

Abstract

The Effect Of Post-Hatch Feed On Chick Development

R. Molenaar*, L. der Kinderen‡, R. Meijerhof*, H. van den Brand‡

- * HatchTech BV, Veenendaal, The Netherlands, rmolenaar@hatchtech.nl
- ‡ Adaptation Physiology Group, Wageningen University, Wageningen, The Netherlands

In practice access to feed for day-old chicks is delayed, due to variation in hatch time, hatchery management and transport time. Early feeding seems beneficial for chick development, but the relation between diet composition and post-hatch development is hardly known. This study evaluates the effect of different feed types on chick development.

420 day-old chicks were randomly assigned to 7 treatments: no feed, dextrose, boiled eggwhite, mixture of 50% boiled egg-white and 50% dextrose, oat hulls and 2 commercial products. All fed chicks received 5 gram of feed per bird per day, without additional water, till 3 days posthatch. Twenty chicks per day were evaluated on chick length, body weight, intestine length, residual yolk, heart, spleen, liver and bursa of Fabricius till 3 days post-hatch.

Residual yolk weight decreased from hatch till 3 days post-hatch, regardless of treatment

P>0.01). Egg-white, dextrose or a mixture of both, resulted in an advanced development of chicks, demonstrated by a significant increase in chick weight, yolk free body mass, heart weight, liver weight and longer intestine.

Post-hatch feeding can positively affect posthatch chick development. However, type of feed is important for final results and might be related to the availability of water in the feed, and the digestibility of nutrients, as the digestive tract is not fully developed yet.



