A good start for the young chick ensures lifetime profitability

A rule of thumb says that for every 10g more body weight at day seven results in 1.4% higher ADG and 1% lower FCR until final live weight (see Fig. 1). To ensure good broiler chicken profitability, a good start is very important.

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During the first week post-hatch, the chick's body weight may increase two-threefold, mostly as a result of rapid gastrointestinal growth. The growth of the gastrointestinal tract is correlated with feed intake. The highest priority in the first week is the development of the intestinal tract.

Despite the presence of some yolk reserves, delayed feed intake for newly hatched chicks results in retarded development of muscle and intestines that result in lower performance and also immuno-suppression. The reduced development of the villi results in lower capacity for absorption, lower immune status and higher incidence of leaky gut symptoms (Fig. 2).

There are several nutritional ways to help the chicken to overcome these problems. Glutamine is the fuel for intestinal growth. Glutamine is a semi-essential amino acid for healthy mature animals, but because it is the preferred source of fuel for the villi, it is essential for young animals.

The growth performance and feed conversion of broiler chickens is significantly improved by extra glutamine supplementation.

Highly digestible proteins are essential for young broiler chicks as their digestive capacity is not yet fully developed.

Feed with low indigestible protein contents results in less protein streaming into the colon and caeca and a lower incidence of clostridium, less salmonella, better gut health and better performance.

Adding good sources of omega 3 to the diet result in less leaky gut symptoms and healthier and better performing animals.

The supply of essential omega 3 fatty acids (EPA/DHA) contributes to an increased anti-inflammatory capacity.

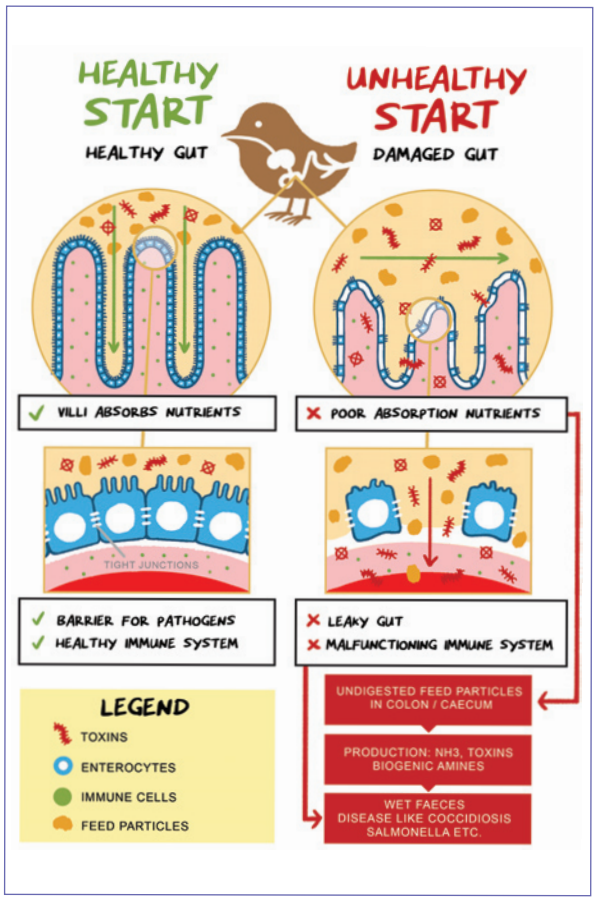
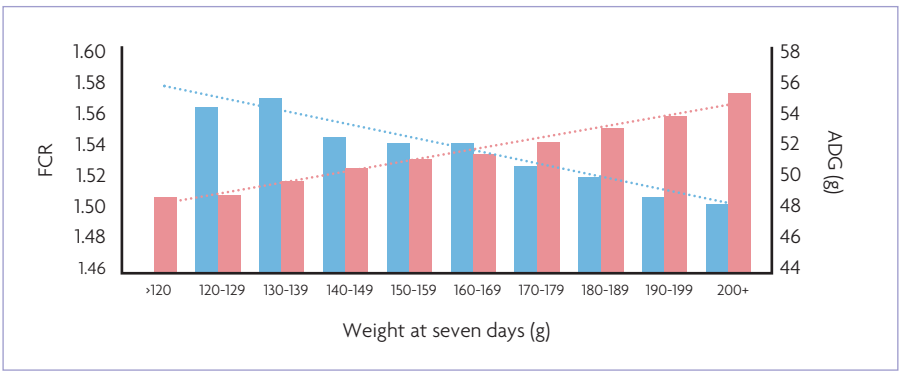


Fig. 2. A healthy start results in good absorption of nutrients and good barrier function. Wider tight junctions (leaky gut) allow bacteria and toxins to translocate by entering into the bloodstream.

Fig. 1. Higher broiler weights at day seven results in better growth performance based on data of 102.3 million broilers.



Early feeding products

Based on this knowledge, Joosten Young Animal Nutrition provides two products specially designed for young animal (early) feeding, to boost gut health and performance: FMR Ω 3 and JPC 56.

Both products have an excellent protein digestibility of over 95%. The special products contain balanced levels of amino acids, including high levels of glutamine to support gut health development.

With FMR Ω 3 the supply of essential omega 3 fatty acids (EPA/DHA) contributes to an increased anti-inflammatory capacity.

These premium products result in an improved gut integrity, a more efficient nutrient use and significantly increased growth performance.

In conclusion, it has been shown that better performance and better gut health in the starter phase strongly contributes to a better profit for a lifetime. ■