

Computerized histomorphometry of the prostate of infant mice breastfed by females submitted to diet with flaxseed

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In the last decades, many studies have shown that diets with adequate quantities of Omega 3 polyunsaturated fatty acids play an important role in the prevention and treatment of various diseases. Flaxseed (*Linum usitatissimum*) is an important source of Phytoestrogens. These compounds are being used to inhibit bone loss and protect cardiovascular system, partly by improving lipid profile. Thus, a diet with this compounds becomes very interesting for chronic diseases control. The purpose of the present study was to verify changes in cell secretory activity in prostate of rats breastfed for mothers submitted to experimental diet based on flaxseed, through computerized histomorphometry. We used two groups of five animals each, including a control group, females receiving rations with 10% of casein protein-based and a test group, females fed with flaxseed during lactation. After 160 days, the animals were sacrificed and their prostates removed and excised. The prostates suffered a first cross section. The material obtained was fixed in buffered formalin in thickness were stained by hematoxylin and eosin solution. Cuts of 5 for analysis of the integrity of the specimens. For the computerized morphometric analysis, the images of light microscopy was digitized and . We evaluated areas® the files analyzed with the software Scion-Image and heights of the alveolar epithelium of the secretion samples. After examining, we found the means values: areas (im²) Control 61.0 and Flaxseed 53.9; P value of 0.8413 (considered not significant) between the averages of areas, height (im): Control 14.4251 and Flaxseed 14.3441; P value of 0.9728 (considered not significant) between the epithelial average heights. These results suggest that there is no significant interference in the offspring prostate secretory activity with the consumption of flaxseed diet during lactation.

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