

Weeranuch Panthong 2010: Safety, Standard and Quality of Chicken Meat from Small Slaughterhouses. Master of Science (Food Safety), Major Field: Food Safety, Department of Animal Science. Thesis Advisor: Assistant Professor Sasitorn Nakthong, Ph.D. 130 pages.

The purpose of this research was to study safety, standard and quality of chicken meat from the four small chicken slaughterhouses; slaughterhouse No. 1 (Nakhon Pathom Province), slaughterhouse No. 2 (Kanchanaburi Province) slaughterhouse No. 3 (Pathumthani Province) and slaughterhouse No. 4 (Suphanburi Province). The research was divided into two parts: Part 1. Study on working procedures of small chicken slaughterhouses included biological changes of chicken meat from chicken slaughterhouses to market. The result found slaughterhouse No. 1, 2 and 3 were classified as a Class B slaughterhouse (slaughtering license) but process need to improve the hygienic production. The slaughterhouse No.4 was not yet registered for licenses with the Department of Livestock Development that was classified as Class C. For the evaluation on the best practices for poultry slaughterhouses follow the Thai Agricultural and Food Standards Agency (ACFS. 9008-2549) found that there were not qualified for all of slaughterhouses. For microbiological changes of chicken meat from slaughterhouses to the market found that total microorganisms increased from the first step to the final step as same as result of *E. coli*. For *Salmonella* spp. were different serovar from the process after killing to market. Part 2. Study on changes of quality and safety of chicken meat from slaughterhouses; 1) The meat were stored at room temperature and compared to storage at 4 degrees Celsius for a period of six hours. 2) study on the effects of time (nine days) on meat quality. The result found that chicken meat stored at room temperature reduced water holding capacity and lower quality than chicken meat in the refrigerator (4 degrees C). Chicken meat stored for nine days had the best quality just the first three days and the quality of meat decreased from day 5 to day 9 of storage period. For chemical examination, Enrofloxacin had excess level of standards prescribed by law in slaughterhouse No. 3

---

Student's signature

---

Thesis Advisor's signature