

ABSTRAK

Kinasih, Larasati Sekar.2014. **Pengaruh Formulasi Tepung Bekatul Dan Tepung Pisang Nangka (*Musa paradisiacal normalis*) Terhadap Nilai Energi, Kandungan Zat Gizi Makro Dan Mutu Organoleptik *Food Bars***. Tugas Akhir, Program Studi Ilmu Gizi Fakultas Kedokteran Universitas Brawijaya. Pembimbing: (1) Dr. dr. Endang Sri Wahyuni, MS, (2) Fuadiyah Nila K, S.Gz.MPH

Bekatul dan pisang nangka dimanfaatkan dalam bentuk olahan tepung sehingga dapat meningkatkan nilai kedua bahan. Tepung bekatul dan tepung pisang nangka diolah menjadi produk pangan berbasis bahan pangan lokal, yaitu dalam bentuk *food bars*. *Food bars* merupakan campuran beberapa bahan, berbentuk batang dan kompak yang memiliki nilai aktivitas air (*aw*) rendah. Penelitian ini bertujuan mengetahui pengaruh mutu gizi dan mutu organoleptik *food bars* berbahan dasar tepung bekatul dan tepung pisang nangka pada berbagai formulasi. Penelitian ini terdiri atas 5 taraf perlakuan yaitu P0 (100% tepung gandum utuh), P1 (20% tepung bekatul : 80% tepung pisang nangka), P2 (30% tepung bekatul : 70% tepung pisang nangka, P3 (40% tepung bekatul : 60% tepung pisang nangka) dan P4 (50% tepung bekatul:50% tepung pisang nangka). Selanjutnya lima sampel *food bars* pada setiap taraf perlakuan diuji mutu gizi (energi, protein, lemak, dan karbohidrat) dan mutu organoleptik (rasa, aroma, tekstur, dan warna). Hasil penelitian pada perlakuan P0-P4 menunjukkan pengaruh signifikan pada protein ($p=0.000$), dan tidak memberikan pengaruh signifikan pada kandungan energi ($p=0.406$), kandungan lemak ($p=0.299$), kandungan karbohidrat ($p=0.057$). Uji organoleptik pada perlakuan P0-P4 tidak memberikan pengaruh signifikan pada rasa ($p=0.92$), aroma ($p=0.469$), tekstur ($p=0.332$) dan warna ($p=0.392$). Taraf perlakuan terbaik terdapat pada produk *food bars* P1 (20% tepung bekatul : 80% tepung pisang nangka). Kesimpulannya terdapat perbedaan secara signifikan pada mutu gizi protein dan perbedaan tidak signifikan pada mutu gizi karbohidrat dan lemak serta mutu organoleptik *food bars* pada berbagai formulasi.

Kata Kunci : *food bars*, tepung bekatul, tepung pisang nangka, mutu zat gizi, mutu organoleptik

ABSTRACT

Kinasih, Larasati Sekar.2014. **The Effect of Formulation of Rice Bran Flour and Nangka Banana (*Musa paradisiacal normalis*) Flour on Value of Energy, Content of Macronutrient and Organoleptic Quality of Food Bars**. Final Assignment, Nutrition Study Program Faculty of Medicine, University of Brawijaya, Advisors: (1) Dr. dr. Endang Sri Wahyuni, MS, (2) Fuadiyah Nila K, S.Gz.MPH

Rice brain and nangka banana were used in the form of flour so as to increase the value of both materials. Rice bran flour and nangka banana flour were processed into product based on local food as food bars. Food bars is a mixture of several materials, as bar shape and compact which has a low water activity values. This study aims to determine the effect of nutritional quality and organoleptic quality of food bars made from rice bran flour and nangka banana flour in various formulations. This study consisted of five level treatment that were P0 (100% whole wheat flour), P1 (20% rice bran flour: 80% nangka banana flour), P2 (30% rice bran flour: 70% nangka banana flour, P3 (40% rice bran flour : 60% nangka banana flour, P4 (50% rice bran flour : 50% nangka banana flour. Five samples of food bars on each level of treatment were tested the nutritional quality (energy, protein, fats, and carbohydrates) and organoleptic quality (taste, aroma, texture, and color). The results showed that on the treatment (P0-P4) have a significant effect on the protein ($p=0.000$), and has no significant effect on the energy content ($p=0.406$), fat content ($p=0.299$), carbohydrate content ($p=0.057$). Organoleptic test on P0-P4 treatment did not have a significant effect on the taste ($p = 0.92$), aroma ($p=0.469$), texture ($p=0.332$) and color ($p=0.392$). The best level of treatment found in food bars P1 (20% rice bran flour: 80% nangka banana flour). In conclusion, there are significant differences in nutritional quality of the protein and no significant in nutritional quality of the carbohydrate and fat and organoleptic quality of some food bars formulation.

Keywords : food bars, rice bran flour, nangka banana flour, nutritional quality, organoleptic quality.