Polysaccharides of *Tremella fuciformis* as a Diet for Improvement of Constipation in Rats

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**Abstract**


Polysaccharides of *Tremella fuciformis* are known to have high water retention capacity and intestinal physiology, they are of potential for the treatment of constipation in animals. This study was conducted to determine effects of *Tremella* polysaccharides (TP) as a diet for improvement of constipation in rats. Rats were treated with Loperamide by hypodermic injection, twice a day at 2 mg/kg of body weight for each injection, to induce spastic constipation as negative control, and then fed with a diet containing 1% or 5% TP of body weight as experiment groups. Rats treated with saline were used as positive control. During the feeding trial for 14 days, the rats in all of the four groups were examined for the symptoms improvement of constipation and microflora population in the cecum of each rat. Results showed that the rats treated with Loperamide and fed with 1% or 5% TP significantly increased fecal weight, dry stool weight and water content (%) of feces (\(P < 0.05\)) compared to the negative control. The colony forming units of *Clostridium perfringens* of cecum in experiment groups was significantly decreased compared to negative control. This study indicates that *Tremella* polysaccharides are important dietary components for improvement of Loperamide-induced spastic constipations in rats and their potential for treatment of constipation in human warrants further investigations.

**Key words:** *Tremella fuciformis*, Polysaccharides, Constipation, Animal model.