

Book of Abstracts

‘EGGMEAT 2017’

XVIIth European
Symposium on the
Quality of Eggs and
Egg Products

XXIIIth European
Symposium on the
Quality of Poultry Meat.



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The symposia is organised by the Eggmeat 2017 committee under the auspices of the UK branch of the World' Poultry Science Association (WPSA) and the European Federation of the WPSA.

The EGGMEAT 2017 symposium is a joint activity of working groups 4 and 5 of the European Federation of the WPSA. This symposium forms part of the WPSA's mission to support education, organisation and research in the poultry sector. An industry that provides a large proportion of the world's food.



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of transport during rainy and dry seasons for long (90 km) and short (15 km) distances. The experiment followed a completely randomized design with four treatments in a factorial scheme (2 seasons: rainy and dry) x 2 (distances: short – 42min and long – 2h:09min), with four replicates. In the rainy season (summer), the transport distance determined significant alterations in meat quality. For longer distances, it was recorded the highest temperatures (31.1°C) and relative humidity (65.4%) inside the load, resulting a tendency of dark, firm and dry meat (DFD), average of meat pH 6.08 ($p<0.01$) and with lower cooking losses (CL), 12.77% ($p<0.01$). In the winter (dry season), the climatic conditions inside the load were 28.8°C and 37.6%, respectively. Broiler chickens transported in the winter had meat pH (5.93) classified as "normal", however, with higher cooking CL (14.37%). For shear force, neither season nor journey length has any significant effects upon tenderness of the evaluated meat. In conclusion, the combination of summer season and long distance tended to develop DFD meat, thus, special attention should be given when chickens are transported to slaughter in the summer or periods of high humidity.

Keywords: broiler, cook loss, microenvironment, pH, texture

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PREVALENCE OF *SALMONELLA* IN POULTRY MEAT

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Raw poultry is a well-recognized source of *Salmonella* spp. and many surveys have confirmed the presence of this pathogen on poultry. The presence of *Salmonella* in poultry receives major attention because of the importance of this bacteria as causative agent of human foodborne illness. The present study was conducted to determine the prevalence of *Salmonella* in poultry meat.

One thousand and seventy eight samples were taken in the period 2009-2012. Samples were taken from whole carcasses, and meat portions (wings, legs and breasts). *Salmonella* was isolated from 47 samples (4,35% of the samples analysed). The highest prevalence was observed in 2011 (8.72%) and the lowest in 2010 (2.16%). These results are similar to those reported in the EU by EFSA (2.8% in 2014 and 3.5% in 2013).

Higher prevalence of *Salmonella* was found in carcasses than in meat portions. Twelve different *Salmonella* serovars were isolated from poultry meat: S. Virchow, S. Infantis, S. 4.12b, S. 4i.1 S. Anatum, S. Hadar, S. Haifa, S. Kentucky, S. Lisboa, S. Matadi, S. Typhimurium and S. Toulon. The predominant serovar was S. Virchow, being found in 14 isolates. These results differ from those reported by EFSA in 2014, since the most frequent serovar types found in poultry meat in the EU were S. Infantis and S. Enteritidis.

Keywords: food safety, pathogens, poultry meat, *Salmonella*