

KANDUNGAN ZAT GIZI, SIFAT FISIK, DAN DAYA TERIMA MAKANAN JAJANAN STIK DAUN SINGKONG (*MANIHOT ESCULENTA CRANTZ*) UNTUK ANAK USIA SEKOLAH (AUS)

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INTISARI

Latar Belakang: Daun singkong merupakan sayuran lokal yang mengandung zat gizi tinggi namun pemanfaatannya sebagai bahan pangan masih rendah, begitu pula daya terimanya pada anak usia sekolah (AUS). Oleh karena itu supaya zat gizi yang terkandung dalam daun singkong dapat dimanfaatkan oleh tubuh AUS maka perlu diolah menjadi makanan yang disukai oleh AUS seperti stik dengan menambahkan tepung daun singkong.

Tujuan: Mengetahui sifat fisik, daya terima, dan kandungan zat gizi stik daun singkong.

Metode: Jenis penelitian *true experiment* dengan rancangan acak lengkap (RAL) yang terdiri dari 4 variasi penambahan tepung daun singkong dalam stik yaitu 0 g (Formula A), 2 g (Formula B), 4 g (Formula C), dan 6 g (Formula D). Stik daun singkong diujikan sifat fisik secara subjektif, daya terima kepada 92 panelis tidak terlatih, dan kandungan zat gizi. Analisis statistik menggunakan *one-way ANOVA* dan *Duncan* ($\alpha=0,05$), apabila data tidak terdistribusi normal maka digunakan uji *Kruskal Wallis* dan *Mann Whitney*. Penentuan formula stik daun singkong terbaik diperoleh dari nilai rerata daya terima tertinggi secara keseluruhan.

Hasil: Hasil pengamatan sifat fisik menunjukkan bahwa semakin tinggi penambahan tepung daun singkong maka stik semakin berwarna hijau, beraroma dan berasa daun singkong, serta bertekstur rapuh. Hasil uji daya terima berbeda signifikan ($p<0,05$) dan formulasi stik daun singkong dapat diterima secara umum (warna, aroma, rasa, tekstur, keseluruhan) dengan tingkat kesukaan adalah suka (3 dari skala maksimal 4). Formula C yaitu penambahan 4 g tepung daun singkong merupakan formula stik daun singkong yang paling disukai berdasarkan uji daya terima. Hasil kandungan zat gizi berbeda signifikan terhadap kadar air, namun tidak berbeda pada kadar abu, protein, lemak, dan karbohidrat. Kadar air tertinggi pada Formula D (10,16%) dan terendah pada Formula B (5,18%).

Kesimpulan: Penambahan tepung daun singkong mempengaruhi daya terima dan kadar air stik daun singkong, namun tidak mempengaruhi kadar abu, protein, lemak, dan karbohidrat. Formula terbaik berdasarkan daya terima yaitu Formula C dengan kandungan zat gizi sebesar 133,67 kkal; 2,22 g protein; 7,26 g lemak; dan 14,85 g karbohidrat.

Kata Kunci: Tepung daun singkong, *Manihot esculenta* Crantz, stik, daya terima, kandungan zat gizi, anak usia sekolah

NUTRIENT CONTENTS, PHYSICAL PROPERTIES, AND ACCEPTANCE IN

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SNACK STICKS OF CASSAVA LEAVES (*MANIHOT ESCULENTA* CRANTZ) FOR SCHOOL-AGE CHILDREN

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ABSTRACT

Background: *Manihot esculenta* leaf is local plant rich in nutrient unfortunately its utilization as food ingredient was limited, as well as the acceptance of school-aged children. Therefore, so that the nutrients contained in cassava leaves can be utilized by school-age children body then it needs to be processed into food preferred by them like snack sticks by adding cassava leaves powder.

Goal: To evaluate physical properties, acceptance, and nutrient contents of snack sticks of cassava leaves.

Method: Experimental research type was true experiment with complete randomized design consisting of 4 variations of cassava leaves powder added in snack sticks of 0 g (Formula A), 2 g (Formula B), 4 g (Formula C), and 6 g (Formula D). The physical properties of snack sticks of cassava leaves were subjectively tested, acceptance to 92 untrained panelists, and nutrient contents. Statistical analysis using one-way ANOVA and Duncan ($\alpha = 0,05$), if the data is not normally distributed then Kruskal Wallis and Mann Whitney test. The best formulation of snack sticks of cassava leaves was chosen by counting the highest mean score of the school-age children's acceptance.

Result: The result of observation of physical properties showed that the higher addition of cassava leaves in snack sticks the more green, flavored and tasted cassava leaves, and textured brittle. The results of the acceptance test were significantly different ($p < 0.05$) and snack sticks of cassava leaves formulation was generally accepted (color, flavor, taste, texture, whole) with the preference scale was like (3 of the maximum scales 4). Formula C, the addition of 4 g cassava powder, was the most preferred formula of snack sticks of cassava leaves based on acceptance test. The results of nutrient contents significantly different to water content, but not different in ash, protein, fat, and carbohydrate content. The highest water content was found in Formula D (10.16%) and the lowest was found in Formula B (5.18%).

Conclusion: The addition of cassava powder affects the children's acceptance and water content of snack sticks of cassava leaves but does not affect the content of ash, protein, fat, and carbohydrate. The best formula based on acceptance was Formula C with nutrient contents of 133.67 kcal; 2.22 g protein; 7.26 g fat; and 14.85 g of carbohydrate.

Keywords: Cassava leaves powder, *Manihot esculenta* Crantz, snack sticks, acceptance, nutrient contents, school-age children

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