

The influence of temperature on food emulsions stability

Viorica POPESCU and Alina Daria SOCEANU*

Department of Chemistry and Chemical Engineering, Ovidius University, 124 Mamaia Blvd, 900527 Constanta, Romania

Abstract Emulsions are heterogeneous systems consisting of at least one liquid dispersed in another immiscible liquid phase under variable sized drops. The aim of the present study is to determine some characteristics (aspect, odor, color, solubility, emulsion type, pH, water and volatile substances content, total fatty matter, acidity, iodine index) of three types of yogurts and three types of creams from the local market. The stability of emulsions has been studied at different temperatures: 4⁰C, 30⁰C and 60⁰C. It has been noticed that for yogurt samples the temperature increasing determined the disperse of coagulant and the acidity increasing, while for creams the pH and fat content gradients are positive with temperature.

Keywords: food emulsions, temperature, stability
