

ABSTRAK

Manuela Tiasari Simarmata: Analisis Kandungan Gizi dan Sifat Fisik Pada Brownies Kukus Dengan Penambahan Pisang Raja (*Musa acuminata*) Sebagai Tambahan Makanan Ibu hamil. Skripsi. Program Studi Gizi. Jurusan Pendidikan Kesejahteraan Keluarga. Fakultas Teknik. Universitas Negeri Medan. 2024.

Produksi pisang di Indonesia yang cukup tinggi tidak sebanding dengan tingkat konsumsi masyarakat, sehingga mengakibatkan banyaknya pisang yang tidak dimanfaatkan karena daya simpan buah pisang yang relatif singkat. Penelitian ini bertujuan untuk mengetahui : 1) mengetahui pembuatan *brownies* kukus dengan penambahan pisang raja.; 2) Untuk mengetahui sifat fisik (rasa, aroma, warna dan tekstur) pada *brownies* kukus pisang raja ; 3) Untuk mengetahui kandungan gizi terhadap *brownies* kukus pisang raja. Penelitian eksperimen ini menggunakan metode RAL (Rancangan Acak Lengkap). Formula *Brownies* kukus pisang raja terdapat 4 perlakuan yaitu F0/kontrol (0%), F1 (30%), dan F3 (45%). Lokasi penelitian dilaksanakan di Desa Pasar Melintang Pakam, Laboratorium Balai Standarisasi dan Pelayanan Jasa Industri Medan (BSPJI). Uji sifat fisik dilakukan menggunakan panelis tidak terlatih sebanyak 25 ibu hamil. Teknik analisis data dianalisis secara deskriptif dan uji Kruskal Wallis, dilanjutkan dengan uji Mann Whitney.

Hasil Penelitian menunjukkan bahwa *brownies* kukus pisang raja dengan formula tepung terigu 100% dan pisang raja 90% (kode sampel F3) menghasilkan produk terbaik. Hasil uji hedonik *brownies* kukus pisang raja (kode sampel F3 100% : 90%) panelis suka pada rasa 80%, suka pada warna 64%, suka pada tekstur 72%, suka pada aroma 68%. Hasil uji mutu hedonik panelis suka pada rasa sangat berasa pisang raja 76%, suka pada warna coklat kehitaman 68%, suka pada tekstur lembut 60%, dan suka aroma sangat beraroma pisang raja 68%. Formula terbaik *brownies* kukus pisang raja diperoleh rerata rasa 4,28; warna 4,40; tekstur 4,52; aroma 4,44. Kandungan gizi *brownies* kukus pisang raja formula terbaik yaitu protein 6,22 gram, karbohidrat 28,7gram, lemak 17,8 gram, air 30,2%, abu 1,38%, serat kasar 15,7gram, dan kalium 960 mg/100g. 100 gram *brownies* kukus pisang raja yang dikonsumsi dapat memenuhi kebutuhan protein 8,2% per hari, lemak 21,2% per hari, dan karbohidrat 8,3% per hari, serat 44,9% per hari dan kalium 20,4% per hari.

ABSTRACT

Manuela Tiasari Simarmata: *Analysis of Nutritional Content and Physical Properties in Steamed Brownies with the Addition of Plantain (Musa acuminata) as an Additional Food for Pregnant Women. Thesis. Nutrition Study Program. Department of Family Welfare Education. Faculty of Engineering. Medan State University. 2024.*

Banana production in Indonesia is quite high not comparable to the level of public consumption, resulting in many bananas that are not used because of the relatively short shelf life of bananas. This study aims to find out: 1) knowing the manufacture of steamed brownies with the addition of plantain.; 2) To find out the physical properties (taste, aroma, color and texture) of steamed plantain brownies; 3) To determine the nutritional content of plantain steamed brownies. This experimental study used the RAL (Complete Randomized Design) method. There are 4 treatments of plantain steamed Brownies formula, namely F0 / control (0%), F1 (30%), and F3 (45%). The location of the research was carried out in Pasar Melintang Pakam Village, Laboratory of the Medan Industrial Standardization and Services Center (BSPJI). Physical properties tests were conducted using untrained panelists of 25 pregnant women. Data analysis techniques were analyzed descriptively and the Kruskal Wallis test, followed by the Mann Whitney test.

The results showed that steamed brownies of plantain with 100% wheat flour formula and 90% plantain (sample code F3) produced the best product. The results of the F3 plantain steamed brownie hedonic test, showed that panelists who liked the taste 80%, liked the color by 64%, liked the texture by 72% and liked the aroma by 68%. The results of the hedonic quality test panelists liked the taste of plantain 76%, liked the blackish-brown color 68%, liked the soft texture 60%, and liked the very flavorful aroma of plantain 68%. The best formula of plantain steamed brownies obtained an average taste of 4.28; color 4.40; texture 4.52; aroma 4.44. The nutritional content of the best formula plantain steamed brownies is 6.22 grams of protein, 28.7 grams of carbohydrates, 17.8 grams of fat, 30.2% water, 1.38% ash, 15.7 grams of crude fiber, and 960 mg / 100g of potassium. As much as 100 grams of plantain steamed brownies consumed can meet the needs of protein 8.2% per day, fat 21.2% per day, and carbohydrates 8.3% per day, fiber 44.9% per day and potassium 20.4% per day.