

The aim of this study was to investigate the effects of Kefir fermentation on the functional properties of Hair and Saanen goat milk samples, including intensive and extensive nutritional regimes. Kefir samples were produced with natural Kefir grains (2%). Microbial content, the total phenolic content, total antioxidant activity (using ORAC and TEAC assays) and quantification of phenolic substances using liquid chromatography were carried out. After fermentation with Kefir grains, the antioxidant activity of the Kefir samples increased. Kefir made from goat milk had higher content of microflora and total antioxidant activity. The total phenolic contents of the kefir samples made from different goat milk samples ranged between 726.08 and 1,359.32 mg of gallic acid equivalents (GAE) L<sup>-1</sup>. The phenolic compounds in Kefir samples ranged between 0.77-4.21 mg 100 g<sup>-1</sup> for gallic acid and 0.36-5.09 mg 100 g<sup>-1</sup> for catechin. This study showed that goat kefir samples had significantly high bioactive substances.