

PROXIMATE COMPOSITION AND MINERAL PROFILE OF SNAIL MEAT (HELIX LUCORUM) FROM TRAKIA VALLEY IN BULGARIA

**Alexander ATANASOFF^{1*}, Lilko DOSPATLIEV¹,
Dimitrinka ZAPRYANOVA¹, Cigdem ONER²**

¹Trakia University, Faculty of Veterinary medicine, Stara Zagora, 6014, Bulgaria

²Ankara University, Faculty of Veterinary medicine, Ankara, 06110, Turkey

*Corresponding author: hmi_atanasoff@mail.bg

Abstract

Problem statement: Snail's meat is consumed as a delicate product in countries such as France, Greece, Italy and many others. The present paper is aimed to determine the protein, moisture, ash, fat, as well as the mineral content of snail's meat.

Organisms: 400 species of snail (Helix lucorum).

Approach: The content of protein, fat and ash and concentrations of iron, potassium, sodium, calcium, phosphorus, magnesium, copper, selenium and zinc were determined by automatic systems and electro thermal atomic absorption spectrometry (ETAAS) after microwave digestion. Mean values and their respective coefficients of variation were calculated from the measured concentrations. The results from the analysis showed that snail meat is rich in protein (18.56%) and low in both ash (1.61%) and fat (1.40%). The major minerals found in this study were calcium (159.3 mg/100 g), phosphorus (102.2 mg/100 g), potassium (94.3 mg/100 g), sodium (87.6 mg/100 g) and magnesium (38.0 mg/100g). However, iron, zinc, manganese and copper content were less than 10 mg/100 g.

Conclusion: The results of this study have showed that snails meat (Helix lucorum) are good sources of protein and micro elements and that its consumption can promote health, proper growth and development of the human body.