Analysis of Oils used for Frying in Warsaw Restaurants

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Frying is widely used technique for food preparing. During processing, oxygenation, hydrolysis and polymerization reactions take place in the frying medium. Different methods of measuring the quality of frying fats and oils are used to point out the moment when they have to be replaced. It is alarming that there still are no common limits for frying fats and oils in the European Union. The member states adopted different regulations and recommendations with some countries having neither of those. Quality control of fats and oils use for frying in restaurants in Poland is an important issue.

The aim of the work was to check the quality of oils used for frying in Warsaw restaurants. In recollected samples the content of polar compounds, acid value, smoke point, anisidine value and content of conjugated dienes and trienes was determined. In analysed samples, the content of polar compounds was from 3,3 to 27,3%. One sample exceed the most universal in European Union countries limit of 25% of polar compounds. Determined acid value was from 0,22 to 1,59 mg KOH/g. At the same time the smoke point was from 184 to 248°C. Anisidine value was between 6,3 and 166,5, content of conjugated dienes was from 2,77 to 16,73, and conjugated trienes from 0,75 to 3,82. Conducted analysis showed generally good quality of oils used for frying in Warsaw restaurants.

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