



85 Research paper

A 'meta-analysis' of effects of post-hatch food and water deprivation on development, performance and welfare of chickens by de Jong, I.C., van Riel, J., Bracke, M.B. and H. van den Brand
2017 PLOS ONE 12: e0189350 (20p.)

in **Significant Impact Group(s)**: Feed / gut health \ Feeding management - Feeding management ; Water

Species targeted: Poultry;

Age: Young;

Outcome Parameter(s): body weight; cumulative food intake; FCR; mortality; relative yolk sac weight

Summary: This study reports results collected in other studies showing that post-hatch food deprivation or food and water deprivation (PHFWD) for approximately 24 hours can lead to significantly lower body weights compared to early fed chickens up to six weeks of age. Body weights and food intake were reduced more the longer the food and water deprivation lasted. PHFWD also has negative effects on the development of liver and pancreas, and delay the development of duodenum, jejunum and ileum. These effects were observed mainly in the first week of age. As a conclusion, findings also suggest a chicken welfare is lowered for PHFWD, however, additional studies are recommended on the effect of PHFWD containing a wider range of variables, including behaviour and disease resistance, in the short-term as well as long-term.

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Where to find the original material:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5728577/>;

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