

Developing a competitive sequential injection chromatographic method for monitoring the quality of edible oil

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This communication presents the development of a new sequential injection chromatographic (SIC) assay method for trilinolein and triolein in edible oil. The communication highlights the potentials of SIC instrumentation in terms of simplicity, cost-effectiveness, reagent saving and rapidity [1]. Parameters (mobile phase composition, flow rate, column dimension and tube length) controlling method performance will be optimized using the factorial design approach [2]. The proposed SIC method was validated according to the guidelines recommended by the International Union of Pure and Applied Chemistry. Linearity, weighing regression of calibration equation, correlation coefficient of linearity, accuracy, precision, repeatability, intermediate-precision, limit of detection, limit of quantification and sample frequency will all be determined. The newly proposed SIC method will competitor conventional chromatographic methods. Hence, the method is recommended for routine analysis in industry and monitoring laboratories for the purpose of quality control.