

Healthy chicks perform better – but just what is a healthy chick?

There are many key performance indicators within a hatchery to measure chick quality, but it can be concluded that healthy chicks are those increasing their live weight by 4.25 times at seven days, with a low rate of first week mortality and an absence of antibiotic usage during the brooding period.

by Miren Arbe Ugalde,
Vaccination Services
& Equipment Manager,
Ceva Santé Animale, France.
www.ceva.com

Leaving aside the farm management factors influencing the brooding period (feed access, temperature management, fresh air, clean water and high light intensity among

A rotten egg explosion in a hatch basket.



others), the potential of the chicks will depend on their sanitary status at hatch.

Chick health starts with hatching egg sanitary status. Within a hatchery context, the higher the presence of rotten eggs in a flock, the higher late embryo mortality and cull and dead chicks at hatch.

Gas producing bacteria inside those eggs, such as *Pseudomonas* spp., increase the pressure inside the egg up to a level that any vibration or movement triggers their explosion.

When those eggs explode, the contamination inside spreads. Therefore, when rotten eggs explode in hatcheries, the microbiological load increases significantly, compromising the health of the chicks around.

Thus, the less presence of rotten eggs in hatcheries, the lower late embryo mortality and cull chicks, and more, healthier chicks will hatch.

The latest development in candling technology provides the unique solution to identify rotten eggs without touching them.

This new candling system is based on thermal image technology to differentiate the heat emission of living exothermic embryos from dead and rotten eggs.

Strictly comparative data shows that the removal of rotten eggs at transfer leads to less rotten eggs at hatch and, consequently, less risk of bacterial cross contamination due to exploders in hatcheries, meaning lower late embryo mortality and less cull



The difference in heat emission between exothermic live embryos and rotten eggs.

chicks. In short, more and healthier chicks at hatch.

In a market where competition is a constant pressure for poultry producers, optimum chick health at

day-old is paramount in order to reach performance goals efficiently. In this context, Laser Life is a new generation candling technology to improve chick health by reducing contamination.

Fig. 2. Chick health with new candling technology (LL = Laser Life, TC = traditional candling).

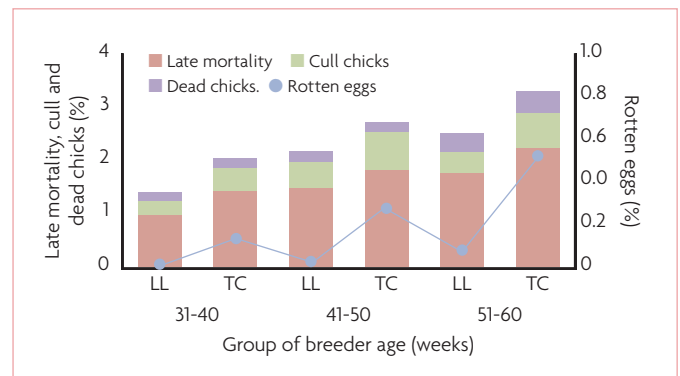


Fig. 1. Rotten egg presence and its relation with embryo mortality, cull and dead chicks.

