

SUPLEMENTASI STEROL LEMBAGA GANDUM (*Triticum sp.*) PADA MARGARIN

(Supplementation of Margarine with Wheat Germ Sterol)

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ABSTRACT

Margarine is a water in oil (w/o) emulsion product which is widely used for household cooking and baking industry. Consuming of margarine, which contains trans fatty acid may cause health problem due to the increase of LDL cholesterol. Since margarine is also a good carrier of phytosterol which prevent the absorption of cholesterol, there is a possibility to formulate a healthier margarine. In this research formulation and characteristics of products was investigated. The research work consisted of two steps: (1) supplementation of wheat germ sterol into margarine (two methods) and (2) analysis of physical, chemical characteristics and hedonic score. Parameters of physical characteristics were melting point and emulsion stability, whereas chemical characteristics were water and oil contents. The hedonic test was carried out based on product's color, odor, taste, texture, and spreadability. Results showed that method II of supplementation produced better margarine than method I, in which the concentration of sterol in the margarine was higher with a melting point similar to that of control, better emulsion stability, and higher hedonic score. Supplementation process was carried out by mixing sterol into fat phase melted at 50 °C, followed by mixing with aqueous phase at 4 °C. Sterol used for method II was extracted using mixed solvent of hexane and ethanol at the ratio of 1:2 (v/v), which was resulted from previous experimentation.

Key words: supplementation, wheat germ sterol, margarine