



## Análise do consumo de extrato hidrossolúvel de soja na qualidade do tecido ósseo de ratos jovens adultos [

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text (article)

Analítica

**Introduction:** Soy is a legume rich in protein, source of calcium and isoflavones. One of the possible effects of isoflavones is to reduce bone loss when there is an estrogen deficiency. **Objective:** to analyze the influence of diet supplemented with soybean water extract (EHS) on the bone mass of young adult rats of both sexes. **Materials and methods:** A total of 40 Novergicus Albinus rats Wistar young and healthy adults were used, 20 males and 20 females. They were randomly divided into four groups: control male (MC), supplemented male (MS), control female (FC) and supplemented female (FS) who remained for 11 weeks in a common cage receiving 500 ml of water and 300g of feed daily, and the supplemented groups (MS and FS), to which 500 ml of soy milk were offered in addition to water and feed, during the same experimental period of control. During the experimental period feed intake and fluid intake were measured. At the end of the experimental period the bones were extracted. Bone densitometry - DXA and mechanical test for bone mineral density - BMD (g / cm<sup>2</sup>), Maximum Strength (N) and Rigidity (kN / m) were used. **Results:** EHS consumption caused a decrease in BMD in the MS group, but there was no change in biomechanical properties, maximum strength and stiffness. **Conclusion:** The water soluble soybean extract negatively influenced the bone mineral content of young adult male rats without altering the mechanical characteristics

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