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大豆小肽对大鼠高血脂症和抗疲劳作用的研究

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摘要: 通过建立大鼠高血脂症动物模型，用不同剂量的自制大豆小肽灌胃大鼠，分别在第20，40，60天时尾静脉采血测定血液生化指标，并在第21天进行游泳负重实验和肝糖原含量测定，探讨了大豆低聚肽在调解血脂、预防动脉粥样硬化、抗疲劳作用。结果表明：灌胃60 d时高剂量组的大鼠的TC、TG、LDL-C、TXA-2相对于模型对照组显著降低，分别降低22.97%、8%、15.29%、18.97%,高剂量组大鼠的NO、HDL-C、PGI-2相对于模型对照组显著升高，分别升高了43.85%%、20.56%、28.92%。抗疲劳试验中，在灌胃剂量2.0 g·kg^{-1}（体重）时，小鼠负重时间比对照组延长61.49%，小鼠肝糖原含量为20.07 mg·g^{-1}，与对照组相比提高了41.14%。表明大豆小肽具有明显的预防动脉粥样硬化和抗疲劳的功能。

Abstract: Through establishing animal model group of hyperlipidemia, and feeding self made soybean peptides with different doses, blood biochemical parameters of serums collected from caudal vein were detected at 20, 40 and 60 d, the text of physical power and detect of liver glycogen content were carried out at 21 d. the functions of soybean peptides in regulating blood lipid, preventing atherosclerosis and anti-fatigue were studied by testing plasma indicators, swimming load test and liver glycogen content detection. The results showed that TC、TG、LDL-C、TXA-2 levels of the high dose group hyperlipidemia rats who were fed soybean small peptides for 60 days, with respect to the model group, decreased by 22.97%、8%、15.29%、18.97%. The NO、HDL-C、PGI_2, significant higher than model group, increased by 43.85%%,20.56%,28.92%, respectively. In anti-fatigue experiments, when administered at a dose of 2.0 g·kg^{-1}bw, swimming time of mice extended to 61.49%; mouse liver glycogen content was 20.07 mg·g^{-1}, compared with control increased by 41.14%.So soybean peptides has distinct efficacy of regulating blood lipids, preventing AS and anti-fatigue.

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