

KARAKTERISTIK ES KRIM DENGAN TEPUNG OAT SEBAGAI SUBSTITUSI *WHIPPED CREAM*

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INTISARI

Es krim merupakan salah satu produk olahan susu yang paling digemari masyarakat, tetapi memiliki kalori tinggi sehingga beberapa kelompok masyarakat menghindari untuk mengkonsumsinya. Tepung *oat* memiliki kandungan lemak yang rendah dan mengandung serat. Tujuan penelitian ini untuk mengetahui karakteristik fisiko-kimia, dan sensoris es krim dengan tepung *oat* sebagai substitusi *whipped cream*. Penelitian ini terdiri dari tepung *oat* 0; 2 dan 4% (b/b) sebagai substitusi *whipped cream*. Parameter kualitas es krim yang dianalisis meliputi kualitas fisik (*overrun*, viskositas, waktu leleh), kimia (kadar lemak, serat kasar dan pH), sensoris (tekstur, rasa, warna, aroma). Data-data dianalisis menggunakan analisis variansi dalam rancangan acak lengkap pola searah dan dilanjutkan dengan *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa tepung *oat* sebagai substitusi *whipped cream* berpengaruh signifikan ($p < 0,05$) pada kualitas fisik dan kualitas kimia tetapi tidak berpengaruh signifikan ($p > 0,05$) terhadap kualitas sensoris. Kesimpulannya berdasarkan sifat fisik (waktu leleh dan *overrun*), kimia (lemak dan serat kasar), serta sensoris es krim, substitusi tepung *oat* pada *whipped cream* yang terbaik adalah tepung *oat* 4%, dan sudah memenuhi syarat mutu es krim menurut SNI (1995).

Kata kunci: Es krim, Tepung *oat* , Kualitas fisik, Kualitas kimia, Kualitas sensoris,

THE CHARACTERISTIC OF ICE CREAM WITH OAT FLOUR AS WHIPPED CREAM SUBSTITUTION

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ABSTRACT

Ice cream is one of the most popular dairy products among consumers, but it is high in calories, which causes some groups to avoid its consumption. Oat flour have a low fat content and are rich in fiber. The aim of this study was to determine the physicochemical and sensory characteristics of ice cream with oat flour as a substitute for whipped cream. The study consisted of oat flour at concentrations of 0%, 2%, and 4% (w/w) as a substitution for whipped cream. The analyzed quality parameters of the ice cream included physical properties (overrun, viscosity, melting time), chemical properties (fat content, crude fiber, and pH), and sensory attributes (texture, taste, color, aroma). The data were analyzed using analysis of variance (ANOVA) in a completely randomized design with a one-way pattern and continued with Duncan's New Multiple Range Test (DMRT). The results showed that oat flour as a substitute for whipped cream had a significant effect ($p < 0.05$) on the physical and chemical qualities, but did not have a significant effect ($p > 0.05$) on the sensory quality. In conclusion, based on the physical properties (melting time and overrun), chemical properties (fat and crude fiber), and sensory evaluation of the ice cream, the best substitution level of oat flour for whipped cream was 4%, which met the quality standards for ice cream according to the Indonesian National Standard (SNI) 1995.

Keywords: Ice cream, Oat flour, Physical quality, Chemical quality, Sensory quality