

Poor welfare or future investment?

Different growth pattern of broiler breeders

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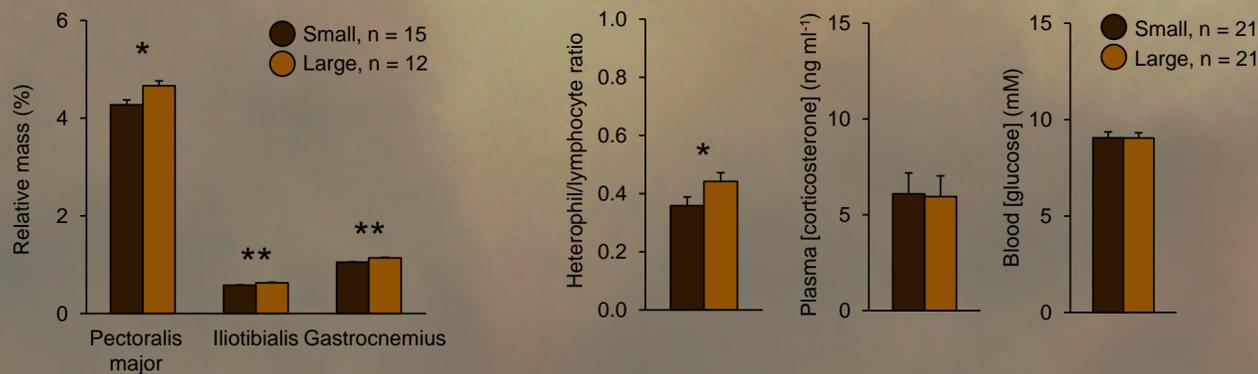
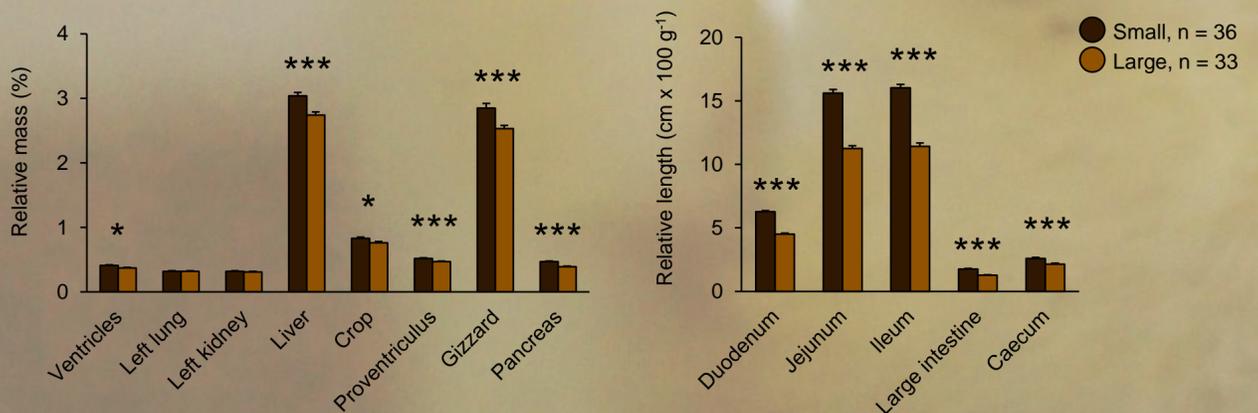
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Aim & hypothesis

The aim was to characterise welfare and morphometric differences between small and large 4 week old broiler breeder females within a flock, with the hypothesis that small birds would show signs of lower welfare as a consequence of losing in the competition for food and thereby experience a higher feed restriction.

Background

The parental stock of meat type chickens (broiler breeders) are commonly feed restricted to decrease their rapid growth and the issues associated with it. Among these birds, chronic hunger and stress are the most prominent welfare concerns and flock heterogeneity, as an effect of food competition, a major management challenge.



Graphs show mean values and standard errors. Statistically significant differences (Permutations tests) between the two size groups are indicated with asterisks (* $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.001$).

Conclusion

Small broiler breeders seem to invest more in their gastrointestinal tract, which will make them more efficient in the long term. They also show a lower heterophil/lymphocyte ratio and taken together this might indicate that **small broiler breeders are more successful in coping with the feed restricted environment of the industry than large breeders.**

Results

- ✓ Small broiler breeders had relatively heavier gastrointestinal tracts
- ✓ Large broiler breeders had relatively heavier muscles
- ✓ Large broiler breeders had a higher heterophil/lymphocyte ratio
- ✓ No differences in corticosterone or glucose concentration between the groups