

POLITEKNIK KESEHATAN TANJUNGPUR
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Kajian Pembuatan Es Krim Tinggi Protein Diperkaya dengan Penambahan Ikan Gabus dan Pewarna Alami Ekstrak Bunga Telang

xiii + 70 halaman + 13 tabel + 13 gambar + 11 lampiran

ABSTRAK

Es krim adalah makanan beku yang dibuat dari campuran produk susu, gula, penstabil, pengemulsi dan bahan lainnya yang telah melewati proses pasteurisasi dan homogenisasi. Kandungan gizi 100 gram es krim adalah 12,5 gram lemak, 4 gram protein, 20,6 gram karbohidrat, dan 0,1 mg zat besi. Es krim juga dapat diperkaya dengan penambahan ikan gabus dan pewarna alami ekstrak bunga telang untuk meningkatkan daya terima es krim.

Penelitian ini menggunakan metode eksperimen dengan perlakuan penambahan ikan gabus dan pewarna alami ekstrak bunga telang untuk menghasilkan produk yang paling disukai berdasarkan hasil uji organoleptik menggunakan uji hedonik. Pembuatan es krim dengan melakukan 4 formulasi yang berbeda, yaitu F1= 20%, F2= 30%, F3= 40%, dan F4= 50%. Selanjutnya dilakukan analisis perhitungan nilai gizi menggunakan Tabel Komposisi Pangan Indonesia (TKPI) dan uji proksimat serta perhitungan *food cost* pada formula es krim yang paling disukai.

Dari uji organoleptik yang dilakukan terhadap warna, aroma, rasa, tekstur, dan penerimaan keseluruhan es krim ikan gabus dengan pewarna alami ekstrak bunga telang didapatkan hasil bahwa formula es krim yang paling disukai panelis yaitu F1 atau penambahan 80 gram ikan gabus, dengan hasil uji proksimat memiliki kandungan air 70.13 gram, protein 2.53 gram, lemak 0.52 gram, karbohidrat 26.38 gram, serat 2.4 gram, dan abu 70.13 gram. Sedangkan hasil perhitungan menggunakan TKPI yaitu air 42.28 gram, energi 73.49 kkal, protein 2.68 gram, lemak 2.04 gram, karbohidrat 9.47 gram, serat 0.006 gram, dan abu 0.447 gram. *Food cost* sebesar Rp. 40.703,9 untuk 10 cup es krim dan harga jual per cup es krim Rp. 10.175 per 80 gram.

Direkomendasikan jika dilakukan penelitian pengembangan dapat diperkaya dengan penambahan hewani lain yang juga tinggi nilai gizi, dan dapat juga menggunakan pewarna alami lain seperti buah atau sayur karena dengan menggunakan pewarna alami dapat terbebas dari pewarna sintetis yang tentunya mempunyai dampak buruk bagi kesehatan.

Kata kunci : Es krim ikan gabus, bunga telang, protein

Daftar bacaan : 54 (2004-2021)

**HEALTH POLYTECHNIC OF TANJUNGPUR
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The Study of Making High Protein Ice Cream Enrichment of Snakehead Fish and Natural Coloring Telang Flower Extract

xiii + 70 pages + 13 tables + 13 images + 11 attachments

ABSTRACT

Ice cream is a frozen food made from a mixture of dairy products, sugar, stabilizers, emulsifiers and other ingredients that have gone through a pasteurization and homogenization process. The nutritional content of 100 grams of ice cream is 12.5 grams of fat, 4 grams of protein, 20.6 grams of carbohydrates, and 0.1 mg of iron. Ice cream can also be enriched with the addition of snakehead fish and natural coloring of telang flower extract to increase the acceptability of the ice cream.

This study used an experimental method with the addition of snakehead fish and natural dyes of telang flower extract to produce the most preferred product based on the results of organoleptic tests using hedonic tests. Making ice cream by doing 4 different formulations, namely F1 = 20%, F2 = 30%, F3 = 40%, and F4 = 50%. Furthermore, an analysis of the calculation of the nutritional value was carried out using the Indonesian Food Composition Table (TKPI) and the proximate test as well as the calculation of the food cost on the most preferred ice cream formula.

From the organoleptic tests carried out on the color, aroma, taste, texture, and overall acceptance of snakehead fish ice cream with natural dyes of telang flower extract, it was found that the most preferred ice cream formula by the panelists was F1 or the addition of 80 grams of snakehead fish, with proximate test results. contains 70.13 grams of water, 2.53 grams of protein, 0.52 grams of fat, 26.38 grams of carbohydrates, 2.4 grams of fiber, and 70.13 grams of ash. While the results of calculations using TKPI are 42.28 grams of water, 73.49 kcal of energy, 2.68 grams of protein, 2.04 grams of fat, 9.47 grams of carbohydrates, 0.006 grams of fiber, and 0.447 grams of ash. Food costs of Rp. 40,703.9 for 10 cups of ice cream and the selling price per cup of ice cream is Rp. 10,175 per 80 grams.

It is recommended if development research is carried out, it is better if development research is carried out it can be enriched with the addition of other animals that are also high in nutritional value, and can also use other natural dyes such as fruit or vegetables because using natural dyes can be free from synthetic dyes which of course have a bad impact on health.

Keywords: snakehead fish ice cream, telang flower, protein
Reading list : 54 (2004-2021)