



Compare of Three Derivatization Methods and Determination of Fatty Acid by GC/MS in Egg Yolk

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Abstract: Fatty acid present in food product such as fish, meat, egg and those compounds have influence for human health especially polyunsaturated fatty acid (PUFA). Today next research aim is to find one best method for derivatization step which will include all fatty acid present in the sample and analysis with GC/MS to be possible and easy for determination. For this research were used three different method for derivatization of total fatty acid in fresh egg yolk, in situ method, conventional method and third method using TMS-DM which had great recovery values but precision, repeatability and reproducibility were not acceptable. In situ method can use in fast and routine analysis and conventional method can used for determination of the different lipid classes.

Keywords: *fatty acids, egg yolk, GC/MS, esterification.*

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