

## VI. — FEEDING

**Comparative study of a compound and a simplified diet based on wheat offered to sows in intensive production conditions**

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Two types of diets were compared in a «sow» trial carried out between 1980 and 1982. The compound diets used as control contained maize, wheat, barley, bran, soyabean meal, fish meal, minerals and vitamins. The simplified diets contained only wheat, soyabean meal, minerals and vitamins.

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Dietary supplies were almost equivalent :

- During gestation :  
300 to 320 g crude protein/day,  
11 to 11.5 g lysine/day,  
7 750 to 7 800 Kcal/day.
- During lactation :  
700 g crude protein/day,  
31 to 31.5 g lysine/day,  
15,900 to 16,000 Kcal/day.

The trial was made in 156 *Large White* sows (78 per diet) corresponding to 573 litters distributed over more than 5 successive reproductive cycles.

As compared to the compound diet, the simplified diet based on wheat led to the following results :

- a slight decrease in the prolificacy of sows with a high litter order,
- a significant increase in piglet mortality, especially perinatal mortality,
- a significantly lower number of weaned piglets per litter (—0.68),
- a slightly higher sow renewal rate.

In the absence of a physiological explanation of these results, we may conclude that it is not recommended to use wheat as only cereal in sow diets and that a combination with barley seems to be favourable. Likewise, use of fish meal is advisable.

Further studies are required to solve these problems.

**Utilization of freshly harvested wheat by the weaned piglet**

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In a trial concerning two consecutive crops (1981 and 1982), six batches of wheat of different variety and geographical origin were given to piglets very shortly after the harvest (4 to 18 days according to cases) in second age diets including wheat and