PENGARUH SUBSTITUSI BIJI RAMI *(Linum usitatissimum)* TERHADAP SIFAT ORGANOLEPTIK DAN KADAR OMEGA-3 SELAI BIJI BUNGA MATAHARI

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Abstrak

Penyakit obesitas disebabkan oleh asupan lemak jenuh dan tidak jenuh yang tidak seimbang. Biji rami merupakan bahan pangan tinggi omega-3. Tujuan penelitian ini adalah 1) Menganalisis pengaruh substitusi biji rami pada selai biji bunga matahari terhadap sifat organoleptik, 2) Menganalisis pengaruh substitusi biji rami pada selai biji bunga matahari terhadap kadar omega-3, dan 3) Menganalisis kandungan gizi formula terpilih selai biji bunga matahari dengan substitusi biji rami. Metode penelitian ini eksperimental dengan desain Rangkaian Acak Lengkap (RAL) dengan satu faktor dan dua kali pengulangan. Formula substitusi biji rami dibedakan menjadi 3 yaitu F1 (20 gram), F2 (25 gram), dan F3 (30 gram). Analisis organoleptik menggunakan uji Kruskal Wallis, dilanjutkan dengan uji Mann Whitney. Lalu analisis omega-3 menggunakan ANOVA, dilanjutkan dengan uji Duncan. Substitusi biji rami berpengaruh nyata ($p>0,05$) terhadap rasa dan tekstur selai dan juga berpengaruh nyata ($p=0,005$) terhadap kadar omega-3 selai. Dengan menggunakan metode MPE didapatkan formula terpilih F2 dengan kadar air (1,29%), kadar abu (2,605%), kadar protein (23,295%), kadar lemak (47,815%), kadar karbohidrat (24,995%) dan kadar omega-3 (5,835%).

Kata kunci: Obesitas, Asam lemak tidak jenuh, Omega-3, Biji Rami, Selai

EFFECT OF FLAXSEED *(Linum usitatissimum)* SUBSTITUTION ON ORGANOLEPTIC PROPERTIES AND OMEGA-3 LEVELS OF SUNFLOWER SEED SPREAD

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Abstract

Obesity is caused by the imbalance intake between saturated fatty acid and unsaturated fatty acid. Flaxseed is food rich in omega-3. The purpose of this study is to 1) Determine the effect of flaxseed substitution in sunflower seed spread on organoleptic properties, 2) Determine the effect of flaxseed substitution in sunflower seed spread on omega-3 levels of the spread, and 3) Determine the nutritional content of the selected formula of sunflower seed spread. This studys' method is experimental and uses a completely randomized design (CRD) with one factor and two times repetition. Formulas with addition of flaxseed are divided in 3 which are F1 (20 gram), F2 (25 gram) and F3 (30 gram). Analysis on sensory acceptance is performed using *Kruskal Wallis* test, continued with *Mann Whitney* test. And omega-3 levels are analyzed with ANOVA, continued with *Duncan* test. Substitution of flaxseed had a significant effect ($p>0,05$) on taste and texture of spread and also had a significant effect ($p=0,005$) on omega-3 levels of spread. By using MPE method the selected formula is F2 having water content (1,29%), ash content (2,605%), protein content (23,295%), fat content (47,815%), carbohydrate content (24,995%) and omega-3 levels (5,835%).

Keywords: Obesity, Unsaturated Fatty Acid, Omega-3, Flaxseed, Spread