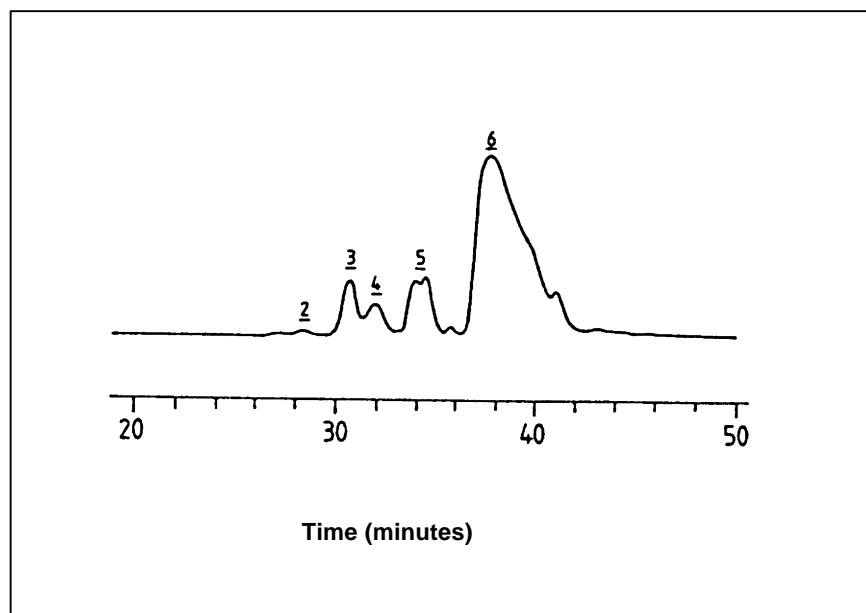


Determination of Polymers from autoxidized fish oils



Hydrolysed cod liver oil.

2: dimers; 3: triacylglycerols; 4: diacylglycerols; 5: monoacylglycerols; 6: fatty acids.

Ivan c Burkow; R. James Henderson - Journal of chromatography, 522 (1991) 501-506.

Recently there has been an increased interest in the polymeric triacylglycerols formed during the autoxidation of highly unsaturated fats and oils and their influence on the quality of marine dietary lipids.

Among various methods used for the determination of oligomeric and polymeric materials from oxidized lipids, size exclusion chromatography (SEC) seems to be the most promising. The most successful approach is to use HPLC methods with columns packed with macroporous styrene-divinylbenzene copolymers and ELSD detection.

Chromatographic conditions :

Column : Waters ultrastyrigel (300x7.8mm)
(2 of 500 A + 1 of 1000 A in series)

Injection Volume : 40µl

Flow Rate : 0.8 ml/mn

Mobile Phase : Dichloromethane

Nebulizer temperature : 20°C

Evaporation temperature : 30°C

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