

ABSTRAK

ERISKE RIESTAMALA. 2019. Formulasi Tepung Ubi Jalar Kuning, Tepung Kedelai, dan Bayam Hijau terhadap Mutu Kimia, Nilai Energi, Kadar Fe, Vitamin C dan Mutu Organoleptik *Cookies* sebagai Makanan Selingan Remaja Putri Penderita Anemia. Pembimbing : **I Komang Suwita, S.ST, MP dan Maryam Razak, S.TP., M.Si**

Salah satu masalah gizi utama di Indonesia yaitu Anemia Defisiensi Besi (ADB) pada remaja putri dengan prevalensi menurut Riskesdas 2018 sebesar 48,9%. Tingginya prevalensi anemia pada remaja putri berkaitan dengan kebiasaan remaja putri yang ingin tampil langsing sehingga membatasi asupan makanannya dan mengalami proses menstruasi setiap bulan yang membutuhkan asupan zat besi lebih daripada laki-laki.

Jenis penelitian yang digunakan adalah penelitian eksperimen laboratorium dengan desain Rancangan Acak Lengkap (RAL) menggunakan 3 taraf perlakuan dan dilakukan pengulangan sebanyak 3 kali dalam substitusi tepung ubi jalar kuning, tepung kedelai dan bayam hijau sebagai bahan pembuatan *cookies* berdasarkan kebutuhan *snack* remaja putri (10% dari kebutuhan energi) menurut AKG 2013. Penelitian ini dilaksanakan pada bulan Januari hingga Mei 2019

Hasil penelitian ini yaitu : 1) Analisis mutu kimia (kadar air, kadar abu), mutu gizi (protein, lemak, dan karbohidrat) sudah memenuhi syarat *cookies* berdasarkan SNI 01-2973-1992 kecuali kadar lemak. Hasil analisis statistik *Oneway Anova* pada tingkat kepercayaan 95% menunjukkan bahwa proporsi substitusi tepung ubi jalar kuning, tepung kedelai, dan bayam hijau memberikan pengaruh yang signifikan ($p=0,000$) terhadap kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, zat besi, dan vitamin C. 2) Analisis statistik *Oneway Anova* pada tingkat kepercayaan 95% menunjukkan bahwa proporsi substitusi tepung ubi jalar kuning, tepung kedelai, dan bayam hijau memberikan pengaruh yang tidak signifikan ($p=0,417$) terhadap nilai energi *cookies*. 3) Analisis mutu organoleptik secara keseluruhan panelis menyatakan suka terhadap warna aroma, tekstur, dan rasa *cookies* dan *Kruskal Wallis* menunjukkan bahwa proporsi substitusi tepung ubi jalar, tepung kedelai, dan bayam hijau memberikan pengaruh tidak signifikan terhadap warna, aroma, tekstur, dan rasa. 4) Taraf perlakuan terbaik *cookies* yaitu P2 ($N_h=0,68$) yaitu substitusi 16% tepung ubi jalar kuning, 17% tepung kedelai, dan 21% bayam hijau.

Perlu mempertimbangkan kembali pemilihan atau penambahan bahan pangan lain pada pembuatan *cookies* untuk memperoleh kadar Fe dan Vitamin C yang sesuai dengan kebutuhan sasaran.

Kata Kunci: mutu kimia, nilai energi, kadar Fe, vitamin C, *cookies*, anemia remaja putri

ABSTRACT

ERISKE RIESTAMALA. 2019. Formulation of Yellow Sweet Potato Flour, Soybean Flour, and Green Spinach on Chemical Quality, Energy Value, Fe Levels, Vitamin C and Organoleptic Quality Cookies as Young Women Intermediate Foods for People with Anemia. Advisor: **I Komang Suwita, S.ST, MP dan Maryam Razak, S.TP., M.Si**

One of the main nutritional problems in Indonesia, namely Iron Deficiency Anemia (ADB) in pravelensi girls according to Riskesdas 2018 of 48.9%. The prevalence of anemia in young women is related to the habits of young women who want to appear slim so that they limit their food intake and experience menstrual processes every month which require more iron intake than men.

The type of research used was laboratory experiment research with a completely randomized design (CRD) using 3 levels of planning and repeated three times in substitution of yellow sweet potato flour, soybean flour and green spinach as ingredients for making cookies according to teenage food requirements (10% from energy needs) according to the 2013 AKG. This research was conducted from January until May 2019.

The results of this study are: 1) Analysis of chemical quality (moisture content, ash content), nutritional quality (protein, fat, and carbohydrate) has met the requirements of cookies based on SNI 01-2973-1992 except fat content. The results of Oneway Anova statistical analysis at a 95% confidence level showed that the proportion of yellow sweet potato flour, soybean flour and green spinach substitutes had a significant effect ($p = 0,000$) on water content, ash content, protein content, fat content, carbohydrate content, iron, and vitamin C. 2) Statistical analysis of Oneway Anova at a 95% confidence level showed that the proportion of substitute yellow sweet potato flour, soy flour and green spinach had no significant effect ($p=0.417$) on the energy value of cookies. 3) The overall organoleptic quality analysis of the panelists stated that they liked the color of aroma, texture, and taste of cookies and Kruskal Wallis showed that the proportion of substitution of sweet potato flour, soy flour and green spinach had no significant effect on color, aroma, texture and taste. 4) The best level of cookies is P2 ($Nh = 0.68$) which is substitution of 16% yellow sweet potato flour, 17% soy flour, and 21% green spinach.

It is necessary to reconsider the selection or addition of other food ingredients in making cookies to obtain Fe and Vitamin C levels that are in accordance with the needs of the target.

Keywords: chemical quality, energy value, Fe content, vitamin C, cookies, anemia of young women