

Consumption of canned oily fish as a source of fatty acids

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Seafood has been acknowledged as an integral part of a healthy diet, especially due to its polyunsaturated fatty acid content. The aim of this study was to investigate the contribution of canned oily fish to the daily fatty acid intake in the representative sample of Croatian adults. Consumption data were obtained through the National Food Consumption Survey, while the fatty acid profile of different canned products (tuna, sardine and mackerel) was determined using gas chromatography. The average canned fish consumption of 36.64 g/day was registered in only 4% of examinees. The analysed canned products highly varied in their n-3 fatty acids share. The n-3/n-6 ratio ranged from 0.09 (canned tuna in oil) to 1.33 (canned tuna with vegetables). Judging by the average daily consumption and mass ratio of PUFAs in canned fish products, when consuming sardine in oil, Croatian consumers attain 130.3% of the recommended EPA + DHA intake; when consuming tuna in oil, sardine with vegetables, mackerel in oil and tuna with vegetables, the resulting percentages are 60.4, 43.0, 25.9 and 3.8, respectively.

Keywords: canned oily fish, consumption, fatty acids, PUFA, n-3, n-6, EPA, DHA