



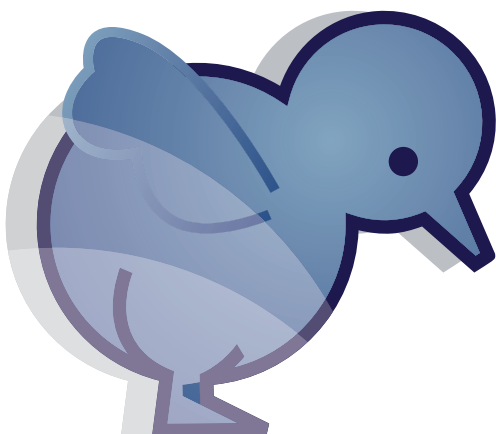
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Reduced Campylobacter Infections in Poultry after use of Fly Nets

A test carried out by Birthe Hald (the Institute for Food and Veterinary Research, Technical University of Denmark) who researches in and advises on infectious livestock diseases in productive and hobby livestock has shown that the risk of passing on Campylobacter bacteria in poultry batches is reduced considerably by protecting production buildings against penetrating insects. Protection can be ensured by fitting mosquito nets on all air inlets and outlets on the production buildings.





Purpose

The test was carried out to demonstrate any effect of the use of mosquito nets in the spreading of *Campylobacter* bacteria in poultry batches. It was decided to examine the occurrence of *Campylobacter* bacteria in 11 Danish test farms over a period of 5 months. The test was carried out in the summer where the occurrence of insects is greatest.

On 1st June 2006, all air inlets and outlets in 20 broiler houses were fitted with mosquito nets. During the test period, 52 batches passed through the buildings at the test farms until the last chickens were slaughtered on 6th November 2006.

In the same period, 70 batches were studied in 25 houses at 13 control farms.

The control batches were kept at other farms because studies from 2004 had indicated a risk of *Campylobacter* bacteria being transferred from control houses to reference houses if both types of house were located at the same poultry farm.

Private partners

Three companies, including SKOV A/S, collaborated with the Institute for Food and Veterinary Research on making sturdy, individually adaptable mosquito nets for air inlets and outlet. Furthermore, doors and windows in service and control rooms were protected and additional protection of wall fan closings was ensured when these were not in use.

Statistics

This study showed a relatively high increase in the occurrence of *Campylobacter* bacteria in the control batches from day 21 (11.4% = 8/70) until slaughtering time (51.4% = 36/70). Compared to the control batches, a significant reduction in the occurrence of *Campylobacter* bacteria was seen in the reference batches from day 21 (5.8% = 3/52) until slaughtering time (15.4% = 8/52).

In comparison, the occurrence of *Campylobacter* bacteria in Danish poultry batches was generally higher than in the control batches included in the study.



Conclusion

If mosquito nets are fitted on buildings as a supplement to already existing protection against insects on air inlets and outlets, the occurrence of *Campylobacter* bacteria in poultry will be reduced considerably. This will most probably result in a similar, significant decrease in the number of incidents of *Campylobacter* infections in persons eating meat from poultry batches that are given extra protection against penetrating insects.

Previous studies have shown that *Campylobacter* infections are the most common cause of diseases transmitted via feedstuffs in the industrialised world. For health as well as financial reasons, it is therefore of extremely great interest to eliminate the occurrence of *Campylobacter* bacteria in poultry.

