Traditional and regional meat products in Poland

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Abstract. Nowadays, consumers in Europe are increasingly paying attention to the quality, health benefits and origin of meat products. Thanks to this, traditional and regional meat products, which in addition to being of high quality and part of regional/country traditions, are of great interest. European consumers are ever more willing to buy meat products produced using traditional methods from local raw materials, which – contrary to mass production – guarantees the highest quality.

1. Introduction
In the European Union countries, a retreat from food produced on an industrial scale has increasingly been noticed. Nowadays, people are much more aware of chemicals added to food and try to avoid them, switching to traditional and regional products. However, this is still a small segment of the food market [1]. Meat is an expensive but controversial commodity [18]. The policy of traditional and regional food quality in the European Union (EU) is implemented, among other factors, by distinguishing and certifying those foods that confirm the high quality of agri-food products originating from specific regions, as well as those characterized by traditional production methods [2]. This emphasizes the specific quality of regional and traditional food, increases consumer confidence in such foods and protects products from dishonest appropriation of the name, i.e., counterfeiting or food fraud. The production of traditional and regional foods is one of the most important factors affecting the development of rural areas [3]. It creates new livelihoods in the countryside, increases farmers’ incomes, especially in less-favored areas, and prevents depopulation of these areas [4].

2. Traditional and regional products in Poland
In order for a Polish product to be labeled traditional, it must be entered on the National List of Traditional Products. The National List of Traditional Products includes products that are characterized by traditional, time-honored production methods (recipes passed down from generation to generation), with quality or unique features and properties resulting from the use of traditional production methods. These are considered production methods used for at least 25 years as part of the heritage of the cultural region in which they are produced and as part of the identity of the local community [5, 12]. These traditional products are also the result of the influence of natural factors related to the area, such as climate, vegetation, terrain, and soil quality. Traditional products served under the umbrella of national or regional cuisines are a very important element of tourist promotion in both Poland and Europe [6]. Poland, as a member of the EU must meet the requirements imposed by EU law [10]. Actually, the system of promotion and protecting traditional and regional products in the EU is based on regulation of the European Parliament and of the Council (EU) No. 1151/2012 of November 21, 2012 on quality systems for agricultural products of foodstuffs and Supplementary Regulation of the Commission (EU) No 664/2014 of 18 October 2013 supplementary Regulation (EU) No 1151/2012 of the European Parliament and of the Council as regards the establishment of European Union symbols on protected designations of origin, protected geographical indications and...
guaranteed traditional specialties and with reference to some rules concerning the origin of feed and raw materials, some procedural provisions, and additional transitional provisions [6, 8]. The National List of Traditional Products (data from May 2019), currently shows that 417 meat products labeled traditional are registered in Poland (Figure 1) [9, 11].

2.1. Kiełbasa myśliwska (hunting sausage) – Traditional Speciality Guaranteed

For the production of kiełbasa myśliwska (hunting sausage), meat from pigs with a body weight of up to 120 kg is used, characterized by a higher intramuscular fat content (above 3%) than typical fattener pigs with weights of 90-100 kg (intramuscular fat content 2-3%). This more fatty type of meat is very useful for the production of traditional Polish sausages with their desired taste qualities. Slaughter should be based on traditionally maintained Polish breeds of pigs: Puławska, Złotnicka, Wielka polska biała or Polska biała zwisłoucha. Mixed-breeds of these pigs can also be used. The minimum blood content of these native breeds should be 50%. Fattening is completed using traditional mixtures of cereal and other components [15]. Feed mixtures (doses) are composed of energy components including cereal meal – wheat, barley, rye, oat, wheat-rye, corn – and protein components – lupin, fava bean, pea meal, soy and rapeseed meal, rape cake, fodder yeast, dried green fodder. Feed can be supplemented with vitamins and minerals. The raw material for the production of kiełbasa myśliwska is pork or 50% pork and 50% beef. The unique taste and smell distinguish kiełbasa myśliwska from other types of sausages. This is the result of using carefully selected spices used (juniper, natural pepper, and fresh garlic), and sugar, curing mixture and a creamy mixture consisting of vinegar, water and rapeseed or sunflower oil. Juniper (Juniperus) is a traditional spice that occurs frequently in forests, which enhances the taste and smell of this sausage and significantly influences its specificity [14]. Kiełbasa myśliwska is warm-smoked traditionally and heat-treated to achieve an internal temperature of at least 70°C. The smoking and heat-treating processes produce a characteristic color and unique taste, and the internal temperature of 70°C gives a uniform color and inactivates microorganisms present in the stuffing. The, sausages are cooled to <10°C followed by drying at 14-18°C at 70% to 80% relative humidity for 5-7 days until the desired characteristics are obtained.
Strengthening and deepening of the external color then occurs through dehydration to obtain the desired shelf-life [16].

2.2. Kabanos – Traditional Speciality Guaranteed
The history of kabanos on Polish soil dates back to the 1920s and 1930s. Kabanos was made in small plants with local coverage under one name, but encompassing different regional varieties. The advantages of kabanos are the original taste and extended shelf life, which is ensured by smoking and drying processes. Kabanos is a thin, dried, smoked pork sausage in sheep intestine. The surface color is dark red with a shade of cherry. Dark red pieces of meat and light-cream cuts are visible on the cross-section fat. Kabanos has a distinctly perceptible taste of heat-treated, corned pork, and a light aftertaste of caraway, pepper and smoke. An important component of kabanos affecting its specificity is the pork from specially fattened pigs of up to 120 kg (as in the case of kielbasa myśliwska) and characterized by a higher intramuscular fat content [19]. Kabanos is produced from pork meat with an intramuscular fat content above 3%, which ensures appropriate taste and technological properties of meat [16]. The purpose of proper fattening is to obtain raw material (meat) characterized by an increased intramuscular fat content. For kabanos production, meat from traditional Polish pig breeds is used: Puławska, Złotnicka, Wielka polska biała or Polska biała zwisłoucha. Apart from these pure-bred pigs, mixed breeds can also be used, but only those descended from the aforementioned breeds. This meat/fat raw material and compliance with the traditional production methods, with particular emphasis on the stages of grinding, curing and smoking, provides kabanos with exceptional crispiness (snap) and juiciness. Animals intended for this type of product are fed with natural feeds. The characteristic feature of kabanos is clearly heard when it is broken – a snapping sound is produced. This is the effect of meat fragility and properly conducted processes of drying and smoking. Smoking and heat-treating produce the characteristic color of the skin, the appropriate taste qualities, and heating to an internal temperature of 70°C destroys any pathogens present in the stuffing. The unique taste and smell of kabanos is the result of selected spices used (natural pepper, nutmeg, and cumin) and well-conducted drying, smoking and cooling processes [17].

2.3. Kaszanka Nadwieprzanka - Traditional Speciality Guaranteed
Kaszanka Nadwieprzanka is a well-known product in Poland. It is a blood sausage with buckwheat groats, scalded, and which includes masks (pork head rinds) and meat from pig heads, offal raw materials, pork skin, pork fat and blood [13]. Kaszanka Nadwieprzanka has a grainy cross-section with visible lighter groats and fat points, while the remaining mass is gray-brown or brown. The consistency is fragile, but the slices should not disintegrate, and the taste and smell are characteristic of offal sausage brewed with the addition of blood and buckwheat [20]. Kaszanka is moderately salty with perceptible aromatic spices. Raw materials used for the production of this kind of product are specially selected by contract with individual farmers from the Baranów commune; the meat and fat come exclusively from young pigs up to six months of age and weighing less than 100 kg. Water used for the production of this black pudding is naturally pure and derived from quaternary deposits. Kaszanka Nadwieprzanka has been produced since 1968 on the basis of the recipe developed by the management and crew of the Masarnia Commune Samopomoc Chłopska. The name of Kaszanka Nadwieprzanka dates from 1971, and came from the local jargon, referring to the restaurant Nadwieprzanka in Baranów where this blood sausage was served as a main snack. Kaszanka has a unique taste, a shelf-life of 7 days from the date of production, and is greatly appreciated by locals and foreigners alike [13].

3. Conclusions
The registration of meat products as Traditional Speciality Guaranteed is an excellent means to support regional promotion. Thanks to this registration system, meat products characteristic for particular regions have become showpieces, the efforts of the producers are rewarded and consumers have an opportunity to try authentic local cuisine. Traditional and regional food is a basic element
contributing to promotion of Polish cultural heritage. Promoting the cuisine and regional products is an obvious need in increasing the number of foreign tourists and in developing agri-tourism and tourism country-wide.

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