

## **MEAT QUALITY PARAMETERS AT DOMESTIC TURKEYS FED VARIOUS DIETARY RATIONS**

**Meri Krsteska<sup>1</sup>, Ljubica Trajkoska<sup>1</sup>, Vesna Karapetkovska - Hristova<sup>2</sup>**

<sup>1</sup>Master of Food Safety and Quality, North Macedonia

<sup>\*2</sup> Department of Biotechnology, Faculty of Biotechnical Sciences – Bitola, North Macedonia

e-mail address: [v.primavera79@gmail.com](mailto:v.primavera79@gmail.com)

With respect to other poultry species, turkeys belong to the largest poultry and the best producers of high-quality poultry meat, because it contains a high percentage of protein, especially essential amino acids and low fat content.

Turkeys that have been taken as research material originate from the domestic breed of turkey (white and black). A total of 30 heads of turkeys was grown under the so-called indoor keeping system in Pelagonia region, North Macedonia. The aim of the research was to determine the differences in the body weight in the period of 10 - 90 days and the slaughtering characteristics of turkeys fed with two different rations in relation to the origin of feed proteins (group R - fed with fish flour and group S - fed with whey powder).

An analysis of the chemical composition of the large breast muscle (*Musculus pectoralis superficialis* - MPS) was also performed on samples of the two groups of turkeys. Statistics (ANOVA) on turkey growth (10-90 days) show significant differences in body mass between the two groups of S and R for different feeding intervals ( $p < 0.05$ ).

The results of the examinations of the chemical composition of the MPS showed higher values for protein and fat in the meat of turkeys fed with whey powder and were (protein 25% and fat 8.67%) compared to the values of turkeys fed with fish flour and were 23.27 and 6.5% respectively. At the same time, protein and fat values were significantly different ( $p < 0.05$ ) among the groups.