



403 Research paper

**Selective breeding for high natural antibody level increases resistance to avian pathogenic Escherichia coli (APEC) in chickens**

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In **Significant Impact Groups:**

Breeding for disease resistance or robustness \

Species targeted: Poultry;

Age: Not stated;

**Summary:**

Chickens bred for higher levels of 'natural antibodies' have a better Escherichia coli disease resistance, researcher of Wageningen University & Research and Utrecht University report. Breeding chickens for an improved general disease resistance is thereby a step closer. This can ultimately result in reduced antibiotics use and improved welfare for animals. Animals have so-called 'natural antibodies', which are a part of the immune system. Natural antibodies recognize pathogens in healthy animals, without (a previous) exposure of the animal to this pathogen. The antibodies slow down and prevent spreading of the pathogen from in the body. In addition, they warn and activate other parts of the immune system.

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**Where to find the original material:**

<https://www.sciencedirect.com/science/article/pii/S0145305X18304816>;

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