

ABSTRAK

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Latar Belakang: Obesitas mendorong terjadinya resistensi insulin yang dapat meningkatkan kadar glukosa darah postprandial. Strategi gizi untuk mengontrol glikemik dengan mengkonsumsi makanan rendah indeks glikemik dan beban glikemik, serta sumber serat seperti puding “*Euonii Musa*”.

Tujuan: Menganalisis kandungan zat gizi, Indeks glikemik dan bbeban glikemik serta kadar glukosa darah postprandial pada individu obesitas.

Metode: Jenis penelitian merupakan *complete randomized design*. Dua puluh dua responden penelitian terbagi menjadi dua kelompok yaitu kelompok kontrol diberikan puding kontrol dan kelompok intervensi diberikan puding “*Euonii Musa*” sesuai dengan 25 g *available carbohydrate*. Analisis zat gizi menggunakan uji *one-way anova* dan pengambilan sampel darah melalui vena dorsalis untuk pemeriksaan glukosa darah postprandial pada menit ke-0, 30, 60, 90, dan 120 yang dianalisis dengan *independent sample t-test*. Uji normalitas menggunakan Shapiro-Wilk, data berdistribusi normal menggunakan *t paired t test* dan tidak normal menggunakan *mann-withney*.

Hasil: Puding “*Euonii Musa*” memiliki kandungan pati resisten, inulin, serat larut dan serat tidak larut lebih tinggi dibandingkan puding kontrol ($p < 0,001$). Indeks glikemik puding kontrol termasuk kategori sedang, sedangkan puding “*Euonii Musa*” tergolong indeks glikemik rendah. Terdapat pengaruh kadar glukosa darah postprandial pada menit ke-120 pada kelompok intervensi ($p < 0,001$).

Kesimpulan: Pemberian puding “*Euonii Musa*” dapat menurunkan rerata kadar glukosa darah postprandial.

Kata Kunci: Rumput laut, pisang kepok, glukosa postprandial, obesitas

ABSTRACT

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Background: Obesity contributes to the development of insulin resistance, which can elevate postprandial blood glucose levels. Nutritional strategies to control glycemia include the consumption of low glycemic index (GI) and glycemic load (GL) foods, as well as fiber sources such as “Euonii Musa” pudding.

Objective: To analyze the nutritional content, glycemic index, glycemic load, and postprandial blood glucose levels in obese individuals.

Method: This study employed a complete randomized design. Twenty-two respondents were divided into two groups: the control group received control pudding, while the intervention group was given “Euonii Musa” pudding, corresponding to 25 g of available carbohydrates. Nutritional analysis was performed using one-way ANOVA, and blood samples were taken from the dorsal vein for postprandial glucose testing at 0, 30, 60, 90, and 120 minutes, analyzed with independent sample t-tests. Normality was assessed using the Shapiro-Wilk test; normally distributed data were analyzed using paired t-tests, while non-normally distributed data were analyzed using the Mann-Whitney U test.

Result: “Euonii Musa” pudding contained higher levels of resistant starch, inulin, soluble fiber, and insoluble fiber compared to control pudding ($p < 0.001$). The glycemic index of the control pudding was classified as moderate, whereas “Euonii Musa” pudding was classified as low glycemic index. A significant effect on postprandial blood glucose levels was observed at 120 minutes in the intervention group ($p < 0.001$).

Conclusion: The administration of “Euonii Musa” pudding can reduce the average postprandial blood glucose levels.

Keywords : Seaweed, kepok banana, postprandial glucose, obesity