

**PENGARUH PENAMBAHAN SUSU BUBUK *FULL CREAM*
DAN SKIM PADA KONSENTRASI YANG BERBEDA
TERHADAP KARAKTERISTIK MINUMAN FUNGSIONAL
SINBIOTIK SARI LABU KUNING (*Cucurbita moschata*)**

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Pengaruh Penambahan Susu Bubuk *Full Cream* Dan Skim Pada Konsentrasi Yang Berbeda Terhadap Karakteristik Minuman Fungsional Sinbiotik Sari Labu Kuning (*Cucurbita moschata*)

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan konsentrasi susu bubuk terhadap karakteristik minuman fungsional sinbiotik sari labu kuning dan mengetahui perlakuan terbaik dalam pembuatan minuman fungsional sinbiotik sari labu kuning yang dihasilkan berdasarkan analisis kimia, uji mikrobiologi, dan uji organoleptik. Penelitian ini menggunakan analisis Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 pengulangan. Variasi penambahan susu bubuk (skim dan *full cream*) adalah A (susu skim 13% : *full cream* 2%), B (susu skim 12% : *full cream* 3%), C (susu skim 11% : *full cream* 4%), D (susu skim 10% : *full cream* 5%), dan E (susu skim 9% : *full cream* 6%). Data dianalisis menggunakan Analysis of Variance (ANOVA) dan kemudian dilanjutkan dengan Duncant's New Multiple Range Test (DNMRT). Hasil penelitian menunjukkan bahwa penambahan konsentrasi susu bubuk (skim dan *full cream*) yang berbeda terhadap minuman sinbiotik sari labu kuning memberikan pengaruh nyata terhadap pH, total asam tertitrasi, total bakteri asam laktat, aktivitas antioksidan, total padatan terlarut, kadar abu, kadar lemak, kadar protein, kadar kalsium, viskositas, dan organoleptik penampakan, namun tidak berbeda nyata terhadap kadar betakaroten, organoleptik warna, aroma, rasa, dan konsistensi. Perlakuan terbaik berdasarkan analisis kimia, uji mikrobiologi, dan uji organoleptik yaitu perlakuan A dengan tingkat penerimaan panelis terhadap warna 3,80 (agak suka), aroma 3,40 (agak suka), konsistensi 3,50 (agak suka), dan penampakan 3,75 (agak suka). Produk ini memiliki rata-rata pH 4,22, total asam 0,43%, kadar protein 3,78%, total padatan 17°Brix, viskositas 8,44 dPa, kadar lemak 1,16%, kadar abu 0,83%, aktivitas antioksidan 3,13%, kadar betakaroten 2,41 µg/g, dan total bakteri asam laktat $2,1 \times 10^9$.

Kata kunci: konsentrasi, susu full cream, labu kuning, susu skim, sinbiotik

**The Effect Of Addition Of Full Cream Milk and Skim Milk Powder at
Different Concentrations On The Carateristics Of The Pumpkin (*Cucurbita
moschata*) Juice Synbiotik Drink**

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ABSTRACT

This study aims to determine the effect of increasing the concentration of powdered milk on the functional characteristics of pumpkin juice synbiotic drinks and to find out the best treatment in making functional pumpkin juice synbiotic drinks produced based on chemical analysis, microbiological tests, and organoleptic tests. This study uses a Completely Randomized Design (CRD) analysis with 5 treatments and 3 repetitions. Variations in the addition of milk powder (skim and full cream) are A (13% skim milk: 2% full cream), B (12% skim milk: full cream 3%), C (11% skim milk: 4% full cream), D (10% skim milk: 5% full cream), and E (9% skim milk: 6% full cream). Data were analyzed using Analysis of Variance (ANOVA) and then followed by Duncan's New Multiple Range Test (DNMRT). The results showed that the addition of different concentrations of milk powder (skim and full cream) to the pumpkin juice synbiotic drink had a significant effect on pH, total titrated acid, total lactic acid bacteria, antioxidant activity, total dissolved solids, ash content, fat content, protein content, calcium content, viscosity, and organoleptic appearance, but not significantly different from beta-carotene content, organoleptic color, aroma, taste, and consistency. The best treatment based on chemical analysis, microbiology test, and organoleptic test, namely treatment A with a panelist acceptance level of color 3.80 (somewhat like), aroma 3.40 (somewhat like), consistency of 3.50 (somewhat like), and appearance 3.75 (somewhat like). This product has an average pH of 4.22, a total acid of 0.43%, a protein content of 3.78%, a total solid of 17°Brix, a viscosity of 8.44 dPa, a fat 1.16%, an ash content of 0.83%, an antioxidant activity of 3.13% , beta-carotene content of 2.41 µg/g, and total lactic acid bacteria 2.1x10⁹.

Keywords : concentration, full cream milk, pumpkin, skim milk, synbiotic.