

# Polyunsaturated fatty acid pattern in liver and erythrocyte phospholipids from obese patients

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**Objective:** Our aim was to study the fatty acid (FA) composition of liver phospholipids and its relation to that in erythrocyte membranes from patients with obese nonalcoholic fatty liver disease (NAFLD), as an indication of lipid metabolism alterations leading to steatosis. Research Methods and

**Procedures:** Eight control subjects who underwent antireflux surgery and 12 obese patients with NAFLD who underwent subtotal gastrectomy with a gastro-jejunal anastomosis in Roux-en-Y were studied. The oxidative stress status of patients was assessed by serum F2-isoprostanes levels (gas chromatography/negative ion chemical ionization tandem mass spectrometry). Analysis of FA composition of liver and erythrocyte phospholipids was carried out by gas-liquid chromatography.

**Results:** Patients with NAFLD showed serum F2- isoprostanes levels 84% higher than controls.

Compared with controls, liver phospholipids from obese patients exhibited significantly 1) lower levels of 20:4n-6, 22:5n-3, 22:6n-3 [doco