

OIL QUALITY ASSESSMENT FROM THE POINT OF FOOD QUALITY

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In view of the well-known effects on an increased consumption of saturated fatty acids and cholesterol, various food items have recently started to be tested for atherogenic action. In 1986, Connor et al. proposed a procedure for the assessment of atherogenic potential of food, known as cholesterol/saturated fat index or CSI. They checked the applicability of the index by calculating it for some 40 countries and comparing it against the statistical data for the mortality caused by coronary diseases in these countries. They found that the atherogenic potential of a food item is inversely proportional to its CSI value.

The objective of this study was to assess the CSI value of the sunflower oils consumed in Vojvodina Province. These oils are refined from different sunflower hybrids. The procedure consisted of gas chromatographic analyses of fatty acid composition in the oils and the calculation of the CSI by the formula of Connor et al.: $CSI = (0.01 \times g \text{ saturated fat}) + (0.05 \times mg \text{ cholesterol})$.

Large differences in the CSI were found for the oils coming from different sunflower hybrids, the CSI values ranging from 8.4 to 16.9. It ensues that attention should be paid to this parameter when introducing new sunflower hybrids in production in order to secure healthy human food.