Des aliments porcs moins riches en protéines et formulés à base de tourteau de colza et d'acides aminés de synthèse, dont la L-Valine, permettent de réduire le recours au tourteau de soja

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Utilisation of soybean meal in pig diets can be reduced through the formulation of low crude protein diets based on rapeseed meal and synthetic amino acids, including L-Valine

One hundred and forty-four (144) group-housed growing-finishing pigs were allocated to one of three experimental feeding strategies. Diets S were formulated with soybean meal and their dietary crude protein (CP) content averaged 15.9 and 15.0% during the growing and the finishing periods, respectively. In diets C, CP levels were reduced to 15.0 and 14.1%, respectively, and soybean meal was replaced partially or completely with rapeseed meal and balanced with L-Lysine, DL-Methionine, L-Threonine and L-Tryptophan. In diets CV, L-Valine was also incorporated (0.3 g/kg) allowing an additional reduction of CP content (14.5 and 13.2%, respectively). All diets were formulated on the same net energy basis (9.7 MJ NE/kg) and on minimum ratios between digestible lysine and other amino acids following the ideal protein profile. Between 27 and 111 kg, no significant differences were observed between treatments on average daily gain, feed intake, feed conversion ratio or carcass fatness. These results indicate that it is possible to replace soybean meal with rapeseed meal in association with available free amino acids for an extended time without impacting growth performance. They also show that an additional reduction of dietary CP content can be achieved using L-Valine without affecting growth performance, as long as diets are formulated on a NE basis and in keeping with the ideal protein concept. Reduced dietary CP obtained with C and CV feeding strategies was associated with a reduction of N output of 400 and 650 g /pig, respectively.