

CHAPTER 5

Food, nutrition and health in Bosnia and Herzegovina

Slavica Samardžić¹, Gordana Đurić², Vesna Rudić-Grujić³,
Gordana Radovanović¹, Tarik Dizdarević⁴ and Suzana Đorđević-Milošević⁵

¹Slow Food Convivium Trebinje, Trebinje, Bosnia and Herzegovina

²Faculty of Agriculture, University of Banja Luka, Banja Luka, Bosnia and Herzegovina

³Faculty of Medicine, University of Banja Luka, Banja Luka, Bosnia and Herzegovina

⁴Faculty of Agriculture and Food Science, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

⁵Environment and Sustainable Development Studies, Singidunum University, Belgrade, Serbia

5.1 Introduction

Bosnia and Herzegovina's (BiH) geographic position made this country a crossroad of the various civilizations, conquerors and migrations of populations. Each of these civilizations has left its influence in BiH's kitchen. Some dishes are authentic BiH; others are modified, but still prepared in the BiH's unique way. They all created today's BiH cuisine, which can be considered among the most heterogeneous cuisines in the Balkans, Europe, and even the world. Thus, some of the BiH's most famous dishes like Ćevapi, according to some sources ([Taste Atlas, 2020a](#)), are ranked among the best 10 dishes of the world.

Food in BiH is rather fatty and delicious, rather than light and healthy. It was very difficult to make a list of the 15 most popular BiH foods, but these include Herzegovinian cheese in a sack, Vlastic's/Travnik's cheese, Livno's cheese, Romanija's kajmak, Kebabs, Roasted lamb on a spit, Meat baked in the sač, Sudžuka, Cicvara, Bosnian pies, Bosnian pot, Japrak, Poljak bean soup, Herzegovinian sage honey, and Plum jam/bestilj. These dishes are prepared today and are made on a daily basis in BiH homes and restaurants.

5.2 Historical overview

BiH has a long history that stretches back to the major civilizations of the ancient world. The culture of its people has developed from a broad mix of influences: from Islam, Eastern and Western Christianity, as well as Judaism. These different civilization influences justify BiH's claim that it is the country that connects East and West Europe ([Šarić-Halilović, 2014](#)). BiH food is a blend of authentic BiH dishes with Turkish, Austro-Hungarian, and other food customs. At the same time, elements of

continental and Mediterranean cuisine are present in the BiH gastronomy. The BiH kitchen is also highly influenced by religious customs that have their origins in Orthodox, Catholic, and Islamic religion.

The country's cuisine has also been influenced by the methods used to conserve food throughout history. Before the invention of electricity, some methods of storing food were invented, and they are still in use. For instance, meat was stored only smoked, while fresh meat was eaten on the day. Cheese and kajmak were stored in a sheepskin bag. The tradition has continued to present day, so that cheese in a sack is one of the most characteristic dishes of BiH cuisine (Samardžić et al., 2014). Potato, onion, carrot, mangold, pumpkin, and beetroot were stored underground in a structure called "trap" (root cellar), while cereals and legumes were stored as dried.

5.3 Geography and the natural agricultural landscape

BiH covers an area of 51,129 km². It is bordered by Croatia, Serbia, and Montenegro. It has a coastline on the Adriatic Sea via the Neum municipality. Administratively BiH is composed of two entities (i.e., the Federation of Bosnia and Herzegovina (FBiH) and the Republic of Srpska (RS)) and one district (i.e., Brčko district). The FBiH itself has a federal structure and consists of 10 cantons.

BiH is a predominantly mountainous country with the dominating Dinaric Mountains. Approximately 60% of the surface lies more than 500 m above sea level, while only 8% lies below 150 m. The Dinaric Massif and the vegetation makes the country one of the wettest in Europe (average 1250 mm per year). The rivers of BiH to the north belong to the Danube (Black Sea) catchment, while those to the south belong to the Adriatic catchment.

BiH has around one-third of its land under cultivation or in pasture. The most fertile soils are in the north, along the Sava River valley. In hillier areas, land is used for both cultivation and grazing. Principal crops include corn (maize), potatoes, wheat, plums, cabbages, and apples. Sheep and cattle are the major livestock, although pig breeding is also present, and apiculture is practiced. About two-fifths of the country is forested.

5.4 Culture and traditions

BiH for centuries has been developing a multicultural environment. Each cultural and religious group had its own customs during which characteristic dishes were developed. All religious and cultural groups took particular care to host and honor representatives of other groups during their religious and cultural events. In the Orthodox and Catholic religion, the most important feasts are Christmas and Easter, while the

Orthodox have the third important feast, which is the Saint of the home. The most important Islamic holidays are Bayrams: Ramadan and Kurban Bayram. During these feasts all groups prepare and serve the best possible meals. Orthodox and Catholics for Christmas and Muslims for Kurban Bayram usually slaughter the ram, sheep, or lamb, which is roasted on a spit or cut into smaller chunks and cooked in the oven, then served to family, neighbors, and the poor. An inevitable custom, associated with the Orthodox Christmas, is the preparation of the dish called *cicvara*.

For Easter, Orthodox and Catholics prepare plenty of delicious food, and usually celebrate it only with their own family. The particularity for Easter is preparing boiled eggs, usually colored with onion peel and mingled with different shapes of grasses. Every Easter egg before eating is the subject of the “knocking” with someone’s other egg.

The Orthodox, beside Christmas and Easter, celebrate the Saint of the home. The most celebrated saints among the Orthodox population in BiH are St. Nicola, St. Johan, and St. George. For the Saint of the home celebration, abundant dining is prepared with the best food that has been prepared during the whole year (e.g., ham). There is one dish especially prepared for celebrating the Saint of the home called *Slavic grain*, which is made from cooked whole wheat grain, coated with sugar, and served with nuts. The Saint of the home is celebrated with the guests.

5.5 Typical foods and food products

5.5.1 Hercegovački sir iz mijeha (Herzegovinian cheese in a sack)

Throughout history, the area of production of cheese in a sack was linked to Dinara mountain range, which stretches from Slovenia, Croatia, through BiH, Montenegro, Serbia, Kosovo, Albania, and Macedonia. Nowadays production is largely concentrated in Herzegovina. Production of cheese in a sack, according to [Mulić \(2004\)](#), dates back to 1379, before Ottoman’s Empire advent in Balkans.

The very first step is to prepare a container (i.e., sheepskin bag/sack) for cheese ripening. The sack should be very carefully separated from carcass, washed together with the wool, and dried. The wool is shaved and the sack turned inside out. All the holes in the sack should be closed, and then the sack is inflated, hung on a wedge, and smoked for several days. When the outside part of the sack is smoked, all holes in the sack should be untied to allow smoke to enter the inside. Before inserting cheese, the sack should be washed properly. The hole where the neck was is opened and the sack is ready to be filled with cheese.

Cheese in a sack is made from raw cow’s, sheep’s, and mixed milk. Immediately after milking, milk should be filtrated through a thick woven cotton cloth and heated up to the temperature of 35°C. Rennet should be added to the filtrated and warmed milk. Curdling can last between 1 and 1.5 h. Drained curd is salted, wrapped in cotton cloth, and then placed under the press, where it stays for about 12 h. The big block of



Figure 5.1 Cheese in a sack.

cheese should be broken by hands into smaller fist-sized pieces. Broken pieces of cheese are additionally salted and left up to 24 h for additional spontaneous drainage. When the sack is filled, the neck should be tied and the sack is transferred to the ripening room. The cheese is stored in a dark room, where the temperature is 12°C–15°C and humidity 60%–70%. Filled sacks are placed on a wooden plank for ripening (Fig. 5.1). The ripening process lasts from 2 to 8 months.

Ripened cheese in a sack belongs to the group of semihard cheeses. Its specificity comes, for the most part, from the natural packing, the sheepskin bag, which gives it a specific, pleasant scent, as well from the raw milk of animals whose diet consists solely of grazing fresh fodder, hay, and cereals, which are mandatory from the territory of Herzegovina. Cheese in a sack 2 months ripened in a room with an air humidity of 65% and an average temperature of 13°C shows the following chemical composition: humidity 21.02%, fat 39.5%, fat in dry matter (FDM) 49.54%, proteins 31.71%, ash 2.8%, NaCl 5.44%, Ca 0.27%, P 0.5%, and lactic acid 0.85% (Samardzic, 2012).

Cheese in a sack is usually eaten with boiled, unpeeled potato or roasted halved potato called “pole,” with warm homemade bread, with other traditional dishes (e.g., pura or cicvara), with ustipci (priganice), or alone while drinking wine. It is inevitable to mention that the taste of BiH’s famous potatoes varieties (i.e., Nevesinje’s, Glamoč’s, and Romanija’s) comes to light especially when eaten with cheese or kajmak in a sack.

5.5.2 Trvnički/Vlašićki sir (Travnik’s/Vlasic’s cheese)

Travnik’s/Vlasic’s cheese belongs to the group of white pickled cheeses. The main production area of this cheese is Mount Vlasic, located in the central part of BiH.

This type of cheese is predominantly produced in the countries of the Mediterranean and the Balkan Peninsula. It is believed that technology of this cheese was brought by

nomad shepherds (Arnauts) from east to Mount Vlasic in the mid-19th century (Adametz, 1892 as cited in Ivankovic, 2013).

Travnik's/Vlasic's cheese is produced only with the milk of Pramenka sheep breed, strain Vlasic's/Dub's Pramenka, without adding starter cultures. Production of this cheese has seasonal character (May–September), when the sheep are grazing on Mount Vlasic. Vlasic's Pramenka is the best breed of sheep raised in BiH. It is grown at an altitude of 800–1200 m. The average weight of the sheep is 65 kg. Milk production is between 90 and 120 kg per season.

The technology is adapted to limited mountain conditions. Immediately after milking, rennet is added in the milk and left to coagulate. Cheese curd is then poured into cheese cloth and strained to form a cheese ball, which is then cut into slices, placed into wooden barrels and simultaneously salted. Optimum amount of salt in brine is 10%–15% (Dozet, 1963; Zdanovski, 1942). Ripening of Travnik's/Vlasic's cheese lasts for minimum of 60 days at temperature range of 13°C–15°C. The storage of Travnik's/Vlasic's cheese can be up to 1 year, at a temperature of 6°C–8°C with relative humidity 70%–80%. Cheese can be sold in markets in wooden barrels with different weights from 3 to 50 kg, or in vacuum packs. The color of Travnik's/Vlasic's cheese is predominantly white, which is the main characteristic of cheeses produced from sheep's milk. A cheese slice on a cross section is dappled with several cheese eyes, irregular in shape. The consistency of the cheese is firm, not too hard, well-connected, with porcelain fractures, suitable for cutting, and easily breakable.

Travnik's/Vlasic's cheese smell is pleasant, consisting of sheep's milk, clear, without harsh acids or any other foreign notes. The taste is milky-sour, clean, pleasant, moderately salty, and characteristic of sheep cheese without foreign material. The size of the Travnik's/Vlasic's cheese slice ranges between 500 and 1500 g with an average of 1 kg. Average physicochemical composition of Travnik's/Vlasic's cheese after 60 days of ripening is as following: pH 4.50, fat 26.51%, dry matter (DM) 51.25%, protein 17.12%, and NaCl 4.06%. The most dominant free amino acids in Travnik's/Vlasic's cheese (mg/g) are: lysine (489), proline (98), and isoleucine (76), while the predominant organic acids (mg/100 g) are: lactic (3149), acetic (113), and succinic (44) (Havranek et al., 2012).

This cheese is very popular and usually served as starter with ustipci (fried dough) and smoked and dried meat, also with pura (cooked polenta). It can also be added in different cooked meals.

5.5.3 Livanjski sir (Livno's cheese)

Livno's cheese is produced in Livno and in surrounding areas. It is connected to the seminatural pasture areas of the Cincar mountains in the Dinaric mountain range and other mountains in the vicinity.

The first technology for hard sheep cheese of the Gruyere type was introduced by Austro-Hungarian administration in Livno area after 1888 (Sarić and Bijeljac, 2003). In 1900 the appointed manager French agronomist Jaillet Cyprian started experimenting with the different ratios of sheep's and cow's milk, while spreading consistent technology to small artisan private dairies in Livno and Glamoč areas. The slightly modified so-called "Suisse cheese," until the end of World War I, became known on the wider market as Livno's cheese (Okusi Hercegovinu, n.d.).

Livno's cheese is traditionally made of fresh unpasteurized sheep's milk, from the sheep breed Pramenka, strains Vlastic's/Dub's, and Kupres's, grown in extensive pastoral systems of a pristine nature. Vlastic's Pramenka breed is mentioned in the description of Vlastic's/Travnik's cheese, while Kupres's Pramenka is a strain of Pramenka breed characteristic for the plateau of Kupres at the altitude of 1000–1200 m. The average weight of the sheep is 55 kg. Milk production is about 70 kg per season. Specific junction of biodiverse grasslands, maritime, and mountain climate, and the hardiness of the sheep breed are believed to be responsible for the good health of animals, providing high quality milk.

Nowadays sheep cheese is produced with addition of 20% of cow's milk, which provides better results in cheese making. Pure cow's milk cheese also became common, especially after the sheep number decreased. Pasteurization of raw milk is today implemented in all big dairies, while rare small artisans fight to preserve original technology (as much as local origin of raw milk), but without much success. Large dairies favor pasteurization, which reduces the risk of contamination, although better control and full introduction of adequate milking equipment (instead of manual) can preserve the originality of the cheese without pasteurization. This conflict is reflected in the "frozen" status of Livno's cheese protection by a geographical indication (GI) mark.

Livno's cheese is originally produced immediately after milking. Curd is produced with the assistance of rennet and dried in warm whey at 48°C. After whey is separated, curd is kept under pressure for 12–24 h. Salting is done in brine for 3–4 days and ripening continues for at least 6–8 weeks. First class Livno's cheese should be light yellow of 20 cm diameter and about 10 cm high (2–4 kg), with small equally distributed mid-sized holes and thin crust. Livno's cheese has 36%–40% fat, 31%–36% proteins, 2% NaCl, and 30%–40% water (Dozet, Adžić, Sanišić, & Živić, 1996).

Livno's cheese is served mostly sliced, with ham and kajmak as a cold plate appetizer with homemade bread, while the ripened cheese could be added to warm dishes or grated in stews. Although considered healthy, its high fat content indicates consumption limitations, especially for people with metabolic disorders and cardiovascular diseases.

5.5.4 Romanijski kajmak (Romanija's kajmak)

Kajmak is a soft creamy dairy product produced in the Balkans, some regions of Asia and in the Middle East. It can be produced from cow's, sheep's, or mixed milk. Kajmak

is produced from boiled milk, and its main characteristic is the high content of milk fat. There are a few different varieties of kajmak characteristics for BiH, such as Kajmak from the sheepskin bag, Janj's kajmak, and Romanija's kajmak. Romanija's can be considered the most authentic kajmak for BiH because the crust is smoked in huts, specially constructed for this purpose. Romanija's kajmak is produced in a part of East BiH called Romanija plateau that encompasses the region of Jahorina, Romanija, Sokolac, Han Pijesak, and Treskavica (Dozet, Pandurević, Jovanović, & Borovčanin, 2011).

Just milked and filtrated milk is boiled and purred over a wooden dish called "škip." Škip has a rectangular form, whose ends are spread from the bottom to the top. The reason for it is to allow proper formation of the kajmak that is forming like a crust on the surface of milk in the process of its cooling. Škips are stacked on shelves arranged along the edges of the hut. Formation of crust lasts 36–48 h. During the crust formation phase, kajmak is smoked with the help of a fireplace (called "ognjište") positioned in the middle of the hut. During this step, škips with milk should be protected by a curtain to avoid ash deposition on the crust surface. The smoke goes out through windows in the roof. After the crust is formed and smoked, it is removed from the surface of the milk and transferred to a wooden container called "kaca" where the ripening process starts. Every layer of crust laid in kaca should be salted. Next to the bottom, kaca has a small hole where the liquid part of kajmak drains out. Drainage is done by putting pressure (usually stone) over the last layer of kajmak. Kajmak can be produced as a fresh product with a period of ripening of 2–20 days, or as a ripened product with period of ripening of 30–60 days. Kajmak can be stored in "kacas" up to 9 months. Content of DM in fresh kajmak is 59.42%–63.66%, while ripened kajmak contains between 67.42% and 69.75% DM. FDM varies between 81.87% and 88.33%. The content of proteins varies between 4.41% and 9.95% (Dozet et al., 2011).

Fresh kajmak is white-colored, soft and easy to spread, while ripened kajmak is usually in the form of lumps, with a yellow color and strong taste. Kajmak is usually served as appetizer or as a condiment to several dishes. It is best consumed as a starter served with cheese, bread, dried meat, and peksimeti (deep-fried dough). Kajmak is an excellent combination with boiled and roasted potatoes.

5.5.5 Bosanski ćevapi (Bosnian kebabs)

One of the main features of BiH's cuisine are kebabs. The provenience of kebabs in BiH is supposed to be Turkish, but the original recipe has undergone some modifications and has become one of the most famous traditional dishes in BiH (Agencija Anadolija, 2013). These small, hand-rolled minced meat sausages are commonly made with ground beef or a mix of beef mince with other meats, such as pork, veal, or lamb, seasoned with a mix of different spices—usually garlic, salt, black pepper, and sometimes paprika

or hot red pepper flakes (Taste Atlas, 2020a). After they have mellowed for a couple of hours, kebabs are barbecued over charcoal. Traditionally, one portion of the dish consists of ten pieces of kebabs tucked in a soft, moist, lightly grilled flatbread called “lepinja” or “somun,” and a variety of accompaniments, such as ripened kajmak (see above Romanijski kajmak), ajvar (roasted red pepper and eggplant), and raw onions.

There are several variations when preparing kebabs, and with it the eternal debate about whose are better and tastier. The most famous variations of kebabs are Sarajevo’s, Tuzla’s, Banja Luka’s, and Travnik’s. In Sarajevo, kebabs are served in flat bread (steamed or not) with finely chopped onions or possibly kajmak. In Tuzla, kebabs are served in a bun that is not steamed, but can be sprinkled with some compound that is a culinary four kebabs. In Banja Luka kebabs are served in laminas consisting of four kebabs. Travnik’s are mainly a combination between Tuzla’s and Sarajevo’s; their uniqueness is attributable to the meat deriving from animals grazing on mountain Vlasic, which has a particular flora.

5.5.6 Pečena jagnjetina na žaru (roasted lamb on a spit)

Roasted lamb on a spit is a very characteristic method of preparing lamb in the Balkans. There is strong competition between many Balkan regions whose lamb is better. In fact, the main secrets of its quality and differentiation in final taste are lamb race and quality of feeding/pastures. Because of these factors, lamb from Herzegovina is among the most popular in the Balkans. The famous sheep breed Pramenka in South East BiH has a strain called Hercegovinian (Hum’s, Stolac’s) Pramenka, which is the third most important sheep strain originating from BiH, in addition to the aforementioned strains of Vlasic’s and Kupres’s Pramenka. The breeding area of this sheep strain is the lower Herzegovina with an altitude of between 300 and 350 m, with characteristic sub-Mediterranean and Mediterranean climate characterized by dry summers and mild winters with a lot of precipitation. Usually the sheep are sent in the spring to graze on the high mountains of Herzegovina, where they remain until autumn and then return to the lower Herzegovina for wintering. Mountain pastures are scarcer, and the natural environment is poorer, with one peculiar exception: the plant called Zanolijet (*Petteria ramentacea*) characteristic for Herzegovina’s pastures, which gives the lamb a particular taste and quality.

This strain Hercegovinian (Hum’s, Stolac’s) Pramenka has smaller body with thin bones and modest productive features; the sheep weight from 35 to 40 kg and rams from 45 to 50 kg. This strain is extremely endangered with a few thousand remaining samples.

The optimal weight of lamb carcass is 15–20 kg. The carcass is salted with 2% of the total weight, put on a spit and left overnight. The lamb is roasted on a grill on embers. The meat should be placed at the distance of 50–60 cm from the embers. Roasting is done by turning the lamb on a skewer. Meat should be constantly coated with fat during roasting. Depending on the weight of the carcass, roasting lasts 3–4 h.

Roasted lamb on a spit is a main dish of every celebration in BiH, from religious feasts like Christmas, Bajram, and Saint of home, to any type of civil celebration, such as weddings and birthdays.

5.5.7 Meso ispod sača (meat baked in the “sač”)

The sač actually consists of two parts: a round pan (called “crepulja” or “tepsija”) and a shallow bell part whose diameter is slightly larger than the tepsija to cover it completely. The technique of preparing a dish under a large metal or ceramic lid, like a shallow bell covered with embers is prehistoric. It is believed that the preparation of the meal in the sač was invented contemporaneously with the fire. This is confirmed by many archaeological excavations where different forms of this object made of various materials (e.g., clay, bronze, or metal) were found. [Ivanišević \(2015\)](#) states that sač has not changed much since its first found archaeological forms from the Hallstatt period (800–450 BCE). This technique of preparing food was irreplaceable for centuries, especially as the fire was burning in the middle of the room where the so-called “ognjište” (fire pit) was located. With the advent of wood-burning stoves, food preparation under the sač was slowly abandoned. Nevertheless, the preparation of meals in the sač in the Balkans was retained as a curiosity and is still quite present today. This is explainable because the taste of dishes prepared in the sač is unmatched by any other preparation technique. Dishes baked in the sač retain all the juices and flavors of baked foods. Almost anything could be baked in the sač, but the most common prepared dishes were meat with potatoes or other vegetables, pies, and breads.

In BiH, the most commonly prepared meat in the sač is veal, lamb, or goat kid meat. It is also common practice to prepare in the sač the best chops of carcass, legs, shoulders, or ribs with potatoes. First step is to light a fire to make a lot of embers. The bottom of the baking dish (tepsija) is smeared with a little oil or fat, then the meat is placed after it has been previously dried and rubbed with salt and spices. Around it, potatoes cut in larger slices and other vegetables, depending of the taste, are arranged. Tepsija with meat and potato is placed on the fire and covered with the shallow bell on the surface of which a lot of embers are placed. The dish is baked for at least 2 h. During baking, once or twice it can be opened to roll over the meat and mix the vegetables to be equally baked from all sides. Meat prepared in the sač is as attractive to locals, as it is to tourists and other visitors of BiH.

5.5.8 Sudžuka (Sudžuka smoked sausage)

Sudžuka is a traditional BiH sausage. The provenance of sudžuka is not proven, but it is supposed to be Turkish ([Jašić et al., 2012](#)). The product is well recognized for its horseshoe shape and characteristic taste. The meat for sudžuka production comes from ruminants, mainly older, fattened cows and sheep. Fatty meat is preferred; if lean meat

is used, suet must be added. The maximum fat content in meat can be up to 15%. The preparation of the mixture for sudžuka starts with proper preparation of carcass. After slaughtering, the carcass should properly be cooled and drained in a cooling chamber overnight. Then, the meat is cut, salted and left to salt for another night. Salted meat is minced with a grinder, mixed with 0.7% Vegeta—a spicy meat prepared from garlic 0.3%, pepper 0.1%–0.3%, and sugar 0.3% (Jašić et al., 2012). As a wrapper for sudžuka, cleaned cow's or sheep's bowels, which have been turned inside out, are used. The bowel could be used immediately after cleaning or could be salted and conserved up to one year at 4°C and relative moisture of 75%–80% for later usage (Jašić et al., 2012). After filling and ensuring no air pockets form, the ends of the sausage are tied to make a horseshoe shape and hung overnight on a stick to drain. Finally, the sausages are exposed to smoke. Smoking of sudžuka is done with cold smoke and the distance of sausages from the fire source has to be about 3 m. The most desirable wood for making smoke is beech. The drying is done at 15°C–20°C and a relative humidity of 80%–90% (Jašić et al., 2012). Smoking takes 10 days. Afterwards, the sausages are transferred to another room for ripening where they remain for 10 days. The total time necessary for making sudžuka is approximately 21 days.

Sudžuka is in itself a complete meal and can be consumed alone with some drink as a snack, with hot bread and kajmak (usually for breakfast), or with ustipci (fried dough).

5.5.9 Cicvara (dish with flour and kajmak)

Cicvara is an old dish that is mostly tied to high regions of the Dinarides (Hercegovinapromo, 2017), but it is prepared even in lowlands, in BiH, Montenegro, and Serbia. Cicvara is especially connected with the most important Orthodox feast—Christmas. According to the old custom, it is the first dish eaten after 5 weeks' fast in the early Christmas morning. Cicvara is also a dish of special honor; it is always prepared by the host to show special hospitality to someone.

It is usually prepared from barley, corn, or wheat flour, depending on the region. In upper Herzegovina, cicvara is prepared with wheat flour. The traditional receipt from the East upper Herzegovina is as follows: in 2 L water, salt, and up to 700 g fresh kajmak are added, and the mixture is boiled. After that, it is exposed to lower heat and coarse ground wheat flour is slowly added up to the moment when the paste is lightly clotted. This is then stirred gently up to 1 h or until the fat liquid part begins to separate on the surface. A few minutes before removing it from the fire, it is desirable to add up to 300 g fresh cheese, called skripavac. This cheese stretches when it is heated. When cheese is melted, cicvara is ready to be served.

Cicvara is a very caloric dish and it cannot be eaten in large quantities. It is better to eat it as the only dish for a meal, than to mix it with other dishes. There are

different recipe variations depending on the method of preparation, as well as the type of flour, cheese, and the type and strength of kajmak used. For the most part of BiH, cicvara is made from corn flour. There are two varieties of typical corns in BiH. The first one is corn Stodanjak originating from lower Herzegovina, locality Popovo polje, characterized by its short vegetative season of 100 days (Vulesevic, Dolina, n.d.). The second one is Bjelcic (its name means “white” because of its white kernel), which is characteristic for Northwest Bosnia (i.e., Kozara foothill region) (Đuričić, n.d.).

5.5.10 Bosanske pite (Bosnian pies)

Bosnian pie is a meal for every occasion, whether it is a special celebration, a simple working/weekend day, or for breakfast, lunch, or dinner. The pie is ubiquitous at every corner of the country. It could be thought that pie is very simple to prepare, but it is not. The wisdom of rolling out dough is a traditional knowledge characteristic for majority of the BiH women.

The pie belongs to the group of stuffed pastries with minced meat, spinach, cheese, or potato fillings. The dough for pie is prepared by placing flour in a large bowl, adding salt, a little oil, and water gradually until a soft, springy dough is obtained. After 30 min of resting, the dough is rolled out with a rolling pin by careful and skillful movements until it becomes thin. While the rolled-out dough is left to dry for little time, the pie filling is prepared. Depending on the type of ingredients used for filling, pies with different names are obtained, such as: (1) burek (minced meat with onion, salt, and paper), (2) sirnica (eggs, cheese, salt, and cream; see Fig. 5.2), (3) zeljanica



Figure 5.2 Bosnian pie: sirnica.

(eggs, spinach, salt, cheese, and cream), and (4) krompirusa (potatoes, onion, salt, and pepper). Pies can be baked in a classical oven in the sač covered by ember. Ready pie is greasy and crunchy at the same time. Bosnian pie provides a unique experience every time it is consumed for both locals and tourists.

5.5.11 Bosanski lonac (Bosnian pot)

Bosnian pot is a traditional dish from BiH that originates from medieval Bosnia—it is assumed that it was prepared as a workers' dish by Bosnian miners ([Taste Atlas, 2020b](#)). It was much more modest in the past, and to these days the dish has undergone significant changes. It is basically a meat and vegetables stew, as it is known in other Mediterranean cuisines. It is prepared with fresh meat (e.g., beef, pork, lamb, or goat kid), half of cabbage, 0.5 kg of potatoes, a few heads of onions, one head of garlic, celery, parsley leaves and root, 4–5 bigger carrots, one tomato, sweet ground red paprika, black peppercorns, salt, laurel leaf, some rosemary, 0.5 L white wine, and 0.1 L white wine vinegar. The meat is sliced into equal pieces and potatoes are peeled. Meat, potatoes, and chopped vegetables are arranged in rows in a pot. Finally, spices are added and over the top water is poured, so that everything is submerged. The ceramic pan or pot is covered and placed in the oven or cooked on a quiet open fire. The pot is simmered for 2–3 h at moderate temperature.

The Bosnian pot has several variants, depending on the area and customs. In some areas cabbage, wine, vinegar, and a combination of pork meat are always added; in some parts it is prepared without these ingredients. The secret to a good Bosnian pot is a ceramic pot, as many ingredients as possible, longer cooking time at a lower temperature, and a sufficient amount of fat meat, but not too greasy, of excellent quality and in sufficient quantity.

5.5.12 Jarpak (minced meat rolled in collard)

Collard (*Brassica oleracea* L. var. *acephala* D.C.) is traditionally grown in Herzegovina, where many ecotypes and landraces, specific for a particular area and even a village, are still present. Today, local populations of this species are also grown in the northern BiH (i.e., Lijevce polje and Posavina). Under these conditions, however, the plants cannot survive during the winter, so seed maintenance must be ensured by protecting the individual stems during the winter months ([Djuric & Golub, 2018](#)).

Collard leaves are used for dishes. The leaves are usually green or blue-green and may contain a small amount of anthocyanin, which turns it red, so sometimes the collard is called red cabbage. The leaves are better and tastier after the first frost. If the plants are left in the garden until spring, then lateral branches with the local name “vršika” or “cymula” may appear before flowering. The leaves can be over 40 cm long and about 15 cm wide. The color varies from light green to dark green in the presence



Figure 5.3 Japrak.

of purple. The stem is very strong, over 40 mm wide. A single stem can yield over 100 leaves. One of the most famous dishes where leaves are used is japrak (sarma u raštici—collard rolls). This dish is prepared from minced meat with vegetables and spices that are wrapped in blanched collard leaves. The minced meat (e.g., sheep, lamb, beef, veal or mixed beef and pork, about 600 g) is mixed with finely chopped red and white onions, rice (one small cup), chopped parsley, peppercorns, and salt (by taste). Red milled paprika may also be added if japrak is prepared without browned flour.

The leaves should be blanched for a few minutes. One tablespoon of the prepared meat and vegetable mixture are placed on the leaf, and the leaf is wrapped. Little oil and a few chopped collards are placed on the bottom of the pan, then japrak is arranged in layers and water or a previously cooked clear soup is poured. Before that, a mint twig is placed on top. Instead of mint, sometimes chopped parsley leaves may be added at the end of cooking. Japrak is cooked at low temperature for about 1 h. In the meantime, browned flour is prepared and poured over at the end of cooking. Some water is added and cooked for another half an hour. When is done, japrak is served with 100–200 mL of sour milk (Fig. 5.3).

5.5.13 Čorba od graha poljaka (Poljak bean soup)

“Poljak” bean (*Lathyrus sativus* L.) is an ancient variety of legume from the Trebinje. The form and shape of “poljak” beans are very unusual. They look like small beach stones having irregular shape of predominantly beige color but may vary from beige to brown. Due to the appearance of the new, more productive beans, which were introduced after World War II, “poljak” beans started to be less and less cultivated, even becoming endangered. However, having deep historical roots as food of poor

and meat substitute, the variety is preserved and still cooked by families living in Trebinje villages (Bajramović, Ramić, Drkenda, & Radovanović, 2012).

There is no written evidence about dishes made of this legume, but two traditional recipes are kept in local cuisine. Having quite neutral taste, “poljak” bean gets its best flavor in the long-cooked soup, prepared in two possible ways. One recipe is represented by the soup cooked with local vegetables and a bit of smoked pig or sheep meat. As any beans, “poljak” bean has first to be soaked in water the night before cooking. Next day it should be shortly cooked. That water is removed and fresh water is added and then it is slowly cooked together with smoked meat and chopped vegetables (e.g., carrots, onion, garlic, celery and parsley roots and leaves, and one or two bay leaves) until the beans are cooked, but not overcooked. The other recipe is based on the same vegetables but cooked without meat and in olive oil.

Recent findings about their high level of proteins (i.e., 27% according to the analysis made in 2010 by Torino chamber of commerce) place “poljak” beans on the list of high nutritive foods (Bajramović et al., 2012).

5.5.14 Hercegovvački med od kadulje (Herzegovinian sage honey)

BiH is known for its high biodiversity in herbs. It has an estimated 3572 plant species, subspecies, and varieties (Gibson, Sisseem, & Dug, 2003). Therefore, it is not surprising that honey production is one of the largest food traditions kept. There are several honeys in BiH with very good quality among which Herzegovina’s sage (*Salvia officinalis*) honey is the most popular. The Latin word “salvia” comes from the verb “salvere” meaning “to save.” Indeed, there is a popular belief that sage honey has curative properties and that is the main reason why honey consumers are buying it. In Ancient Egypt, sage is likely to have been used to treat stomach pains, toothache, and asthma. This was mentioned as a cure for itching in the Ebers Papyrus (1500 BCE) (Vogel, n.d.). The local population, as well as that of the larger Balkan region, like the product’s strong and aromatic taste, too. The color depends on the season and of other herbs that are blooming in the same period, and it varies from light to mid-dark brown.

As with other labiates, sage originally belongs to the Mediterranean flora. Between the Dalmatian mainland (Croatia and Montenegro) to the sunny lime hillsides it can be found in large numbers (Vogel, n.d.). The prevalence of sage in the karst is very high, and it can be found in each Balkan country. The richest areas of sage in BiH are Trebinje, Bileća, Mostar, and Nevesinje (Hercegovinapromo, 2015).

It is also popular in folk medicine (not scientifically proven) as a firsthand treatment of modern age diseases related to stress as a reenergizer and general immunity booster. Traditionally, in some parts of Herzegovina, honey is eaten together with cicvara. A more modern culinary use is in making honey biscuits, while honey is generally increasingly used as a sugar substitute.

5.5.15 Bestilj (plum jam)

Bestilj (plum jam) is a cooked fruit pulp of unpeeled or peeled plum fruits with no sugar, or little sugar or honey. The best cultivar for preparing homemade plum jam is Pozegaca (also called Hungarian, Bistrica, Blue plum, or Chustendil plum). The amount of fruits for this plum jam without sugar and preservatives depends on the need and size of the cauldron in which the jam is cooked. This jam is very thick and sticky—in strudel, buns, and salt flats, it does not leak when baking. Pozegaca originates from Asia and was brought to Europe (Greece) before the new era (CE; Ivanovska et al., 2020). It is widespread in Europe and North America. The fruits are small, with an average weight of about 17 g, irregularly egg-shaped and purple-blue, covered with gray ash. The fruit flesh is golden yellow in color, firm, juicy, sweet acidic, aromatic, and of excellent quality. The seed is small and easily separated from the pulp. Pozegaca had its largest expansion in the late 19th and early 20th century. The fruit is used for fresh consumption, as well as for drying, food processing, and brandy production (Djuric & Golub, 2018).

It is of the most importance to select only ripe and healthy fruits. Then the fruits are washed, placed in a big pot with a stand, under which the fire is burning. A little water is added to the bottom of the pot at the beginning. During cooking it is important to stir constantly the mass, so it does not burn, preferably with a wooden spoon with a large handle. It is necessary to cook it until the jam is thick and dark. It should be so thick that the spoon stands upright in it. Toward the end of cooking, by taste, a cup of rum and a little cinnamon are added. In the years when the fruits are not sweet enough, sugar or honey is added, but not more than 1 kg per 50 kg of fresh plums.

Jars in which the jam will be stored are prepared before cooking. They have to be washed and sterilized by heating in the oven. The jam is poured carefully into jars and each of them is covered with cellophane before placing the lid. Then the jars are closed, turned upside down, and put in a wooden crate. After that, the jars are covered with a warm blanket, and left to cool gradually (cooling lasts all day). Once cooled, the jars are returned to their normal position and stored in a cool and dark place. Jam could be stored for several years.

Plum jam is used on a daily basis in BiH. It is eaten as a main dish, usually for breakfast as spread on bread with butter, or as part of other dishes like pancakes. It is impossible to imagine wintering without plum jam.

5.6 Sustainability and environment

When it comes to food sustainability, BiH is facing serious challenges. According to the annual report on the state of agriculture, food and rural development of BiH for 2017, the trade in agrofood products is characterized by relatively high dependency on

imports and a modest export value; the total value of imported agrofood products was 3125 million convertible marks (KM), while the value of exported products was 1009 million KM (Ministry of foreign trade and economic relations, 2018). The situation can be attributable to a range of causes, primarily to the rural depopulation and land abandonment.

From an environmental point of view, the situation is completely opposite. BiH, being mainly a hilly-mountainous country, has never been the subject of intensive agricultural production. This has left BiH's agricultural land unpolluted and unexhausted in terms of soil fertility (Foreign Investment Promotion Agency, 2011).

The most important initiatives in BiH for safeguarding local foods have been taken by local groups ("convivia") of Slow Food, an international organization that supports regional traditions, good food and gastronomic pleasure, and a general slow pace of life (Slow Food, n.d.). Due to their work, 17 Bosnian foods items have been placed on the list of endangered foods, the so-called Ark of Taste (Slow Food Foundation for Biodiversity, n.d.a), two of which are on the list of Presidia (i.e., products with particular attention) (Slow Food Foundation for Biodiversity, n.d.b).

5.7 Present nutritional conditions

Consumption of foods of animal origin, salt, and saturated fat is increasing globally over the intake of traditional unprocessed fiber-rich foods, such as whole grain cereals, legumes, and root vegetables. Consumption of processed and convenience foods is growing significantly in low- and middle-income countries, including BiH. This phenomenon is called "nutritional transition" and increases the risk of noncommunicable diseases (NCD) (World Cancer Research Fund International, 2014; World Health Organization, 2003). The most common risk factors leading to disability and dying in BiH in 2017 after smoking are increased fasting glycemia, increased blood pressure, diet, and increased body mass index (Institute for Health Metrics Evaluation, n.d.) (Fig. 5.4). From this, it can be concluded that among the top five causes of disability and illness, four of them are related to diet.

Increased blood pressure is associated with increased salt intake, and it increases the risk of stroke and vascular heart disease (World Health Organization, 2013). In BiH, the mean population salt intake, for adults of 20+ is 9 g/day (World Health Organization, 2018), which is well above the recommended amount of 5 g/day. Based on eating habits analyzed data in the 2010 Household Survey in the RS (Ministry of Health and Social Welfare of Republic of Srpska, Institute of Public Health of RS, 2011) it was determined that one in ten residents (10.6% of respondents) adds salt to food before tasting it. A study of salt intake among the younger student population showed that over 81% of salt consumed in food came from bread (15.6%), meat pie—"burek" (10.9%), rolls and puff pastry (7.28%), bacon (6.85%), and

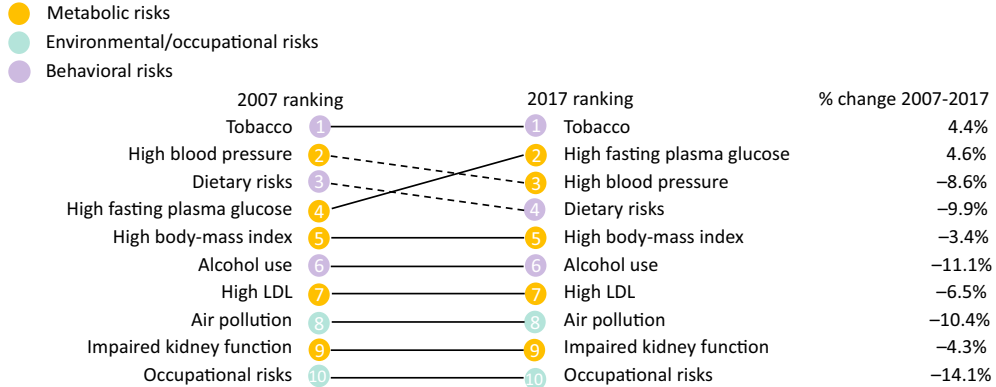


Figure 5.4 Factors driving the most deaths and disability in BiH 2007–17, all ages, number. *Data from Institute for Health Metrics Evaluation. (n.d.). Bosnia and Herzegovina. Retrieved from <<http://www.healthdata.org/bosnia-and-herzegovina?language=41>>.*

“ćevapi” (5.87%), which are also foods with a high frequency of consumption in BiH (Grabež, Rudić Grujić, Ahmetović, & Novaković, 2018).

According to the Food Safety Agency BiH Annual Report (FSA Agency for Food Safety of Bosnia and Herzegovina, 2018), in 2017 a total of 53,105 food samples were tested for microbiological parameters. The most common cause for microbial contamination of all food samples was the presence of *Salmonella*, aerobic mesophilic bacteria, and *Enterobacteriaceae*. Compared to the total number of samples analyzed, the highest contamination was found in the category of cereals and primary cereal products (i.e., 2.07%).

5.8 Open questions

The traditional food sector of the country is insufficiently researched, analyzed, and promoted. BiH does not yet have a well-developed functional system to protect traditional Bosnian foods (e.g., through GI certification). The country’s very slow administrative processes threaten the existence of local products, local raw materials, and local know-how. There is also a need to reconstruct and modernize production facilities of small farmers in order to meet the necessary hygienic and food safety standards, as well as to ensure a satisfactory level of traceability throughout the food chain. BiH’s food sector is further challenged by the major, ongoing problem of abandonment of rural areas.

5.9 Future outlook

To stop further loss of local products, resources, and know-how, urgent measures should be undertaken at institutional, production, and promotional levels. Institutions in BiH have to adopt legislation that favors small-scale local productions, fosters food

traceability systems, and aligns quality policy schemes with the EU legislation. Producers and all involved in the protection of the local, traditional food products should intensify promotion of the traditional BiH gastronomy on local, regional, and international level. Initiatives like the Slow Food movement need to be used more and more widely. And the most important measure in BiH, which will contribute to the preservation of local gastronomy is to stop rural exodus or at least slow it down.

References

- Adametz, L. (1892). Über den Trafniker oder Arnautenkase und dessen Herstellung auf den Hochweiden der Vlašić Planina. *Milchzeitung* 27–29, Bremen.
- Agencija Anadoluja. (2013). *Bosanski ćevap kao nacionalni specijalitet druge države* (In English: Bosnian kebab as a national specialty of another country). Retrieved from <<https://www.nezavisne.com/ekonomija/analize/Bosanski-ćevap-kao-nacionalni-specijalitet-druge-drzave/191628>>.
- Bajramović, S., Ramić N., Drkenda, P., & Radovanović, G. (2012). Typical agricultural products as a way of diversification of rural economy in Bosnia and Herzegovina – Case study of grah poljak. In *Proceedings of 6th Central European Congress on food (CEFood)* (pp. 1420–1425). Novi Sad, Serbia, May 23–26, 2012.
- Djuric, G., & Golub, D. (2018). *Agrobiodiversity in Southeast Europe – Assessment and policy recommendations – Entity report Republika Srpska, Bosnia and Herzegovina*. Skopje: GIZ. Retrieved from <<http://seerural.org/wp-content/uploads/2018/09/Agrobiodiversity-Study-BiH-RS.pdf>>.
- Dozet, N. (1963). *Prilog poznavanju proizvodnje bijelih mekih sireva na području Bosne i Hercegovine* (Ph.D. thesis). (In English: Contribution to the knowledge of the production of white soft cheeses in Bosnia and Herzegovina). Sarajevo.
- Dozet, N., Adžić, N., Sanišić, M., & Živić, N. (1996). *Autohtoni mliječni proizvodi* (In English: Autochthonous dairy products), Poljoprivredni institut Podgorica, SILMIR Beograd.
- Dozet, N., Pandurević, S., Jovanović, S., & Borovčanin, T. (2011). *Romanijski skorup-kajmak* (In English: Romanija's cream-kajmak). Univerzitet u Istočnom Sarajevu Poljoprivredni fakultet, Istočno Sarajevo, BiH.
- Đuričić, S. (n.d.). *Potkozarje Bjelčić Corn*. Retrieved from <<https://www.fondazioneSlowFood.com/en/ark-of-taste-slow-food/bjelcic-corn-from-potkozarje/>>.
- Foreign Investment Promotion Agency. (2011). *Bosnia and Herzegovina - Great potential for healthy food*. Retrieved from <<http://fipa.gov.ba/doc/brosure/Agriculture%20and%20Food%20Industry.pdf>>.
- FSA (Agency for Food Safety of Bosnia and Herzegovina). (2018). *Izveštaj o stanju u oblasti bezbjednosti hrane u Bosni i Hercegovini za 2017. godinu* (In English: Annual Report of food safety in Bosnia and Herzegovina, 2017). Retrieved from <<https://www.fsa.gov.ba/old/images/PPI/Izvjecje%20C5%A1taj-o-stanju-u-pblasti-sigurnosti-hrane-za-2017-godinu.pdf>>.
- Gibson, D.C., Sisseem, R., & Dug, S. (2003). *Bosnia and Herzegovina biodiversity assessment*. Retrieved from <<http://www.bih-chm-cbd.ba/materijali/Relevant%20documents/BiH%20Biodiversity%20Assessment.pdf>>.
- Grabež, M., Rudić Grujić, V., Ahmetović, N., & Novaković, B. (2018). Sodium content and the most important dietary sources of sodium in a sample of student population. *JHED*, 25, 44–48.
- Havraneck, J., Mikulec, N., Antunac, N., Iveković, D., Jakaša, I., Rogelj, I., . . . Dizdarević, T. (2012). *An Atlas of Sheep Cheeses of the Countries of the Western Balkans*. Zagreb: University printing house.
- Hercegovinapromo. (2015). *Ljekovito bilje naših krajeva: Žalfija* (In English: Medical herbs of our region: *Salvia officinalis*). Retrieved from <<http://www.hercegovinapromo.com/ljekovito-bilje-nasih-krajeva-zalfija/>>.
- Hercegovinapromo. (2017). *Trpeza naših predaka: Cicvara* (In English: The table of our ancestors: Cicvara). Retrieved from <<http://www.hercegovinapromo.com/cicvara/>>.
- Institute for Health Metrics Evaluation. (n.d.). *Bosnia and Herzegovina*. Retrieved from <<http://www.healthdata.org/bosnia-and-herzegovina?language=41>>.

- Ivanišević, J. (2015). *Tradicijska kuhinja: peka, Prapovijest pokrivena žarom* (In English: Traditional cuisine: baking bell. Prehistory raked over with embers). *Iće I piće*, No. 45. Retrieved from <<https://www.iceipice.hr/hr/clanak/prapovijest-pokrivena-zarom>>.
- Ivanovic, S. (2013). *Projekt funkcionalni program razvika ukupnog lanca vrijednosti kozarstva u Federaciji BiH I. faza* (In English: Project functional program for the development of the overall value chain of goat breeding in the Federation of BiH Phase I.). Retrieved from <<https://fmpvs.gov.ba/wp-content/uploads/2017/Publikacije/Operativni-program/7-Funkcionalni-program-razvoja.pdf>>.
- Ivanovska, S., Jankulovska, M., Jani, S., Gjuric, G., Zecevic, E., Dordevic Milosevic, S., ... Fetahu, S. (2020). *Food Beyond Borders*. Bonn and Eschborn, Germany: GIZ GmbH. Retrieved from <<http://seerural.org/wp-content/uploads/2020/06/GiZ-cookbook-interactive.pdf>>.
- Jašić, M., Spahić, E., Sarvan, E., Bašić, M., Vilušić, M., Suljkanović, A., ... Armutović, N. (2012). *Priručnik za proizvođače tradicionalnih prehrambenih proizvoda* (In English: A handbook for traditional food producers). Nezavisni biro za razvoj, Gradačac/Modriča. Retrieved from <<http://seerural.org/wp-content/uploads/2018/04/Prirucnik-Tipicni-Proizvodi-BiH.pdf>>.
- Ministry of foreign trade and economic relations. (2018). *Godišnji izvještaj iz oblasti poljoprivrede, ishrane i ruralnog razvoja Bosne i Hercegovine za 2017. godinu* (In English: Annual report in the field of agriculture, food and rural development for Bosnia and Herzegovina for 2017). Sarajevo. Retrieved from <<http://www.mvteo.gov.ba/attachments/bs-Home/Ostale-stranice/Poljoprivreda,-prehrana,-%C5%A1umarstvo-i-ruralni-razvoj/Izvjecje%C5%A1taji-za-poljoprivredu,-prehranu,-%C5%A1umarstvo,-ruralni-razvoj-/12022019-Godisnje-izvjesce-iz-oblasti-p-i-i-r-r-BiH-za-2017-godinu-bosanski-jezik.pdf>>.
- Ministry of Health and Social Welfare of Republic of Srpska, Institute of Public Health of RS. (2011). *Population health survey of the RS, report on research results*. Banja Luka (RS): Ministry of Health and Social Welfare of RS.
- Mulić, J. (2004). *Hercegovina. Feudalna oblast srednjovjekovne bosanske države*. (In English: Herzegovina. Feudal area of the medieval Bosnian state). Muzej Hercegovine. Mostar.
- Okusi Hercegovinu. (n.d.). *Livno cheese*. Retrieved from <<http://www.okusihercegovinu.com/en/tradicionalni-proizvodi/livanski-sir/>>.
- Samardzic, S. (2012). *Herzegovinian Cheese in a sack in a role of rural development of Herzegovina* (Ph.D. thesis). Faculty of agriculture, University of Banja Luka.
- Samardzic, S., El Bilali, H., Bajramovic, S., Kanlic, V., Ostojic, A., Berjan, S., ... Savkovic, A. (2014). Cheese in a sack: Exploring history, production area and production process of a typical Herzegovinian product. *International Journal of Environment and Rural Development (IJERD)*, 5-2, 74–79. ISSN 2185-159X. Rajamangala University of Technology Thanyaburi, Thailand. Retrieved from: <<http://iserd.net/ijerd52/IJERD%205-2-15>>.
- Sarić, Z., & Bijeljac, S. (2003). Autohtoni sirevi Bosne i Hercegovine. *Mljekarstvo*, 53(2), 135–143.
- Šarić-Halilović, E. (2014). *Tradicionalna bosanska hrana* (In English: Traditional Bosnian food). Retrieved from <<https://www.bastina.ba/images/stories/sadrzaj/2017/20170316/2tradicija/Edina%20Halilovi%C4%87-%C5%A0ari%C4%87%20Tradicionalna%20bosanska%20hrana.pdf>>.
- Slow Food Foundation for Biodiversity. (n.d.a). *Arke of Taste products in Bosnia and Herzegovina*. Retrieved from <<https://www.fondazioneSlowFood.com/en/nazioni-arca/bosnia-and-herzegovina-en/>>.
- Slow Food Foundation for Biodiversity. (n.d.b). *Presidia in Bosnia and Herzegovina*. Retrieved from <<https://www.fondazioneSlowFood.com/en/nazioni-presidi/bosnia-and-herzegovina-en/>>.
- Slow Food. (n.d.). *Convivia and communities in Bosnia and Herzegovina*. Retrieved from <<https://www.slowfood.com/nazioni-condotte/bosnia-and-herzegovina/>>.
- Taste Atlas (2020b). *Bosanski lonac*. Retrieved from <<https://www.tasteatlas.com/bosanski-lonac>>.
- Taste Atlas. (2020a). *Čevapi*. Retrieved from <<https://www.tasteatlas.com/cevapi>>.
- Vogel, A. (n.d.). *Plant encyclopedia Salvia officinalis L. Sage*. Retrieved from <<https://www.avogel.ch/en/plant-encyclopaedia/salvia-officinalis.php>>.
- Vulešević, S., & Dolina, A. (n.d.). *Popovo Polje Brzac Com*. Retrieved from <<https://www.fondazioneSlowFood.com/en/ark-of-taste-slow-food/popovo-polje-brzac-com/>>.
- World Cancer Research Fund International. (2014). *The link between food, nutrition, diet and non-communicable disease*. Retrieved from <<https://www.wcrf.org/sites/default/files/PPA-NCD-Alliance-Nutrition.pdf>>.

- World Health Organization. (2003). *Diet, nutrition and the prevention of chronic disease: Report of a joint WHO/FAO expert consultation*. Geneva, Switzerland: WHO.
- World Health Organization. (2013). *A global brief on hypertension. Silent killer, global public health crisis. World Health Day 2013*. Geneva, Switzerland: WHO.
- World Health Organization. (2018). *Noncommunicable Diseases (NCD) Country Profiles, 2018*. WHO. Retrieved from <<https://www.who.int/nmh/countries/bih-en.pdf>>.
- Zdanovski, N. (1942). *Travnički sir* (In English: *Travnik's cheese*). Poseban otisak "Veterinarskog vjesnika" (pp. 3–18).