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Changes due to Aging in the Serum Biochemical Profile and Weights of Internal Organs Using the Rat as a Model

Akifumi ONO¹⁾, Yoko YASUHARA¹⁾, Shuji MATSUEDA¹⁾, Tetsuro MORITA¹⁾ and Hisami ONO²⁾

Department of Clinical Nutrition Faculty of Medical Professions Kurashiki, 701–0194, Japan¹⁾

Department of Nursing Niimi Women's College²⁾

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Abstract

Rats were used as the experimental aging model. The rats were divided into four groups, aged 10, 37, 75 and 92 weeks. Serum biochemical data and organ weights were studied to determine the effects of aging. Serum protein in the older rats was unchanged when compared with the 10 week old rats, while the serum albumin decreased. The A/G ratio decreased with aging. There was a sharp decrease in alkaline phosphatase at 37 weeks and activity remained low thereafter. Total serum cholesteral and phospholipids increased with aging. There was no variation in sodium and chlorine in this experiment. Liver and kidney weights in relation to body weight decreased with aging.

Data variations in the biochemical profile may be caused not by increased synthesis but by a decrease in the catabolic rate.