on their external and internal characteristics, also known as quality cues. Intrinsic and extrinsic quality cues of organic fruit were measured by Likert scale adopted from authors Olson & Jacoby (1972, p. 7). The question consists of 22 statements separated into two distinctive groups. First 12 statements (touch, colour, taste, smell, vitamin context, size, texture, shape, familiarity, freshness, wrapping, and looseness) relate to the measurement of the internal quality cues, while remaining 10 statements (advertisement, brand, promotion, provenance, price, salesforce, opening hours, parking facilities, proximity, and variety) relate to the measurement of the external quality cues of the organic fruit. Finally, purchase intention was measured using standardized Likert scale adopted from authors Dodds, Monroe and Grewal (1991, p. 312). Purchase intention was measured through 3 statements.

## **4.3 Research Sample**

For the purpose of this research, respondents were chosen using the method of convenience sampling. Convenience sampling is also known as Haphazard or Accidental Sampling, and it is a type of non-random sampling, where targeted population is chosen by a certain criteria. Some of the criteria are accessibility, geographical proximity, availability at a

given time, or the willingness to participate are included for the purpose of the study. The main assumption of this type of sampling is the homogeneity of targeted population due to its accessibility (Etikan, Musa & Alkassim, 2016, p. 2).

#### 4.3.1 Demographic Characteristics of Consumers in Canton Sarajevo

The respondents were mostly between ages of 25 and 34 (N=106 or 47.75%). On average, the respondents were 30.75 years of age, ranging between 19 and 67 years. More than 30.00% of respondents were younger than 25, while 14.41% of respondents were aged between 35 and 50 years. Also, the majority of the respondents were females, 142 of them or 63.96%. Males accounted for 36.04%, or there were 80 of them.

*Table 3: Age Structure of the Respondents*

Age	Respondents	
	Frequency	Relative Frequency (%)
Younger than 25	67	30.18
Aged 25-34	106	47.75
Aged 35-50	32	14.41
Aged 51-64	15	6.76
Older than 64	2	0.90
<b>Total</b>	<b>222</b>	<b>100.00</b>

Household size differs from single resident to 6 or more. Household counting two members was answered by 62 respondents or 27.93% of them. Following two-member household size is four-member household size, where or 27.03% of respondents or 60 of them come from, while 23.42% of respondents come from a three-member household.

*Table 4: The Structure of Respondents in Terms of Household Size*

Household Size	Respondents	
	Frequency	Relative Frequency (%)
1 (only me)	24	10.81
2	62	27.93
3	52	23.42
4	60	27.03
5	22	9.91
6 and more	2	0.90
<b>Total</b>	<b>222</b>	<b>100.00</b>

The highest percentage of respondents in terms of the degree of education, have finished master studies (N=100 or 45.05%). Close to 37% of respondents have a university degree, followed by 16.22% of respondents or 36 of them who completed the high school.

*Table 5: Respondents' Degree of Education*

Degree of Education	Respondents	
	Frequency	Relative Frequency (%)
Secondary	36	16.22
University	82	36.94
Master	100	45.05
PhD	4	1.80
<b>Total</b>	<b>222</b>	<b>100.00</b>

The socio-economic status data shows us that the largest number of respondents are full time employed (N=128 or 57.66%). Most of the respondents who are working full-time have a higher household monthly income and consume organic fruit products regularly. More than 22.00% of respondents are students, while 11.26% of respondents are unemployed.

*Table 6: Socio-economic Status of the Respondents*

Socio-economic Status	Respondents	
	Frequency	Relative Frequency (%)
Student	50	22.52
Unemployed	25	11.26
Working Full-Time	128	57.66
Working Part-Time	15	6.76
Working at Home	2	0.90
Retired	2	0.90
<b>Total</b>	<b>222</b>	<b>100.00</b>

Household monthly income statistics shows us that all of the respondents, who are consumers of organic food products, tend to consume these products even though the level of household monthly income varies significantly. The largest number of respondents stated that their household monthly income is between 850 Bosnia and Herzegovina Convertible Mark (hereinafter: BAM) and 1,700 BAM (N=87 or 39.19%). Around 26.00% of respondents claimed that their monthly income in the household is between 1,701 BAM and 2,500 BAM, while 24.77% of respondents stated that their income is higher than 2,500 BAM.

*Table 7: Structure of the Respondents in Terms of Household Monthly Income*

Household Monthly Income	Respondents	
	Frequency	Relative Frequency (%)
Less than 850 BAM	22	9.91
From 850 BAM up to 1,700 BAM	87	39.19
From 1,701 BAM up to 2,500 BAM	58	26.13
2,500 BAM and more	55	24.77
<b>Total</b>	<b>222</b>	<b>100.00</b>

The results shown in Table 7 indicate that even consumers who have lower household monthly income will choose to consume organic food products for their own personal reasons. It is also a good sign for organic food producers to increase the organic food production, and strengthen the presence of organic products on the local markets.

#### 4.3.2 Consuming Habits of the Respondents

Demographic characteristics tell us in more detail who organic food consumers are, while following tables should help us understand the consuming habits of the respondents. It is important to determine who is in charge of shopping in the household. The highest number of respondents, around 55.00% or 123 of them, stated that they along with another person are in charge of shopping. This number goes along with the household size results, since only 10.81% of respondents live alone, while remaining respondents live in households that count at least two members.

*Table 8: Responsible Person for Shopping in the Household*

Responsible Person for Shopping in the Household	Respondents	
	Frequency	Relative Frequency (%)
Me	60	27.03
Another Person	39	17.57
Me and Another Person	123	55.41
<b>Total</b>	<b>222</b>	<b>100.00</b>

Another answer which 60 respondents provided is that they alone are responsible for the shopping. This means that 27.03% of respondents will choose on their own whether and which organic food products they will purchase. Finally, 39 respondents which count for 17.57% of total respondents stated that someone else is responsible for shopping in their household. Almost all of the respondents which chose this answer are between ages of 20 and 30, or they are students or young professionals. There is a chance that they have no time to go shopping themselves, so they rely on someone else to do it for the household. Most of the respondents stated they purchase organic fruit at least once a week (N=87 or

39.19%), while 24.77% of respondents claimed to purchase organic fruits several times a week. The remaining answers show that 41 respondents or 18.47% of them stated that they purchase organic fruit products few times a year, along with 39 respondents (17.57%) who claimed to purchase organic fruits once a month. Respondents who purchase organic fruit once a week have a monthly income higher than 850 BAM, while most of them have at least 1,700 BAM. Organic food products are more expensive than conventionally produced alternatives so we can conclude that it is necessary to have a high income in order to regularly consume organic food products.

*Table 9: Frequency of Purchasing Organic Food Products*

<b>Organic Fruit Products Purchase Frequency</b>	<b>Respondents</b>	
	<b>Frequency</b>	<b>Relative Frequency (%)</b>
Once a Week	87	39.19
Several Times a Week	55	24.77
Once a Month	39	17.57
Few Times a Year	41	18.47
<b>Total</b>	<b>222</b>	<b>100.00</b>

For the purpose of this research, it was also important to find out where consumers purchase organic food products. Respondents were given five options to choose from, with the ability to write any additional location which wasn't stated. Based on the obtained results, respondents usually purchase organic fruit at the open market or street market (N=128 or 57.66%). It is important to mention that there is a chance that not all organic products are indeed organic. Many of the sellers at open and street markets tend to present their products as organic, backed with statements such as it is locally grown and without the use of pesticides and herbicides. All of this could be true, but none of these particular sellers have organic certification which is necessary to prove that certain product is organic. In the end, it is up to individual consumer to decide whether they will observe locally grown food as food of organic origin.

*Table 10: Location of Organic Food Purchase*

<b>Location Where Consumers Purchase Organic Fruit Products</b>	<b>Respondents</b>	
	<b>Frequency</b>	<b>Relative Frequency (%)</b>
Open/Street Markets	128	57.66
Discount Markets	68	30.63
Supermarket Chains	60	27.03
Organic Shops	44	19.82
Farm Shops	13	5.86
Other	7	3.15

Organic products at these locations tend to have organic logos next to their name, producer's name or country of origin. Usually three distinct logos can be found on the organic food packaging in above mentioned locations, in Canton Sarajevo. Based on the obtained results, 89 respondents stated that they aren't familiar with any of the shown organic logos. The majority of the respondents are familiar with Logo 2 (N=71 or 31.98%), closely followed with Logo 1 (N=65 or 29.28%). During the formulation of the questionnaire we were guided with the assumption that respondents are familiar with logos 1 and 2, because they are most commonly used:

- Logo 1 - organic logo used by OK, sole organic legislation body in B&H;
- Logo 2 - organic logo created by IFOAM and used on all organic food products produced in EU.

*Figure 1: Organska Kontrola Organic Logo (Logo 1)*



*Source: Organska Kontrola (n.d.).*

*Figure 2: European Union Organic Logo (Logo 2)*



*Source: Adapted from European Commission (n.d.).*

Contrary to Logo 1 and Logo 2, organic consumers in Canton Sarajevo aren't well familiar with Logo 3. This can be attributed to the fact that US organic producers use Logo 3. Even though organic food products are present in US for more than four decades now, there is a limited supply of them in B&H. This could be attributed to the fact that EU shares borders with B&H, so it is easier to import organic products from EU than US.

*Figure 3: United States Department of Agriculture Organic Logo (Logo 3)*



*Source: Adapted from United States Department of Agriculture (n.d.).*

Only 35 of the respondents or 15.77% of total respondents stated that they recognize Logo 3. These results represent an indicator of consumer's knowledge of organic food. It is important to be able to recognize organic logos, since they guarantee the consumers the origin and quality of the product which they are consuming. It was previously mentioned that even EU organic consumers have a hard time recognizing Euro-leaf.

*Table 11: Recognition of Organic Food Logos*

Recognition of Organic Food Logos	Respondents	
	Frequency	Relative Frequency (%)
Logo 1	65	29.28
Logo 2	71	31.98
Logo 3	35	15.77

## 4.4 Hypothesis Testing

Determining demographic characteristics help us understand who organic consumers are, however, we still need to determine why the consumers purchase organic food products. In the following part we will analyze the results of the questionnaire which relate to:

- Consumers' health consciousness;
- Consumers' affiliation to a healthy lifestyle;
- The importance of internal and external cues which are taken into consideration during the purchase of organic fruits;
- Purchase intention for organic fruit;
- The influence of health consciousness and healthy lifestyle on purchase intentions for organic fruit;
- The influence of perceived intrinsic and extrinsic cues on purchase intentions for organic fruit.

The questionnaire was created following the previous findings from different studies thorough the years. Researchers in the past had different approaches to the subject of consumers' purchase intentions for organic food. Based on the literature review, we hypothesise:

H1: Health consciousness influences purchase intentions for organic fruit.

H2: Health lifestyle influences purchase intentions for organic fruit.

H3: Perceived intrinsic quality cues influence purchase intentions for organic fruit.

H4: Perceived extrinsic quality cues influence purchase intentions for organic fruit.

In the following text, we will test all of the stated hypotheses.

### 4.4.1 Health Consciousness of Respondents

The reliability (internal homogeneity) of health consciousness' Likert scale can be confirmed due to the positive trend of Cronbach Alpha ( $\alpha$ ), which measured over 0.700. In our case, the internal homogeneity of health consciousness was  $\alpha=0.908$ . All of the dimensions also experienced a positive trend: health self-consciousness ( $\alpha=0.812$ ), health involvement ( $\alpha=0.727$ ), health alertness ( $\alpha=0.789$ ), and health self-monitoring ( $\alpha=0.815$ ).

Table 12: Health Consciousness of the Respondents

Item (N=222)	Mean	Standard Deviation
I reflect about my health a lot.	3.90	1.008
I'm very self-conscious about my health.	3.96	0.931
I'm generally attentive to my inner feelings about my health.	3.57	1.065
<b>Health Self-Consciousness (<math>\alpha=0.812</math>)</b>	<b>3.81</b>	<b>0.855</b>
I'm constantly examining my health.	2.78	1.162
I'm very involved with my health.	3.51	1.019
<b>Health Involvement (<math>\alpha=0.727</math>)</b>	<b>3.14</b>	<b>0.968</b>
I'm alert to changes in my health.	3.57	1.077
I'm usually aware of my health.	3.85	0.977
<b>Health Alertness (<math>\alpha=0.789</math>)</b>	<b>3.71</b>	<b>0.934</b>
I'm aware of the state of my health as I go through the day.	3.72	1.078
I notice how I feel physically as I go through the day.	4.16	0.952
<b>Health Self-Monitoring (<math>\alpha=0.815</math>)</b>	<b>3.94</b>	<b>0.934</b>
<b>Health Consciousness (<math>\alpha=0.908</math>)</b>	<b>3.67</b>	<b>0.783</b>

Based on the obtained results, we can conclude that the respondents have a moderate level of health consciousness (M=3.67). The biggest impact on this result have statements "I'm constantly examining my health" with M=2.78, and "I'm very involved with my health" with M=3.51. These results are worrying because people in general should pay more attention to their health and overall wellbeing. One more statement had one of the lower results and that is "I'm alert to changes in my health" with M=3.57.

In terms of individual dimensions, the respondents have the highest degree of health self-monitoring (M=3.94). Remaining results for individual dimensions include health self-consciousness (M=3.81), health alertness (M=3.71) and health involvement (M=3.14). All of the results are presented in Table 12.

#### 4.4.2 Healthy Lifestyle of Respondents

The reliability or internal homogeneity of healthy lifestyle was satisfied, since the value of  $\alpha$  measured at 0.775. Based on the obtained results, we can conclude that the respondents have a low level of healthy lifestyle (M=2.92). Consumers don't lead a healthy lifestyle in B&H. When we take into account that B&H is a developing country, and the people in general don't have a high purchasing power, the results go along with the predictions made before and during the formulation of questionnaire.

Table 13: Healthy Lifestyle of the Respondents

Item (N=222)	Mean	Standard Deviation
I follow a low-salt diet.	1.93	1.292
I am a vegetarian.	1.43	1.029
I do exercise regularly.	2.86	1.354
I avoid eating processed food (no processed food).	3.05	1.331
I often eat fruits and vegetables (high fruit consumption).	4.04	1.011
I rarely eat red meat (moderate meat consumption).	2.64	1.370
I avoid eating food products with additives (without additives).	3.10	1.241
I take regular health check-ups (regular health control).	2.53	1.235
I try to reduce my stress (less stress).	3.46	1.124
I try to have an organized and methodical lifestyle (ordered life).	3.37	1.076
I try to balance work and personal aspects (working/private life).	3.69	1.051
<b>Healthy Lifestyle (<math>\alpha=0.775</math>)</b>	<b>2.92</b>	<b>0.665</b>

In the previous years there has been a rise in health awareness, meaning that the consumer's lifestyle is changing as well. People care more about their health, try to consume healthier products, and spend more time working out. However, in reality results are still worrying, especially the results for statements "I take regular health check-ups" with  $M=2.53$  and "I do exercise regularly" with  $M=2.86$ . People should regularly visit their doctors, and monitor the quality of their health along with the changes in their health. Next to quality nutrition, one of the best ways to preserve good health is through exercise.

It is worth mentioning that two particular statements decreased  $\alpha$  value, and with that the mean and standard deviation. Consumers in most cases didn't agree with statements "I follow a low-salt diet", and "I am a vegetarian", which means that these statements recorded the lowest values. If these two particular statements were exempt from the Likert scale, average mean value would measure  $M=3.10$ . The obtained results are shown in Table 13. When we compare average mean values for health consciousness and healthy lifestyle, we can say that even the difference isn't too big, meaning that indeed one can be healthy conscious without leading healthy lifestyle.

#### 4.4.3 Intrinsic and Extrinsic Quality Cues of Organic Fruit

Question relating intrinsic and extrinsic quality cues of organic fruit also had a satisfying reliability or internal homogeneity for both quality cues. The intrinsic quality cues recorded  $\alpha = 0.890$ , while extrinsic quality cues recorded  $\alpha = 0.822$ . The results of intrinsic quality cues of organic fruit analysis can be seen in Table 14, while the extrinsic quality cues of organic fruit results are shown in Table 15.

Table 14: Intrinsic Quality Cues of Organic Fruit

Item (N=222)	Mean	Standard Deviation
Touch	3.53	1.341
Colour	3.85	1.189
Taste	4.40	0.996
Smell	4.31	0.937
Vitamin Context	4.13	1.032
Size	3.01	1.178
Texture	3.45	1.194
Shape	3.16	1.214
Familiarity	3.85	1.085
Freshness	4.67	0.817
Wrapping	3.42	1.233
Looseness	3.41	1.088
<b>Intrinsic Quality Cues (<math>\alpha=0.890</math>)</b>	<b>3.77</b>	<b>0.751</b>

Based on the obtained results, we can conclude that the intrinsic quality cues have moderate importance for respondents during the purchase of organic fruit (M=3.77). In terms of individual intrinsic quality cues, the highest importance with respondents during the purchase of organic fruit have freshness (M=4.67), and taste (M=4.40). On the other hand, respondents graded shape (M=3.16), and size (M=3.01) as the least important quality cues.

Table 15: Extrinsic Quality Cues of Organic Fruit

Item (N=222)	Mean	Standard Deviation
Advertisement	2.51	1.183
Brand	2.61	1.227
Promotion	2.57	1.215
Provenance	4.02	1.121
Price	3.67	1.151
Salesforce	3.05	1.193
Opening Hours	2.95	1.272
Parking Facilities	2.67	1.441
Proximity	3.32	1.246
Variety	3.97	1.113
<b>Extrinsic Quality Cues (<math>\alpha=0.822</math>)</b>	<b>3.13</b>	<b>0.756</b>

Based on the obtained results, extrinsic quality cues have low importance for respondents during the purchase of organic fruit (M=3.13). Respondents classify provenance (M=4.02) and variety (M=3.97), as the most important extrinsic quality cues. On the other hand,

advertisement (M=2.51) and promotion (M=2.57) recorded the lowest values. The majority of these statements depend on locations where organic fruit is purchased and the knowledge which consumers have of organic food products. The offer of organic food products is scarce in Canton Sarajevo, so there aren't a lot of organic brand on which consumers can rely. The results could be improved if more organic food sellers entered the markets, and more branding and promotion was done due to the increase in competitiveness. This result is, to some extent, in accordance with previous studies (Zeithaml, 1988; Alonso, Paquin & Mangin, 2002; Fandos & Flavián, 2006) who claim that intrinsic cues have a higher predictive value than extrinsic cues.

#### 4.4.4 Purchase Intention for Organic Fruit of Respondents

Reliability or internal homogeneity of this scale was present, since the satisfying value was recorded ( $\alpha=0.911$ ). Based on the obtained results, we can conclude that internal characteristics have a high influence on purchase intentions for organic fruit (M=3.99). The results are shown in Table 16.

*Table 16: Purchase Intention for Organic Fruit*

Item (N=222)	Mean	Standard Deviation
The likelihood that I purchase organic fruit is very high.	3.86	1.277
The probability that I consider buying organic fruit is very high.	3.96	1.204
I am willing to buy organic fruit.	4.15	1.115
<b>Purchase Intention (<math>\alpha=0.911</math>)</b>	<b>3.99</b>	<b>1.107</b>

#### 4.4.5 The Influence of Health Consciousness and Healthy Lifestyle on Purchase Intentions for Organic Fruit

Multiple regression analysis was used for the analysis of the influence of health consciousness and healthy lifestyle on purchase intentions for organic fruit. The independent variables in our case were health consciousness and healthy lifestyle, while the dependent variable was purchase intentions for organic fruit. Before the inclusion of the independent variables in the regression model, preliminary analysis was conducted, using the Pearson correlation, to test the connectivity between the variables. The obtained results indicate that there is a statistically significant correlation between the health consciousness and purchase intentions for organic fruit ( $R=0.469$ ,  $p<0.05$ ; Pearson correlation), and between the healthy lifestyle and purchase intentions for organic fruit ( $R=0.343$ ,  $p<0.05$ ; Pearson correlation). Based on the abovementioned, the independent variables can be included in the regression model. We can calculate the Purchase

Intentions for Organic Fruit by determining the coefficients of Health Consciousness and Healthy Lifestyle and the Constant. This can be seen below in equation (1).

$$\begin{aligned} \text{Purchase Intentions for Organic Fruit} = & \beta_0 + \beta_1 \text{ Health Consciousness} \\ & + \beta_2 \text{ Healthy Lifestyle} + \varepsilon \end{aligned} \quad (1)$$

The remaining results from the multiple regression analysis are shown in Table 17.

*Table 17: The Influence of Health Consciousness and Healthy Lifestyle on Purchase Intentions for Organic Fruit*

<b>Dependent Variable: Purchase Intentions for Organic Fruit Products</b>				
<b>Sample Size: 222</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>t-Statistic</b>	<b>p (Sig.)</b>
<b>Constant</b>	1.364	0.342	3.985	0.000
<b>Health Consciousness</b>	0.576	0.103	5.581	0.000
<b>Healthy Lifestyle</b>	0.177	0.121	1.461	0.045
R=0.477			F=32.241	
R-squared=0.227			F (Sig.)=0.000	
Adjusted R-squared=0.220			Sum of squares regression=61.563	
S.E. of the Estimate=0.97710			Sum squared residual=209.086	

The obtained results of the analysis are statistically accepted. The coefficient of determination ( $R^2$ ) is 0.227, which indicates that health consciousness and healthy lifestyle explain 22.70% of changes which occur in the purchase intentions for organic fruit within the consumers in Canton Sarajevo. Adjusted  $R^2=0.220$ , and that tells us that our data base in this case was adequate.

Value of  $F=32.241$  and it is statistically significant  $p=0.000<0.05$ , which implies for our regression model as well, meaning that the same one is better to use for the prediction of the future values of dependent variable, than to make conclusion based on the average values.  $b_0=1.364$  ( $p=0.000<0.05$ ) means that in the case when independent variables are 0, purchase intentions for organic fruit will be positive in the stated amount. Correlation coefficient in the case of health consciousness is  $b_1=0.576$  ( $p=0.000<0.05$ ), and that indicates that for every increase of independent variable for 1, value of purchase intentions for organic fruit will increase for 0.576. The correlation coefficient for healthy lifestyle is  $b_2=0.177$  ( $p=0.045<0.05$ ), which tells us that for every increase of independent variable for 1, the value of purchase intentions for organic fruit increases for 0.177.

Normal probability plot, one of the assumptions for standardized residuals, indicates the normal disperse (Figure 4), while based on the scatterplot, we can conclude that the homoscedasticity was fulfilled (Figure 5).

Figure 4: Standard Residuals Assumptions (Model 1)

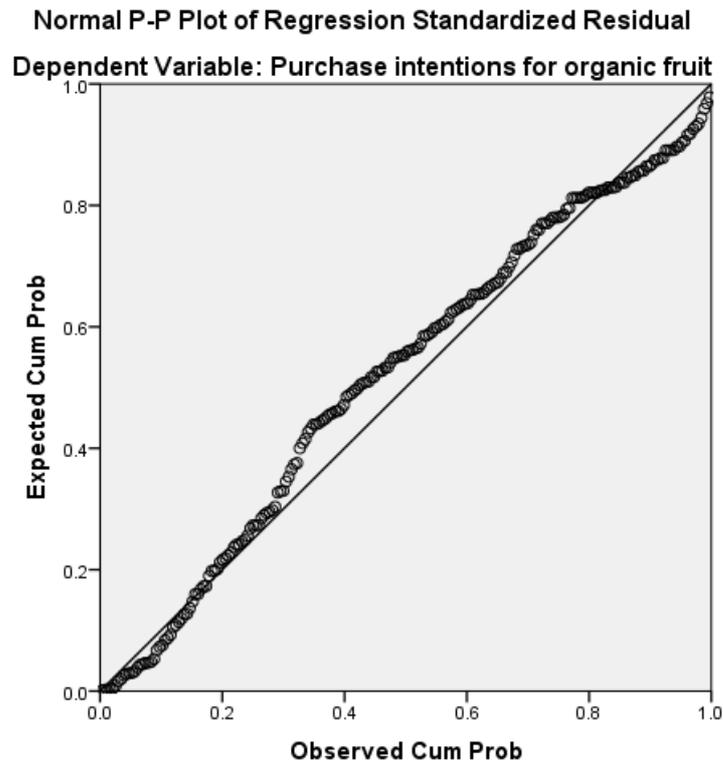
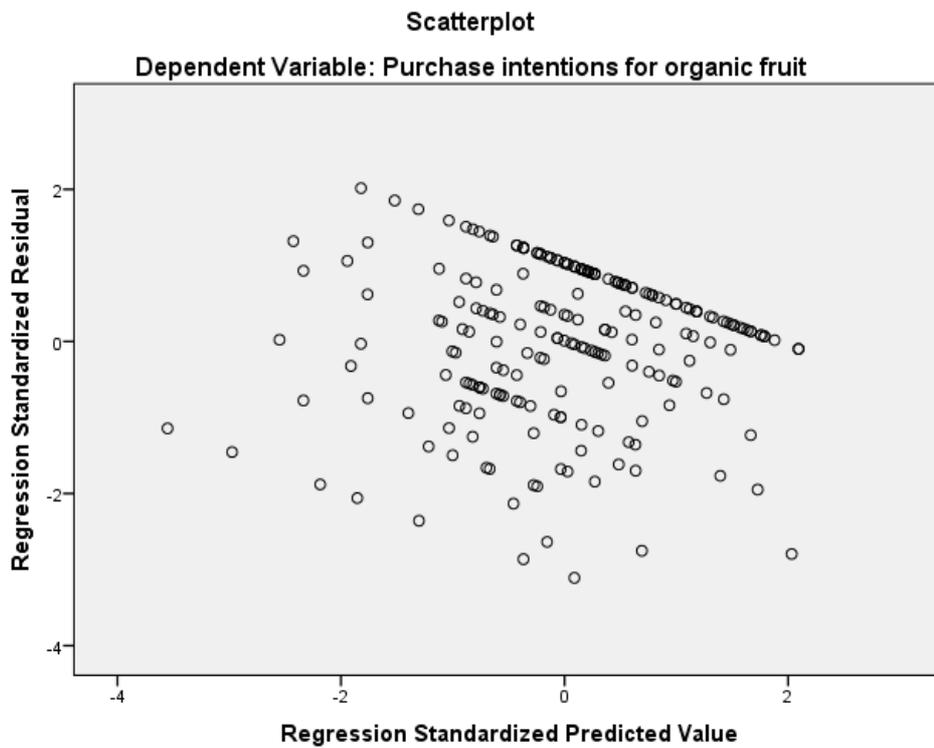


Figure 5: Standard Residuals Assumptions Scatterplot (Model 1)



The validity of this model is based on the facts that the value of Cook's Distance is lower than 1, and 95% of standard residuals in this model are  $\pm 2$ . Tolerance and Variance Inflation Factors (hereinafter: VIF) value indicate that this model is relevant. Tolerance with both of the independent variables has a value lower than 1, or 0.663, while the value of VIF is within the acceptable range or 1.508 for both independent variables. Based on all of this, we can claim that there is no multi-collinearity in this model. The obtained results help us confirm first two hypothesis, or both health consciousness and healthy lifestyle influence on purchase intentions for organic fruit.

#### 4.4.6 The Influence of Perceived Intrinsic and Extrinsic Cues on Purchase Intentions for Organic Fruit

Multiple regression analysis was used to analyze the second set of variables. Independent variables in our case are perceived intrinsic and extrinsic cues, while the dependent variable is purchase intentions for organic fruit. The preliminary analysis results indicate a statistically significant correlation between the perceived intrinsic cues and purchase intentions for the organic fruit ( $R=0.448$ ,  $p<0.05$ ; Pearson correlation), and the perceived extrinsic cues and purchase intentions for organic fruit ( $R=0.287$ ,  $p<0.05$ ; Pearson correlation). Based on the abovementioned, the independent variables can be included in the regression model. We can calculate the Purchase Intentions for Organic Fruit by determining the coefficients of Perceived Intrinsic Cues and Perceived Extrinsic Cues and the Constant. This can be seen below in equation (2).

$$\begin{aligned} \text{Purchase Intentions for Organic Fruit} = & \beta_0 + \beta_1 \text{ Perceived Intrinsic Cues} \\ & + \beta_2 \text{ Perceived Extrinsic Cues} + \epsilon \end{aligned} \quad (2)$$

The remaining results from the multiple regression analysis are shown in Table 18.

*Table 18: The Influence of Perceived Intrinsic and Extrinsic Cues on Purchase Intentions for Organic Fruit*

Dependent Variable: Purchase Intentions for Organic Fruit Products				
Sample Size: 222				
Variable	Coefficient	Standard Error	t-Statistic	p (Sig.)
Constant	1.348	0.363	3.709	0.000
Perceived Intrinsic Cues	0.597	0.102	5.844	0.000
Perceived Extrinsic Cues	0.126	0.102	1.239	0.017
R=0.454			F=28.479	
R-squared=0.206			F (Sig.)=0.000	
Adjusted R-squared=0.199			Sum of squares regression=55.861	
S.E. of the Estimate=0.99034			Sum squared residual=214.787	

The obtained results of the analysis are statistically accepted. The coefficient of determination ( $R^2$ ) is 0.206, which indicates that perceived intrinsic cues and perceived extrinsic cues explain 20.60% of changes which occur in the purchase intentions for organic fruit within the consumers in Canton Sarajevo. Adjusted  $R^2=0.199$ , and that tells us that our data base in this case was adequate.

Value of  $F=28.479$  and it is statistically significant  $p=0.000<0.05$ , which implies for our regression model as well, meaning that the same one is better to use for the prediction of the future values of dependent variable, than to make conclusion based on the average values.  $b_0=1.348$  ( $p=0.000<0.05$ ) means that in the case when independent variables are 0, purchase intentions for organic fruit will be positive in the stated amount. Correlation coefficient in the case of perceived intrinsic cues is  $b_1=0.597$  ( $p=0.000<0.05$ ), and that indicates that for every increase of independent variable for 1, value of purchase intentions for organic fruit will increase for 0.597. The correlation coefficient for perceived extrinsic cues is  $b_2=0.126$  ( $p=0.017<0.05$ ), which tells us that for every increase of independent variable for 1, the value of purchase intentions for organic fruit increases for 0.126.

Figure 6: Standard Residuals Assumptions (Model 2)

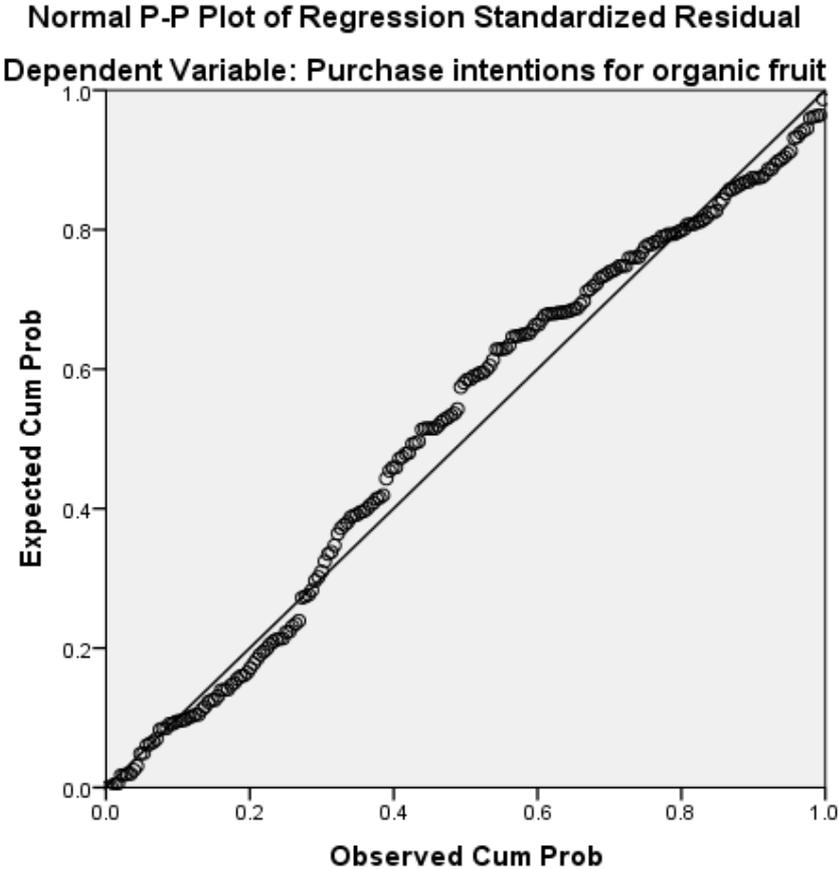
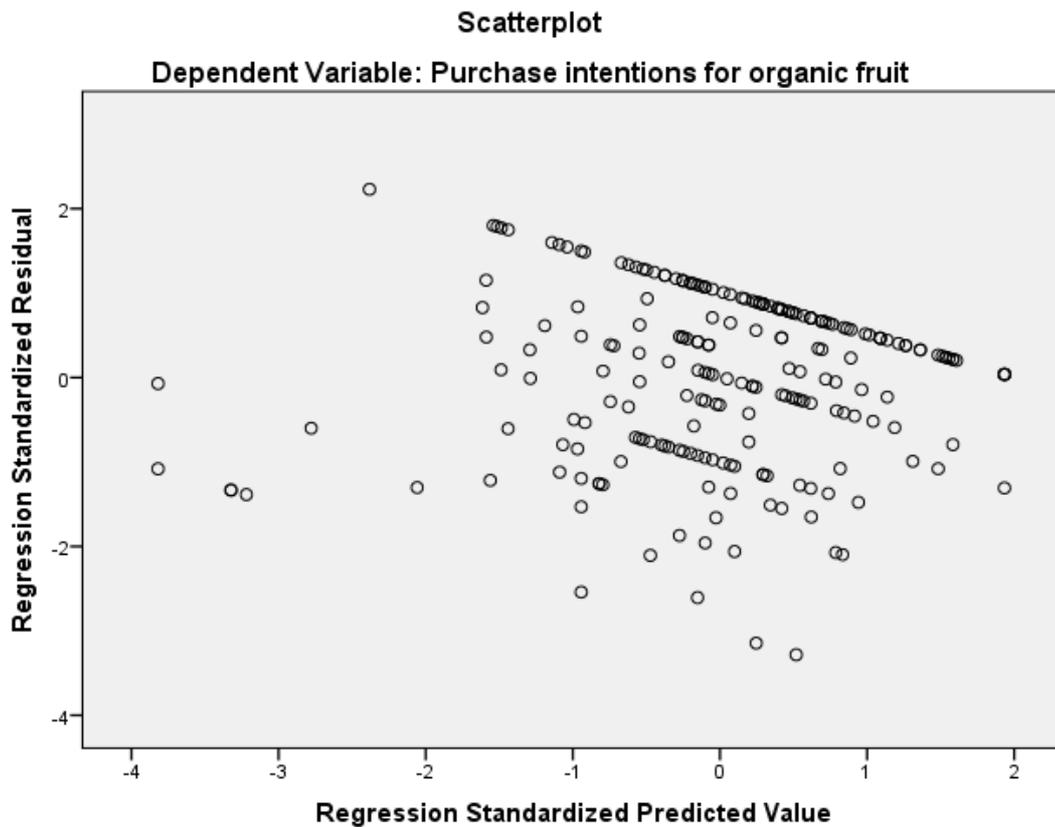


Figure 7: Standard Residuals Assumptions Scatterplot (Model 2)



Similar to the first model, Figure 6 shows the normal disperse, while scatterplot (Figure 7) confirms the assumption of homoscedasticity. The validity of this model is based on the facts that the value of Cook's Distance is lower than 1, and 95% of standard residuals in this model are  $\pm 2$ . Tolerance and VIF value indicate that this model is relevant. Tolerance with both of the independent variables has a value lower than 1, or 0.753, while the value of VIF is within the acceptable range or 1.328 in both cases for both independent variables. Based on all of this, we can claim that same as with the first model; the second model also doesn't show multi-collinearity. The obtained results help us confirm third and fourth hypothesis, or both intrinsic quality cues and extrinsic quality cues influence on purchase intentions for organic fruit.

## CONCLUSION

In this thesis, organic consumption is examined through analysis of online questionnaire filled out by organic consumers living in Canton Sarajevo. The organic sector in B&H is still developing and has a long way to go to become recognizable by EU countries. Achieving this will benefit the organic producers the most as locally grown organic food products will find a place on international market shelves. For organic sector to grow, Bosnian organic sector needs better infrastructure and create legislation on a national level instead of entity level.

The socio-demographic analysis helped us understand who organic consumers are. The analysis of organic consumers in Canton Sarajevo indicate that organic consumers are of younger age, or on average are 30.75 years of age. The organic consumers in Canton Sarajevo have high education levels, meaning they are students or full-time employed. Based on the questionnaire results, the majority of organic consumers belongs to middle-income groups. Similar results can be found in research conducted by Mutlu (2007). The combination of these factors helps shape organic food purchasing habits, as they tend to consume organic food products more often, up to several times a week. Furthermore, the organic buyers in Canton Sarajevo stated that open/street markets are their preferred location to purchase organic food products. The organic shops were the second least answered option, which shows us that organic shops need to undertake more steps in becoming more recognizable. The easiest way to achieve this is through strengthening their brands and the organic food image in consumers' minds.

The thesis is structured in a way to give a reader insight into the organic world, first into the EU organic market, and afterwards into the organic market of B&H. Attention is also given to the organic legislation in EU countries. The officials in B&H should pay more attention to the way organic legislation in EU is implemented and enforced. Taking into consideration that B&H shares a border with EU member country, it is important to enforce organic legislation locally to be able to enter foreign markets. Keeping this in mind, this thesis also tried to explain the complex organic legislation in B&H and present the only certification body in FB&H named OK. For this purpose, interview with Mrs. Bernisa Klepo was conducted to understand better the importance of organic legislation and organic logos in general, and what does organic food production mean for Bosnia and Herzegovina.

The main theoretical contributions of this thesis lie in uncovering the complex relationships that exist among health consciousness, healthy lifestyle, perceived organic food quality dimensions and purchase intentions. The practical contributions are reflected in the results, or whether health consciousness and healthy lifestyle influence consumers'

purchase intentions on one side, and whether perceived organic food quality cues influence purchase intentions on the other side. Namely, research by Chen (2009, p. 174), who found empirical support that lifestyle mediates the impact of health consciousness on attitude toward organic food was approached differently. During the formulation of the hypothesis in this thesis, we went with the idea that each of the factors can singularly influence purchase intention towards organic food products. Even though without a question all of the factors are connected in a way, one can be health conscious without leading the healthy lifestyle. Also, consumers could choose products based on intrinsic quality cues while disregarding the extrinsic quality cues and vice versa. This study builds on work by other authors, where we are 1) investigating the influence of the health consciousness on organic food purchase intention (Gould, 1988), 2) determining the consumers' affinity towards the healthy lifestyle (Gil, Gracia & Sánchez, 2000; Chen, 2009), and 3) specifying the role of intrinsic and extrinsic organic food quality attributes (Grunert, Loose, Zhou & Tinggaard, 2015).

Firstly, we find that each of the above-mentioned factors influences the consumers' purchase intentions towards organic food products. Through this paper, we've proven and accepted all of the hypothesis. The effect of health consciousness on purchase intentions towards organic food products is higher than the effect of other factors on purchase intentions. Consumers are aware that organic food is healthy and contains higher nutritional value, but this isn't reflected in the individual's lifestyle. Consumers don't lead a healthy lifestyle, and many of their decisions during product purchase and consumption aren't health driven. Finally, in terms of the mechanism under which food quality perceptions operate, this study provides evidence that perceived intrinsic quality cues are a relevant mediator in terms of purchase intentions, while the role of extrinsic food quality attributes (advertising, brand or promotion) have a lower effect on purchase intentions. Advertising, brand or promotion would most likely influence consumers' purchase intentions towards organic food products more if the consumers had a better image of organic food products. Due to the lack of knowledge, experience, and diversity, many consumers don't believe in the benefits and origin of organic food products.

From the managerial aspect, the results of this research imply that organic food producers and retailers should focus on developing stronger value propositions towards customers that are based more on intrinsic food quality characteristics and less on extrinsic ones. It also means that the other members of the food supply and value chain should take particular care in preserving and sustaining these intrinsic quality attributes until the product reaches the final consumer. In terms of extrinsic quality cues, investments in different mechanisms should result in strengthening the producer-buyer relationship, or advertising of organic food products should create strong organic brands. Developing specific marketing and sales actions aim to highlight stress reduction and promote all positive effects of healthy lifestyle.

Since the market is still well under-developed, organic food producers and retailers need government assistance to some extent to grow and strengthen their brand both locally and internationally. Based on the findings from United Nations conference on trade and development in 2008, governments - especially the governments of the developing countries - should have the role of facilitator, rather than controlling role. It is necessary that they communicate with organic sector to help out with their needs, and make sure the set goals are reached. It is also necessary that organic policies are integrated into agricultural policies, and that governments work on increasing the supply of organic food products through education, research, market development, infrastructure support etc. (United Nations, 2008, p. 14). It is up to governments to decide how to approach and help the local organic production.

Without a question, it is easier to start with lower level of regulation and strengthen it through the years. The easiest approach would be to tie the domestic organic legislation with for example IFOAM Basic Standards, meaning that producers should follow these standards, and only products which passed the production controls and checks would be labelled organic. The process would be monitored by foreign control bodies, as it is the case with B&H, and together with domestic labelling bodies work on providing and improving the organic certification. Finally, governments should work on increasing the export of organic products, and that can be achieved through mandatory organic export regulations. All exporting products should fulfil certain standards, however, products couldn't be exported to the unregulated markets. This shouldn't represent a problem for the government of B&H since the country shares a border with an EU member country, which means that it is for best that organic products ready for export fulfil all the requirements set on EU level.

This study is not without its limitations. The focus is only on one category, i.e. organic fruit products. It is advised that further research replicates our model with regard to different product categories, to confirm or disconfirm universality of the model across other product categories. Other limitations can be seen in the sample choosing process and organic legislation observed. Convenience sampling is the most used form of sampling, but the results aren't the exact representation of the population. Also, since the focus of this research was on consumers in Canton Sarajevo, only organic law from FB&H was used. RS also has an organic law which is different from the one which was used, so some attention should be paid on it as well to be able to draw conclusions on a national level.

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## **APPENDIXES**

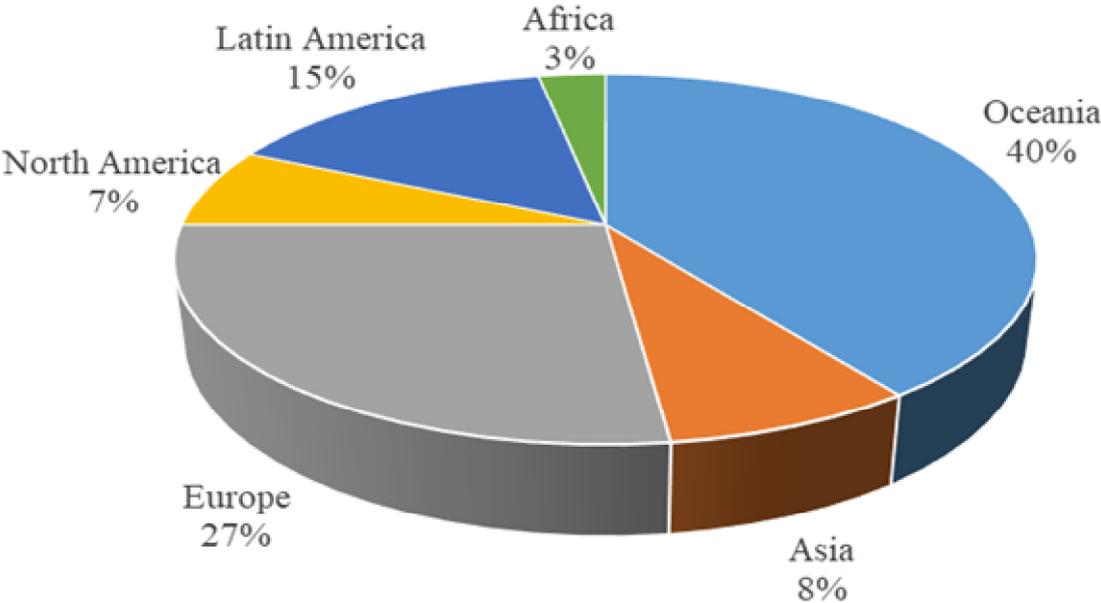


## **Appendix 1: Povzetek**

Namen tega magistrskega diplomskega dela je analizirati odnos potrošnikov do organskih živil v Kantonu Sarajevo, zaradi povečane uporabe izraza »organski« v sosednjih državah in na trgih po državah Evropske unije (EU). Zato je bil glavni poudarek te magistrske naloge postavljen na javni politiki trga organskih živil v BiH in njen razvoj. Avtor je poskušal prispevati k literaturi z analizo trenutnih trendov povpraševanja po organskih živilskih proizvodih, natančneje organsko pridelanega sadja. Teza je bila strukturirana z namenom, da bi bralcu omogočil vpogled v področje organske hrane v EU in BiH. Predstavljen je bil tudi pravni okvir za delovanje trga organskih živil na obeh trgih. Splošna ugotovitev je, da bi morale vlade v BiH uvesti regulativni okvir za delovanje organskih sektorjev v skladu z obstoječimi standardi, ki se izvajajo v državah EU. V diplomski nalogi so predstavljene in obravnavane ugotovitve, ki izhajajo iz ankete potrošnikov, ki je bila opravljena med potrošniki organskega sadja. Raziskava je bila uporabljena kot glavni raziskovalni instrument, katerega cilj je bil analizirati vpliv zaznanih notranjih in zunanjih znakov za nakupne namere, za ekološko pridelano sadje. Raziskan je bil tudi vpliv zdravstvene zavesti potrošnikov in njihovega načina zdravega življenja za nakupne namere, za organsko pridelano sadje. Opredeljene so bile štiri hipoteze, od katerih je vsaka predstavljala vpliv enega samega dejavnika, za nakupne namere potrošnikov, za organsko pridelano sadje. Čeprav so brez dvoma vsi dejavniki na nek način povezani, lahko oseba postane zdravstveno ozaveščena, čeprav ne skrbi za zdravo življenje. Prav tako lahko potrošniki izberejo izdelke, ki temeljijo na notranjih kakovostnih znakih, ne da bi upoštevali zunanje lastnosti kakovosti in obratno. Preko te teze so bile vse hipoteze dokazane in sprejete. Od štirih dejavnikov je najpomembnejši učinek zdravstvene zavesti, o nakupnih namerah, do organskih živilskih proizvodov.

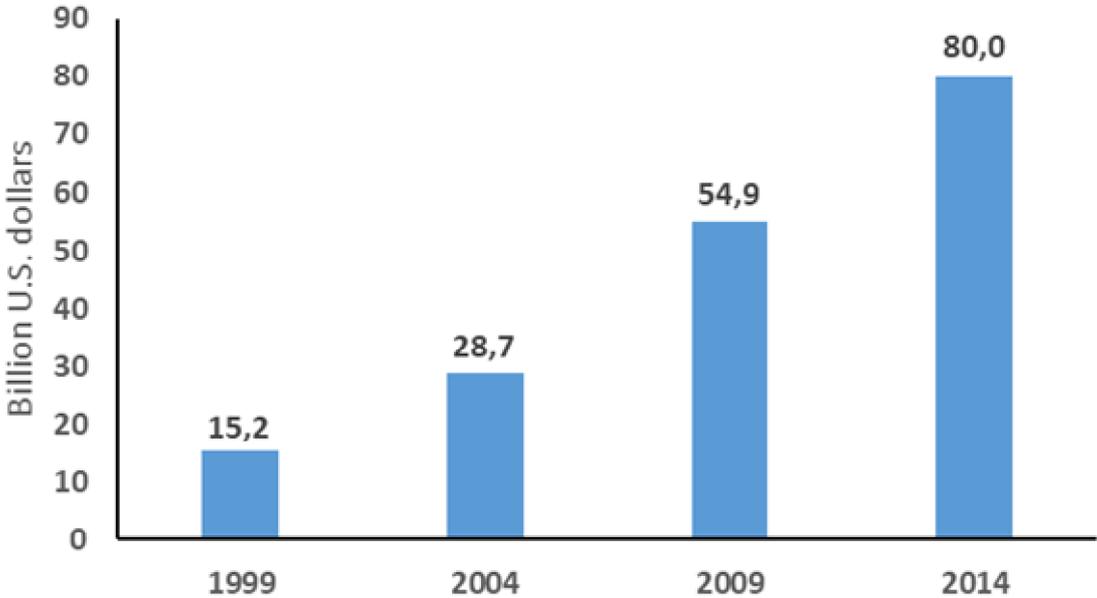
**Appendix 2: Data on Organic Food Markets**

*Figure 1: Worldwide Distribution of Organically Managed Lands by Region 2014*



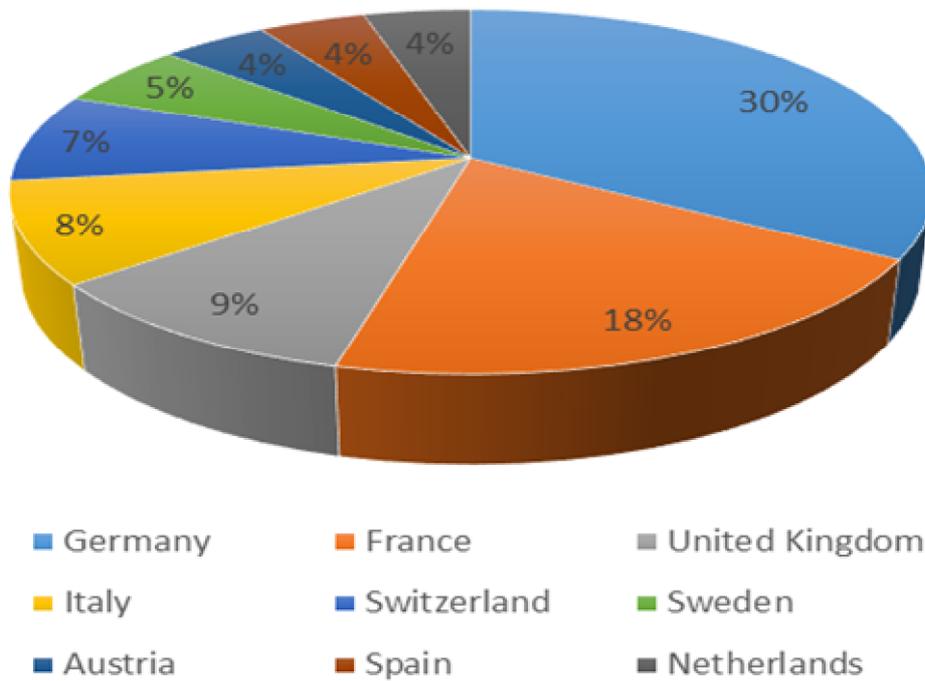
*Source: Adapted from FIBL & IFOAM - Organics International (2016).*

*Figure 2: Growth of the Global Market for Organic Food and Drink (1999-2014)*



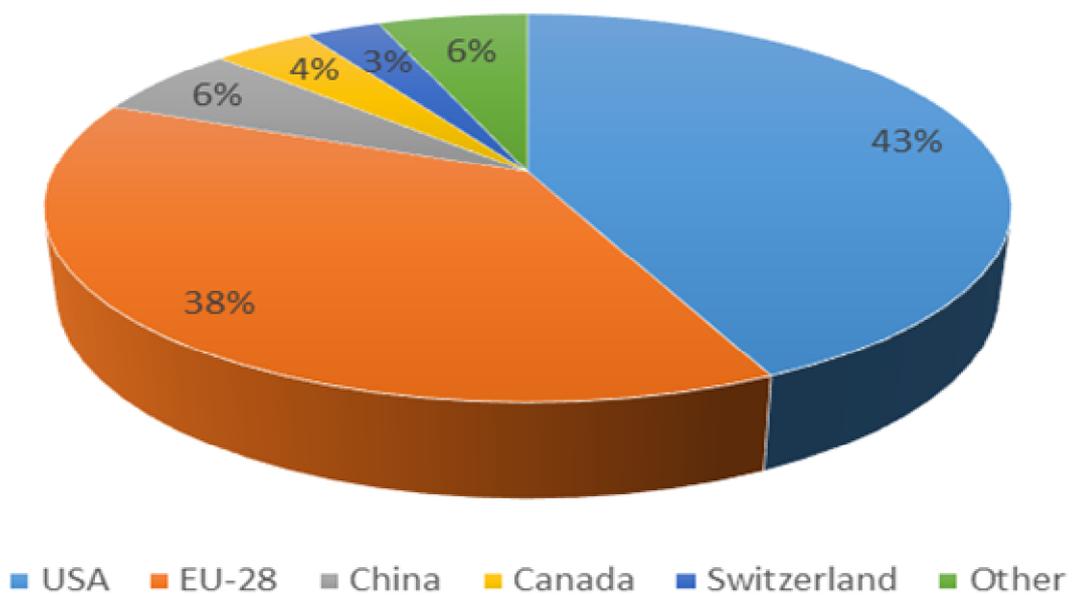
*Source: Adapted from FIBL & IFOAM - Organics International (2016).*

Figure 3: Distribution of Retail Sales in Europe in 2014



Source: Adapted from FIBL & IFOAM - Organics International (2016).

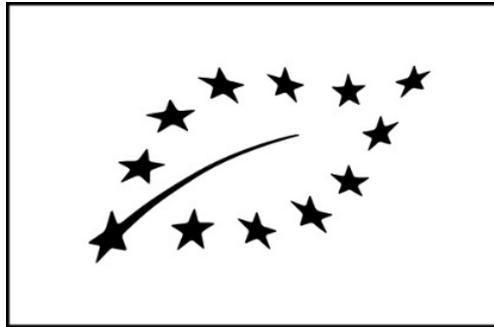
Figure 4: Worldwide Distribution of Retail Sales by Single Market in 2014



Source: Adapted from FIBL & IFOAM - Organics International (2016).

### Appendix 3: Organic Food Logos

*Figure 5: Variation of EU Organic Logo - Black Logo on White Background*



*Source: Adapted from European Commission (n.d).*

*Figure 6: Variation of EU Organic Logo - White Logo on Black Background*



*Source: Adapted from European Commission (n.d).*

*Figure 7: Variation Organska Kontrola Organic Logo*



*Source: Adapted from Organska Kontrola (n.d).*

## Appendix 4: Organic Fruit Questionnaire

I am student from University of Sarajevo, School of Economics and Business conducting a survey on organic fruit products. I would very much appreciate if you participate in my survey. It should take about 10-15 minutes.

The term “organic” refers to the way agricultural products are grown and processed. Specific requirements must be met and maintained in order for products to be labelled as "organic".

**Question 1:** Who is generally responsible in your household for the food shopping?

- Me
- Another person
- Me and another person

**Question 2:** How often do you buy organic fruits?

- Once a week
- Several times a week
- Once a month
- Few times a year

**Question 3:** Where do you buy organic fruits?

- Supermarket chains
- Discount markets
- Organic shops
- Open/Street market
- Specialized fruit shops
- Farm shop
- Other: \_\_\_\_\_

**Question 4:** Do you recognize following logos associated with organic food products?



- Yes
- No



- Yes
- No



- Yes
- No

**Question 5:** How do you think that following statements describe you?

*1 - doesn't describe you at all, 2 - describes you a little, 3 - describes you about fifty-fifty, 4 - describes you fairly well, 5 - describes you very well*

Statement	1	2	3	4	5	6	7
I reflect about my health a lot.							
I'm very self-conscious about my health.							
I'm generally attentive to my inner feelings about my health.							
I'm constantly examining my health.							
I'm alert to changes in my health.							
I'm usually aware of my health.							
I'm aware of the state of my health as I go through the day.							
I notice how I feel physically as I go through the day.							
I'm very involved with my health.							

**Question 6:** Do you agree with following statements?

*1 - absolutely disagree, 7 - absolutely agree*

Statement	1	2	3	4	5	6	7
I follow a low-salt diet.							
I am a vegetarian.							
I do exercise regularly.							
I avoid eating processed food (no processed food).							
I often eat fruits and vegetables (high fruit consumption).							
I rarely eat red meat (moderate meat consumption).							
I avoid eating food products with additives (without additives).							
I take regular health check-ups (regular health control).							
I try to reduce my stress (less stress).							
I try to have an organized and methodical lifestyle (ordered life).							
I try to balance work and personal aspects (working/private life).							

**Question 7:** How important is each of the following characteristics for you when you are purchasing organic fruits?

*1 - absolutely not important, 7 - absolutely important*

Number	Characteristic	1	2	3	4	5	6	7
1.	Touch							
2.	Colour							
3.	Taste							
4.	Smell							
5.	Vitamin Context							
6	Size							
7.	Texture							
8.	Shape							
9.	Familiarity							
10.	Freshness							
11.	Wrapping							
12.	Looseness							
13.	Advertisement							
14.	Brand							
15.	Promotion							
16.	Provenance							
17.	Price							
18.	Sales force							
19.	Opening hours							
20.	Parking facilities							
21.	Proximity							
22.	Variety							

**Question 8:** How do you think that following statements describe you?

*1 - highly unlikely, 7 - highly likely*

Statement	1	2	3	4	5	6	7
It is likely I would buy organic fruit the next time I buy myself fruit.							
I intend to buy myself organic fruit next time when I purchase the fruit.							
Deciding for organic fruit when purchasing a fruit for myself is something I would do.							
The likelihood that I purchase organic fruit is very high.							
The probability that I consider buying organic fruit is very high.							
I am willing to buy organic fruit.							

**Question 9:** How old are you?

Answer: \_\_\_\_\_

**Question 10:** Gender:

- Male
- Female

**Question 11:** How many people live in your household?

Answer: \_\_\_\_\_

**Question 12:** What is the highest education level you have completed?

- Primary education
- Secondary education
- University education
- Master,
- PhD

**Question 13:** What is your employment status?

- Working full-time
- Working part-time
- Student
- Retired
- Unemployed
- Other: \_\_\_\_\_

**Question 14:** What was your average monthly household income in 2015?

- Less than 850 BAM
- From 850 BAM up to 1,700 BAM
- From 1,700 BAM up to 2,500 BAM
- 2,500 BAM and more

## Appendix 5: Anketa o konzumiranju organskog voća

Moje ime je Zlatan Vajnberger i student sam Ekonomskog fakulteta U Sarajevu. Ova anketa je dio magistarskog rada, čija je tema ispitati stavove potrošača o konzumiranju organskog voća. Bio bih vam jako zahvalan ukoliko biste izdvojili 10-15 minuta svog vremena da mi pomognete i učestvujete u istraživanju. Riječ "organska" se odnosi na način na koji su poljoprivredni proizvodi uzgojeni i obrađeni. Specifični zahtjevi se moraju ispuniti da bi hrana bila označena da je organskog porijekla. Također, organska hrana često potiče sa sela, gdje nema puno zagađivača, tj. gdje prirodno raste bez ikakvih aditiva i pesticide.

**Pitanje 1:** Ko je u Vašem domaćinstvu zadužen za kupovinu hrane?

- Ja
- Druga osoba
- Druga osoba i ja

**Pitanje 2:** Koliko često kupujete organsko voće?

- Jednom sedmično
- Nekoliko puta sedmično
- Jednom mjesečno
- Nekoliko puta godišnje

**Pitanje 3:** Gdje kupujete organsko voće?

- Supermarket
- Trgovinski lanci
- Prodavnice organske hrane
- Pijaca
- Specijalizovane prodavnice voća
- Farma
- Drugo: \_\_\_\_\_

**Pitanje 4:** Označite koja od navedenih logotipa (slike 1, 2 i 3) prepoznajete koja su asocirana sa organskom hranom?



- Da
- Ne



- Da
- Ne



- Da
- Ne

**Pitanje 5:** U kom omjeru se slažete sa navedenim tvrdnjama?

*1 - apsolutno ne slažem, 2 - malo se slažem, 3 - i slažem se i ne slažem se, 4- slažem se, 5 - apsolutno slažem*

Tvrdnja	1	2	3	4	5	6	7
Mnogo razmišljam o svom zdravlju.							
Osvješten/a sam po pitanju svog zdravlja.							
Općenito sam osjetljiv/a na unutrašnje osjećaje koji se tiču mog zdravlja.							
Stalno provjeravam svoje zdravlje.							
Ozbiljno shvatam promjene svog zdravlja.							
Obično sam svjestan svog zdravlja.							
Tokom dana svjestan/a sam stanja svoga zdravlja.							
Tokom dana primjećujem kako se fizički osjećam.							
Jako sam posvećen/a svom zdravlju.							

**Pitanje 6:** U kom omjeru se slažete sa navedenim tvrdnjama?

*1 - apsolutno ne slažem, 7 - apsolutno slažem*

Tvrdnja	1	2	3	4	5	6	7
Na dijete sam sa niskim učešćem soli.							
Vegeterijanac/vegeterijanka sam.							
Vježbam redovno.							
Izbjegavam jesti fast food.							
Često jedem voće i povrće.							
Rijetko jedem crveno meso.							
Izbjegavam jesti hranu koja sadrži aditive.							
Redovno idem kod doktora.							
Trudim se da smanjim stres.							
Trudim se da imam organiziran i planski stil života.							
Trudim se da balansiram posao i privatni život.							

**Pitanje 7:** Koliko su Vam bitne naredne karakteristike kada kupujete organsko voće?

*1 - apsolutno nebitne, 7 - apsolutno bitne*

Broj	Karakteristika	1	2	3	4	5	6	7
1.	Dodir							
2.	Boja							
3.	Okus							
4.	Miris							
5.	Vitaminske odlike							
6	Veličina							
7.	Tekstura							
8.	Oblik							
9.	Upoznatost sa proizvodom							
10.	Svježina							
11.	Pakovanje							
12.	Labavost (kompaktnost proizvoda)							
13.	Reklama							
14.	Brend							
15.	Promocija							
16.	Porijeklo							
17.	Cijena							
18.	Osoblje							
19.	Radno vrijeme prodavnice							
20.	Mogućnost parkinga							
21.	Blizina							
22.	Raznovrsnost ponude							

**Pitanje 8:** U kom omjeru se slažete sa navedenim tvrdnjama?

*1 - apsolutno ne slažem, 7 - apsolutno slažem*

Tvrdnja	1	2	3	4	5	6	7
Postoji vjerovatnoća da ću kupiti organsko voće idući put kada budem kupovao/la voće.							
Namjeravam kupiti organsko voće idući put kada budem kupovao/la voće.							
Voljan/a sam da razmotrim kupovinu organskog voća pri narednoj kupovini voća.							
Mogućnost da ću kupiti organsko voće je visoka.							
Vjerovatnoća da ću razmisliti o kupovini organskog voća je visoka.							
Voljan/a sam da sebi kupim organsko voće.							

**Pitanje 9:** Koliko imate godina?

Odgovor: \_\_\_\_\_

**Pitanje 10:** Pol:

- Muški
- Ženski

**Pitanje 11:** Koliko ljudi živi u vašem domaćinstvu?

Odgovor: \_\_\_\_\_

**Pitanje 12:** Koji je vaš stupanj obrazovanja?

- Osnovna škola
- Srednja škola
- Bachelor
- Magistarski studij
- Doktorat

**Pitanje 13:** Koji je vaš radni status?

- Puno radno vrijeme
- Pola radnog vremena
- Student
- U penziji
- Nezaposlen
- Drugo: \_\_\_\_\_

**Pitanje 14:** Koliki je bio prosječni mjesečni prihod vašeg domaćinstva u 2015. godini?

- Manje od 850 KM
- Između 850 KM i 1,700 KM
- Između 1,700 KM i 2,500 KM
- Više od 2,500 KM