

Application of Sunflower Seed Oil in Preparation of Novel Low-Fat Kefir

Bensmira Meriem and Bo Jiang¹

State Key Laboratory of Food Science and Technology, Jiangnan University, Wuxi, Jiangsu 214122, China ¹Department of Agronomic Science, University of Mascara, Mascara 29000, Algeria E-mail: meriem.bensmira@univ-mascara.dz

Abstract: The objectives of this research were focused on preparing Kefir with skimmed milk and sunflower seed oil and studying its compositional, rheological, and textural properties as well as its microstructure characteristics. Rheological and textural properties of Kefir samples containing 2-4% sunflower seed oil (SMK) did not differ significantly from the standard Kefir made from whole milk (WMK). The substitution of milk fat by sunflower seed oil improved the chemical composition of Kefir. In addition, the microstructure of Kefir made from skimmed milk and sunflower seed oil was similar to that of Kefir made from whole milk.

Keywords: Kefir, Sunflower seed oil, Rheological and textural properties, Microstructure