

ABSTRAK

PENGEMBANGAN SIOMAY BERBASIS TEPUNG KOMPOSIT DAN JAMUR TIRAM DENGAN SUPLEMENTASI TEPUNG TULANG IKAN LELE SEBAGAI MAKANAN SELINGAN ANAK USIA SEKOLAH DASAR

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Latar Belakang: Siomay merupakan jajanan yang populer pada usia anak sekolah yang berpotensi dijadikan pangan fungsional. Pemanfaatan tepung komposit (tapioka-mocaf), jamur tiram, dan suplementasi tepung tulang ikan lele diharapkan dapat meningkatkan nilai gizi, khususnya protein dan kalsium dengan mutu hedonik yang disukai.

Metode: Penelitian eksperimental dengan desain Rancangan Acak Kelompok faktorial, menggunakan dua faktor, yaitu tepung komposit:jamur tiram (80:20, 70:30, 60:40) dan suplementasi tepung tulang ikan lele (5%, 10%, 15%). Kadar protein dianalisis dengan Two Way Anova, sedangkan mutu hedonik diuji menggunakan *Friedman* dan dilanjutkan dengan *Duncan's Multiple Range Test*. Formula terbaik ditentukan menggunakan uji indeks efektifitas.

Hasil: Proporsi tepung komposit:jamur tiram tidak berpengaruh terhadap kadar protein ($p = 0,134$). Suplementasi tepung tulang ikan lele berpengaruh terhadap kadar protein siomay ($p = 0,004$). Proporsi tepung komposit:jamur tiram dan tingkat suplementasi tepung tulang ikan lele berpengaruh terhadap mutu hedonik warna ($p = 0,000$), mutu hedonik tekstur ($p = 0,005$), dan kesukaan keseluruhan ($p = 0,002$). Namun, tidak berpengaruh terhadap mutu hedonik aroma ($p = 0,129$) dan mutu hedonik *flavour* ($p = 0,275$).

Kesimpulan: Formula terbaik siomay diperoleh dari perbandingan 70:30 antara tepung komposit:jamur tiram, dengan suplementasi 10% tepung tulang ikan lele, mengandung protein 5,7% dan kalsium 1,77%. Siomay tersebut memiliki warna agak coklat, aroma amis agak tercium, tekstur kenyal, *flavour* tepung tulang lele tidak terasa, dan tingkat kesukaan panelis termasuk kategori "suka".

Kata Kunci: Siomay, Tepung Tulang Ikan Lele, Anak Usia Sekolah

ABSTRACT

DEVELOPMENT OF SIOMAY BASED ON COMPOSITE FLOUR AND OYSTER MUSHROOMS WITH CATFISH BONE FLOUR SUPPLEMENTATION AS A SNACK FOOD FOR SCHOOL-AGE CHILDREN

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Background: Siomay is a popular snack among school-age children and has the potential to be developed as a functional food. The use of composite flour (tapioca–mocaf), oyster mushrooms, and supplementation with catfish bone flour is expected to enhance nutritional value, especially protein and calcium, as well as sensory quality.

Methods: This experimental study applied a Randomized Block Design with a factorial design, consisting of two factors: the proportion of composite flour:oyster mushroom (80:20, 70:30, 60:40) and the supplementation level of catfish bone flour (5%, 10%, 15%). Protein content was analyzed using Two Way ANOVA, while sensory quality was assessed using the Friedman test followed by Duncan's Multiple Range Test. The best formula was determined using the effectiveness index.

Result: The proportion of composite flour:oyster mushroom had no significant effect on protein content ($p=0.134$). Catfish bone flour supplementation significantly affected protein content ($p=0.004$). Both factors significantly affected the sensory attributes of color ($p=0.000$), texture ($p=0.005$), and overall acceptance ($p=0.002$), but had no significant effect on aroma ($p=0.129$) and catfish bone flour flavour ($p=0.275$).

Conclusion: The best formula was obtained from a 70:30 proportion of composite flour:oyster mushroom with 10% catfish bone flour supplementation, yielding 5.7% protein and 1.77% calcium. This siomay was characterized by a brownish color, low fishy aroma, chewy texture, unnoticeable catfish bone flour flavour, and an overall acceptance rating categorized as “liked” by panelists.

Keywords: Siomay, Catfish Bone Flour, School-Aged Children