

Abstrak

SIFAT ORGANOLEPTIK DAN KANDUNGAN PROTEIN TERLARUT YOGURT SUSU KECAMBAH KACANG MERAH YANG DIBUAT DENGAN VARIASI KONSENTRASI STARTER BAKTERI ASAM LAKTAT DAN LAMA FERMENTASI UNTUK REMAJA PUTRI OBESITAS

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Latar Belakang: Konsumsi minuman kaya protein dapat memberikan efek kenyang lebih lama. Kandungan protein terlarut yang mempunyai ukuran kecil dalam bentuk asam amino diketahui dapat lebih cepat diserap oleh tubuh, sehingga cocok untuk penderita obesitas yang sedang menjalani program penurunan berat badan. Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi starter BAL dan lama fermentasi terhadap protein terlarut dan sifat organoleptik yogurt susu kacang merah.

Metodologi: Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) terdiri dari dua faktor yaitu konsentrasi starter BAL (B) dan lama fermentasi (F). Sampel penelitian terdiri dari 20 unit percobaan. Data protein terlarut dan organoleptik dianalisis statistik menggunakan Anova dilanjut dengan *Duncan's Multiple Range Test* (DMRT) dan uji Tukey's dengan taraf 5%.

Hasil: Terdapat pengaruh ($p < 0,05$) interaksi konsentrasi BAL dan lama fermentasi terhadap warna, rasa, aroma, dan kekentalan serta lama fermentasi terhadap protein terlarut. Tidak terdapat pengaruh ($p > 0,05$) konsentrasi BAL dan interaksi BAL dan lama fermentasi terhadap protein terlarut. Produk terbaik yaitu formula dengan konsentrasi BAL 2% dan lama fermentasi 24 jam dengan kadar protein terlarut sebesar 38%.

Kesimpulan: Organoleptik warna, rasa, dan kekentalan (agak suka - suka); aroma (tidak suka - agak suka). Produk terpilih yaitu konsentrasi BAL 2% dan lama fermentasi 24 jam, kadar protein terlarut 38% dengan takaran saji 290 ml memberikan sumbangan terhadap AKG sebesar 42%.

Kata Kunci: Yogurt, Kacambah kacang merah, Protein terlarut, Organoleptik, Obesitas.

Abstract

ORGANOLEPTIC PROPERTIES AND DISSOLVED PROTEIN CONTENT OF YOGURT RED BEAN SPROUTS MILK MADE WITH VARIATIONS IN THE CONCENTRATION OF LACTIC ACID BACTERIA AND FERMENTATION TIME FOR OBESE ADOLESCENT GIRLS

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Background: Consumption of protein-rich drinks can provide a longer satiety effect. The dissolved protein content that has a small size in the form of amino acids is known to be absorbed faster by the body, making it suitable for obese people who are undergoing a weight loss program. This study aimed to determine the effect of BAL starter concentration and fermentation time on dissolved protein and organoleptic properties of red bean sprouts milk yogurt.

Methodology: This study used a Randomized Block Design (RBD) consisting of two factors, namely the concentration of BAL starter (B) and duration of fermentation (F). The study sample consisted of 20 experimental units. Dissolved and organoleptic protein data were analyzed statistically using ANOVA followed by Duncan's Multiple Range Test (DMRT) and Tukey's test with a level of 5%.

Results: There was an effect ($p < 0.05$) of the interaction of BAL concentration and duration of fermentation on color, taste, aroma, and thickness and the length of fermentation on dissolved proteins. There was no effect ($p > 0.05$) of LAB concentration and interaction of LAB and duration of fermentation on dissolved proteins. The best product is a formula with a 2% BAL concentration and a 24-hour fermentation time with a dissolved protein content of 38%.

Conclusion: Organoleptic color, taste, and thickness (rather like - like); aroma (dislike - rather like). Selected products are 2% BAL concentration and 24 hours fermentation time, dissolved protein content of 38% with a serving dose of 290 ml contributing to the RDA of 42%.

Keywords: Yogurt, Kidney bean sprouts, Dissolved protein, Organoleptic, Obesity.