

**PENGARUH PEMBERIAN MAKANAN SELINGAN BERBAHAN DASAR
TEPUNG GEMBILI (*Dioscorea esculenta*) TERHADAP KADAR
KOLESTEROL TOTAL ORANG DEWASA *OVERWEIGHT* DAN OBESITAS**

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INTISARI

Latar belakang : *Overweight* dan obesitas menjadi masalah kesehatan serius di dunia dan merupakan penyebab penyakit kardiovaskuler. Gangguan metabolisme lipid seperti peningkatan kadar kolesterol total adalah salah satu faktor risiko peningkatan penyakit kardiovaskuler. Penelitian sebelumnya menyatakan bahwa serat pangan khususnya serat larut dapat menurunkan kadar kolesterol total. Salah satu umbi lokal Indonesia yang mengandung serat larut yang tinggi adalah gembili (*Dioscorea esculenta*).

Tujuan : Mengetahui pengaruh pemberian makanan selingan berbahan dasar tepung gembili (*Dioscorea esculenta*) terhadap kadar kolesterol total darah orang dewasa *overweight* dan obesitas.

Metode : Merupakan penelitian kuasi eksperimental dengan rancangan pre test dan post test tanpa kelompok kontrol yang diikuti oleh 27 orang dewasa dengan IMT > 25 kg/m². Subjek diberikan makanan selingan yang terbuat dari 37 gram per porsi tepung gembili selama enam minggu. Pengambilan sampel darah dan pengukuran antropometri dilakukan pada saat sebelum dan setelah pemberian perlakuan. Kadar kolesterol total diukur dengan menggunakan metode enzimatik fotometrik. Data dianalisis menggunakan uji normalitas *Shapiro-Wilk*, uji beda *paired t test* atau *Wilcoxon signed rank test* dan uji korelasi *Spearman* atau *Pearson*.

Hasil : Subjek mengonsumsi makanan selingan berbahan dasar tepung gembili dengan rata-rata per hari sebesar 28,32 ± 16,78 gram. Setelah enam minggu perlakuan, kadar kolesterol total seluruh subjek, subjek laki-laki, perempuan, hiperlipidemik, dan obesitas mengalami penurunan yang signifikan (p= 0,001; p= 0,033; p= 0,014; p= 0,0003; p= 0,004; berturut-turut). Namun setelah diuji korelasi antara rata-rata asupan gembili dengan perubahan kadar kolesterol total pada seluruh subjek tidak terdapat hubungan yang signifikan (r= 0,109; p= 0,585).

Kesimpulan : Pemberian makanan selingan dari tepung gembili dapat menurunkan kadar kolesterol total secara signifikan pada orang dewasa *overweight* dan obesitas.

Kata kunci : gembili (*Dioscorea esculenta*), kolesterol total, *overweight*, obesitas

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**THE EFFECT OF LESSER YAM (*Dioscorea esculenta*) SNACK
CONSUMPTION ON TOTAL CHOLESTEROL LEVELS IN OVERWEIGHT AND
OBESE ADULTS**

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ABSTRACT

Background : Overweight and obesity is a serious health problem in the world and causes of cardiovascular disease. Lipid metabolism disorders such as increased of total cholesterol levels is one of the risk factors of cardiovascular disease. Previous studies state that dietary fiber, especially soluble fiber can decrease total cholesterol levels. One of the local Indonesian yams that have a high soluble fiber is lesser yam (*Dioscorea esculenta*).

Objective : To determine the effect of lesser yam snack consumption on total cholesterol levels in overweight and obese adults.

Methods : This study used quasi-experimental design of pre test and post test without control group, followed by 27 adults with s BMI > 25 kg/ m². Subjects were given lesser yam snack made from 37 grams per portion of its flour in six weeks of treatment period. Blood sampling and anthropometric measurements were done at before and after the treatment. The total cholesterol level was determined using enzymatic-photometric method. The data obtained were analyzed using Shapiro-Wilk normality test, paired t-test or Wilcoxon comparative test, and Spearman or Pearson correlation test.

Results : Subjects consumed lesser yam snack with an average of 28.32 ± 16.78 grams per day. Total cholesterol levels in men, women, hyperlipidemic, obesity, and all subjects were decreased significantly (p= 0,001; p= 0,033; p= 0,014; p= 0,0003; p= 0,004; respectively) after six weeks of treatment. However, after having tested the correlation between the average intake of lesser yam cookies with changes in total cholesterol levels in all subjects there is no significant correlation (r = 0.109; p = 0.585).

Conclusion : The consumption of lesser yam snack was decreased of total cholesterol levels significantly in overweight and obese adults.

Key words : lesser yam (*Dioscorea esculenta*), total cholesterol, overweight, obesity

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