

Kandungan Zat Besi dan Karakteristik Organoleptik Pada *Snack Bar* dengan Tepung Mocaf, Tepung Buah Bit dan Kurma

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ABSTRAK

Latar belakang: Tepung mocaf, tepung buah bit, dan kurma memiliki kandungan zat besi yang berpotensi untuk diolah bersama dalam bentuk *snack bar* sebagai alternatif pangan fungsional sumber zat besi untuk mencegah Anemia Defisiensi Besi (ADB) pada remaja putri di Indonesia.

Tujuan: Menganalisis kandungan zat besi dan karakteristik organoleptik *snack bar* dengan tepung mocaf, tepung buah bit, dan kurma.

Metode: Penelitian eksperimental dengan 4 kelompok perlakuan berdasarkan perbandingan antara tepung mocaf, tepung buah bit, dan kurma, yaitu F0 (100%:0%:0%), F1 (50%:30%:20%), F2 (50%:25%:25%), F3 (50%:20%:30%). Kandungan zat besi dianalisis dengan metode Spektrofotometri Serapan Atom (SSA). Karakteristik organoleptik dianalisis dengan uji hedonik 9 skala dan uji *Just-About-Right* (JAR) 9 skala.

Hasil: Terdapat perbedaan yang signifikan ($p < 0,05$) dari penambahan tepung buah bit dan kurma terhadap kandungan zat besi *snack bar*, hasil uji hedonik meliputi warna, rasa, tekstur dan keseluruhan *snack bar*, serta hasil uji *Just-About-Right* (JAR) meliputi aroma *roasty*, rasa manis, kecerahan, dan kepadatan *snack bar*. Kandungan zat besi tertinggi terdapat pada formula F2 dengan nilai 2,54 g/100 g *snack bar*. Formula F0 menerima penalti dengan hasil signifikan ($p < 0,05$) untuk kurang manis dan terlalu cerah.

Simpulan: Penambahan tepung buah bit dan kurma berpengaruh terhadap peningkatan kandungan zat besi dan karakteristik organoleptik *snack bar*.

Kata kunci: bit, kurma, mocaf, *snack bar*, zat besi

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Iron Content and Organoleptic Characteristics of Snack Bars with Mocaf Flour, Beetroot Flour, and Dates

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ABSTRACT

Background: Mocaf flour, beetroot flour, and dates are rich in iron and have the potential to be processed together into snack bars as an alternative functional food source of iron to prevent Iron Deficiency Anemia (IDA) in adolescent girls in Indonesia.

Objective: To analyze the iron content and organoleptic characteristics of snack bars made with mocaf flour, beetroot flour, and dates.

Methods: An experimental study with four treatment groups based on the ratio of mocaf flour, beetroot flour, and dates: F0 (100%:0%:0%), F1 (50%:30%:20%), F2 (50%:25%:25%), and F3 (50%:20%:30%). Iron content was analyzed using the Atomic Absorption Spectrophotometry (AAS) method. Organoleptic characteristics were analyzed using a 9-point scale hedonic test and a 9-point scale Just-About-Right (JAR) test.

Results: Significant differences ($p < 0.05$) were observed in the iron content of snack bars due to the addition of beetroot flour and dates. Hedonic test results, including color, taste, texture, and overall acceptability, as well as JAR test results for roasted aroma, sweetness, brightness, and density, showed significant variation. The highest iron content was found in formula F2, with a value of 2.54 g/100 g of snack bar. Formula F0 received significant penalties ($p < 0.05$) for being less sweet and too bright.

Conclusion: The addition of beetroot flour and dates enhances the iron content and improves the organoleptic characteristics of snack bars.

Keywords: beetroot, dates, iron, mocaf, snack bar

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