

ANALISIS KADAR PROKSIMAT DAN SERAT PANGAN YOGHURT UMBI BIT (*Beta vulgaris L.*) DAN KAYU MANIS (*Cinnamomum burmanii*)

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INTISARI

Latar belakang: Gaya hidup masyarakat yang cenderung mengonsumsi makanan yang instan, tinggi lemak, dan rendah serat memicu timbulnya masalah kesehatan. Makanan fungsional menjadi salah satu alternatif untuk meningkatkan kesehatan. Yoghurt merupakan salah satu makanan fungsional yang dibuat melalui fermentasi bakteri asam laktat *Lactobacillus bulgaricus* dan *Streptococcus thermophilus*. Umbi bit dan kayu manis mengandung zat-zat bioaktif yang bermanfaat bagi kesehatan dan berpengaruh pada kenampakan makanan. Penambahan umbi bit dan kayu manis pada yoghurt diharapkan mampu memperkaya cita rasa dan nilai gizi pada produk yoghurt.

Tujuan: Mengetahui kadar serat pangan dan kadar proksimat pada berbagai formulasi yoghurt umbi bit dan kayu manis.

Metode: Penelitian ini merupakan eksperimental dengan Rancangan Acak Lengkap (RAL) yang terdiri dari lima kelompok perlakuan, yaitu yoghurt tanpa penambahan umbi bit dan kayu manis, yoghurt dengan penambahan 5% umbi bit dan 0,5% kayu manis, yoghurt dengan penambahan 5% umbi bit dan 1% kayu manis, yoghurt dengan penambahan 10% umbi bit dan 0,5% kayu manis, dan yoghurt dengan penambahan 10% umbi bit dan 1% kayu manis. Uji yang dilakukan meliputi analisis kadar serat pangan dan kadar proksimat (kadar air, abu, protein, lemak, dan karbohidrat). Analisis statistik kadar serat pangan, protein, lemak, dan karbohidrat dilakukan dengan uji ANOVA. Sedangkan kadar air dan abu menggunakan uji Kruskal Wallis.

Hasil penelitian: Terdapat perbedaan yang signifikan ($p < 0,05$) pada rata-rata kadar serat pangan yoghurt umbi bit dan kayu manis. Pada analisis proksimat terdapat perbedaan yang signifikan ($p < 0,05$) pada rata-rata kadar karbohidrat, namun tidak terdapat perbedaan yang signifikan ($p > 0,05$) pada rata-rata kadar air, abu, protein, dan lemak.

Kesimpulan: Penambahan umbi bit dan kayu manis memengaruhi kadar serat pangan dan karbohidrat produk yoghurt. Namun tidak memengaruhi kadar air, abu, protein, dan lemak produk yoghurt.

Kata kunci: yoghurt, umbi bit, kayu manis, serat pangan, kadar proksimat

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ANALYSIS OF PROXIMATE AND DIETARY FIBER OF BEETROOT (*Beta vulgaris L.*) AND CINNAMON (*Cinnamomum burmanii*) YOGURT

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ABSTRACT

Introduction: The lifestyle of people who tend to eat foods that are instant, high in fat, and low in fiber triggers health problems. Functional food is an alternative to improve health. Yogurt is a functional food made through fermentation of lactic acid bacteria *Lactobacillus bulgaricus* and *Streptococcus thermophilus*. Beetroot and cinnamon contain bioactive substances that are beneficial to health and affect the appearance of food. The addition of beetroot and cinnamon to yogurt is expected to be able to enrich the taste and nutritional value of yogurt.

Objectives: To determine the levels of dietary fiber and proximate composition in those various formulations of beetroot and cinnamon yogurt.

Methods: This study was an experimental study with a completely randomized design (CRD) consisting of five treatment groups, namely yogurt without the addition of beetroot and cinnamon, yogurt with the addition of 5% beetroot and 0.5% cinnamon, yogurt with the addition of 5% beetroot. and 1% cinnamon, yogurt with the addition of 10% beetroot and 0.5% cinnamon, and yogurt with the addition of 10% beetroot and 1% cinnamon. The tests carried out included analysis of levels of dietary fiber and proximate levels (moisture, ash, protein, fat, and carbohydrates). Statistical analysis of levels of dietary fiber, protein, fat, and carbohydrate were analyzed by using ANOVA. While the water and ash content were analyzed by using Kruskal Wallis test.

Results: There was a significant difference ($p < 0.05$) in the average dietary fiber content of beetroot and cinnamon yoghurt. In the proximate analysis there was a significant difference ($p < 0.05$) in the average carbohydrate content, but there was no significant difference ($p > 0.05$) in the average moisture, ash, protein, and fat content.

Conclusions: The addition of beetroot and cinnamon affects the levels of dietary fiber and carbohydrates in yogurt products. However, it does not affect the moisture, ash, protein, and fat content of the yogurt products.

Keywords: yoghurt, beetroot, cinnamon, dietary fiber, proximate

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