

**UJI PREKLINIS VIRGIN COCONUT OIL TERHADAP PENINGKATAN KADAR
KOLESTEROL BAIK HDL, PENURUNAN KADAR TRIGLISERIDA,
PROFIL KIMIA ASAM LEMAK (C6-C18) DAN OMEGA-3 PADA
SERUM DARAH TIKUS PUTIH (*Mus musculus*)**

**¹Sumaryati Syukur, ¹Rina Dahlyanti, ¹Titi Sumanti, ¹Yulia Murni, ¹Zoni Hidayat,
²Helmi Arifin, ³Endang Purwati, ⁴Risfa Heri**

¹Laboratorium Biokimia/Bioteknologi Jurusan Kimia FMIPA-UNAND Padang

²Laboratorium Farmakologi Jurusan Farmasi FMIPA-UNAND Padang

³Laboratorium Nutrisi Ternak FATERNA-UNAND Padang

⁴Laboratorium LITBANG Pasca Panen Dep.Pertanian Cimanggu, Bogor

ABSTRACT

The Virgin Coconut Oil (VCO) products have different qualities and controversy effects of lipids metabolism. This research has been used one of VCO product that was produced by fermentation method using *Lactobacillus sp*. It has high amount of lauric acid (C12) up to 51 %, caprylic acid (C8) 8.9 %, capric acid (C10) 7 % include Omega-3, 6 and 9, vitamins A, D, E, K and three kinds of *phytohormone*. The ratio of Omega-3 and 6 was very proportional, therefore it is important to investigate the Pre Clinic Test of animal experiment. Pre Clinic Test of dietary VCO as food supplement has been determined by using 40 mice's, which divided into 4 groups. Feeding on egg yolk to Group I (negative control), Group II (positive control) increased cholesterol level. The others were Group III (egg yolk and VCO 2 %) and group IV (egg yolk and VCO 4 %). It was determined the total of cholesterol, HDL at 10th, 20th and 30th day treated by using the enzymatic methods. The dietary of VCO 2-4 % resulted in significant increases in HDL levels from 32 % to 69 %. The dietary of VCO 4 % for four weeks did not toxic to mice metabolism. Triglycerides level decreased 50 % from 177 to 85 and similar resulted to cholesterol ratio. Feeding on VCO for 4 weeks, the SCFA and MCFA not detected in serum of mice. The LCFA (C16) palmitate in significant decreased from 0.96 to 0.1%. The significant level of Omega-3 increased more than three times in serum of mice dietary VCO 2-4 %.

Keywords: *Coconut Oil, Lactobacillus*

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