



How to assess fitness for transport of Danish broiler chicken

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HOW TO ASSESS FITNESS FOR TRANSPORT OF DANISH BROILER CHICKEN

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Background

According to the Council Regulation EC 1/2005 on the protection of animals during transport, the suitability for transportation should be evaluated before translocation of animals. This evaluation is a necessity to ensure animal welfare but at the same time the evaluation presents a challenge for the veterinary authorities in that transport fitness is not very well defined.

The aim of this project (2013-2016) is therefore to establish knowledge about useful indicators to assess broilers' suitability for transport. The objective is to develop a practical protocol which can be applied to assess the transport fitness of a flock on-farm within 24 hours prior to harvesting.

Protocol

On-farm we will perform the assessment in the following order

- Qualitative Behaviour Assessment (QBA)
- Fear assessment
- Transect walk
- Clinical assessment of focal animals
- Resource- and management data will be included, such as litter quality, house and flock characteristics as well as personnel background and empathy.



Qualitative behaviour assessment

The animals are observed from different positions in the flock for 20 min. and the quality of their behaviour is scored on 20 descriptors and finally turned into a principle component.



Human approach test – Stationary observer test

During these tests a sample size of birds will be tested for their avoidance distance to the observer which will be expressed as a mean distance per flock.

During the **transport** itself, the birds cannot be assessed directly, so resource based measures such as variations in temperature; driving route and road characteristics as well as time travelled will be included.

Due to logistical restrictions at **lairage** birds will be assessed in a different way compared to on-farm. Prior to shackling on flock level for the indicator QBA and clinical parameters such as panting, huddling, stuck toes/wings.

After **slaughter** meat inspection data as rejections, bruises, dead on arrival (DOA) and pathology will be included.

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Materials and Methods

During 2015, a number of Danish broiler flocks will be visited within the last 24h before the birds are mechanically harvested and transported to slaughter at approx. 36-37 days of age. Each flock will be assessed on-farm (before harvesting) and after transport (during lairage) at the abattoir. Additionally, certain farm and post-mortem data are assessed as well. Data will be analyzed for confounding and further modeled to identify risk factors for DOA and rejections.



Transect walk

During the transect walk the numbers of panting, sick, dead, dirty, limping and agonizing birds are recorded by the slowly walking observer.

Further the presence of animals performing dust bathing, foraging (scratching/pecking the ground), preening, perching, basking - visible on 10 random points in the flock during the transect walk (but not within the same transect) is recorded in number of defined behaviors/bird/hour.



Single birds examination

A sample size of birds is picked up clinical parameters such as cleanliness, skin lesions, wing and leg damage, emaciation, bloody discharge and ascites/cyanosis

Conclusion

The project will conclude with recommendations for indicators that should be included in an assessment protocol performed prior to transport in order to perform an evaluation of the fitness for transport in broilers on-farm.

