

Irmawati Ningsih. NPM 170331100005. Formulasi *Snack Bar* Berbasis Pisang (*Musa paradisiaca*) dengan Penambahan *Arabic Gum*. Dibawah bimbingan Prof. Umi Purwandari, Ph. D.

ABSTRAK

Camilan tidak sehat banyak beredar di pasaran. Camilan yang beredar banyak mengandung lemak, MSG dan juga kalori yang cukup tinggi. *Snack bar* menjadi salah satu alternatif camilan sehat karena kaya akan nutrisi dan rendah kalori. *Snack bar* pada penelitian ini menggunakan tepung pisang yang dikombinasikan dengan sale pisang dan penambahan *arabic gum* sebagai hidrokoloid. Tujuan penelitian ini yaitu untuk mengetahui karakteristik dari *snack bar* berbasis pisang baik dari segi fisik, sensoris dan kimia, serta untuk mengetahui formulasi terbaik yang dapat diterima konsumen. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) Faktorial yang terdiri dari 2 faktor. Faktor pertama yaitu konsentrasi *arabic gum* (1%, 2% dan 3%), sedangkan faktor kedua yaitu proporsi tepung pisang : sale pisang (40:60. 30:70 dan 20:80). Parameter yang dianalisis antara lain, uji fisik yang terdiri dari warna dan tekstur. Uji sensoris yang terdiri dari atribut warna, tekstur, rasa, aroma dan keseluruhan. Uji efektivitas dengan metode de garmo untuk mengetahui dan menentukan formulasi terbaik. Uji kimia dilakukan pada *snack bar* dengan formulasi terbaik yang meliputi kadar air, kadar abu, kadar protein, kadar lemak dan kadar serat pangan. Hasil penelitian menunjukkan bahwa Proporsi tepung pisang : sale pisang dengan penambahan *arabic gum* pada pembuatan *snack bar* memiliki pengaruh nyata terhadap warna, tekstur dan sensoris. Parameter warna berpengaruh nyata terhadap nilai *L*, *a* dan *b*. Parameter tekstur berpengaruh nyata pada *hardness*, *cohesiveness*, *gumminess*, *chewiness* dan *resilience*. Parameter sensoris hanya berpengaruh nyata pada tekstur. Formulasi terbaik G1P1 diperoleh dari perlakuan 40:60 proporsi tepung pisang : sale pisang serta 1% *arabic gum*. Hasil uji kimia dari formulasi terbaik yaitu kadar air 10,81%, kadar abu 1,66%, kadar protein 6,17%, kadar lemak 12,65%, kadar karbohidrat 68,72% dan kadar serat pangan 3,40%.

Kata kunci: *Arabic Gum, De garmo, Efektivitas, Hidrokoloid, Snack bar*

ABSTRACT

There are many unhealthy snacks on the market. Snacks in circulation contain a lot of fat, MSG and are also quite high in calories. Snack bars are an alternative to healthy snacks because they are rich in nutrients and low in calories. The snack bar in this study used banana flour combined with banana sale and the addition of arabic gum as a hydrocolloid. The purpose of this study was to determine the characteristics of the banana-based snack bar in terms of physical, sensory and chemical aspects, as well as to determine the best formulation that could be accepted by consumers. This study used a factorial completely randomized design (CRD) consisting of 2 factors. The first factor is the concentration of arabic gum (1%, 2% and 3%), while the second factor is the proportion of banana flour: banana sale (40:60, 30:70 and 20:80). Parameters analyzed include, physical test consisting of color and texture. Sensory test consisting of color, texture, taste, aroma and overall attributes. Test the effectiveness with the de garmo method to find out and determine the best formulation. Chemical tests were carried out on snack bars with the best formulations which included water content, ash content, protein content, fat content and dietary fiber content. The results showed that the proportion of banana flour: banana sale with the addition of arabic gum in the manufacture of snack bars had a significant effect on color, texture and sensory. The color parameter has a significant effect on the values of L, a and b. Texture parameters have a significant effect on hardness, cohesiveness, gumminess, chewiness and resilience. Sensory parameters only have a significant effect on texture. The best formulation of G1P1 was obtained from the treatment of 40:60 the proportion of banana flour: sale bananas and 1% arabic gum. The results of the chemical test of the best formulation were water content 10.81%, ash content 1.66%, protein content 6.17%, fat content 12.65%, carbohydrate content 68.72% and dietary fiber content 3.40%.

Keywords: *Arabic Gum, De garmo, Effectiveness, Hydrocolloid, Snack bar*