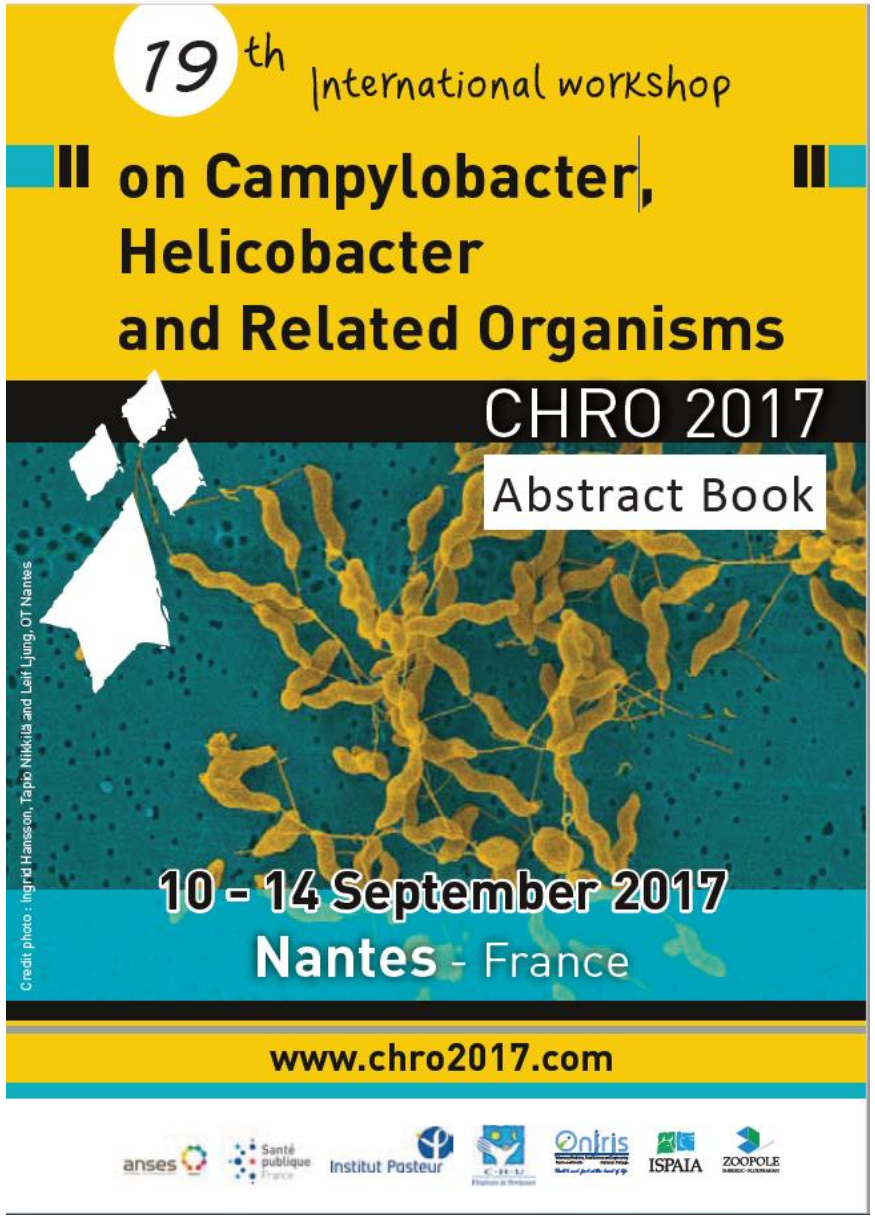

Campylobacter colonization in broilers raised under different management concepts

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Since 2015, a joined effort of Dutch retailers and the poultry industry led to an almost complete switch for the retail market from conventionally reared fast-growing broilers to slower growing birds in alternative systems, with differences *e.g.* in broiler type, stocking density and dark period. Although this transition has a positive impact on animal welfare and fewer antibiotics are used in slower growing birds, it also raised concerns regarding the risk of *Campylobacter*. Age is a risk factor for *Campylobacter* colonization in poultry. Because slower growing birds are being slaughtered at higher ages (depending on the market concept between 45-56 days) compared to traditionally reared broilers (37-43 days), it was expected that slower growers are more frequently *Campylobacter* positive at slaughter and may lead to increased *Campylobacter* contaminated poultry meat.

To assess the percentage of *Campylobacter* positive flocks, broilers were sampled at two locations of a Dutch slaughter plant. Over a period of 26 weeks, between May-November 2016, flocks from both concepts were tested for *Campylobacter*. Of every flock, a pooled sample of 30 caeca was examined by direct plating on CCDA plates that were micro-aerobically cultured at 41,5°C for 48 hours. Of 378 flocks that were screened, 150 were slower growing flocks of which 72% (confidence interval 64-79%) were *Campylobacter* positive. Of the fast growing flocks 79% (confidence interval 73-84%) were positive. Although this difference was not statistically significant, it confirmed previous findings as well as private data from the slaughterhouse.

In conclusion, although the slower growing chickens are slaughtered at an older age, the percentage of *Campylobacter* positive flocks was not higher compared to conventionally fast growing chickens. Possible factors that may account for this are differences in breed and/or farm management. Further exploration may be valuable in providing supporting tools for the control of *Campylobacter*.