

PART VII NEUROLOGY AND AGING

The effect of age and selenium on some biochemical parameters in rat liver

M. C. Santos, H. Rodrigues, S. Vasconcelos, V. Andrade, M. J. Lança and A. M. Viegas Crespo

- Journal Article

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*Abstract*

Two age groups, 3 and 15 mo, were used to investigate whether age-associated changes in some parameters related to lipid peroxidation occur in the liver of male Wistar rats and to observe possible effects of dietary selenium supplementation (0.25 and 0.50 ppm) for 12 mo on the same parameters. At these experimental conditions, the most important observation was that peroxidation did not change by aging, at least until 15 mo of age. In addition, the activity of S-dependent glutathione peroxidase (GSH-Px, EC 1.11.1.9) was higher in the liver of the older animals. It is suggested that the enzyme could have a role in the unchanged hepatic peroxidation observed in aged male rats. On the other hand, an effect of dietary selenium supplementation on those parameters was not observed, probably because the selenium levels were still at an adequate plateau.

Index Entries Aging - lipid peroxidation - selenium - glutathione peroxidase - liver - rat