

## ABSTRACT

**Decreasing Of Cholesterol Level In White Rat (*Rattus Norvegicus*) After Administration Of Konjac (*Amorphophallus Konjac*) Powder Standarized In Its Glucomannan Levels**

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Konjac glucomannan is obtained from the tuber of *Amorphophallus konjac* plant from genus *Amorphophallus*. Glucomannan is a water-soluble polysaccharide consisting of D-glucose and D-mannose that linked by  $\beta$ -1,4 glycosidic bonds. Glucomannan in konjac tuber can reduce cholesterol level by forming gel and delay gastric emptying process, thus result inhibited absorption of fat and carbohydrates. The decrease in absorption of fat and carbohydrates is expected to reduce cholesterol levels in the blood. This study aims to determine the hypolipidemic effect of konjac powder (*Amorphophallus konjac*) that had been standarized with its glucomannan level. Glucomannan level obtained in konjac powder were  $61.24 \pm 0.61\%$  (w/w). This study consisted of 5 treatment groups, each group consist of six male white rats (*Rattus norvegicus*) aged 2-2,5 months, weight of 100-300 grams. Those rats has induced with mixture of high-cholesterol diet contained lard and duck egg yolk and PTU 0,005%. Treatment groups consisted of negatif control group (CMC Na-0,3%), positive control group (simvastatin 0,455mg/kg white rat), and konjac powder dosage group I, II, and III (with glucomannan dose of 59,5 ; 115,5; 175 mg/kg white rat, respectively). The treatment was given everyday for 27 days. Measurement of cholesterol levels performed in day-5,7,10,13, 20, and 27. Meanwhile measurement of rats body weight was done everyday in order to calculate konjac powder dosage that must be given. The data obtained was analyzed with One Way ANOVA with significant value of  $p < 0,05$  and  $p < 0,01$ . The result showed that konjac powder dosage group III (175mg/kg white rat) is the best dose to reducing cholesterol levels.

Keywords : Glucomannan, *Amorphophallus konjac*, Cholesterol level, Rats, Hypercholesterolemia.