

**Determination of protein level and lysine supplementation
of a maize/soyabean diet for bacon pigs**

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This study was made to examine the consequences of restricted protein feeding constant supply during both growing and finishing periods and in order to limit, by lysine supplementation, the slight lowering of performances recorded in previous trials during the growing period.

The results obtained show the following facts :

Comparison of dietary protein levels (17, 15 and 13 p. 100)

Diets containing 17 and 15 p. 100 crude protein gave the same performances for all parameters studied.

The diets containing 13 p. 100 crude protein did not differ from the others for the overall growing-finishing period, but the performances recorded between 29 and 60 kg were lower, notably in the females. This was partially compensated for during the finishing period where the dietary lysine content was 0.65 p. 100 and the lysine/digestible energy ratio 1.92.

Comparison of lysine supplementation levels.

For the whole experimental period, the three lysine supplemented diets (13 p. 100 crude protein in the basal diet) did not show any significant difference either between each others or in comparison with the first three ones (17, 15 and 13 p. 100 crude protein).

The previously recorded lower performances during growth (CASTAING and LEUILLET, 1975) with a 14 p. 100 crude protein diet supplemented with lysine as compared to a 18 p. 100 crude protein diet were not observed in the present trial. The difference between the weights of the piglets at the beginning of the experiment might explain this result : lighter animals with higher requirements for protein would be penalized.

During the finishing period we observed that performances were reduced with increasing lysine levels, in particular in castrated males. This would indicate the limits for use of this amino acid in low crude protein diets.