

PENGARUH PENAMBAHAN SIROP UMBI YAKON (*Smallanthus sonchifolius*) TERHADAP KANDUNGAN GIZI DAN KADAR VITAMIN B7 PANGAN FUNGSIONAL DADIH SUSU SAPI

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Abstrak

Prevalensi penderita Diabetes Mellitus Tipe 2 (DMT2) akibat konsumsi makanan tidak sehat terus mengalami peningkatan. Penderita DMT2 dapat mengalami defisiensi vitamin, salah satunya vitamin B7 (biotin) akibat peningkatan diuretik oleh efek osmotik gula darah. Sehingga diperlukan adanya pangan alternatif dalam upaya pengendalian kejadian tersebut. Tujuan penelitian ini yaitu membuat formula dadih susu sapi dengan penambahan sirop umbi yakon sebagai pangan antidiabetik pembantu pemenuhan kebutuhan vitamin B7 (biotin), serta menganalisis pengaruh pemberian sirop umbi yakon terhadap kandungan gizi dan vitamin B7 dadih susu sapi. Metode Rancangan Acak Lengkap satu faktor dengan dua kali ulangan digunakan dalam penelitian ini. Penambahan sirop umbi yakon pada dadih susu sapi sebanyak F1(10%), F2(20%), dan F3(30%). Hasil analisis kandungan gizi dan vitamin B7(biotin) dilakukan menggunakan uji *One-Way Anova (Analysis of Variance)* dilanjutkan dengan *Duncan's Multiple Range Test (DMRT)*, uji organoleptik (hedonik) diolah dengan uji Kruskal Wallis dilanjutkan dengan uji Mann Whitney. Hasil analisis menunjukkan terdapat perbedaan signifikan ($p < 0.05$) pada kadar lemak, karbohidrat, dan vitamin B7. Uji organoleptik (daya terima) menunjukkan adanya perbedaan signifikan pada aspek rasa ($p < 0.05$). Metode Perbandingan Eksponensial (MPE) digunakan dalam pemilihan formula. Formula terpilih adalah F3 yaitu penambahan 30% sirop umbi yakon.

Kata kunci: dadih, sirop umbi yakon, kandungan gizi, vitamin B7, biotin

EFFECT OF ADDITIONAL YACON TUBER SYRUP (*Smallanthus sonchifolius*) ON NUTRIENT CONTENT AND VITAMIN B7 LEVELS IN FUNCTIONAL FOOD DADIH OF COW'S MILK

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Abstract

The prevalence of Type 2 Diabetes Mellitus (T2DM) due to consumption of unhealthy foods continues to increase. The increased diuretic due to the osmotic effect of blood sugar in people with T2DM could cause vitamin deficiency, one of which is vitamin B7 (biotin). In the case of controlling that event, alternative functional foods were needed. The purpose of this study was to formulate cow's milk dadih with the addition of yacon tuber syrup as an antidiabetic food that helps the vitamin B7 adequacy. In specific objectives were to analyze the effect of yacon tuber syrup addition on nutrient and vitamin B7 levels in dadih. Single-Factor Completely Randomized Design with repetitions was used as the method. The formula consists F1 (10%), F2 (20%), and F3 (30%) yacon syrup addition. Nutrient and vitamin B7 contents levels were analyzed by One-way Anova and Duncan's Multiple Range Test (DMRT), while the organoleptic (hedonic) data were analyzed by the Kruskal Wallis and Mann Whitney Test. The results showed that yacon syrup affect fat, carbohydrate, and vitamin B7 levels ($p < 0.05$) and did not affect water, ash, and protein level ($p > 0.05$) in dadih. The chosen formula was F3 with a 30% addition of yacon syrup tuber.

Keywords: Cow's milk dadih, yacon tuber syrup, nutrient content, vitamin B7, biotin