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ORIGINAL PAPER

FISH DIET INFLUENCE ON BLOOD BIOCHEMICAL MARKERS RELATED TO LIPID METABOLISM IN DANUBE DELTA POPULATION

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Abstract. It is known that fish meat contains a high quality protein that helps keeping low values of total lipids levels. Our main objective was to determine blood biochemical parameters which emphasize the correlations between a fish based diet and health conditions. We analyzed the blood of 176 patients, residents of Danube Delta, diagnosed clinically healthy. Tested blood biochemical parameters belong or relate to the lipid metabolism (e.g. total serum lipid levels, total cholesterol, HDL cholesterol, LDL cholesterol, triglycerides, glucose, total serum proteins). Blood was processed in the Routine Med Sulina laboratory. Differentiation criteria were based on geographical region affiliation, sex, age and diet. Our results showed that patients with a diet based on fish are healthier than those with a diet in which fish meat is scarce, the former having blood biochemical parameters values closer to normal. The values of total cholesterol, HDL cholesterol ("good" cholesterol), LDL cholesterol ("bad" cholesterol), triglycerides are positive correlated with total serum lipids values. The overall results were within normal limits. The presence of fish meat and fish secondary products in people's diet is beneficial in preventing lipid metabolism disorders.

Key words: lipids metabolism, fish, Danube Delta, health

Introduction

Fish diet is rich in high quality protein, is an important source of omega 3, vitamins and minerals, it helps to lower blood pressure and decrease levels of triglycerides, total cholesterol, HDL („good" cholesterol) and LDL cholesterol value, serum total lipids.

Dominant fish species in the Danube Delta that people eat are: rapacious, perch, crucian carp, bream, rudd, perch, catfish, pike, anchovy, herring, turbot, sturgeon etc.

Based on literature data, normal values of biochemical parameters vary by sex, age, diet and geographical region and we want to determine if the fish diet