## EVALUATION OF MEAT QUALITY OF INTENSIVELY GROWN TURKEYS

Gražina Januškevičienė<sup>1</sup>, Gintarė Zaborskienė<sup>1,2</sup>, Galina Garmienė<sup>2</sup>, Rasa Vaitukaitytė<sup>1</sup>, Vidmantas Paulauskas<sup>1</sup>, Vytautas Januškevičius<sup>1</sup> <sup>1</sup>Department of Food Safery and Animal Hygiene, Veterinary Academy, Lithuanian University oif Health Sciences Tilžės str.18, LT-47181, Kaunas, Lithuania, e-mail: grazinaj@lva.lt <sup>2</sup>Food Institute of Kaunas University of Technology, Taikos av. 92, LT-51180, Kaunas, Lithuania

**Summary.** To evaluate acceptability of intensively grown turkey thigh and breast muscle for aging physicochemical characteristics of meat were examined. The amount of lactic acid, pH and content of biogenic amines (putrescine, histamine, cadaverine, tyramine, spermidine, spermine) were determined periodically during meat maturation period in breast and thigh meat of healthy and turkeys with the pathological signs of ascites, chest Bursal violation, pododermatitis, arthritis, tendovaginitis and *Varus – Valgus* deformities.

In turkeys with the lesions of legs in all cases (except pododermatitis) during 4 days of meat maturation period the amount of lactic acid in breast and thigh meat increased from 14.0% to 21.5% and from 10.34% to 20.85%. Despite the change of active acidity was not significant, turkey meat was characterized as DFD (the darker, harder and drier) and was not suitable for storage or aging.

These results demonstrate that the turkey breast meat with a slight signs of ascites and with a slight and mild chest Bursal inflammation is not suitable for aging. Active acidity of healthy turkey breast and thigh meat was lower compared to sick turkey meat. In healthy turkey 24 h after slaughter pH ranged from 5.65 to 5.71 in breast meat and from 5.7 to 5.83 in thigh meat. There was no evidence of PSE or changes of meat quality.

Keywords: lactic acid, biogenic amines, pathology, meat, turkeys.