Analisis Zat Gizi *Fruit Leather* Jambu Biji Merah (*Psidium Guajava*) dengan Penambahan Tepung Daun Kelor (*Moringa Oleifera*) untuk Anemia Defisiensi Besi

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ABSTRAK

Latar belakang: Anemia defisiensi besi merupakan masalah kesehatan global yang perlu dikendalikan, salah satunya melalui konsumsi makanan yang cukup akan zat besi sekaligus memperhatikan faktor *enhancer* zat besi. *Fruit leather* berbahan jambu biji merah dan tepung daun kelor dapat menjadi inovasi camilan bagi anemia karena memiliki kandungan zat besi dan vitamin C yang cukup sehingga dapat mengatasi anemia defisiensi besi.

Tujuan: Menganalisis pengaruh penambahan tepung daun kelor terhadap zat gizi *fruit leather* jambu biji merah.

Metode: Penelitian eksperimental rancangan acak lengkap 1 faktor yaitu variasi formulasi jambu biji merah dan tepung daun kelor (100:0, 99:1, 98:2, dan 97:3). Analisis kadar serat pangan dengan enzimatik gravimetri, vitamin C dengan spektrofotometri UV-Vis, zat besi dengan spektrofotometri serapan atom, kadar air dengan thermogravimetri, dan kadar sukrosa dengan spektrofotometri Nelson-Somogyi. Analisis statistik dengan one way ANOVA dan kruskall walis.

Hasil: Kadar serat pangan dan zat besi tertinggi pada F_3 yaitu 12,68% dan 8,73 mg/100 g, vitamin C tertinggi pada F_2 yaitu 35,47 mg/100 g, dan kadar sukrosa tertinggi pada F_1 yaitu 46,94%. Sedangkan kadar air pada setiap formulasi berkisar pada 14% dan telah sesuai dengan syarat mutu SNI-01-1718-1996 (maks. 25%).

Simpulan: Penambahan tepung daun kelor memberikan pengaruh terhadap serat pangan, zat besi, dan sukrosa. Namun tidak berpengaruh terhadap vitamin C dan kadar air *fruit leather* jambu biji merah.

Kata kunci: Anemia defisiensi besi, *fruit leather*, jambu biji merah, tepung daun kelor.

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Nutritional Analysis of Guava (*Psidium Guajava*) Fruit Leather with Moringa Leaves (*Moringa oleifera*) Powder for Iron Deficiency Anemia

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ABSTRACT

Background: Iron deficiency anemia is a global health problem that needs to be controlled, one of which is through consuming food that is sufficient in iron as well as enhancing factors. Fruit leather made from red guava and moringa leaf flour can be an innovative snack for anemia because it contains sufficient iron and vitamin C so it can overcome iron deficiency anemia.

Objective: To analyze the effect of addition moringa leaf flour on the nutrients of red guava fruit leather.

Methods: A completely randomized experimental study with one factor, namely variations in the formulation of red guava and moringa leaf flour (100:0, 99:1, 98:2, dan 97:3). Dietary fiber was analyzed using enzymatic gravimetry, vitamin C was analyzed using UV-Vis spectrophotometry, iron was analyzed using atomic absorption spectrometry, water content using thermogravimetry, and sucrose content using Nelson-Somogyi spectrophotometry. Statistical analysis with one way ANOVA or Kruskall Walis.

Results: Dietary fiber and iron with the highest levels in F_3, that is 12,68% and 8,73 mg/100 g, the highest levels of Vitamin C in F_2, that is 35,47 mg/100 g, and the highest levels of sucrose in F_3, that is 46,94%. Meanwhile, the water content in each formulation is around 14% and is in accordance with the quality requirements of SNI-01-1718-1996 (max. 25%).

Conclusion: The addition of Moringa leaf flour has an effect on dietary fiber, iron and sucrose. However, it has no effect on vitamin C and water content of fruit leather.

Keywords: Iron deficiency anemia, fruit leather, red guava, moringa leaves.

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