EFFECT OF CANOLA AND SUNFLOWER OIL -BASED DIETS ON THE HEPATIC STEATOSIS OF *WISTAR* RATS

Cruz, A.C.B[1]., Lima, D. G[1]., Sousa, J.M.A[1]., Nascimento, C. B. S[1]., Tôrres, M. E. F[1]., Santos, E.A[1]., Lima, D.F[1]

[1] Departamento de Bioquímica- UFRN – Natal/RN, Brasil.
anacellycruz@yahoo.com.br

Dietary fatty acid quantity, composition and animal serum lipids profile are associated to several pathologies, mainly those related to specifical tissues. We evaluated hepatic steatosis in response to ingestion of 12% and 8% canola and 12% and 8% sunflower oil-based diets, through histopathologic diagnosis and lipids profile. A total of 30 Wistar rat males, 90 day's old were feed with the tested diets during 30 days. Triglycerides response to canola-based diet it was 116,45±29,5 mg/dl, a decreased value in comparison to the other diets. Total cholesterol response to the 8% sunflower oil-based diet (102,92mg/dl ±15,40) was the lowest in comparison to the other tested diets. The lowest LDL response was obtained with the 12% canola oil-based (67,56 mg/dl ±25,0). The best HDL response was obtained with the 12% sunflower oil-based diet (34,93mg/dl ±5,77). Diet containing 8% sunflower oil caused less steatosis in all intensity levels analyzed such as low (+33%), moderate (++20%) and high intensity level (+++6,7%). Diets containing 12% sunflower, 8% canola oil and 12% canola oil caused steatosis levels of +23,4%, ++26,7%, +++13,4%; +46,66%, ++10%, +++10%; +30%, ++16,7%, +++16,7%, respectively. Together these dates suggest that hepatic steatosis in *wistar* rats may be due the high fatty acid concentrations of the assayed diets .

Supported by CNPq/PIBIC