Pengaruh ekstrak buah garcinia atroviridis terhadap kadar ldl pada darah tikus strain wistar yang diberi asupan lemak berlebih = Effect of garcinia atroviridis fruit extract to ldl level in high lipid diet wistar strain rats blood

Dwi Wicaksono, author

Abstrak

[ABSTRAK
Penyakit kardiovaskular merupakan salah satu penyebab utama kematian di Indonesia. Low Density Lipoprotein (LDL) adalah salah satu profil lemak yang memengaruhi kejadian penyakit kardiovaskular. Penelitian ini bertujuan untuk mengetahui efek buah Garcinia atroviridis sebagai alternatif terapi untuk menurunkan kadar LDL. Penelitian ini merupakan studi eksperimental, perlakuan terhadap hewan coba tikus, dibagi dalam kelompok propylthiouracil (PTU)+diet tinggi lemak, kelompok PTU, dan pemberian 3 kelompok ekstrak. Induksi dengan asupan tinggi lemak (0,375 ml gajih ayam dan 1,5 ml kuning telur puyuh) dan PTU pada kelompok PTU+diet tinggi lemak dan 3 kelompok ekstrak. Pengambilan sampel darah pada tikus PTU dan PTU+diet tinggi lemak setelah 21 hari, dan 42 hari pada kelompok ekstrak. Data dianalisis menggunakan tes parametrik one way ANOVA dan uji T tidak berpasangan. Didapatkan rata-rata LDL tiap perlakuan: (1) PTU (24,8), (2) PTU+diet tinggi lemak (52,4), (3) dosis 10 mg (22,8), (4) dosis 20 mg (25,4), (5) dosis 30 mg (36,25). Pada uji T menunjukkan kenaikan LDL yang signifikan pasca induksi, pada uji ANOVA menunjukkan penurunan LDL pasca pemberian ekstrak buah Garcinia atroviridis yang berbeda bermakna. Analisis Post Hoc menunjukkan penurunan LDL paling signifikan pada dosis 10 mg. Disimpulkan bahwa pemberian ekstrak buah Garcinia atroviridis pada tikus strain Wistar secara signifikan menurukan kadar LDL.
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ABSTRACT
Cardiovascular disease is one of the leading cause of death in Indonesia. Low Density Lipoprotein (LDL) is one of lipid profile that has effect on cardiovascular disease. This research is aimed to discover the effect of Garcinia atroviridis fruit extract to lower LDL level. This is an experimental study, intervention was given differently to laboratory rats: propylthiouracil (PTU)+high lipid diet, PTU, and 3 extract groups. Induction is conducted with high lipid diet (0,375 ml chicken fat and 1,5 ml quail egg yolk) and PTU, in PTU with high lipid diet and 3 extract groups. Rats blood was extracted, PTU and PTU+high lipid diet after 21 days, and 42 days for extract group. Data was analysed using one way ANOVA parametric test and independent T test. Mean LDL value of each treatment: (1) PTU (24,8), (2) PTU+high lipid diet (52,4), (3) 10 mg (22,8), (4) 20 mg (25,4), (5) 30 mg (36,25). T test showed significant result in increasing LDL level after induction and ANOVA test showed significant result in lowering LDL level after given Garcinia atroviridis fruit extract. Post Hoc analysis shows the most significant result comes from 10 mg dose. In conclussion, Garcinia atroviridis fruit extract significantly lowers blood LDL of Wistar strain rats.;Cardiovascular disease is one of the leading cause of death in Indonesia. Low Density Lipoprotein (LDL) is one of lipid profile that has effect on cardiovascular disease. This research is aimed to discover the effect of Garcinia atroviridis fruit extract to lower LDL level. This is an experimental study, intervention was given differently to laboratory

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