

**EFFECT OF EXOPOLYSACCHARIDES-PRODUCING COMMERCIAL LACTIC ACID BACTERIA CULTURE ON TEXTURE AND SENSORY PROPERTIES OF KAYMAK, A TURKISH DAIRY PRODUCT**

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Kaymak (clotted cream) is a Turkish dairy product obtained by concentration of the milk fat (Cream). It is produced from water buffalo or cow's milk in Turkey. Recently, it has mostly been produced from cow's milk due to decreased number of water buffalo. Kaymak is fondly consumed by the Turkish people with honey or jam at breakfast. Kaymak contains conjugated linoleic acids (CLA) which have anticarcinogenic, antioxidant and antiatherosclerotic properties. Kaymak should have a good creamy texture for consumer acceptance. So, the aim of this study was to determine effects of exopolysaccharides (EPS)-producing commercial lactic acid bacteria culture on texture and sensory properties of Kaymak. For this propose, a commercial lactic acid bacteria culture, producing EPS, was added before the fermentation of Kaymak. The kaymak samples were stored at 4°C for 15 days, and its texture and sensory properties were determined in the 0 and 15 days. Hardness and spreadability values of the samples were determined as texture properties. At end of fifteen, day hardness values were 3610.4 and 4030.2 g for control (without culture) and with EPS-producing culture groups, respectively, while spreadability values were 8502.4 and 10231.5 g/s for the control and EPS-producing cultured samples, respectively. Sensory results showed that overall acceptability, cuttability and spreadability of the kaymak samples were better in EPS-producing cultured samples than that of the control samples. Consequently, it can be suggested that addition of EPS-producing LAB culture has a potential to improve texture and sensory properties of Turkish kaymak.

Keywords: Kaymak, EPS, Lactic acid bacteria, texture and sensory

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