Abstract

Introduction: There are few studies on body composition and the effects of diet on weight postpartum women. The aim was to evaluate the body composition and bone parameters in lactating rats treated with diet containing flaxseed flour during postweaning period. Methods: After weaning, the lactating rat were divided in control (n = 6) and experimental (F, n = 6) group, treated with 25% flaxseed flour diet. After 30 days, body composition by dual-energy X-ray absorptiometry, serum analysis, organs and intra-abdominal fat mass, femur and lumbar vertebra parameters were determined. Results: The groups showed similar food intake, body mass and bone parameters. While F group showed the following: lower body (-5%), gonadal (-17%), mesenteric (-23%) and intra-abdominal (-6%) fat mass. Increase of HDL-cholesterol (+10%) and lower glucose (-15%), triglycerides (P < 0.05, -37%) and cholesterol (P < 0.05, -21%). Conclusions: The findings highlight the effects of flaxseed for control of adiposity and to maintain a healthy biochemical profile during the postnatal period.

Keywords

Flaxseed flour, Rats, Postweaning period, Adiposity, Bone.