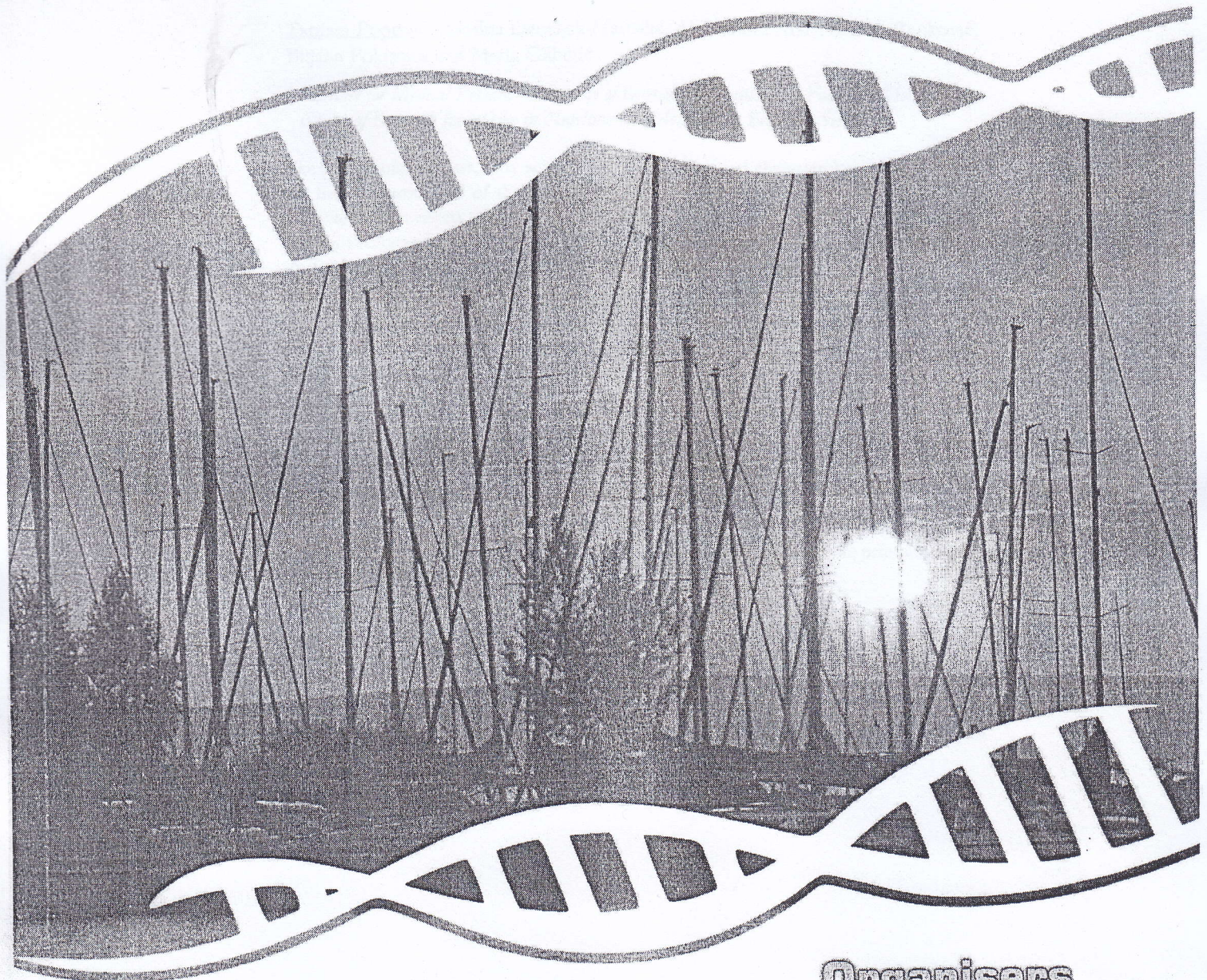
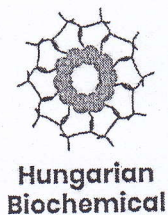


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**P2-02**

**POLYUNSATURATED FATTY ACIDS PHOSPHOLIPIDS  
PROFILES IN PLASMA AND LIVER IN WISTAR RATS OF  
DIFFERENT AGE**

Tamara Popović, Jasmina Debeljak-Martaćić, Aleksandra Arsić, Slavica Ranković,  
Biljana Pokimica and Maria Glibetić

*Institute for Medical Research University of Belgrade, Laboratory for Food and Metabolism,  
Centre of Research Excellence in Nutrition and Metabolism, Belgrade, Serbia*

The phospholipids class, fatty acids (FAs) composition and cholesterol content in membranes are basic determinants of the physical properties of membranes. They have been shown to influence a wide variety of membrane dependent functions such as membrane transport, enzyme activity and receptor function. The FAs profile in tissues partly reflects not only the dietary fat intake, but also the efficiency of FAs metabolism in the body.

We examined overall saturated (SFA), monounsaturated (MUFA) polyunsaturated (PUFA) fatty acids phospholipids profiles in plasma and liver in male Wistar rats of different age (n=10; 3 months and n=10; 22 months), as well as overall n-3, n-6 and n-6/n-3 ratio. We determined it by GC chromatography.

Results showed different tissue specificity and age specificity also. In young rats plasma phospholipids MUFA were increased ( $p < 0.01$ ), while PUFA and n-6 were decreased ( $p < 0.01$ ) compared to aged rats. In liver phospholipids in young rats overall n-3 were increased ( $p < 0.001$ ), while overall n-6 were decreased. N-6/n-3 ratio was significantly decreased ( $p < 0.001$ ) compared to aged rats.

Liver as a place of biosynthesis and degradation of FAs seems to have more pronounced changes in its phospholipids profiles in aging.