

increased in the case of dry matter or organic matter (apparent digestibility coefficient (ADC) = 87.3 and 89.0 for groups 1 and 6). The digestibility of nitrogen increased in the same proportions, but in a significant way (ADC = 83.6 and 85.4 in the same groups). Conversely, and like in the case of replacement of skim-milk protein, the nitrogen retention coefficient (NRC = 66.1, 65.5, 61.5 and 59.9 in the groups 1, 4, 5 and 6) and the amount of nitrogen retained per day significantly decreased parallel to the weight gain (312, 311, 299 and 285 g/day in the groups 1, 4, 5 and 6). This lowering of protein efficiency may be explained by the decrease in the lysine level of the diet after introduction of MPC (1.52 p. 100 of lysine in the control diet, 1.34 p. 100 of lysine in the diet containing 10 p. 100 MPC and 1.26 p. 100 in that containing 15 p. 100 MPC). The maize protein concentrate studied has the advantage of being remarkably digestible, but its utilization must be limited because of the risks for amino acid imbalance : tryptophan, leucine/ isoleucine ratio and especially low lysine level. Furthermore, the present results suggest that the minimum lysine level of 3-weeks-weaning diets must range about 1.45 p. 100 in the conditions of practice.

**Utilization of cane sugar molasses in pig feeding.
Influence of a high dietary energy content on piglet performances;
metabolic utilization of nitrogen in pigs of 35 kg**

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Two trials were made on 60 *Large White* pigs with a view to studying the following parameters :

- influence of a tallow supplementation of diets based on cane sugar molasses on the performances of piglets between 5 and 9 weeks of age ;
- influence of increasing levels of molasses (0, 20 and 40 p. 100) on the apparent digestibility and metabolic utilization of nitrogen in pigs of 35 kg, placed in digestibility cages.

Addition of 7.5 and 15 p. 100 tallow to piglet diets brought about a linear reduction in the digestibility of dry matter ($P < 0.05$), organic matter ($P < 0.05$) and energy ($P < 0.05$) of the diet. The growth performances were also significantly reduced because of a decrease in the intake of crude protein and digestible energy. On the other hand, the feed efficiency (kg gain/kg feed) increased with the tallow level of the diet.

In pigs of 35 kg, the increase in the molasses content of the diet was accompanied by a reduction of the digestibility of dry matter ($P < 0.05$), organic matter ($P < 0.05$) energy ($P < 0.05$) and especially crude protein ($P < 0.05$). This resulted in a decrease in the daily nitrogen retention ($P < 0.05$) although no significant effect of molasses on the nitrogen retention coefficient was noticed.