Getting the same performance for less in Broilers using GalliPro®

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Competition for cereals (the main source of energy in poultry feed) between agriculture and a growing human population, as well as other factors such as poor harvests, means that the cost of energy in poultry feed can be high. Maximizing the release of energy from cereals is crucial to ensure cost effective animal production.

Chr. Hansen conducted a study in September 2013 at a commercial research facility in the USA to evaluate the impact of feeding GalliPro on the performance of broilers fed diets containing different energy levels.

The study consisted of 48 pens with 45 Cobb 500 male broilers per pen (1.56m²). There were 6 treatment groups and 8 replicates per treatment.

Table 1 Treatments

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<tr>
<th>Metabolizable Energy (ME) (Kcal/kg)</th>
<th>100% (3,069)</th>
<th>98% (2,999)</th>
<th>96% (2,939)</th>
<th>94% (2,879)</th>
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The standard diet comprised corn and soybean meal. Phytase was included in all feeds. The diets were formulated to maintain the same amino acid profile as far as possible across treatments. Feeding phases were as follows: starter, 0-21 days; grower, 22-35 days; finisher, 36-42 days. Birds were fed ad libitum. The anticoccidial programme comprise: starter and grower, Robenz 33 ppm; finisher, Deccox 125 ppm. GalliPro® was included in feed at the commercial level, 500g/T feed (8 x10⁵ CFU/g feed). No feed additive antibiotics were used. Top dressed reused litter was used to mimic commercial conditions.

Figure 1. FCR adjusted for mortality and average weight gain at 42 days

As has been demonstrated on numerous occasions, the addition of GalliPro® to standard diets (100% ME) results in superior FCR and weight gain compared to controls. However, when birds were fed diets comprising 98% ME supplemented with GalliPro®, their weight gain was numerically superior to non-supplemented birds fed 100% ME, although FCR was comparably slightly poorer. As ME in diets was reduced even further (down to 94% ME) the advantages of GalliPro® on weight gain and FCR are apparent.

This is first step in understanding the contribution of GalliPro® to feed digestibility and the potential for GalliPro®, for example, to compensate for variability in ingredient quality.