



TRADITIONAL TURKISH CUISINE PREPARED WITH LEGUMES

Aybuke CEYHUN SEZGİN¹ (orcid.org/ 0000-0003-1068-9940)

Merve ONUR^{2*} (orcid.org/ 0000-0001-7985-1243)

¹Ankara Hacı Bayram Veli University, Faculty of Tourism, Department of Gastronomy and Culinary Arts, Ankara, Turkey

²Osmaniye Korkut Ata University, Kadirli School of Applied Sciences, Department of Gastronomy and Culinary Arts, Osmaniye, Turkey

Abstract

Turkish cuisine is one of the oldest among the world cuisines, which reflects the dietary habits of Turkish people with a variety of food types. Being amongst the main nutritional foods of Turks since time immemorial, legumes are used as main ingredients in soups, main dishes, salads, appetizers, and desserts. Chickpeas, lentils, beans, peas, and cowpea are commonly used legumes in Turkish cuisine. Edible legumes have a significant place in Turkish culinary culture both in terms of their use in the cooking of several types of food and basic compounds that they contain. This research is planned to show the use of legumes in Turkish cuisine and their gastronomic importance. For this reason, the general characteristics of legumes, which are an indispensable part of Turkish cuisine, their evaluation in terms of health and some local cuisine examples are included in this study. In addition, traditional Turkish dishes prepared with legumes, the photographs of cooking steps and dishes are presented in detail together with the ingredients used. It is thought that this study will be a source for future studies on this subject.

Keywords: Turkish Cuisine, Traditional Turkish Dishes, Legumes

* Sorumlu Yazar: merveonur@osmaniye.edu.tr

DOI: 10.33083/joghat.2022.122

Introduction

Since it is a part of culture, eating habit differs in every society. The concept of culinary culture is a part of the cultural values that reflect the eating habits of a society. Turkish cuisine that reflects the nutritional habits of Turkish society has been constituted by different factors like nomadic life, agricultural economic structure, geography, religious structure, socioeconomic characteristics, tradition, custom and the interaction with various cultures. Thousands of different kinds of dishes have been developed in Turkish cuisine so far with the influence of these factors. Turkish culinary culture differs from others in terms of food types, cooking techniques, food production and dietary habits (Akan, 2007).

The dishes in Turkish cuisine can be classified in a wide variety of groups such as soups, meat dishes, vegetable dishes, dried legumes stew with meat, dishes cooked with olive oil, pilafs, pastries, salads, and desserts (Ertaş and Karadağ, 2013). Among those, dried legumes, which are the main ingredients of legume dishes, are indispensable foods of Turkish cuisine thanks to their high nutritional value and taste (Food and Bevarage Services, 2011a). Legumes such as dried beans, chickpeas, and lentils are some of the most widely used ingredients of Anatolian cuisine. Among the meat dishes made especially with dried legumes, the stews called "yahni" are appreciated and widely consumed by Turkish people (Çiftçi, 2004). Salads made with raw vegetables and prepared with cooked legumes like haricot beans and mashed broad beans have an important place in Turkish cuisine (Akan, 2007).

If they were to be evaluated in terms of public health, beans, peas, lentils, cowpea, chickpeas and horse beans have been a major part of diets for thousands of years (Pekşen and Artık, 2012). Besides providing calories, legumes are a source of vitamin B complex, mineral matter, fiber and vegetable protein that has a high potential value for the human diet. They have superior nutritional value because they contain high levels of protein, have high protein digestibility and are rich in essential aminoacids (Ertaş, 2007). Dried grains of legumes and other plant organs contain 2-2.5 times more protein than cereals. In addition, legumes are rich in vitamin A, B, and D. Therefore, edible grain legumes have a wide area of usage in developing countries to overcome protein deficiency (Sarı, 2015).

In Turkish cuisine, dried legumes are cooked individually as well as with many nutrients and flavorings such as spices, herbs, vegetables, cereals, etc. not only to enhance the value and the taste of foods but also to decorate. Known to be indigenous to Turkish cuisine, white beans can be served as a cold dish cooked with olive oil or as a main dish cooked with meat, pastrami, and Turkish style fermented sausages called as sujuk. Dried legumes consist of the main ingredients of both hot main courses such as dishes cooked with different kinds of meat (chickpeas with meat, white beans with meat), bulgur and rice pilaf (rice with chickpeas or peas) and cold dishes cooked with olive oil (kidney beans with olive oil, bean salad with olive oil). They are also used in the preparation of salads (haricot bean salad) and appetizers (mashed feaves, hummus), as well as desserts (Ashura) and cakes (pie with dry beans) (Food and Bevarage Services, 2011a). In this study, the photographs of traditional Turkish meals prepared with legumes and their cooking steps are also presented.

Conceptual Framework

Turkish Cuisine

Turkish cuisine can be divided into two categories which are Classical Turkish Cuisine and Regional (Folk) Cuisine. Classical Turkish Cuisine represents the cuisine of the Ottoman Palace, which forms the basis of today's Turkish Cuisine (Anonymous 1).

Due to harsh conditions in Central Asia, the Turks emigrated and settled in Anatolia. Anatolian Seljuks was the most important and strong state founded in Anatolia. Anatolian Seljuks met new and diverse ingredients in their new location. They blended these new ingredients with their existing cuisine. After the 15th century when Istanbul was conquered by Sultan Mehmed cuisine became more important by meeting new cultures. This led to having a more intricate and compound cuisine for Turks (www.turkishcuisine.org). Central Asian Turks, Seljuks, and Ottomans have a great influence on the formation of Turkish cuisine. In addition, Anatolia, which is accepted as the land of beginning and the development of human history, has considerably rich and fertile lands in terms of cultivated and used food substances that contributed to the development of Turkish cuisine (Güler, 2010).

It is possible to describe Turkish cuisine as the applications that cover all the processes ranging from the preparation to the presentation of traditional Turkish dishes and drinks that provide nutrition for the people living in Turkey (Mavis, 2003; Güneş, Ülker and Karakoç, 2008). Nomadic Turks mainly consumed animal

products found in their immediate circle. They also had an agrarian way of life, in which they fed on agricultural products in addition to the animals they bred, and products of these animals (www.turkishcuisine.org). Contemporary Turkish cuisine involves dishes made out of meat and vegetables. Moreover, spices are generally added, and dishes are accompanied by beverages such as ayran (buttermilk), fruit juice and lemonade. Most of the dishes are fatty and hard to prepare. To illustrate the dishes that are difficult to cook, dolma (stuffed vegetables), sarma (stuffed vine leaves), kebabs, mantı (pasty), and legume dishes prepared with meat like dried beans, chickpea, lentil, and other meat dishes can be counted. Generally, meals are served with side dishes such as rice or bulgur pilaf, seasonal salad or cacık (cucumber-yoghurt). Ayran (buttermilk) is the most common drink consumed with Turkish food. Wide range of Turkish desserts can be exemplified as baklava, sweet pastry, candy, or milk-based desserts (Öktem and Purina, 2016). Table manners and beliefs belonging to the Turkish culture are the elements that contribute to the formation of traditional Turkish cuisine. Representing rich examples from every branch of gastronomy and being amongst the oldest world cuisines, Turkish cuisine is one of the three richest cuisines in the world with over 2500 types of food (Mavis, 2003; Güneş, Ülker and Karakoç, 2008; Giritlioğlu, 2008).

The Importance of Legumes in Turkish Cuisine

Legumes are thought to be the first human-domesticated plants. Over the past 10.000 years, grain legumes have played a key role in the social evolution (Anonymous 1). In the archaeological excavations performed in one of the oldest settlements in Anatolia, Çatal Höyük, Can Hasan and Hacılar, fossils have been found, which prove the cultivation of peas, chickpeas, and beans as well as wheat and barley in Anatolia around 6000-5000 BC (Türkoğlu, 2014). These seeds have been the ground for food in this area and dispersed to the north-west and south-west (into Africa) and over India. Following the early period, the use of legume seeds expanded. Due to economic and social reasons, some countries, such as India, used legumes as the main source of protein. Since meat was the most widespread source of protein for daily intake, developed countries decreased the consumption of dry pulses (Anonymous 1). Until quite recently, legumes used to be known as 'ancient' foods, which meant that the food belonged to an old eating habit of farmers. However, this perception has changed by the increasing importance of "modern" basic foods such as rice, bread and meat (Pekşen and Artık, 2012).

Dried legumes, used in many ways in Turkish cuisine, can be used in the preparation of soups and main dishes, salads and appetizers, side dishes and desserts. Soups such as “*tarhana*”, a kind of soup made with dried yogurt and some spices, lentil soup and flour soup are among the most consumed and known soups (Güler, 2010; Turkey Ministry of National Education Dried Legumes Dishes, 2011b). In Turkish cuisine, white beans, chickpeas, and lentils are stewed mostly. While vegetables such as potatoes, carrots, and onions that are added during the cooking of dried legumes increase the nutritional value of the meal, additional service of rice or bulgur and ayran ensures a balanced diet (Çiftçi, 2004).

Basic Turkish pilaf tastes buttery, chewy, and tasty. Pilafs are often cooked with chicken stock and added orzo pasta to give extra texture. Bulgur pilaf is another common form of pilaf which generally enriched with some tomato paste. These two types of pilaf are the inseparable parts of meals. Firik is a commonly preferred wheat product in the South East of Turkey. Also, lentil also is widely consumed in main dishes and soups. Bean dish called “*kuru fasulye*” is the most famous one made with white beans cooked in tomato sauce and with small pieces of stewed meat (Anonymous 2).

Production and Consumption of Legumes in Turkey

Edible legumes, which comprise the main source of vegetable protein, are important crops for Turkey and the world countries. After the cereal grain crops, legumes are the most important grain crops in terms of cultivation area and production. The most cultivated legumes in the world are beans, chickpeas, black-eyed peas, green peas, lentils and broad beans, respectively (Gülümser, 2016). In addition to their benefit for human diet, legumes are used in many areas such as in feeding the animals, in the pharmaceutical industry as medicinal plants, in the production of furniture and paper, paint and resin and as the compounds of cosmetic products (Edible Legume Workshop, 2014).

Among the cultivation areas of the field crops; legumes, one of the traditional agricultural products in Turkey are the second after cereals (Bolat, Ünüvar and Dellal, 2017). Turkey is the homeland and one of the centres of genes of chickpeas and lentils among the legume family. Ecological conditions are suitable for legume production. Turkey is one of the most consumed chickpeas and lentils per capita (Mart, 2018). According to the data from 2015, every year approximately 3.2% of farmland is used for the cultivation of legumes in Turkey. Edible legumes are cultivated in 66.8 million hectares of the world's 1.5 billion hectares of farmland and 61.2




million tons of crops are produced. In Turkey, edible legumes are cultivated in 735 thousand hectares of the total of 24.3 million hectares of the cultivated area, and about 1 million tons of crops are produced (Gülümser, 2016).

Most produced edible legumes in Turkey are chickpea, lentil, beans, broad bean and black-eyed pea, respectively. Chickpeas, lentils and beans constitute 95% of the total legume production. 43% of the production is chickpea, 31% is red lentil, and 21% is dry bean (www.tuik.gov.tr). Daily legume consumption level per capita is around 31 g in Turkey (Edible Legume Workshop, 2014). Moreover, if per capita annual average consumption of 3-4 kg of beans, 4-5 kg of lentils and 5-6 kg of chickpeas is considered, it can be seen that edible grain legumes have a great importance for human diet (Adak, Kayan and Benlioğlu, 2015).

There are 150 kinds of legumes in the world that have economic value among 1000 kinds of plants. When soybeans and peanuts are added to these 150 species, 8 of them are used as food substances in Turkey, including beans, chickpeas, lentils, beans, peas, and cowpea (Edible Legume Workshop, 2014). Among these 8 kinds of legumes, chickpeas, white beans, and lentils are the mostly cultivated legumes in Turkey. The cultivation of legumes has spread throughout the country, and Southeastern Anatolia, Central Anatolia, and transition areas are the regions where the cultivation is at the highest. In general, red lentils are grown in the Southeastern Anatolia, green lentils, chickpeas and white beans in Central Anatolia and passage areas, broad beans and peas are grown in the Aegean and South Marmara regions (www.ubk.org). In the cultivation of beans, Konya, Kahramanmaraş, Karaman, Erzincan and Samsun; in the cultivation of chickpeas, Konya, Diyarbakır, Uşak, Kütahya and Yozgat; in the cultivation of red lentil, Şanlıurfa, Diyarbakır and Mardin; in the cultivation of green lentil, Yozgat, Çorum, Ankara, and Konya; in the cultivation of horse beans, Muğla, Çanakkale and Balıkesir; in the cultivation of pea, Konya, Bursa, Tunceli and Hatay regions come to the forefront. Edible grain legumes that are grown in almost every region of Turkey constitute the protein source of Turkish cuisine and especially for the low-income families (Adak, Kayan and Benlioğlu, 2015).

As a raw material legumes are used in flour, as well as in salads and soups as the whole grain. They are also used in the emulsified products high in fat like salami and sausage, in instant soups and foods, in toffies, in the production of baby foods, in salads as boiled or germinated, in snacks by browning and seasoning with different methods, as an alternative to soy products in foods like tofu (soy cheese) and miso, in non-allergenic milk products and as additives in special diet products in Turkey (Şahin, 2016). The legumes used in Turkish cuisine and their characteristics are given in Table 1.

Table 1. Legumes used in Turkish cuisine and their properties

Legumes	Properties
	<p><i>Chickpea:</i> Produced in Turkey's Central Anatolia Region. The second place in production is the Mediterranean Region. The production of chickpeas is widespread especially in Kahramanmaraş and Isparta regions. Usually used as dry form or canned food. Dry chickpeas should be kept in water about 12-24 hours before use for eating. The chickpea meal has a gas-forming effect. In Turkey and the Near East countries, leblebi (roasted chickpea) is made by roasting chickpeas. Humous and tahini are obtained from mashed chickpeas.</p>
	<p><i>Lentil:</i> It is a plant with disc shaped fruits. The lentil has a weak and thin root system and its root does not go deep. In Turkey; grows lentil in three different colors as green, red and yellow. Lentil is one of the plants with the least moisture requirement among agricultural products. For this reason, more than half of the lentil production is made in Southeast Anatolia Region (Mardin, Diyarbakir and Sanliurfa) and Central Anatolia Region. Red lentils are mostly produced in Southeastern Anatolia and green lentils are produced in Central Anatolia. While meat dishes are made from green lentils; meatballs, soup and rice are made from other types of lentils.</p>
	<p><i>Beans:</i> Production depends on irrigation or sufficient moisture. Although Central Anatolia, Black Sea and Mediterranean Regions are the main ones in their production, it grows almost anywhere in Turkey. There are many types such as runner bean, Ayşekadın Bean, Boncuk Bean. While it is fresh, food can be made from the green body; pickles or jams from fresh beans can also be made. Dry beans obtained by drying the seeds of big fresh beans are one of the most basic dishes of Turkish cuisine, so the title of “national meal” has been given. There are different types of variations according to regions, and there are different kinds of flavors. Dry beans can be made with meat, pastrami or plain.</p>



Broad Bean: It is a taproot plant from legumes. Two-thirds of the dry broad bean production in Turkey is carried out in Canakkale and Balikesir province. The remaining part is produced in the Aegean Region. It is used as a meal and freshly eaten varieties such as Sakız, Sultani and Bayrampasa beans are available. In Turkey, fresh broad bean is used as vegetables but mostly the dry grains of it are used as meal. Various dishes are made with dried broad beans. Mashed broad bean “fava” is one of them.



Black-eyed pea: In Turkish cuisine, it can be used as fresh in meals but mostly it is used as dry. Dried black-eyed peas gives flavor to winter dishes but it is also consumed because of its high calorie. The most common forms of consumption are boiled black-eyed bean salad, "borani" made with spilled yoghurt with garlic, stew and rice.

References: (www.turkishcuisine.org; Food recipes with legume, 2019)

Local Dishes Made with Legumes

Legumes have a special meaning and even sacredness in Turkish folk culture on special days, in celebrations and various ceremonies (Sürücüoğlu and Özçelik, 2007). For example; white bean and chickpea meals take their place in the local cuisine of Isparta, a city in the Mediterranean Region in Turkey, on special days like birth, death, marriage, circumcision, Hadj, and feast on special occasions that are the transition periods of life. “Ashura” dessert is prepared with various legumes on religious days, especially in the month of Muharram (Isparta Governorship Provincial Directorate of Culture and Tourism, 2014). Kidney beans and white beans are cooked as the main dishes in the Artvin region of the Black Sea Region. “Bulekoni” (radish with beans) and “Hinkala”, “Kırılmış Lobiya” (a kind of beans) are widely cooked local dishes (Önal, 2013). “Merzifon Keşkek”, a kind of traditional Turkish dish prepared using wheat and chickpeas, is offered to special guests in Amasya region in festivals and weddings (www.turkpatent.gov.tr).

Meat, legumes, grains, animal fats and dried fruits-vegetables have gained importance in the traditional culinary culture of Erzurum region of Eastern Anatolia (Önal, 2013). White beans grown in the Hınıs and İspir regions of Erzurum are the crops that have received certified geographical indication (www.turkpatent.gov.tr). In the local cuisine of Afyonkarahisar in the Aegean Region, “göce” and “düğü”, finely grained bulgur obtained from wheat and chickpeas, are widely used. In pastries, especially lentils, cheese, potatoes and minced meat are used for stuffing and the pilafs are cooked together with dried legumes such as lentils and chickpeas (Gezmen, Çelebi, Ertaş and Şanlıer, 2014).

Nutritional Value and the Health Effects of Edible Legumes

Edible grain legumes are plant-based foods that are important for human diet. In the world, 22% of vegetable protein, and 7% of carbohydrates of the human diet, and 38% of proteins and 5% of carbohydrates of animal feeding are supplied from edible grain legumes (www.ubk.org.tr). Legumes with nutritional superiority are economically, culturally, physiologically and medically important in terms of useful bioactive compounds. Legumes are also nutritionally rich plants in terms of providing essential amino acid, complex carbohydrates, dietary fiber, unsaturated fats, vitamins, minerals and protein for human diet (Maphosa and Jideani, 2017). Besides, dry legumes are good sources for all vitamin B complex except vitamin B₁₂ and minerals (Baysal, 2016). They have many superiorities in terms of nutritional value compared to other plant-derived foods (Pekşen and Artık, 2012). They contain an average of 20-25% protein in their seeds, which is about twice as much as the cereal grains have (Annor, Ma and Boye, 2014). In addition, dried grains of edible legumes are rich in vitamins (A, B, C, and D) and various minerals (Çiftçi, 2004). Protein ratios in commonly consumed legumes have been determined as 43.7% in soybeans, 22.8% in chickpeas, 25.5% in beans, and 27.7% in horse beans. Another reason why legumes have a high nutritional value is that they have a high digestibility of protein. Thus, legumes are regarded as a good alternative to meat and fish proteins (Kınacı, 2014) and widely used in cooking as a remedy for the deficiency of high-protein and high-energy food in developing countries (Çiftçi, 2004).

The grains of chickpeas, lentils, beans, horse beans, peas, and cowpea, which are commonly used dry legumes in Turkish cuisine, contain pulp on the outer side and starch on the inside. Dried beans have low-fat content (approximately 0.8-1.5%), mostly composed of polyunsaturated fatty acids and do not contain cholesterol. The compounds of its fat content are usually composed of polyunsaturated fatty acids and linoleic acid. This content is the indicator of its high nutritional value (Hacettepe Food and Nutrition Guide Specific to Turkey, 2015; Turkey ministry of education, 2010). These features make legumes a beneficial option for a good heart health-friendly life and prevention of cardiovascular diseases. In addition, legumes have protective properties against

many diseases, such as colon and rectal cancers, appendicitis, varicose veins and hemorrhoids, coronary heart diseases, gallstones and diabetes through its inclusion in the diets applied for various diseases (Kınacı, 2014).

Legumes are also among the main sources of enzyme-resistant starch. Starch fractions that cannot be digested in the small intestines act as the substrates for the microorganisms in large intestines and allow the development of beneficial microorganisms, particularly bifidobacterial (Dülger and Şahan, 2011). Since they have high fiber content, they can draw 5 times more water than their own volume and create a feeling of fullness (Pekşen and Artık, 2012). It cleanses all the toxins and waste material during digestion, and prevents large bowel and stomach cancers, constipation and stomach insufficiency by regulating bowel movements. In a study conducted by the American Institute for Cancer Research, the risk of prostate cancer in men who consume a lot of beans was found 38% lower than the men who consume small amounts (www.ankaratb.org.tr). Not only the frequent use of legumes in the diets of the patients with cardiovascular diseases and diabetes but also their incorporation in the programs for fighting obesity because of their high pulp content and low- fat content are important for raising awareness about the importance of this food group for society (www.ubk.org.tr).

The Cooking of Legumes

Steeping in legumes facilitates the softening of the grain and each one absorbs as much water as about its own weight. Steeping the granules in the water as much as about their own weight for 8-20 hours shortens cooking time. If the water temperature is between 30-40 °C, this reduces the steeping time. Grains cooked in warm water expand in 45-90 minutes. Legumes contain most of the vitamins in group B. The vitamins in group B dissolve in water and are not resistant to high temperatures. The steeping process applied to legumes and the pouring of the water after boiling causes a loss of these vitamins (Erdoğan, 2009).

Examples of Traditional Turkish Dishes Prepared with Legumes

Traditional dishes prepared with legumes in Turkish cuisine exhibit a wide range of diversity. In this section, the ingredients, the instruction steps of dishes and the photographs of Turkish dishes prepared with legumes are given. The recipes are prepared for four people.


*The study does not require an ethics committee report.

Soups

Red Lentil Soup

It is a kind of traditionally consumed soup in many regions of Turkey. It is consumed hot at each meal by preference. During the preparation, red lentils and green lentils are used. Red lentil soup is prepared after boil and simmering for a few minutes. It is served with lemon, especially in winter. In addition, the taste of the soup is increased by adding dry mint to some regions. Traditional red lentil soup contains lentil, onion, salt, butter and flour. Also butter, pepper flakes and lemon are used for service. Red lentil soup has a cooking time of 40 minutes (Gürsoy, 2005). (Table 2).

Table 2. Red Lentil Soup


Red Lentil Soup	Ingredients	Instruction Steps
	1 cup (170 g) red lentils 1 piece medium size (200 g) potatoes 1 piece medium size (150 g) onion 2 pieces (120 g) carrots 1 tablespoon (15 g) butter 1 tablespoon (6 g) flour 2.5 liters of water 1 teaspoon (2 g) cumin 1 teaspoon (2 g) red pepper flake 2 teaspoons (12 g) salt	<ul style="list-style-type: none"> • Roast potatoes, onions and carrots in square form and fry with oil • Add flour and salt to this mixture and cook until turn pink • Add two and a half liters of broth and boil. • Cook by adding washed lentils • Filter the lentils • Add cumin and red pepper flake. • Heat the oil in a pot and pour over the soup and serve.

Legume Dishes with Meat

White Bean Stew with Lamb

It a popular stewed dish, which is consumed in many parts of Turkey. It is often known as the dish of poor families. During the preparation, beef meat in the form of cubes can be used as well as bacon, sausage and olive oil. Along with this meal, rice and onion is usually consumed. This dish is prepared after boil and simmering for a few minutes. The dish of white bean stew with lamb includes white bean, lamb meat, butter, onion, tomatoes, salt and red pepper flakes. It has a cooking time of 60 minutes (Halıcı, 2009). (Table 3).

Table 3. White Bean Stew with Lamb


White Bean Stew with Lamb	Ingredients	Instruction Steps
	2 cups (320 g) white bean 250 g of lamb meat 3 pieces medium size (250 g) onion 4 tablespoons (40 g) oil 3 pieces medium size (750 g) tomatoes 1 liter of broth 1 teaspoon (2 g) red pepper flake 2 teaspoons (12 g) salt	<ul style="list-style-type: none"> • Soak the beans overnight • The next morning, boil the beans with a fresh batch of water until softened, about 30 minutes • Strain and set aside • Sauté the onions in butter until softened, then add the tomatoes (or tomato paste) continue sautéing • Add the lamb, cook until browned • Finally add the water and salt cook for 10 minutes, and then add the boiled beans, close the lid and cook for about 30-40 minutes until the meat is cooked and the beans have softened • Serve sprinkled with red pepper flakes with rice pilaf and pickles on the side.

Dried Legumes cooked with Olive Oil

Kidney Bean with Olive Oil

Kidney beans cooked with olive oil is one of the dry legumes that is served cold. As well as plain cooking, it can also be cooked with potatoes, carrots and lemons to add color and flavor. It takes place in menus as an appetizer. The dish of kidney bean with olive oil contains kidney bean, tomatoes, potatoes, peppers, olive oil and salt. This dish has a cooking time of 30 minutes (www.tarim.gov.tr). (Table 4).

Table 4. Kidney Bean with Olive Oil

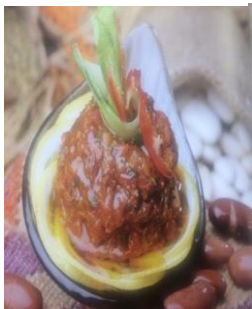
Kidney Bean with Olive Oil	Ingredients	Instruction Steps
	2 cups (1000 g) kidney beans 1 piece medium size (150 g) onion 2 cloves of garlic 1 piece medium size (170 g) potatoes 1 piece medium size (60 g) lemon 1/2 bunch (40 g) parsley 1 cup (200 g) olive oil 2 pieces medium size (400 g) tomatoes 1 teaspoon (4 g) sugar 1 teaspoon (6 g) salt 1 teaspoon (3 g) black pepper	<ul style="list-style-type: none"> • The skins of shell beans are removed and the grains are taken out • Onion and pepper are sautéed in olive oil • Diced carrots are added and sautéed • Then, peeled and diced tomatoes are added and cooked • They are simmered until red beans get soft and served cold

Appetizers and Salads Prepared with Dry Legumes

Mashed Spicy Beans

Mashed spicy beans prepared with dried legumes is served at the beginning of a menu as an appetizer just like other kinds of appetizers. In the food industry, mashed spicy beans is served with meat dishes, kinds of kebab and other meals. Mashed spicy beans which has a special place in Turkish cuisine is also consumed for breakfast. The most important feature of the mashed spicy beans is that it is chopped finely. Mashed spicy beans includes dried beans, tomatoes, peppers, lemon juice, olive oil, garlic, parsley, salt, black pepper and red pepper flake. It has a cooking time of 30 minutes (www.tarim.gov.tr). (Table 5)


Table 5. Mashed Spicy Beans

Mashed Spicy Beans	Ingredients	Instruction Steps
	2 cups (320 g) dried beans 1 piece medium size (300 g) tomatoes 1 piece medium size (80 g) pointy pepper 1 piece medium size (60 g) lemon 2 tablespoons (40 g) pepper paste 4 cloves of garlic 1/2 bunch (40 g) parsley 2 tablespoons (20 g) olive oil 1 teaspoon (6 g) salt 1 teaspoon (2 g) black pepper 1 teaspoon (3 g) red pepper flake	<ul style="list-style-type: none"> • Dry beans are washed and soaked in water a day in advance • They are boiled in salted water until they get a consistency of puree • All the ingredients are finely chopped • It is served after adding olive oil, lemon juice, salt, black pepper, red pepper flake and pepper paste.

Humous

It is a kind of appetizer which is prepared by pureeing chickpeas, which is a kind of legume, and adding various flavoring materials. During the preparation, beetroot pickles can be added to add color and the flavor can be enhanced with cucumber pickles. Humous contains chickpeas, tahini, olive oil, lemon juice, red pepper flake and salt. This traditional dish has a cooking time of 30 minutes (Gezmen, Çelebi, Ertaş and Şanlıer, 2014). (Table 6).

Table 6. Humous


Humous	Ingredients	Instruction Steps
	3.5 cups (600 g) chickpeas 1.5 cups (350 g) tahini 1/2 cup (75 g) olive oil 1/2 cup (50 g) lemon juice 1 teaspoon (6 g) salt 1.5 teaspoon (3 g) red pepper flake	<ul style="list-style-type: none"> • Soak chickpeas a day in advance • The next day, boil chickpeas until they soften well, peel them off and pure • Add tahini, salt and red pepper flake to chickpea paste and mix.

Desserts Prepared with Dry Legumes

Ashure

It is a kind of dessert made by Muslim communities on the tenth day of the month Muharrem, the first month of Hijri calendar system. It is usually prepared using 12 different ingredients as it is made after a 12 day long fasting and it is known as *Ashure* soup. *Ashure* tradition has a spiritual meaning in Turkish cuisine. This dessert, which is made in Muharrem, is considered as a sign of unity and togetherness. *Ashure* includes wheat, rice, white beans, fava beans, chick-peas, dried apricots, dried apricots, dried figs, sultanas, pine nuts, currants, walnuts, hazelnuts, water, milk and sugar. Also pomegranate is used for decorate for *Ashure*. It has a cooking time of 45 minutes (Halıcı, 2009). (Table 7).

Table 7. Ashure

Ashure	Ingredients	Instruction Steps
	2 cups (480 g) wheat 1/2 cup (80 g) beans 1/2 cup (80 g) broad beans 1/2 cup (80 g) chickpeas 1/2 cup (50 g) raisins 1/2 cup (60 g) palm 1/2 cup (80 g) rice 4 cups (480 g) sugar 2 teaspoons (12 g) starch 3 liters of water 1/2 cups rose water 2 tablespoons (40 g) walnut 3 tablespoons (60 g) pomegranate	<ul style="list-style-type: none"> • Boil by adding water to wheat and put in water for 12 hours • Boil beans, chickpeas and beans by adding water in separate pots and keep in water for 12 hours • Boil grapes and split half dates in separate pots • When wheat softens, add rice, grapes and dates and add broad beans, chickpeas and beans after boiled a little • In order not to make it harden; add one glass of sugar before boiling and add one glass after boiling, totally in four times • Cook by mixing continuously in order not to stick to the pan and burn • When thickened, dissolve starch in water and add • Add the rose water after boiling • Add crushed walnut, hazelnut and pomegranate on it in the service plate.

In determining the amounts (as grams) of ingredients, the source (Gezmen, Çelebi, Ertaş and Şanlıer, 2014) was referred to.

Conclusion

Culinary cultures that separate the country and regional cuisines from each other, and that reflect the food, eating habits, and food preparation techniques of a country or region vary according to different societies. Turkish cuisine, which has a rich variety of dishes and different tastes and flavor than the cuisines of other countries, has gained a prominent position among the world cuisines. Historical accumulation, geographical location and the relationship with other civilizations come into prominence in the development of Turkish cuisine. Furthermore, the diversity of cultivated crops has been effective in the variation and diversification of the dishes made in Turkish culinary culture. Among the crops cultivated in Turkey, legumes are used as the main ingredients of many dishes both thanks to their positive health effects and the level of consumption by Turkish society. Especially the lentil soup, white bean stew with meat, and Ashura, a dessert made of various legumes and cereals, are among the traditional dishes of Turkish cuisine. Traditional Turkish dishes prepared with legumes have become an indispensable element of Turkish diet because of their taste, appearance and positive effects on health. In this study, general information about the general characteristics of pulses, their nutritional values, their importance in terms of health, their importance in agricultural production, their place in Turkish cuisine and their use in different food categories are given. With this study, foreign literature researching the world cuisine culture and dishes; to show that pulses are an important food group for Turkish cuisine. In addition, it is thought that this study is important for the relevant literature in terms of promoting traditional Turkish cuisine culture, detailing the most consumed legumes dishes by the Turkish society with recipes. In this study, general information about the general characteristics of pulses, their nutritional values, their importance in terms of health, their importance in Turkish agriculture, their place in Turkish cuisine and their use in different food categories are given.

References

- Akan, S.L. (2007). A Research on Safranbolu Cuisine Culture. On Turkish Cuisine Culture Researches, *Türk Halk Kültürünü Araştırma ve Tanıtma Vakfı Yayınları, Issue No:36*, Ankara.
- Ertaş, Y. and Karadağ, G.M. (2013). The Place of Turkish Cuisine Culture in Healthy Diet (Sağlıklı Beslenmede Türk Mutfak Kültürünün Yeri). *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi, 2(1): 117-136*.
- T.R. Ministry of National Education Preparing Food with Dried Legumes (Kuru Baklagillerle Yemek Hazırlama).(2011a). Food and Beverage Services (Yiyecek ve İçecek Hizmetleri) 811ork053, Ankara.
- Çiftçi, C.Y. (2004). Agriculture of Leguminous Beans in the World and in Turkey (Dünyada ve Türkiye’de Yemelik Tane Baklagiller Tarımı). *TMMOB Chamber of Agricultural Engineers Technical Publications Series (TMMOB Ziraat Mühendisleri Odası Teknik Yayınlar Dizisi), 5, 200*.
- Pekşen E and Artık C. (2012). Anti-Nutritive Ingredients and Nutritive Values of Edible Grain Legumes (Antibesinsel Maddeler ve Yemelik Tane Baklagillerin Besleyici Değerleri). *Anadolu Agronomy Journal (Anadolu Tarım Bilimleri Dergisi), 20(2): 110-120*. Available From: <http://Dergipark.Gov.Tr/Omuanaajas/Issue/20233/214239>.
- Ertaş, N. (2007). Edible Legumes and Antibacterial Factors (Yemelik Baklagiller ve Antibesinsel Faktörler). *Selçuk Agriculture and Food Sciences Journal (Selçuk Tarım ve Gıda Bilimleri Dergisi), 21(41): 85-95*.
- Sarı, H. (2015). *Determination of Crude Protein Contents in Different Plant Parts of Some Edible Grain Legumes According to Their Development Periods (Bazı Yemelik Tane Baklagillerin Gelişme Dönemlerine Göre Farklı Bitki Kısımlarında Ham Protein İçeriklerinin Belirlenmesi)*. On Dokuz Mayıs University Institute of Science and Technology (On Dokuz Mayıs Üniversitesi Fen Bilimleri Enstitüsü), Samsun.
- Anonymous 1: Ildikó Schuster-Gajzágó, Cultivated Plants, Primarily As Food Sources. Vol. I, Nutritional Aspects of Legumes. Available from: <https://www.eolss.net/sample-chapters/C10/E5-02-02.pdf>
- Anonymous 2: The Main Components of Turkish Cuisine. (2018). Available From, <http://www.theguideistanbul.com/article/main-components-turkish-cuisine>. Available Date, 01.11.2021.
- Culinary Art Center. (2018). Turkish Cultural Foundation, Exploring Turkey’s Culinary Heritage A Look Through The History, Traditions and Ingredients, Available From:<http://www.turkishcuisine.org/images/upload/pages/EXPLORING%20TURKEY%27S%20CULINARY%20HERITAGE%20%20For%20the%20web%20RVS.pdf>. Available Date, 15.10.2021.
- Güler, S. (2010). Turkish Cuisine Culture and Food and Drinking Habits (Türk Mutfak Kültürü ve Yeme İçme Alışkanlıkları). *Dumlupınar University Social Sciences Journal (Dumlupınar Üniversitesi Sosyal Bilimler Dergisi), 26 (S1): 24-30*.
- Mavis, F. (2003). *Industrial Food Production (Endüstriyel Yiyecek Üretimi)*. Detay Publishing (Detay Yayıncılık), Ankara.
- Güneş, G., Ülker, H.I. and Karakoç G. (2008). The Importance of Local Cuisine Culture in Sustainable Tourism (Sürdürülebilir Turizmde Yöresel Yemek Kültürünün Önemi). II. National Gastronomy Symposium and Artistic Activities (Ulusal Gastronomi Sempozyumu ve Sanatsal Etkinlikler), 1 August 2008, Antalya. Available From: <http://www.tgyd.net/?Syf=5&Id=78129>.
- Öktem, Ş. and Purina, B. (2016). Standard Recipes of Traditional Turkish and Latvian Meals: Similarities and Differences, *Journal of Tourism and Hospitality Management, 4(2): 87-101* doi: 10.17265/2328-2169/2016.04.004
- Giritlioğlu, İ. (2008). Olive Oil and Usage of Olive Oil in Turkish Cuisine (Türk Mutfağında Zeytinyağı ve Zeytinyağının Kullanımı). I. National Olive Student Congress, (Ulusal Zeytin Öğrenci Kongresi) 2008; May 17-18, Edremit-Balıkesir.

- Türkoğlu, H. (2014). *A Study on the Role of Gourmets in the Development of Turkish Cuisine (Türk Mutfağının Gelişiminde Gurmelerin Rolü Üzerine Bir Çalışma)*. Anadolu University Social Sciences Institute (Anadolu Üniversitesi Sosyal Bilimler Enstitüsü), Eskişehir.
- T.R. Ministry of National Education Dried Legumes Dishes (Kurubaklagil Yemekleri). (2011b). Family and Consumer Services (Aile ve Tüketici Hizmetleri), 811ork135, Ankara.
- Gülümser, A. (2016). The Status of Edible Legume Grains in the World and in Turkey (Dünyada ve Türkiye’de Yemeklik Dane Baklagillerin Durumu). *Field Olants Central Research Institute Magazine (Tarla Bitkileri Merkez Araştırma Enstitüsü Dergisi)*, 25 (Special Issue-1): 292-298.
- Edible Legume Workshop (Yemeklik Baklagil Çalıştayı). (2014). T.R. Ministry of Food, Agriculture and Livestock, Directorate General of Plant Production (T.C. Gıda Tarım ve Hayvancılık Bakanlığı Bitkisel Üretim Genel Müdürlüğü), page 76, 5-6 March 2014, Konya. Available From: <http://www.ubk.org.tr/yemeklikbakliyatcalistayi.pdf>. Available Date, 08.11.2021.
- Bolat M, Ünüvar Fİ, Dellal İ. (2017). Determination of Food Legumes Future Trends in Turkey (Türkiye’de Yemeklik Baklagillerin Gelecek Eğilimlerinin Belirlenmesi). *Tarım Ekonomisi Araştırmaları Dergisi*, 3(2), 7-18.
- Mart, D. (2018). Importance and Breeding of Edible Grain Legumes (Yemeklik Tane Baklagillerin Önemi ve Yetiştiriciliği). Yemeklik Tane Baklagiller Çalıştayı. March, 2018; Adana, Turkey.
- TUİK, (2018). Turkey Statistical Institute, Crop Production Statistics (Türkiye İstatistik Kurumu, Bitkisel Üretim İstatistikleri). Available From: www.tuik.gov.tr, Available Date, 30.10.2021.
- Adak, M., Kayan, N and Benlioğlu, B. (2015). *Changes and New Searching in Edible Legume Grain Production (Yemeklik Tane Baklagiller Üretiminde Değişimler ve Yeni Arayışlar)*. Turkish Agricultural Engineering VIII Technical Congress Notifications Book (Türkiye Ziraat Mühendisliği VIII Teknik Kongresi Bildiriler Kitabı), 387-400.
- Legumes Report. (2017). Available From: http://www.Ubk.Org.Tr/Ziraat_Rapor.Pdf. Available Date, 10.11.2021.
- Şahin, N. (2016). *Importance and Usage Area of Legumes for Food Industry (Baklagillerin Gıda Sanayi Açısından Önemi ve Kullanım Alanı)*. Healthy Nutrition Healthy Life with Legumes Symposium, İstanbul Technical University Food Engineering Department (Bakliyat ile Sağlıklı Beslenme Sağlıklı Hayat Sempozyumu, İstanbul Teknik Üniversitesi Gıda Mühendisliği Bölümü), İstanbul.
- Food Recipes with Legume (Bakliyatlı Yemek Tarifleri). (2019). Available From: <http://www.turkish-cuisine.org/print.php?id=70&link=http://www.turkish-cuisine.org/ingredients-7/ingredients-used-in-turkish-cuisine-66/legumes-70.ht>. Available Date, 28.10.2021.
- Food Recipes with Legume (Bakliyatlı Yemek Tarifleri). (2019). Available From: <https://www.nkfu.com/turkiyede-yetistirilen-baklagiller-ve-yetistirildikleri-yerler/> Available Date, 02.10.2021.
- Sürücüoğlu, M.S. and Özçelik, A. (2007). Historical Development of Turkish Cuisine and Nutrition Culture (Türk Mutfak ve Beslenme Kültürünün Tarihsel Gelişimi). ICANAS, International Congress of Asian and North African Studies (Uluslararası Asya ve Kuzey Afrika Çalışmaları Kongresi), 1289-1310, 10-15 September 2007, Ankara.
- T.C. Isparta Governorship Provincial Directorate of Culture and Tourism (T.C. Isparta Valiliği İl Kültür ve Turizm Müdürlüğü). (2014). Isparta Cuisine Selection from Our Traditional Tastes Book (Isparta Mutfağı Geleneksel Tatlarımızdan Seçmeler Kitabı). Provincial Directorate of Culture and Tourism Publications (İl Kültür ve Turizm Müdürlüğü Yayınları), page 320, Isparta.
- Önal, Ü. (2013). *Artvin Regional Foods (Artvin Yöresi Yemekleri)*, Salmat Printing and Publishing (Salmat Basım Yayıncılık). Page, 238, Ankara.
- Turkish Patent and Trademark Office (Türk Patent ve Marka Kurumu). (2017). Available From: <http://www.Turkpatent.Gov.Tr/Turkpatent/Geographicalregisteredlist/>. Available Date, 10.10.2021.

- Gezmen-Karadağ, M., Çelebi, F., Ertaş, Y., and Şanlıer, N. (2014). *Selections from Traditional Turkish Cuisine: Evaluation in Terms of Food Ingredients (Geleneksel Türk Mutfağından Seçmeler: Besin Öğeleri Açısından Değerlendirilmesi)*. Detay Publishing (Detay Yayıncılık), 2014; page 239, Ankara.
- Maphosa, Y. and Jideani, V.A. (2017). The Role of Legumes in Human Nutrition. In *Functional Food-Improve Health through Adequate Food*. Intech.
- Baysal, A. (2016). *General Nutrition*. Hatiboğlu Publishing (Hatiboğlu Yayınları), 16th Edition, page 278, Ankara.
- Annor, G.A., Ma, Z., and Boye, J.I. (2014). Crops-Legumes. *Food Processing: Principles and Applications*, Second Ed, pages: 305-337.
- Kınacı, G. (2014). Edible Grain Legumes in Healthy Nutrition (Sağlıklı Beslenmede Yemelik Tane Baklagiller), *Eskisehir Stock Exchange Journal (Eskişehir Ticaret Borsası Dergisi)*, Issue: 11, Eskişehir.
- Hacettepe University, Faculty of Health Sciences, Department of Nutrition and Dietetics (Hacettepe Üniversitesi Sağlık Bilimleri Fakültesi Beslenme ve Diyetetik Bölümü). (2015). *Food and Nutrition Guide Specific to Turkey, (Türkiye'ye Özgün Besin ve Beslenme Rehberi)*. Available From:http://www.bdb.hacettepe.edu.tr/TOBR_kitap.pdf. Available Date, 12.10.2021.
- T.R. Ministry of Education (T.C. Millî Eğitim Bakanlığı). (2010). *Calibration of Dry Legumes and Grain Cereal, Food Technology (Kuru Bakliyatlar ve Tahıl Danelerinde Kalibrasyon, Gıda Teknolojisi)*, Ankara.
- Dülger, D and Şahan, Y.(2011). Dietary Fiber Properties and Its Effects on Health (Diyet Lifin Özellikleri ve Sağlık Üzerindeki Etkileri). *Uludağ University Agricultural Faculty Journal (Uludağ Üniversitesi Ziraat Fakültesi Dergisi)*, 25(2): 147-157.
- New Trend of the World Legumes (Dünyanın Yeni Trendi Bakliyat). (Internet). (2017). Available From: https://www.ankaratb.org.tr/lib_upload/Bakliyat%20dosyas%C4%B1.pdf. Available Date, 22.10.2021.
- Erdoğan, S. (2009). *Nutrition and Food Technology (Beslenme ve Besin Teknolojisi)*. Detay Anatolia Academic Publishing Ltd. Şti. (Detay Anatolia Akademik Yayıncılık Ltd.), 2nd Edition, Ankara.
- Gürsoy, D. (2005). *North to and South East to West Turkish Cuisine Kuzeyden Güneye Doğudan Batıya Türk Mutfağımız*. Oğlak Yayıncılık, 4. Baskı. ISBN 975-329-495-6.
- Halıcı, N. (2009). *Turkish Cuisine (Türk Mutfağı)*. Oğlak Yayıncılık. 1. Baskı, ISBN 978-329-652-6. İstanbul.
- Food Recipes with Legume (Bakliyatlı Yemek Tarifleri). (2017). Available From: http://www.Tarim.Gov.Tr/Belgeler/Bakliyatli_Yemek_Tarifleri.Pdf. Available Date, 11.11.2021.