Studies on the Serum Lipids Reducing Effects of Four Grain Sprouts’ Studies on the Serum Lipids Reducing Effects of ...  

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ABSTRACT

The research was to analyze general component in its contents, nutrition and the antioxidation ability as well as anti-inflammation ability of self-made wheat enzyme liquid. The results showed that the wheat enzyme liquid containing 66.5ppm total polyphenols; the half-decay concentration for NO is 92.7mg/mL; while as the half-decay concentration for PGE2 comes to 120.2mg/mL. Therefore, it's plain to see that the wheat enzyme liquid does contain anti-inflammation ability. In addition, the anti-LDL ability and anti-glycation ability in the wheat enzyme liquid is found better than the control group, and the suspend speed of LDL oxidation for the wheat enzyme liquid is 10.5 times to the control group. Animal tests were conducted to investigate the ability of wheat enzyme liquid in reducing blood lipids in hamsters. The method was to take 38 six-week-old male hamsters and randomly divide them into Control Group (C, six hamsters), High Blood Fat Group (H, eight hamsters), 6% Liquid Enzyme Group (H-6, eight hamsters), 12% Liquid Enzyme Group (H-12, eight hamsters), and 18% Liquid Enzyme Group (H-18, eight hamsters). The test was to run for six weeks, records of feed intake and weight changes were taken on every other day. The blood and liver samples were collected after six weeks and TG, TC, LDL-C and HDL-C in the serum as well as the content of liver TC and TG of the hamsters were analyzed. The results indicated there was no distinctive difference in the feed intake (P>0.05) but there were distinctive difference in the weight changes in each group of hamsters; as for blood lipids, the concentration of TC, TG and HDL-C in the serum had greater distinctive differences (P<0.05). The TC concentration in liver had distinctive difference (P<0.05), while as the TG concentration had decreased though the difference was vague. In conclusion, consuming wheat enzyme liquid is able to increase HDL-C and reduce lipids in blood.

Keywords : wheat enzyme liquid、reduce blood lipids