

Proximate Analysis of Muscle of *Helix aspersa* Living in Konya, Turkey

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Abstract : The aim of the present study is the determination of the effects of variations in the proximate analysis, cholesterol content and fatty acid compositions of *Helix aspersa*. Garden snails (*Helix aspersa*) were picked up by hand from the Central Anatolia Region of Turkey, in autumn (November) in 2015. Fatty acid methyl esters (FAMES) and cholesterol analysis were analyzed by gas chromatography (GC). The protein contents of snail muscle were determined with Kjeldahl distillation units. Statistical comparisons were made by using SPSS Software (version 16.0). Thirty different fatty acids of different saturation levels were detected. As the predominant fatty acids, stearic acid (C18:0), oleic acid (C18:1 ω 9), linoleic acid (C18:2 ω 6), palmitic acid (C16:0), arachidonic acid (C20:4 ω 6), eicosadienoic acid (C20:2) and linolenic acid (C18:3 ω 3) were found in *Helix aspersa*. Palmitic acid (C16:0) was identified as the major SFA in autumn. Linoleic acid (C18:2 ω 6), eicosadienoic acid (C20:2) and arachidonic acid (C20:4 ω 6) have the highest levels among the PUFAs. In the present study, ω 3 were found 5.48% in autumn. Linolenic acid and omega-3 fatty acid amounts in the autumn decreased significantly but cholesterol content was not affected in *Helix aspersa* in autumn (November) in 2015.

Keywords : *Helix aspersa*, fatty acid, SFA, PUFA, cholesterol

Conference Title : ICVBS 2016 : International Conference on Veterinary and Biomedical Sciences

Conference Location : Paris, France

Conference Dates : April 25-26, 2016