Hypocholesterolemic effect of black cincau (Mesona palustris bl) based on instant tea in hypercholesterolemic wistar rats

Tri Dewanti Wdyaningsih
Brawijaya University, Indonesia

Background: Increased cholesterol concentrations and low plasma HDL concentrations are hypercholesterolemia. This disease will cause atherosclerosis and finally lead to the coronary heart disease. Diet modification is one of recommended therapy to decrease cholesterol level by increasing fiber and antioxidant intake from herb. Black cincau or black grass jelly is identified as containing fiber and antioxidant compounds, the compounds of cinnamon and pandanus are also useful as antioxidant in black cincau based of instant tea. The aim of this study was to prove the effect of black cincau based of instant tea of different dosages on cholesterol and HDL of hypercholesterolemic rats.

Methods: This research was true-experimental using pre-post test with control group design. Subjects were male Wistar rats, 7-8 weeks old, 150-200 grams weight, inducted hypercholesterolemia. They were divided into 5 groups of the treatment, which were, normal control, positive control (without treatment), given black cincau extract, and black cincau based on instan tea 0.126 g/200 g and 0.252 g/200 g weight of rat dosage for 4 weeks.

Result: The treatment of black cincau based on instant tea for 28 days counted to 0.126 g/200 g BW/day in hypercholesterolemic rat had reduced cholesterol 50.01%, and also increased HDL to 36.47%.

Conclusion: The best hypocholesterolemic effect was found in black cincau based on instant tea.

Biography
Tri Dewanti Wdyaningsih MS, is a Food Technology Graduate from Gadjah Mada University, Yogyakarta, Indonesia. Post Graduate Masters Public Health and has completed her Doctor from Airlangga University Surabaya Indonesia. She is a Senior Lecturer and Head of Food Nutrition Laboratory in Department of Food Science and Technology, Faculty of Agricultural Technology, Brawijaya University, Malang, Indonesia. She is having an experience of 20 years in Nutrition and Functional Food Research and published two books and twenty research papers in different National and International Journals.