

INTISARI

YANTI, S., 2014, PENGARUH PEMBERIAN KOMBINASI EKSTRAK KULIT KAYU MANIS (*Cinnamomum burmanni* Nees ex *Bl.*) DAN EKSTRAK DAUN PEPAYA (*Carica papaya* L.) TERHADAP KADAR LDL DAN HDL TIKUS PUTIH JANTAN, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Penyakit jantung koroner (PJK) terjadi karena peningkatan kadar *Low Density Lipoprotein* (LDL) dan penurunan kadar *High Density Lipoprotein* (HDL) dalam darah merupakan faktor resiko arterosklerosis. Kulit kayu manis (*Cinnamomum burmanni* Nees ex *Bl.*) dan daun pepaya (*Carica papaya* L.) mengandung flavonoid, saponin, dan tannin. Flavonoid dan saponin mampu menurunkan kadar kolesterol darah, serta menghalangi adanya reaksi oksidasi kolesterol dalam tubuh. Penelitian bertujuan untuk mengetahui pengaruh kombinasi ekstrak kulit kayu manis dan ekstrak daun pepaya dalam menurunkan LDL dan meningkatkan HDL pada serum hewan uji.

Penelitian ini menggunakan 35 ekor hewan uji tikus yang dibagi dalam 7 kelompok yaitu kontrol negatif (CMC 0,5%), kontrol positif (simvastatin), tunggal ekstrak kayu manis 75 mg/Kg BB, tunggal ekstrak daun pepaya 750 mg/Kg BB, kombinasi I (57mg/Kg BB:188mg/Kg BB), kombinasi II (38mg/Kg BB:375mg/Kg BB), kombinasi III (19mg/Kg BB:563mg/Kg BB). Hewan uji diukur kadar LDL dan HDL pada hari ke-0, hari ke-14, hari ke-21, hari ke-28.

Hasil penelitian ini menunjukkan bahwa kombinasi ekstrak kulit kayu manis dan ekstrak daun pepaya meningkatkan kadar HDL dan menurunkan kadar LDL serum darah pada hewan uji. Dosis kombinasi yang paling efektif adalah dosis kombinasi III 19mg/Kg BB:563mg/Kg BB. Dosis kombinasi III memiliki aktifitas sama dengan tunggal ekstrak daun pepaya dan simvastatin.

Kata kunci: LDL, HDL, kulit kayu manis (*Cinnamomum burmanni* Nees ex *Bl.*) dan daun pepaya (*Carica papaya* L.).

ABSTRACT

YANTI, S., 2014, EFFECT OF COMBINATION EXTRACT BARK CINNAMON (*Cinnamomum burmanni* Nees ex *Bl.*) AND EXTRACT LEAF PAPAYA (*Carica papaya* L.) ON LDL AND HDL LEVELS IN WHITE MALE RATS, SKRIPSI, PHARMACY FACULTY, SETIA BUDI UNIVERSITY, SURAKARTA.

Increased levels of high density lipoprotein (HDL) and decreased levels of low density lipoprotein (LDL) in the blood is a risk factor for atherosclerosis leading to coronary heart disease (CHD). Bark of cinnamon (*Cinnamomum burmanni* Nees ex *Bl.*) and leaf of papaya (*Carica papaya* L.) contain flavonoids, saponins, and tannins. Flavonoids and saponins can reduce blood cholesterol levels, and prevented the oxidation of cholesterol in the body. The purpose of this research is to find out combination effect cinnamon's bark extract and papaya's leaf extract on increase of HDL and decrease of LDL levels serum in tested animals.

The research was used 35 animals test and the mice were divided into 7 groups. There were negative control (CMC 0,5%), positive control (simvastatin), extract bark cinnamon 75 mg/Kg BW, extract leaf papaya 750 mg/Kg BW, combination I (57mg/Kg BW:188mg/Kg BW), combination II (38mg/Kg BW:375mg/Kg BW), and the combination of III (19mg/Kg BW:563mg/Kg BW). Animals test of LDL and HDL level were measured on day 0, day 14, day 21, day 28.

Concluded this research that the combination of extract bark cinnamon and extract leaf papaya affects on Increased HDL and decreased LDL levels in the animals' blood. The most effective combination dose is dose combination III 19mg/Kg Bw:563mg/Kg BW. Dose combination III has the same activity with an extract papaya and simvastatin.

Keywords: LDL, HDL, kulit kayu manis (*Cinnamomum burmanni* Nees ex *Bl.*) bark of cinnamon (*Cinnamomum burmanni* Nees ex *Bl.*) and leaf of papaya (*Carica papaya* L.).