The whey, a byproduct of cheese manufacture, has high nutritional value and bioactive peptides. The objective of this study was to evaluate the lipid profile in healthy Wistar rats, with a diet supplemented with integral milk whey proteins and different amounts of hydrolysed proteins. A total of 40 animals in four groups: control (C), not hydrolyzed (NH), with intermediate levels of hydrolysis (MTH) and high levels of hydrolysis (ATH), was treated for 43 days with 20g/animal/d of AIN 93M. The nutritional supplement administered to NH, MTH and ATH groups (1.0mL/animal/d) was produced using enzymes pepsin, trypsin, chymotrypsin and carboxipeptidade A. To obtain MTH hydrolyzate, the enzymes were added at the same time, and to ATH the enzymes were added sequentially, every 10 minutes. The lipid profile was analyzed by measuring blood HDL, triglycerides and total cholesterol. The results with young rats (5 months) showed an increased in HDL and cholesterol (p>0.05) only MTH group, compared to control, after the supplementation period; but there was no difference (p <0.05) in triglyceride concentration between the groups. For rats of advanced age (17 months) there was no difference between the groups for HDL and cholesterol; however, there was difference in triglyceride concentration between the ATH group compared to the NH and MTH. These results show that the given supplements did not alter triglycerides of young rats, whereas in that of advanced age, the supplements did not alter HDL and cholesterol.

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