

Table S1 – List of typical culinary products from Austrian BRs.

BR	Product	Use
Grosses Walsertal (BRGW)	Cheese: <i>Walserstolz</i>	One success story of this region is the founding of the Walserstolz cheese brand (Walserstolz 2018). Typical of the region are the many high-altitude alpine dairies, which are difficult to manage and have considerably higher production costs compared to their competitors. In the 1970s and 1980s, the situation was exacerbated by low milk prices, so there was a risk that many of these small farms would be abandoned. In 1998, Walserstolz created a common regional brand under which three alpine dairies produce high-quality mountain cheese made from silage-free hay milk. The construction of a modern cooperative dairy in the village of Sonntag has greatly facilitated independent milk processing, with milk being bought at a reasonable price, and ensuring lower production costs and thus higher added value. The involvement of a larger company (Emmi Österreich GmbH) increased the supra-regional sales opportunities, such that many products have been available throughout Austria for a number of years. This has also increased the level of awareness of the BR throughout Austria. As a result, both jobs and traditional agricultural practices have been preserved. Traditionally, the summer months in the high alpine pastures play a major role in mountain farming. In the BRGW, 47 such pastures are currently being farmed, and on 20 of these the milk is transformed into various products directly on site during the summer (Rumpold & Klenovec 2019). Since 1997, Walserstolz cheese has been protected by EU schemes of geographical origin, such as <i>Voralberger Bergkäse PDO</i> .
	Herbs: <i>Alchemilla</i>	The herbal initiative Alchemilla, founded in 2006 by women who love and are knowledgeable about herbs, aims to impart herbal knowledge and the special value of the region's plant diversity (BRGW 2018a). The members of the initiative, who offer seminars on herbal knowledge in the region that has been handed down over centuries, and convey the sensitive interactions between man and nature during herbal walks. The women also produce high-quality handcrafted products made from local herbs and raw materials, including body-care products and culinary delicacies such as herbal tea, herbal syrups and wild herbal salt.
	Herbal tea: <i>Bergtee</i>	The <i>Bergtee</i> (Mountain tea) initiative creates awareness of the richness of herbs growing in the natural environment as well as in the herb garden, and uses this diversity to create mountain tea: a story, not a product, as the collectors emphasize (Burtscher et al. 2012). The aim is that knowledge of the power of plants should be passed on from one generation to the next (Grasser et al. 2012, 2016; Schunke et al. 2015). Many BR partner businesses, which are important multipliers for the BR management and whose status is awarded according to criteria drawn up jointly, offer mountain teas alongside other regional products.
	Biscuits: <i>Walser Kekse</i>	Cookies made by hand from regional ingredients such as fresh butter, berries, spelt flour, oat flakes and hazelnuts (BRGW 2018b).
Salzburger Lungau & Kärntner Nockberge (BRSL&KN)	Potatoes: <i>Lungauer Eachtling</i>	Thanks to its particular climatic and soil characteristics, the Lungau region is one of the best potato-growing areas in Austria. In the Lungau dialect, the word <i>Eachtling</i> means <i>potato</i> and is used by the local farmers as a brand name for a total of eight cultivated potato varieties. The traditional form of cultivation has been handed down through the generations and produces excellent table potatoes with high-quality vegetable protein, many vitamins and valuable minerals. The farmers also specialize in the production of first-class seed potatoes, which are characterized by their particular vigour and resistance to disease.
	Rye: <i>Lungauer Tauernroggen</i>	A success story from the Salzburg part of the BRSL&KN is the conservation of Lungauer Tauern Rye, a heritage cereal that was typical of the region. This variety is well adapted to the harsh climatic conditions of the Lungau region and very well suited for cultivation in the marginal areas of grain cultivation due to its undemanding nature. Until the 1960s, Lungauer Tauern Rye was the most important cereal variety in the Upper Enns Valley (BMLRT 2017a). By the middle of the 20 th century, the original seed was being propagated and marketed by more than 100 mountain farms in the Lungau. In 1954, the distribution of Tauern Rye reached its peak, with 122 hectares under cultivation; in 2005, the rye accounted for only about 2 ha (Kulinarisches Erbe 2018). However, a Slow Food initiative launched in 2006, which led to the creation of the Lungauer Arche Association, has quadrupled the area of Tauern rye, certified by the Austrian Food Safety Agency as now covering 8 ha (Löcker 2020 pers. comm.). The cultivation of this variety makes an important contribution to the preservation of ecological diversity, the enrichment of the cultural landscape, and the development of a typical regional food culture. This rye is used in the production of bread, pasta and beer and for traditional Lungau pastries such as <i>Roggen Krapfen</i> and <i>Hasenöhrl</i> . The first is a type of flatbread, sprinkled with cheese or filled with roast meat or even jam, and then rolled up like a pancake. The latter are flat, rhombic or triangular pastries made with lard, traditionally served with sauerkraut. The name is derived from the fact that the dough rises during baking in such a way that the pastry resembles long, thin rabbit ears (<i>Hasenöhrl</i>). If prepared from Tauern rye flour, it is said that the pastry is tastier than when it is made using conventional flours.
	Dessert: <i>Lungauer Rahmkoch</i>	This rich sweet dish (also called <i>marzipan from the Lungau</i>) is produced in the Lungau, where it has been preserved as a part of the rural tradition. It is made by slowly cooking flour, butter, cream and raisins and sugar, flavoured with rum and spices, such as cinnamon and aniseed. While this type of dessert used to be widespread in the Alpine region, nowadays it is produced only in the Lungau. It is certainly the most traditional dish in the region, and is protected by the Ark of Taste Slowfood Initiative.
	Milk: <i>Reine Lungau</i>	The promising <i>Pure Lungau Biosphere Milk</i> BR project, launched in 2017, has unfortunately not met with the success that was originally expected. Initiated by the dairy company SalzburgMilch, products using exclusively organic milk, made by almost 60 farmers from the Lungau region, were marketed under the premium brand <i>Reine Lungau</i> (Köck 2019). Since these top-quality products, for which the farms were able to sell their milk at a significant premium, were not as popular with consumers as had been hoped, the multiple award-winning project unfortunately had to be discontinued after three years, in October 2020, for economic reasons.
	Cattle: <i>Nockberge Almrind</i>	The region has a centuries-old tradition of extensive livestock farming on the mountain pastures, which are located at between 1500 and 2440 m a.s.l. The high quality of the meat of the Nockberge Almrind cattle is the result of the cattle being raised outdoors, including the obligatory summer grazing on the alpine pastures in the Nockberge area. The grazing of the alpine pastures up to the summit areas is a special feature of the region. The environmentally conscious and soil-conserving management of the farms and alpine pastures contributes significantly to the sustainable maintenance of the alpine landscape in the region. The 'Bäuerliche Vermarktung Nockfleisch' cooperative of 14 farms ensures the production of high-quality and luxury foods, making beef, pork and game dishes according to traditional farm recipes (BRSL&KN 2018).
	Honey: <i>Nockhonig</i>	<i>Nockhonig</i> , a high-quality honey produced in the BR, may be sold under this label only if it is produced exclusively by a pure-bred regional subspecies of honey bee, namely the Carnica bee (<i>Apis mellifera carnica</i>). The marketing of this brand of honey thus contributes to promoting the Carnica bee, which is endangered by the use of mixed breeds and hybrids. In this way the local beekeepers and their bees make a significant contribution to the preservation of the biodiversity of the region's flora and fauna (BRSL&KN 2018).
	Fish: <i>SIGI'S natural char</i>	Slow growing high-quality char from Carinthia's highest situated fish farm, at 1300 m a.s.l. The particularly long rearing period in ponds with the cleanest mountain water flowing through them and the year-round cold temperature of the water are the basis for the exceptionally high quality of the fish and the delicacies produced from them (NaturaSaubling 2020).
	Milk products: <i>Kaslaln</i>	In the <i>Kaslaln</i> dairy, founded in 2016, organic hay milk from goats and cows from the Nockberge region is made into cheese and butter under the slogan <i>Organic. Regional. Good</i> . (Kaslaln 2018). Founded as a cooperative by four farms in the region, 20 farms now deliver their milk to this showcase dairy, where cheese production can be observed directly.
	Ice cream: <i>Nockberge Bauernhof-Eis</i>	Since 2009, on a mountain farm located at 1600 m a.s.l., around 160 flavours of ice cream are produced from exclusively farm milk and sold direct to restaurants, the retail trade and customers (BRSL&KN 2018).
	Hay from alpine pastures: <i>Almheu</i>	The hay is mowed on mountain slopes between 1800 m and 2000 m a.s.l. Due to the extreme steepness of the terrain (the gradient can be over 100%), cutting the hay has to be done by hand. The hay contains about 100 different plant species and is therefore very valuable. This high biodiversity can only be maintained by constant cultivation. Since some plants are biennial, the areas are divided into two halves, so that each area is mowed only every two years. This gives the flora the chance to reproduce in a species-appropriate way. In addition, this method of cultivation is also an active form of landscape and nature conservation, as the danger of avalanches is greatly reduced on these cultivated areas. As well as for fodder, the hay is also used for medicinal purposes thanks to the presence of various plants, and to make liqueur and bath products (BRSL&KN 2018).

BR	Product	Use
Wienerwald (BRWW)	Fruits	Fruits from the Wienerwald and the products made from them offer high potential for culinary enjoyment. Unfortunately, the high-stem fruit trees that used to be typical of the traditional cultural landscape, such as vineyard peaches, almonds, cherries, apples, cornelian cherry (<i>Cornus mas</i>), nuts or the service tree (<i>Sorbus domestica</i>), have become rare in the orchards of the Wienerwald. However, since orchard meadows with several thousand different animal and plant species are among the most species-rich habitats in Central Europe, the management of the BR has launched an action to support the planting of new fruit trees (BRWW 2020). This successful initiative thus not only contributes to the preservation of the cultural landscape, but will also lead to the preservation of traditional fruit varieties and make them more readily available to consumers in the medium term. In this way, the campaign also contributes to increasing and securing the creation of economic value in the region.
	Wild service tree: Wiesenwienerwald Elsbeere	The Wiesenwienerwald Elsbeere region contributes to the preservation of the huge wild service tree (<i>Sorbus torminalis</i>), which can be up to 200 years old. The freestanding, large-crowned trees, which are used for both wood and fruit, are typical of the western Wienerwald (Kulinarisches Erbe 2018b). The wild service tree produces brownish, thumbnail-sized fruit, which have a high vitamin-C content, taste slightly acidic, and develop a unique almond-like aroma. The fruits have been harvested by hand for generations, and are eaten fresh or dried, or processed into various specialities such as jam. The most sought-after product is probably the Elsbeerbrand distilled from the fruits. This expensive, noble brandy has a unique flavour characterized by an almond-like aroma.
	Wine	The Wienerwald has a share in three outstanding wine regions. On its northern and eastern foothills, there are excellent wine-growing areas with a high landscape diversity. These species-rich viticultural landscapes were one of the reasons for the designation of the Wienerwald region as a UNESCO BR. Each of the three areas grows grape varieties typical for the region – such as Zierfandler or Rotgipfler – or produces the traditional wine known as <i>Wiener Gemischter Satz</i> , listed as a Slow Food Presidium since 2008. In contrast to a cuvée, for <i>Wiener Gemischter Satz</i> up to 20 different grape varieties are planted in the same vineyard, and harvested and pressed together. Originally, growers used the varying degrees of ripeness and acidity as a way to ensure consistent quality and guard against the risk of poor harvests (Wiener Wein 2020). In February 2020, an application was submitted for <i>Wiener Gemischter Satz</i> to be included in the EU Register of Protected Designations of Origin (PDO) was submitted (European Commission 2020).
	Honey	Several partner companies in the BR produce high-quality organic honey in the natural meadows and forests of the biosphere reserve. Most of the beekeepers are engaged in educational programmes for children and adults and offer courses for schools.
Lower Mura Valley (BRUM)	Styrian Scarlet Runner Bean PDO (Protected Designations of Origin)	The scarlet runner bean (<i>Phaseolus coccineus</i>) found its way from the New World to Europe in the 16 th century and over time developed into an unmistakable Styrian speciality. Approximately 200 Styrian farmers produce almost 95% of the Austrian scarlet runner bean harvest on 550 hectares of cultivable land – around 550 tons per year (LSG 2019). The bean is mainly cultivated together with maize, which serves as a supporting plant for it, or in pure culture supported by poles. The maize and beans are threshed together in late autumn. This is followed by mechanical separation, drying, and finally manual sorting. The exceptional quality of the Styrian scarlet runner bean is the result of the interplay between the ideal conditions in south-eastern Styria, the expertise in cultivation and harvesting methods passed down for generations, and the varieties, which are optimally adapted to the environment. In the regional catering businesses, the black-violet pied, a relatively large scarlet runner bean, is processed into delicious dishes such as the traditional beetle bean salad with Styrian pumpkin seed oil. Since August 2016, the Styrian scarlet runner bean has been protected by its inclusion in the EU register of PDO (BMLRT 2017b, European Commission 2020).
	Styrian Pumpkin Seed Oil PGI (Protected Geographical Indications)	No other foodstuff is so inextricably linked to Styria as Styrian pumpkin seed oil. Already at the beginning of the 18th century, oil was pressed from pumpkin seeds, but at that time the seeds still had husks. About 100 years ago, Styrian farmers started to cultivate soft-skinned varieties and finally bred the <i>skinless Styrian pumpkin seed</i> (<i>Cucurbita pepo</i> var. <i>styriaca</i>). These are first ground, mixed with salt and water, then gently roasted and finally pressed. The tasty, dark green, nut-scented oil, which in recent years has become a figurehead for Styria in international speciality cuisine, has been approved by the EU since 1996, when it entered the register of PGI as Styrian Pumpkin Seed Oil PGI (BMLRT 2017c; European Commission 2020). Since then, more than 3 150 local pumpkin seed producers and 40 oil mills have joined forces in the Styrian Pumpkin Seed Oil PGI Producer Ring, founded in 1998, in order to jointly implement the protection of origin. A control system guarantees that only pumpkin seeds from the protected area and pressed within the region can be labelled <i>Styrian Pumpkin Seed Oil PGI</i> .
	Styrian Horseradish PGI	Southeast Styria, and thus also the BR region, is also the traditional area of cultivation for another regional speciality, namely Styrian Horseradish PGI. At present, about one hundred farms cultivate around 300 hectares to produce about 3,000 tons of this speciality annually. The predominant Illyrian climate with its high humidity and high temperatures during the growing season, and the heavy, deep loamy soil in the region provide excellent growing conditions for horseradish. Freshly grated, it refines many regional specialities. Since 2008, Styrian horseradish has been listed in the EU register of PGI (BMLRT 2017d, European Commission 2020, Steirische Spezialitäten 2019).
	Wild garlic	A further contribution to the regional culinary potential is wild garlic (<i>Allium ursinum</i>), which is abundant in the BR's alluvial areas in spring. It is collected by locals and tourists alike, and figures in delicious dishes in the restaurants.
	Wine from historical double ownership	High-quality wine production is an important economic sector in the region. A leading grape variety is the Traminer, which matures in the volcanic Styrian soils which give it outstanding qualities. In the BR itself, however, the areas under wine cultivation are considerably smaller than in the surrounding region. An interesting initiative is the marketing of the so-called wine from <i>historical double ownership</i> . Due to the shifting of international borders after the First World War, a number of wine producers developed who had vineyards in both Styria and beyond the national border, in today's Slovenia. In the Gleichberger Agreement of 1953, it was decided that all dual vineyard owners were allowed to cross the border between the former Yugoslavia and Austria using a special passport so that they could cultivate their vineyards in both countries. This agreement, which remained in force until 2015, also stipulated that only historic dual owners had the right to bring grapes that had been harvested in Slovenia to Austria and to produce Styrian wine from them. However, the validity of this agreement has ceased to be valid with the accession to the EU. However, since the 2018 vintage, the historic dual owners have again been allowed to bring the grapes harvested from their Slovenian vineyards to Styria, where they are processed. These particular wines are now identified clearly by a logo that includes a swallow, which symbolizes the trans-national nature of the wines (Weinzeitung 2020; G. Pock 2020 pers. comm)
Rice	In 2012, the Fuchs farm had the innovative idea of growing rice using the dry rice cultivation method (Fuchs 2020). After several years of learning and teaching, several farmers in the region were finally convinced and brought on board, and the first rice was launched on the market in 2014. 100 tons of rice are now harvested from about 30 hectares of land (some of which is located in the BR), processed by contractual partners using Austria's most modern rice-processing plant, and marketed under the brand <i>SteirerREIS by Fuchs</i> (Fuchs 2020 pers. comm). In a second farm, that of the Fröhlich family, about 6 tons of rice per year are harvested from some 15 hectares in the BR area (Fröhlich 2020 pers. comm.). The rice is then de-husked and polished in Styria's first farm-owned rice mill, and sold in 100% biodegradable packaging to gastronomic establishments and the retail trade (Fröhlich 2020).	

References for Table S1

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