



## Concentrated kefir production by ultrafiltration

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### Abstract

Milk-based powders (skim milk powder, sodium caseinate, whey concentrate/isolate) or several filtration techniques (traditional cloth bag, centrifugation, reverse osmosis) can be used in manufacture of concentrated dairy products due to improve the texture, chemical and nutritional properties of products. Besides, membrane technology is one of the methods used to concentrate milk components. In ultrafiltration technique, a membrane with pores of certain sizes that allows the passage of water and small molecules is used. When skim milk is ultrafiltered, concentration of casein and whey proteins that are larger than membrane pores collected in the retentate. Lactose and minerals in soluble phase of milk are removed with permeate. In previous studies, the ultrafiltration technique was used for Greek-style yoghurt, dahi and labne productions. In recent years, consumption of kefir has increased due to their nutritive value and positive health properties. Kefir is acidic, slightly alcoholic and a viscous fermented dairy beverage that has a health benefits including anti-obesity, anti-oxidative, cholesterol-lowering, anti-allergenic, anti-inflammatory, anti-tumour, and anti-microbial properties. The aim of this work was to manufacture of concentrated kefir by using ultrafiltration technique.



### Biography:

Firuze Ergin, was born in Antalya, Turkey on 17th October 1988. She completed her M.Sc in 2014 and her PhD in 2019 at Institute of Natural and Applied Sciences at Akdeniz University, Turkey. She has worked at Department of Food Engineering, Faculty of Engineering, Akdeniz University since in August of 2019. Her studies focused on dairy technology, probiotic dairy products, bacteriophages and microencapsulation technology.



### Speaker Publications:

1. KKızılay, Kübra & Ergin, Firuze & Demir, Muammer & Küçükçetin, Ahmet. (2018). Süt Endüstrisinde Kullanılan Isı Değiştiricilerde Kalıntı Oluşumu. Akademik Gıda. 450-457. 10.24323/akademik-gıda.505536.
2. Ergin, Firuze & Küçükçetin, Ahmet. (2018). UHT İçme Sütlerinde Jelleşme Sorunu: Enzimlerin Etkisi. Akademik Gıda. 313-322. 10.24323/akademik-gıda.475365.

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