

II. — *Flaked maize digestion in the growing pig*

In growing pigs, flaking of maize significantly improves ( $P < 0,01$ ) organic matter and especially nitrogen digestibility of a balanced feed containing maize (87 or 81 p. 100) and fish meal (6 or 12 p. 100), but it has only an effect on nitrogen retention, at the 12 p. 100 protein level (+ 0.2 g N retained/kg W<sup>0,75</sup>).

In gut contents of pigs killed one or three hours after a test meal the following was noticed after flaked maize feeding :

- a higher water content in the gut,
- a much slower water flow from the stomach, where the  $\alpha$ -amylase activity was higher and the pH decrease later and more marked.
- in the small intestine, starch degradation was intensive (10 to 30 fold higher soluble carbohydrate concentrations) and could explain the higher water retention.

---

**Dynamics and hierarchy of vitamin A storage in the pig liver**

R. FERRANDO, A. RANDOLPH and P. C. BLIN

*Laboratoire de Recherches de la Chaire de Nutrition et Alimentation  
École nationale vétérinaire d'Alfort,  
94701 Maisons Alfort*

---

In the pig, there seems to be a repletion hierarchy of the liver with respect to vitamin A. The right lobe is the first one to be rapidly loaded and the Spiegel lobe, the last one.

The percentage of vitamin A stored as compared to the dose ingested seems to be larger than in the rat. However, in the pig like in the rat, mean doses allotted over several days appear to be more efficient for liver storage than the administration of a single high dose.

---