

Abstrak

OPTIMASI FORMULA MI BASAH SUMBER PROTEIN DARI TAPIOKA, IKAN LELE, DAN TEPUNG TEMPE KORO PEDANG PUTIH UNTUK ALTERNATIF PANGAN LOKAL PENCEGAH STUNTING

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Latar Belakang: Stunting merupakan sebuah masalah gizi kronis yang ditandai dengan Z-score dan tinggi badan anak yang berada di bawah rata-rata usianya. Produk pangan sumber protein diyakini mampu mengatasi stunting. Tujuan penelitian ini untuk mengetahui pengaruh proporsi tapioka, ikan lele, dan Tepung Tempe Koro Pedang Putih (TTKPP) terhadap kandungan protein, lemak, dan mutu hedonik.

Metodologi: Penelitian ini menggunakan Rancangan Acak Kelompok dengan perlakuan proporsi tapioka:TTKPP:ikan lele pada F1 (50:40:10); F2 (50:30:20); F3 (50:20:30); F4 (50:10:40); F5 (50:0:50); dan F6 (50:50:0) dengan 4 kali pengulangan. Analisis statistik kadar protein total dan lemak total menggunakan ANOVA dan DMRT (beda signifikan jika $\alpha < 0.05$), uji mutu sensori menggunakan Friedman.

Hasil Penelitian: Perbedaan proporsi berpengaruh nyata terhadap protein total ($p < 0,05$), namun tidak berpengaruh nyata terhadap lemak total ($p > 0,05$). Formula terbaik adalah F2 dengan proporsi tapioka:TTKPP:ikan lele (50:30:20) yang mengandung protein total 27,18% bk, lemak total 0,98% bk, karbohidrat *by difference* 70,82% bk, air 70,46% bb, dan abu 1,02% bk. Secara sensori F2 memiliki skor warna 3,04 (cukup putih kecoklatan), tekstur 2,91 (kurang kenyal), aroma 2,96 (langu dan amis), dan rasa 2,98 (tempe dan lele). Mi basah telah memenuhi protein sebesar 20% sehingga menurut BPOM No. 1 Tahun 2022 telah memenuhi klaim label gizi sumber protein.

Kesimpulan: Mi Basah mampu memenuhi 30% kebutuhan protein dan 0,46% kebutuhan lemak anak usia 1-3 tahun, mi basah berpotensi untuk mencegah kejadian stunting.

Kata Kunci: Mi basah, Tempe Koro Pedang Putih, Stunting Tapioka, Ikan lele.

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Abstract

OPTIMIZATION OF WET NOODLE FORMULA AS A SOURCE OF PROTEIN FROM TAPIOCA, CATFISH, AND JACKBEAN TEMPE FLOUR FOR A LOCAL FOOD ALTERNATIVE TO PREVENT STUNTING

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Background: Stunting is a chronic nutritional problem characterized by a child's Z-score and height below the average age. Protein source food products are believed to be able to overcome stunting. The purpose of this study was to determine the effect of the proportion of tapioca, catfish, and Jackbean Tempe Flour (JBTF) on protein content, fat content, and hedonic quality.

Methods: This study used randomized block design with treatment proportion of tapioca:JBTF:catfish F1 (50:40:10); F2 (50:30:20); F3 (50:20:30); F4 (50:10:40); F5 (50:0:50); dan F6 (50:50:0) with 4 repetition. The data of total protein and total fat analyzed using ANOVA and DMRT (significantly different if $\alpha < 0.05$), the data of sensory quality analyzed using Friedman.

Result: The difference in proportion had a significant effect on total protein ($p < 0.05$), but no significant effect on total fat ($p > 0.05$). The best formula was F2 with the proportion of tapioca:JBTF:catfish (50:30:20) containing total protein 27.18% db, total fat 0.98% db, carbohydrate by difference 70.82% db, water 70.46% wb, and ash 1.02% db. Based on the sensory quality, F2 had a color score of 3.04 (moderately brownish white), texture of 2.91 (less chewy), aroma of 2.96 (languid and fishy), and taste of 2.98 (tempeh and catfish). The wet noodles have fulfilled the protein of 20% so that according to BPOM No. 1 Year 2022 it has fulfilled the nutrition label claim of protein source.

Conclusion: Wet noodles can fulfill 30% of protein needs and 0.46% of fat needs of children aged 1-3 years, wet noodles have the potential to prevent stunting.

Keywords: Wet Noodle, Jackbean Tempeh, Stunting, Tapioca, Catfish.

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