

PROGLOBULIN® FOR POULTRY



Inclusion of spray dried plasma in starter diets for broilers will boost the performance of the broiler flock. The highly digestible protein source with intrinsic functional components supports the early growth.

An impaired performance in the starter period is likely to have a negative effect on final weight. With the constant reduction in days to slaughter, good growth during the starter period becomes more important.

One of the challenges for young chickens is that they have an immature digestive system resulting in a less efficient digestion. For optimal performance a digestible diet with an appropriate amino acid composition is required. Secondly, bacteriological challenges (infections) in the digestive system at the early stage of life hamper growth and are a reason for antibiotic treatment. Resistance of the gut can be improved with plasma in high quality feeds.

WHY PLASMA CAN SUPPORT HEALTHY FEEDING?

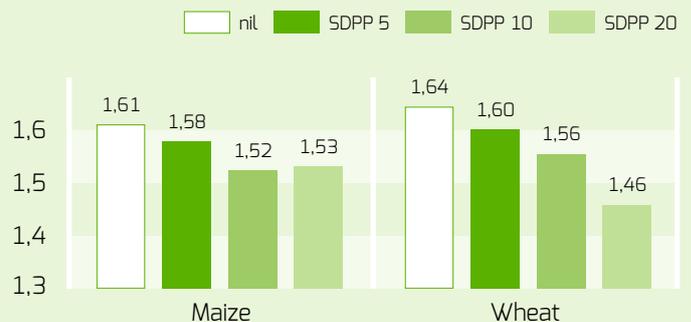
Blood plasma is made from hygienically collected blood at slaughter from healthy animals. During processing the functionality of the components is maintained. There is extensive positive experience with the application of plasma products in feeds for piglets around weaning. Plasma products lead to better feed intake, better growth and improved feed conversion. A major part of the superior effects of plasma is due to functional proteins, mainly immunoglobulins and other bio-active components, that support the immune system.

POULTRY EXPERIENCE

More than a dozen publications can be found that support the positive effect of plasma in broilers. In many studies a significant improvement of Feed Conversion, on average around 6% improvement is reported, ranging from 3% to even 20% percent during the first days. With the same feed intake growth is improved. No negative effects on carcass composition were reported.

ECONOMICS

Compared to other protein compounds plasma would have a high cost when it would only bring high digestible protein. The functional properties in plasma however can result in a 6 to 12 point improvement of feed gain, a good start and an improved growth. Accordingly, the cost per kg growth will be lower, even at levels of 2 % plasma inclusion in the diet.



Results of trial in Australia (2013): FCR at day 35. Significant differences with the control diet. Effect of diet and inclusion rate.

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OTHER RELEVANT FINDINGS IN BROILER FEEDING TRIALS

- Better results are to be expected in less favorable diets. Plasma shows the best benefit in wheat based diets compared to corn (Bhuiyan, 2014).
- Pelleting (temperature) and expansion did not negatively affect the influence of plasma on performance (Campbell et al., 2005; Campbell et al., 2006b).
- Especially under less favorable circumstance (e.g. by housing chickens on used litter in experiments) plasma shows a beneficial effects on zoo-technical parameters like ADG, FI and FCR (Campbell et al., 2003; Campbell et al., 2006, Bregendahl, 2005).
- The beneficial effects of plasma are not only observed when plasma was added to the starter diets; Effects were better when fed till slaughter-finish (Campbell et al., 2006a).
- There is a dose dependent effect of plasma with higher improvement at higher inclusion rates or longer duration of feeding plasma (Campbell et al., 2003).

Turkeys

Also in studies with turkeys improvement of performance was observed.

CONCLUSION

The application of plasma in poultry diets appears to be an economic way to improve the quality of the diets. These high quality diets can support the digestion in the immature chicken and support the immune system of the broiler to compete the bacterial challenges. This may help in starting without antibiotics and rearing uniform flocks.

In many of the reviewed trials a significant improvement FCR and growth in first phases was seen. In some trails also positive effects on feed intake were shown. No negative effects on carcass composition were observed.

To compose a diet bovine, ovine and porcine plasma can be used. Positive effects were reported with different inclusion days, e.g. 5, 10 and 14 days, and with different inclusion percentages like 0.5, 1 and 2%. Expected effects are depending on circumstances. Dose depended effects are to be expected.

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Broilers

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