

FATTY ACID PROFILING

Research and analytical services.



ABOUT LIPID ANALYTICAL LABS INC.

Lipid Analytical Laboratories was established in 1991 on the work of Dr. Bruce Holub (Human Health and Nutritional Sciences, University of Guelph, Professor Emeritus) with a focus on the advancement Omega-3 Fatty Acids and their associated health benefits.

Lipid Analytical Laboratories is the only commercial laboratory in Canada specializing exclusively in the analyses of lipids (including different lipid forms including but not limited to individual neutral lipids, phospholipids, sterols, amongst others) and their Fatty Acid components.

Our particular specialty is the analyses and quantitation of various food products and nutritional supplements for their Omega-3 Fatty Acid content.

Lipid Analytical Laboratories routinely provides lipid/fatty acid/omega-3 analyses in support of various academic, governmental, and commercial trials.

As such, Lipid Analytical Laboratories along with its analytical team members have been named as co-authors and officially acknowledged in a number of peer-reviewed papers which have been published in leading academic journals.



METHOD SUMMARY

Our method determines the Fatty Acid composition, including EPA and DHA, of oils in relative percentage values (%) and in absolute (mg/g) values. The esterification of these Fatty Acids to Fatty Acid Methyl Esters (FAMES) is performed using an alkylation derivatization reagent. Methyl esters offer excellent stability and provide quick and quantitative samples for GC analysis. GC analysis provides a comprehensive profile that allows clients to accurately assess the content and profile of fatty acids in their product from them.

Data Reporting:

- Fatty Acids C6:0 up to and including C24:1 (TG, ME, EE, FFA)
- Amounts mg/g and relative % by weight
- Saturated, Monounsaturated, Polyunsaturated Fatty Acids
- Omega-3 Fatty Acids
- Omega-6 Fatty Acids
- The amount of total fat in your product

***Trans Fatty Acids & Other Fatty Acids available by request**

Reference: Modified AOCS Official Method – Ce-1i-07

Analysis Platform: Agilent 7890A/B - GC-FID

Sample Requirements: Please contact us with regards to your specific sample type.

Email: info@lipidanalytical.com



WHY WORK WITH US?

- Over 30 years of experience.
- Excellent results – AOCS Laboratory Proficiency Program – GOED Nutraceutical Oils.
- Fast sample turn-around-time.
- Accreditation for ISO17025 in progress with Standards Council of Canada (SCC) as of 2021.
- Assisted with numerous Commercial/Academic/Governmental Trials.



CONTACT US



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