

Effect of selenium supplementation on some blood biochemical parameters in male rats .Apresentado em colaboração com Crespo, A.M.V. ; Vasconcelos, S.; Andrade, V.; Rodrigues, H. and Santos, M.C. no IV Congresso Internacional de Elementos-traço em Medicina e Biologia realizado de 5-9 de Abril de 1993 em Chamonix, França.

Trace Elements and free radicals in oxidative diseases: proceedings of the Fourth International Congress on Trace Elements in Medicine and Biology, Chamonix, France, 1993. Volume 47; Editiones 1-3 , Alain Favier; Veronique Ducros and Jean Néve (Eds.), Human Press, 1995, 398 pp.

ABSTRACT of Oral Comunication

The long-term effect of selenium supplementation on blood glutathione peroxidase (GSH-Px) activity and plasma TBARS' production (as an index of peroxidation) was evaluated in 15-month old male rats fed a diet supplemented with 0.25 or 0.50 ppm selenium, for 12 mo. A group of nonsupplemented age-matched rats was the control. In addition, triglycerides, phospholipids, total and free cholesterol, HDL-cholesterol, and HDL-phospholipid levels were measured in plasma. Plasma testosterone levels were also determined in order to control the aging process in these animals.

The GSH-Px activity and the peroxidation level were unchanged in all the groups. However, concerning the lipid parameters, a decrease in triglycerides concentration was observed in both treated groups ($p < 0.05$). Therefore, in these experimental conditions, despite no observed changes in parameters related to lipid peroxidation, selenium seems to be involved with triglycerides metabolism, eventually improving the triglycerides status of aged animals.