Abstract

This work sought to evaluate the effects of chronic intake of flaxseed upon hematologic parameters and immunological findings on body development of Wistar rats. Female Wistar rats were used after gestation. They were randomly assigned into two groups during lactation period: Control group (CG), fed with casein based diet, made up of 17% protein and flaxseed group (FG), fed with casein based diet with the addition of 25% flaxseed. At weaning, 12 male pups of each group continued to receive the experimental diets of their mothers (with only 10% of protein) until adult age, when they were killed at 250 days of life aiming at blood collection. At 250 days old FG presented significant reduction in body mass ($p < 0.000$) and higher levels of hemoglobin ($p = 0.019$) and albumin ($p = 0.030$) than CG. It was observed smaller percentage of segmented lymphocytes ($p = 0.016$) in rats from FG and bigger percentage of segmented leucocytes ($p = 0.023$) when compared to CG. The chronic consumption of flaxseed altered hematologic and immunological indicators in adult Wistar rats. Supplementation with flaxseed seems to be beneficial to maintenance or reduction of body mass.

Keywords

Body weight, Flaxseed, Hematologic indicators, Leukocytes, Rats.