LIPOLYTIC MODIFICATIONS APPRECIATION THROUGH FATTY ACIDS DETERMINATION OF FERMENTED DAIRY

Rotar Mihaela A., Cristina Semeniuc, Camelia Guş, Adela Pintea, C. Bele, S. Apostu

University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Mănăștur Street, No. 3-5 a_m_rotar@yahoo.com

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SUMMARY

Fatty acids analysis consisted in extraction, transesterification and then gas chromatographic analysis. Thus, was followed the next stages: total lipids extraction, fatty acids methyl esters obtaining, separation and identification of fatty acids methyl esters through gas chromatography (GC). Were identified 11 fatty acids, for which was standards, respective: capric acids, lauric acids, myrisitic acids, palmitic acids, palmitoleic acids, heptadecanic acids, stearic acids, oleic acids, linoleic acids, α-linolenic acids, arahidic acids.

Saturated fatty acids: unsaturated fatty acids ratio suffers modification to samples studied through storage, modifications observed also and in fatty acids proportion which differs quantitative against milk.

Saturated fatty acids: unsaturated fatty acids ratio in commercial milk is enough of constant, being circa 2.41:1. Instead, was found great differences in samples of sana and yogurt. Thus, in the yogurt case this ratio present modification between 3.41:1 (to fresh yogurt sample, to beginning of validity) and 4.10:1 (yogurt sample to the end of validity).

Through yogurt samples storage, we found a meaningful decrease especial for oleic acid. Instead, increase linoleic and linolenic acid quantity, important aspect because these fatty acids are part of unsaturated fatty acids.

We can concluded that through knowledge fatty acids configuration from milk and dairy, we can determine fermented dairy authenticity and freshness in disputed issues.

Significant quantities of linoleic acid, much more than in milk, recommended fermented dairy for daily consume by children and old persons.

BIBLIOGRAPHY