

**Composition of female pig fats :  
influence of the genetic type (*LF*, *LB* or *PP*)  
and changes during growth (between 40 and 100 kg)**

G. PASCAL, J. P. MACAIRE, B. DESMOULIN\* and M. BONNEAU\*

*Station de Recherches de Nutrition,*

\* *Station de Recherches sur l'Élevage des Porcs, I. N. R. A., C. N. R. Z.,  
78350 Jouy en Josas*

Comparison was made on the fatty acid composition of total lipids in the leaf fat and backfat of female pigs from the following breeds : *Landrace Français (LF)* ; *Landrace Belge (LB)* and *Pietrain (PP)*. The influences of the energy value and energy/protein ratio of the diet as well as of the growth stage of the animals were also studied.

The results obtained show :

1. That the breed has a small influence on the composition of fats in animals slaughtered at 96 kg. However, with the richest energy diets, the fats of *LB* and *PP* pigs were more unsaturated than those of *LF* pigs.
2. That at slaughter weights of 40 and 60 kg, fats of *LB* pigs were more unsaturated than those of *LF* and *PP* pigs. From 40 kg to 96 kg, the consistence of the fats of *LB* pigs highly increased, that of *LF* pigs moderately increased whereas that of *PP* remained almost unchanged.
3. That the amount of linoleic acid supplied by the consumption of pig fats is rather large. The increase of this amount, easy to obtain through the nutritional factors, leads, however, to a decrease in the technological quality of the fats.

**Comparison of boar taint estimation methods in pork from boars  
and hogs of *Belgian Landrace* or *Large White* breed**

M. BONNEAU and B. DESMOULIN

*Station de Recherches sur l'Élevage des Porcs, I. N. R. A., C. N. R. Z.,  
78350 Jouy en Josas*

Four olfactory tests were practised after quick or long heating of backfat and kidney fat in order to detect boar taint. Their forecasting value was settled by reference to 2 tests realized after cooking of roast or cutlets. The 6 tests were achieved by 3 female and 5 male judges on 16 boars and 14 hogs of *Belgian Landrace* or *Pietrain* breed. Main results were the following :

— olfactory assessments practised after quick heating of backfat or long heating of kidney fat were the most severe and gave the best forecasting of pig meats presenting boar taint at the time of cooking ;

— fatty acid composition was not a precise reference for presence of boar taint ;