



Yogurt, Yogurt-Based Products and Their General Usages

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Abstract

Yogurt is one of the most consumed dairy products over the world. It has healing power and very important properties on human health. Especially for this reason, it is widely used in different forms as different products and meals. In Europe, USA and some Asian countries yogurt is generally consumed as a dessert. Fruity yogurt, yogurt drinks, fruity ayran and frozen yogurt are preferred in these countries. However in the homeland of yogurt, in Central Asia, yogurt has a special meaning. From past to present, yogurt technology and variety have shown major improvements and both traditional and technological methods are still used by Central Asian people. For this reason, very rich diversity about yogurt is present in this region. Yogurt is consumed as plain yogurt, ayran, fruity yogurt, flavored yogurt, buttermilk, strained yogurt, salty yogurt, tulum yogurt, winter yogurt and frozen yogurt. Generally it is used in meals such as soup, main courses, cold appetizers and desserts and alongside with main courses. In this work yogurt-based products are summarized and different usages of yogurt in meals in Turkey are explained.

Keywords: Yogurt, Yogurt-based Products, Yogurt Meals

Yoğurt, Yoğurt Bazlı Ürünler ve Genel Kullanımları

Özet

Yoğurt dünya genelinde en çok tüketilen süt ürünlerinden biridir. İyileştirici güce sahip olan yoğurdun insan sağlığı üzerinde önemli etkileri bulunmaktadır. Özellikle bu sebepten dolayı, yoğurdun farklı ürünler ve yemekler gibi farklı şekillerde kullanılması yaygın olarak görülmektedir. Avrupa, Amerika ve bazı Asya ülkelerinde yoğurt genellikle tatlı olarak tüketilmektedir. Bu ülkelerde meyveli yoğurt, yoğurt içecekleri, meyveli ayran ve yoğurt dondurması tercih edilmektedir. Ancak yoğurdun anavatanında, Orta Asya ülkelerinde, yoğurt özel bir anlam taşımaktadır. Geçmişten günümüze yoğurt teknolojisi ve ürün çeşitliliği büyük bir gelişim göstermiştir ve hem teknolojik hem de geleneksel yöntemler Orta Asyalı insanlar tarafından hala kullanılmaktadır. Bu sebeple bu bölgede yoğurt açısından zengin bir çeşitlilik bulunmaktadır. Yoğurt; sade yoğurt, ayran, meyveli yoğurt, aromalı yoğurt, yayık ayranı, süzme yoğurt, tuzlu yoğurt, tulum yoğurdu, kış yoğurdu ve yoğurt dondurması olarak tüketilmektedir. Yoğurt büyük ölçüde çorbalar, ana yemekler, soğuk başlangıçlar ve tatlılar gibi yemeklerin yapımında ana malzeme olarak kullanılmaktadır. Bu çalışmada yoğurt bazlı ürünler özetlenmiş ve Türkiye’de yoğurdun yemeklerdeki farklı kullanım şekilleri ele alınmıştır.

Anahtar Kelimeler: Yoğurt, Yoğurt Bazlı Ürünler, Yoğurtlu Yemekler

Introduction

Yogurt is a fermented dairy product that is produced by fermentation of lactic acid and contains live lactic acid bacteria. Yogurt is a probiotic food that has very important properties about human health. From past to present, the reason of being one of the most widely consumed food is its healing power. Yogurt has important nutrients such as animal proteins, carbohydrates, lipids, calcium, potassium, phosphorus,

magnesium, zinc and vitamins B. Its dry matter amount is high (Şireli and fri., 2012). The culturing process makes yogurt more digestible than milk. Many people who suffer from lactose intolerance or protein allergy can consume yogurt comfortably. Yogurt contains lactobacteria which are intestines-friendly bacterial cultures that foster a healthy colon, and even lower the risk of colon cancer. Yogurt improves the bioavailability of other nutrients. It can boost immunity. It aids healing

after intestinal infections. It can decrease yeast infections. It can lower cholesterol. It helps reduction of body fat (Anonymous, 2009; Mazahreh and fri., 2009).

The production methods and place of the first yogurt are not known and there are so many theories about it. It is thought that the first production occurred naturally by the bacteria that are necessary for fermentation because these bacteria are widely found in nature.

Nomadic societies learned to milk processing to obtain products that have long shelf life. The first society that produced yogurt is Turkish societies that lived in Central Asia. In many old Turkish artworks, "yogurt" word can be seen. In Ottoman Empires, yogurt was commonly consumed because of its healing power. According to a narration, in 16th centuries, French King the 1st François got illness with fever in his stomach. Ottoman Soltan Kanuni Sultan Süleyman sent him yogurt as "healing food". This event is the first meeting of Europe with yogurt (Özden, 2008).

The knowing and consuming of yogurt in Europe was carried out by a family from Thessaloniki. Izak Karasu was a doctor and he lived with his family in Thessaloniki. While the Balkan wars, they moved in Barcelona. He changed his name as Isac Carasso. In Spain, there was a diarrhea outbreak which was seen in children. Isac Carasso remembered that yogurt was used in Thessaloniki while this situation and used yogurt for treatment of children. After this event, yogurt was sold as a medicament. In 1919, Isac Carasso constructed a small workshop in his cellar to produce yogurt. His son, Daniel Carasso, construct a new company in Paris which is called as "Danone". It was the first venture to produce yogurt industrially in Europe (Yurdakök, 2013). Another reason of being common of yogurt in Europe was a theory (Teory of Longevity) which was suggested by Russian bacteriologist Ilya Metchnikoff who had Nobel Prize. In 1910, he explained the benefits of yogurt on human health in his work called The Prolongation of Life (Şireli and fri., 2012).

Yogurt and Yogurt Based Products

The first production method of yogurt, the traditional production method, is still applied in countryside. In this method, firstly milk is boiled and cooled to body temperature and then fermented with yogurt that is produced previous day. Fermented milk is waited for a night and consumed by cooling in refrigerator. In previously, yogurt was placed cool places such as wells, cellar, etc. instead of refrigerator (Say and fri., 2014).

To prolong shelf life and increase variety of yogurt, some methods were used. Yogurt can be consumed as plain yogurt, ayran, fruity yogurt, flavored yogurt, buttermilk, strained yogurt, salty yogurt, tulum yogurt, winter yogurt and frozen yogurt. For example yogurt was concentrated by taking in a cloth bag and hung on a high place or putting something heavy on this bag to separate whey and strained yogurt was obtained. Another method was concentration of yogurt by applying heat treatment and adding salt to make it stable and to obtain salty yogurt (Şahan and fri., 2003a; Şahan and fri., 2003b).

With developing technology, yogurt production methods are also developed. Recently there are many yogurt types that are produced industrially such as set type, stirred type, drinking type, frozen type and concentrated type (Üçüncü, 2005). The basic plain yogurt types are set and stirred yogurts. In set yogurt, milk is heat treated, inoculated and packaged. Incubation is occurred in packages. In stirred yogurt incubation is occurred in vats. After incubation, yogurt is packaged (Anonymous, 2008; Adhikari and fri., 2002).

Nowadays there are many yogurt types which are industrially produced in different countries. At the present time, the basic ingredients of yogurt are milk (whole milk, partially skimmed milk or skim milk), other dairy products (concentrated skim milk, nonfat dry milk, whey, lactose), sweeteners (glucose or sucrose, high-intensity sweeteners like aspartame), stabilizers (gelatin, carboxymethylcellulose, locust bean gum, guar, alginates, carrageenans, whey protein concentrate), flavors and fruit preparations (including natural and artificial flavoring, color) (Pande, 2010). These yogurts are more stable, more preferable and produced as convenient to palate of consumers. New technological methods helped yogurt to be known from every side of the world. Therefore yogurt can be used in various meals and foods.

Different Yogurt Usages

Yogurt is an important part of dietary habits in Central Asia and the different methods were created to provide variety. Especially in Ottoman Empires it was consumed alongside the main course or in different forms such as ayran and strained yogurt. The Ottoman meals were developed by developing of the empire. The most important social activity was meeting of important people in palace at the meal. Therefore cooks showed their all talent and created many new food recipes. Yogurt can be seen in many Ottoman meal recipes. Spinach with yogurt, Turkish ravioli with

yogurt, molasses dessert with yogurt are present in these recipes (Sürücüoğlu and fri., 2014).

This habit is carried on to present day and in Central Asia and Balkans, yogurt is consumed alongside the meal. However in Europe and some other developed country like USA and China, yogurt is consumed as dessert. Generally fruity yogurt, yogurt drinks, fruity ayran and frozen yogurt are preferred in these regions. European people consume yogurt as a healthy junk food or dessert in their breakfast, after the dinner or for refectation. Yogurts with sugar, with strawberry, with banana, with chocolate and with tropical fruits are most attractive products that are produced in Europe. France, Germany, England and Canada are the countries that commonly consume yogurt (Akgün, 2009; Yıldırım, 2009; Anonymous, 1997).

Turkish people used to salty taste of yogurt. However sugary and fruity yogurts began to be common also in Turkey. Not only in Turkey but also in many countries yogurt and yogurt based products are widely used. Nowadays, because of globalization and migration by political reasons, there is a fusion of cultures. Therefore yogurt became more popular and to be used differently by many regions. However meals with yogurt are not very common in other countries. For this reason Turkish meals with yogurt should be grouped and introduced to them.

It is a fundamental for Turkish people to use yogurt with foods and meals. Meals with yogurt can be separated into four groups as

- cold appetizers,
- soups,
- main courses,
- desserts.

Cold Appetizers: In rich boards, cold appetizers are indispensable. Most of appetizers are made by using yogurt. Generally it is prepared by mixing different vegetables with yogurt (generally with garlic). Collards, carrot, potatoes, pasta, celery, dill (used in Haydari), cucumber, bulgur, chard, broccoli, purslane, chickpea, walnut, spinach, zucchini, black eyed peas, paprika can be used in preparing of cold appetizers with yogurt. For example Çoban Aşı is a traditional food that is made by diluting of torba yogurt, mixing it with sliced bread and consumed as cold (Türker, 2014).

Soups: Yogurt soups have very important place in Turkish cuisine. Meat and many vegetables can be used in these rich soup types. These soups can be consumed as cold or hot. Generally the principal of preparing yogurt soups is boiling of meat and vegetables, mixing yogurt with flour or

egg to solidification and cooking them until proper consistency is obtained.

Most important soup groups are made with tarhana. Tarhana is a traditional fermented and dried food product which is made for using in soups. It is generally produced by homemade and very commonly consumed product. The production techniques of it show difference in different regions of Turkey. Industrially production of tarhana is increased recently (Türüt and fri., 2014; Soltani and fri., 2009).

Some important soups with yogurt are made with potatoes, Turkish ravioli, cereals (wheat, bulgur, rice, corn and etc.), pasta or noodle, lentils, tomatoes and other vegetables. Chickpeas, lamb meat and dried mints which are heated in olive oil are significant ingredients for soups with yogurt (Anonymous, 2006).

Some regional delicacies such as Yayla soup, Çatalaşı soup and Cold Ayran Aşı Soup are produced industrially in Turkey and presented to consumers as soupmix by drying of all ingredients of soup and packaging them tightly.

Main Courses: Turkish cuisine has very rich variety about main courses and there are a lot of meal types which are made by using yogurt. For preparing these meals meats or vegetables or both of them are used as basic ingredients. To restrict of them about their all ingredients is difficult because every type of food can be used in these main courses.

One of the most important and popular meal with yogurt is Turkish ravioli. For preparing it dough is made, it is cut into small square pieces, filled with minced meat, boiled and mixed with yogurt sauces. This meal is peculiar to Kayseri region. It can be produced traditionally as homemade or industrially (Sitti and fri., 2009).

Yuvalama that is peculiar to Gaziantep region is another important meal with yogurt. It has laborious preparing so it is a traditional food that is consumed in special days. It is made by preparing small balls by meat and rice, boiled with yogurt, chickpea and meat (Dizlek and fri., 2009). Gaziantep region has a special cuisine that uses yogurt in very different recipes. For example Şiveydiz which is made by using fresh onion, green garlic, yogurt, lamb meat and chickpea is a peculiar to this region.

Another important and delicious meal that is made in many region of Turkey is stuffed leaves. Vine leaf and cabbage are commonly used for preparing this meal. However especially in Eastern Anatolia region, leaves of beet, chard, cherry, mulberry, pepper, hazelnuts, quince and beans can be used for making stuffed leaves (Ağan and fri.,

2014). In Van region, prepared stuffed leaves are cooked with ayran.

Bulgur can also be used for creating a main course with yogurt. For example bulgur balls with yogurt sauces which can be also known as bulgur balls with ayran is peculiar to Malatya region. It is traditional and consumed as cold. It has simple preparing and is digestible easily (Yurt and fri., 2014).

Some other important main courses prepared by using yogurt comprise vegetables (eggplants, dried zucchini, potatoes, spinach, mushroom, paprika and etc.), meats (lamb, veal and chicken), and some cereals.

Desserts: Yogurt can also be used in desserts. Most important dessert type is frozen yogurt which is more popular in Europe. It can be produced or consumed with fruits. It begins to be consumed widely in Turkey. Beside frozen yogurt, yogurt can be mixed with some fruits to make fruit salad, with honey and nuts. These types are quick prepared and consumed. The other types such as yogurt dessert and Kömbe are cooked in the oven. In this type, a mixture with yogurt is prepared like cake dough and cooked in the oven.

Using yogurt in meals is started to try in many regions. Different recipes and usages of yogurt are necessary to introduced. In the future, with developing technology and fusion of cultures the demand of foreign cuisines and using healthy foods are increased. Therefore yogurt will be one of the most important food which can be used in many meals, desserts and other foods.

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