

## **Karakteristik Fisik, Kadar Serat Pangan Dan Organoleptik *Soft Cookies* Substitusi Tepung Milet Putih, Tepung Kacang Hijau, Dan Tepung Biji Labu Kuning Sebagai Makanan Selingan Lansia**

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### **ABSTRAK**

**Latar Belakang:** Perubahan komposisi tubuh dan fisiologis akibat penuaan meningkatkan risiko kekurangan gizi pada lansia. Asupan serat yang cukup membantu mengoptimalkan penyerapan zat gizi. Kemampuan mengunyah lansia melemah sehingga memerlukan makanan yang lunak seperti *soft cookies*.

**Tujuan:** Menganalisis karakteristik fisik (*hardness*), kadar serat pangan dan organoleptik *soft cookies* substitusi tepung millet putih, tepung kacang hijau dan tepung biji labu kuning.

**Metode:** Penelitian eksperimental rancangan acak lengkap dengan 4 formulasi berdasarkan perbandingan tepung millet putih, tepung kacang hijau dan tepung biji labu kuning yaitu F0 (0%), F1 (65%:20%:15%), F2 (60%:30%:10%), dan F3 (70%:25%:5%). *Hardness*, kadar serat pangan dan organoleptik berturut-turut dianalisis dengan metode *Texture Profile Analysis*, multienzim, uji hedonik dan uji *Just About Right* (JAR).

**Hasil:** *Hardness* tertinggi formula F2 ( $13,15 \pm 4,38N$ ). Kadar serat pangan total, serat larut dan serat tak larut tertinggi formula F3 ( $12,80 \pm 3,14\%$ ;  $0,35 \pm 0,13\%$ ;  $4,09 \pm 0,25\%$ ). Secara umum, panelis paling menyukai formula F1 dan semua formula perlu mempertimbangkan tingkat kemanisan.

**Simpulan:** Terdapat perbedaan signifikan *hardness*, kadar serat pangan, parameter warna, rasa dan keseluruhan pada uji hedonik serta parameter kecerahan dan kekuatan aroma pada uji JAR.

**Kata kunci:** *soft cookies*, tepung millet putih, tepung kacang hijau, tepung biji labu kuning, selingan lansia

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## Physical Characteristics, Dietary Fiber Content and Organoleptic of Soft Cookies Substituted with White Millet Flour, Green Bean Flour, and Pumpkin Seed Flour as Snacks for Elderly

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### ABSTRACT

**Background:** Changes in body composition and physiology due to aging increase the risk of malnutrition in the elderly. Adequate fiber intake helps optimize nutrient absorption. The elderly's hearing ability is weakened so they need soft foods such as soft cookies.

**Objective:** Analyzing the physical characteristics, dietary fiber content and organoleptic properties of soft cookies substituted with white millet flour, green bean flour and pumpkin seed flour.

**Methods:** Experimental research of completely randomized design with 4 formulations based on the ratio of white millet flour, mung bean flour and pumpkin seed flour, namely F0 (0%), F1 (65%:20%:15%), F2 (60%:30%:10%), and F3 (70%:25%:5%). Hardness, dietary fiber content and organoleptic were analyzed successively using Texture Profile Analysis, multienzyme, hedonic test and Just About Right (JAR) test.

**Results:** The highest hardness of formula F2 ( $13.15 \pm 4.38\text{N}$ ). The highest total dietary fiber, soluble fiber and insoluble fiber content of formula F3 ( $12.80 \pm 3.14\%$ ;  $0.35 \pm 0.13\%$ ;  $4.09 \pm 0.25\%$ ). In general, panelists preferred formula F1 the most and all formulas need to consider the level of sweetness.

**Conclusion:** There were significant differences in hardness, dietary fiber content, color, taste and overall parameters in the hedonic test as well as brightness and aroma strength parameters in the JAR test.

**Keywords:** soft cookies, white millet flour, green bean flour, pumpkin seed flour, elderly snacks

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