**Abstract**
Cooling technologies are used intensively in food industry, beginning with processing and continuing with storage, supply chain and marketing of perishable foodstuffs, particularly in the meat industry. In this article we analyzed the refrigerated broiler carcasses quality along a short cold chain: transport from factory to retailer, storage to retailer store and to consumer until the product is losing the shelf life. The purpose of this study is to verify the quality and freshness of broiler carcasses on a real life cold chain. The quality parameter analyzed for broiler carcasses are: pH, easily hydrolysable nitrogen, the freshness index (FI) based on biogenic amines, and psychotropic microbiota. We recorded the temperature and relative humidity variation in the refrigerated van and at home refrigerator. The broiler meat pH is increasing with 14 % between the first and the last day of shelf life along the considered cold chain. The easily hydrolysable nitrogen had at the 5th day of meat refrigeration a 31 % increase from the first day of refrigeration. The freshness index proposed by the authors for chicken meat was calculated based on mathematical relation of biogenic amines: spermine, spermidine, cadaverine, putrescine, histamine and tyramine. For a fresh product the value of FI is bigger, at the last day of analysis the value of FI being 1.20. The psychotropic bacteria is increasing in number over time, at the last day of shelf life being double the number determined in the first day of analysis. Although the studied cold chain was a short one, the values of physic-chemical and microbiological determinations give us an overview of the quality of raw broiler carcasses.

**Key words**: chicken meat, cold storage, refrigeration, consumer, retailer.