The Consumption Effect of Gel and Solution Types of Eucheuma cottonii Seaweeds on Hypercholesterolemic of Blood Wistar Rat

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Abstract

The consumption effect of gel and solution of Eucheuma cottonii seaweed on blood lipid level were studied on hypercholesterolemic male wistar rat. The rat were made hypercholesterolemic by a ration that contained high lipid and cholesterol, and then they were given standard ration orally and 10, 15, and 20 % (w/w feed) of gel and solution seaweed parenterally. The results show that the standard ration could not reduce hypercholesterolemic to normal level while gel and solution of the seaweed could. The gel type of the seaweed has higher capacity decrease of cholesterol and triglyceride blood level. The consumption of seaweed gel 20 % and 15 % could reduce cholesterol to normal level in 9 and 15 days, respectively, while the solution type 20 % needed 18 days. The seaweed gel 10 %, solution 15 % and 1% could reduce blood cholesterol level, but they could not reach to normal level in 18 days.

Key words: cholesterol, gel, rat, solution, seaweed