# **UNIVERSITY OF FOOD TECHNOLOGIES - PLOVDIV**



# **BOOK OF ABSTRACTS**

65th Anniversary Scientific Conference with International Participation "Food Science, Engineering and Technology - 2018"

Organized in cooperation with the Foundation "Scientific Research" under Contract № DPMNF 01/21 signed on August 23, 2018

Volume I
"FOOD SCIENCE AND TECHNOLOGY"

October 11 - 13, 2018 UFT, Plovdiv, Bulgaria

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## Detection for non-milk fat in kashkaval by gas chromatography

Mila Arapcheska¹\*, Zehra Hajrulai-Musliu¹, Risto Uzunov¹, Jovanka Tuteska¹, Vangelica Jovanovska¹, Steve Veleska¹

<sup>1</sup> Faculty of Biotechnical Sciences, St. Kliment Ohridski University, Bitola, Macedonia

### Abstract

Dairy products are frequently included as important components of healthy diet. For the smooth taste of dairy products responsible is milk fat. It has specific fatty acid composition which can vary by: breed, diet and stage of lactation. From an economic point of view milk fat is a target of fraudulent practices such as replacement with cheaper non-milk fats of plant and animal origin. Fatty acid profile of milk fat is used as criterion for detection of fraudulence of dairy products. The aim of this study was to analyse authenticity of the dairy product kashkaval (type of yellow cheese). Samples of kashkaval were taken from local markets. Fatty acids profiles of samples were analyzed by gas chromatography. Butter fat, palm and coconut oils, were used as referent material for the detection of vegetable oils. According obtained results high concentrations of medium and long chain fatty acids were determined in kashkaval samples with vegetable oils. The results of this study provide valuable information for consumers. For legal reasons and for consumer protection and confidence, dairy products should be authentic and correctly labeled.