INTISARI

Latar Belakang: Diet tinggi serat terbukti dapat menurunkan kadar trigliserida. FiberCreme-IMO merupakan krimer tinggi serat yang berpotensi memperbaiki profil trigliserida subjek hiperlipidemia. Variasi genetik *ChREBP* rs3812316 dan *ANGPTL8* rs2278426 diperkirakan mempengaruhi respon trigliserida terhadap konsumsi kukis FiberCreme-IMO.
Tujuan Penelitian: Mengkaji efek FiberCreme-IMO terhadap kadar trigliserida dan efek simultan FiberCreme-IMO dengan genotip *ChREBP* rs3812316 dan *ANGPTL8* rs2278426 terhadap kadar trigliserida subjek hiperlipidemia.
Metode: Lima puluh subjek hiperlipidemia dibagi menjadi 2 kelompok perlakuan yaitu kelompok diberi kukis FiberCreme-IMO (n=25), dan kukis santan sebagai kontrol (n=25). Kukis perlakuan diberikan 80 gram per hari selama empat minggu. Kadar trigliserida diukur sebelum dan 4 minggu setelah perlakuan. Variasi genotip dianalisis di akhir penelitian menggunakan metode PCR-RFLP.
Hasil Penelitian: Kukis FiberCreme-IMO tidak menurunkan kadar trigliserida secara signifikan (-13,90 ± 11,70; p=0,083). Kukis FiberCreme-IMO dengan variasi genotip *ChREBP* rs3812316 dan *ANGPTL8* rs2278426 tidak memberikan efek yang signifikan terhadap penurunan kadar trigliserida.
Kesimpulan: Pemberian kukis FiberCreme-IMO selama 4 minggu tidak signifikan menurunkan kadar trigliserida subjek hiperlipidemia. Variasi genotip dengan kukis FiberCreme-IMO tidak memberikan efek yang signifikan terhadap kadar trigliserida.

Kata kunci: FiberCreme-IMO, Hiperlipidemia, Nutrigenetik, Serat

ABSTRACT

***Background**: High fiber diet can reduce the triglyceride levels of hyperlipidemic subjects. FiberCreme-IMO is a non-dairy creamer product containing fiber that potentially improves triglyceride profile. Genetic variants of ChREBP rs3812316 and ANGPTL8 rs2278426 may affect triglyceride response on the consumption of FiberCreme-IMO cookies.*
***Objectives**: This study aims to investigate the effect of FiberCreme-IMO on triglyceride levels, and the simultaneous effects of FiberCreme-IMO and genotypes of ChREBP rs3812316 and ANGPTL8 rs2278426 on triglyceride levels of hyperlipidemic subjects.*
***Methods**: Fifty adults with hyperlipidemia were assigned into two groups: one group consumed cookies made from FiberCreme-IMO (n=25), and another consumed cookies made from coconut milk powder (n=25). Each subject consumed 80 grams of cookies per day for four weeks. Serum triglycerides were measured at baseline and four weeks after treatment. Genotype variations were analyzed at the end of the study using PCR-RFLP.*
***Results**: FiberCreme-IMO cookies did not reduce the triglyceride levels significantly (-13,90 ± 11,70; p = 0,083). FiberCreme-IMO cookies and ChREBP rs3812316 and ANGPTL8 rs2278426 did not significantly reduce the triglyceride levels.*
***Conclusion**: FiberCreme-IMO cookies did not significantly reduce the triglyceride levels after four week-consumption. FiberCreme-IMO cookies and genetic variants of ChREBP and ANGPTL8 did not significantly affect the triglyceride levels.*

***Keywords**: Dietary Fiber, FiberCreme-IMO, Hyperlipidemia, Nutrigenetic*