

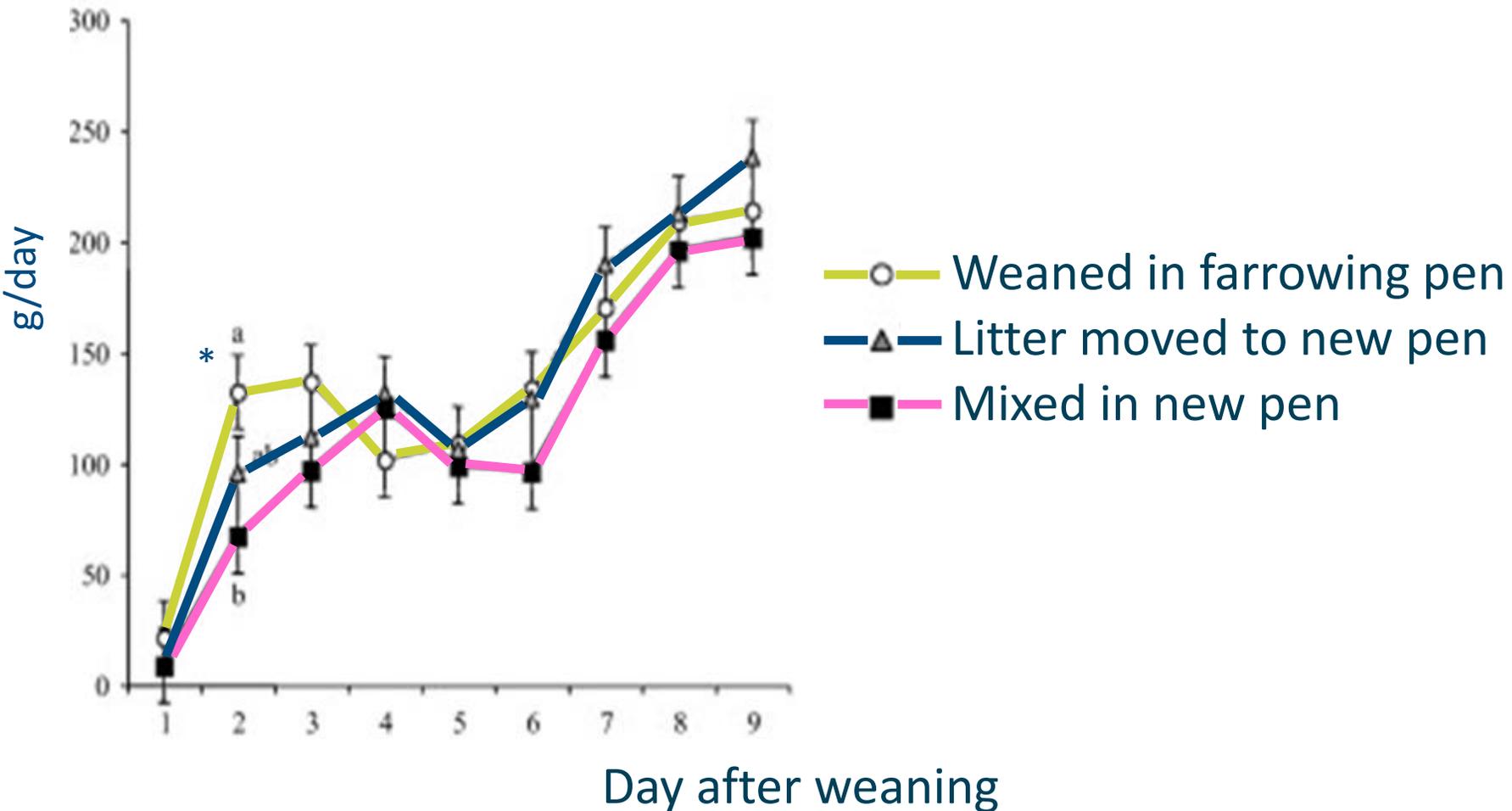
Feed intake patterns and gut health in piglets shortly after weaning

Jan Willem Resink and Theo van Kempen



After weaning piglets often show a “second dip” in feed intake

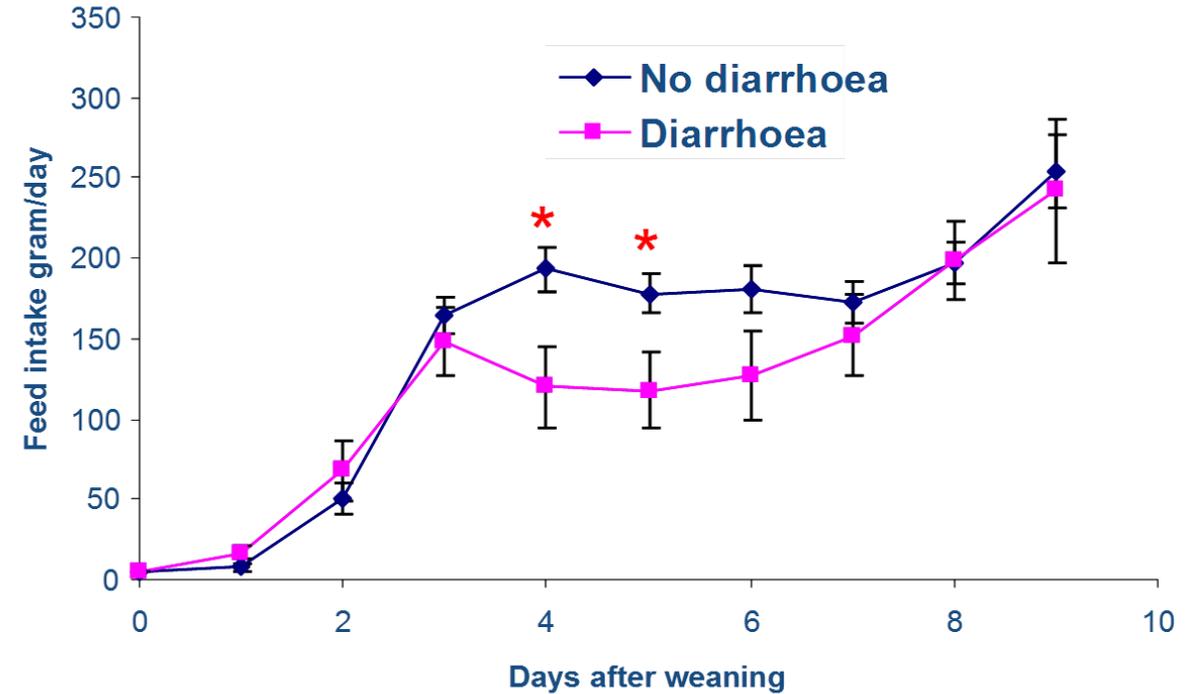
Average daily feed intake



Hypothesis

➤ Weaning stress is followed by a transition phase :

- Piglets are hungry
- Adaptation to solid feed
- Dip in feed intake



➤ Hypothesis:

A too high or too fast feed intake:

Overload of the stomach

Microbial disturbances in intestines

Drop in feed intake.

Set up of the study

➤ Animals

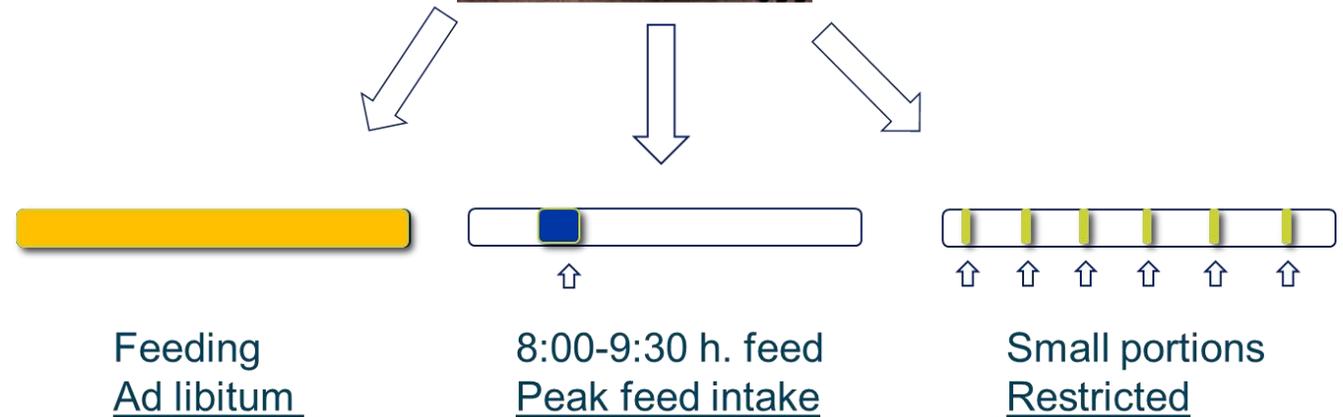
- 30 gilts and 30 barrows
- Weaned at day 21±1
- Housed in individual cages

➤ Feed

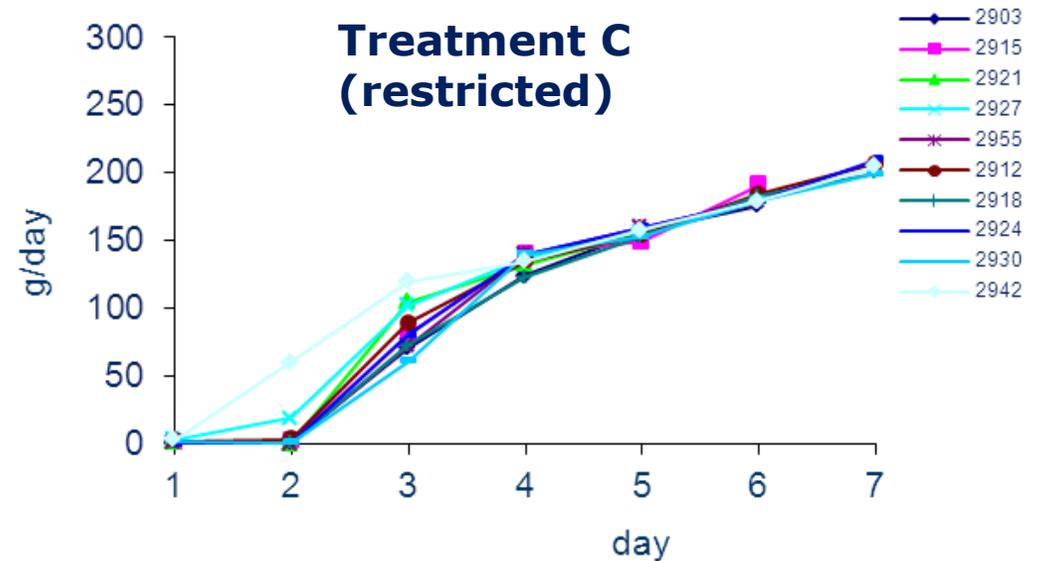
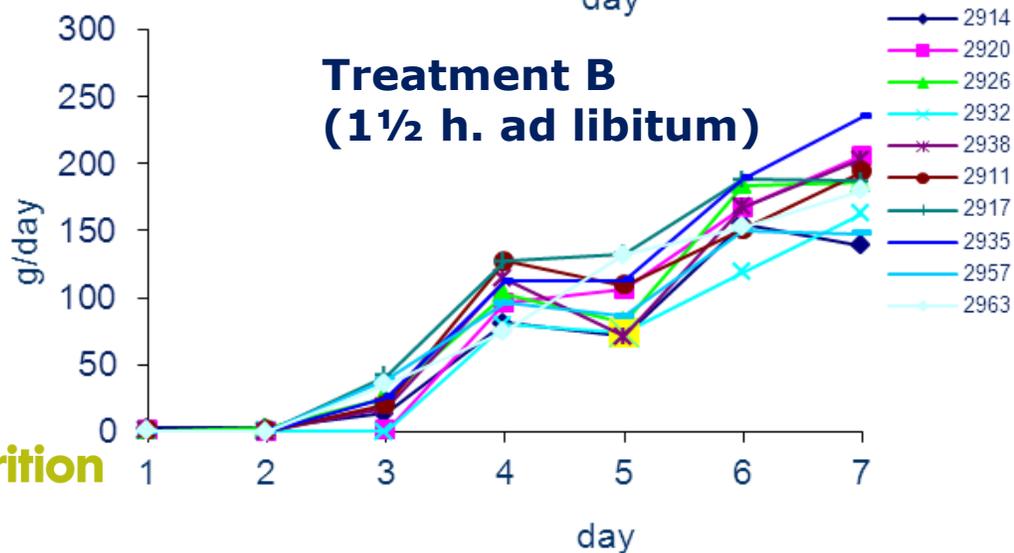
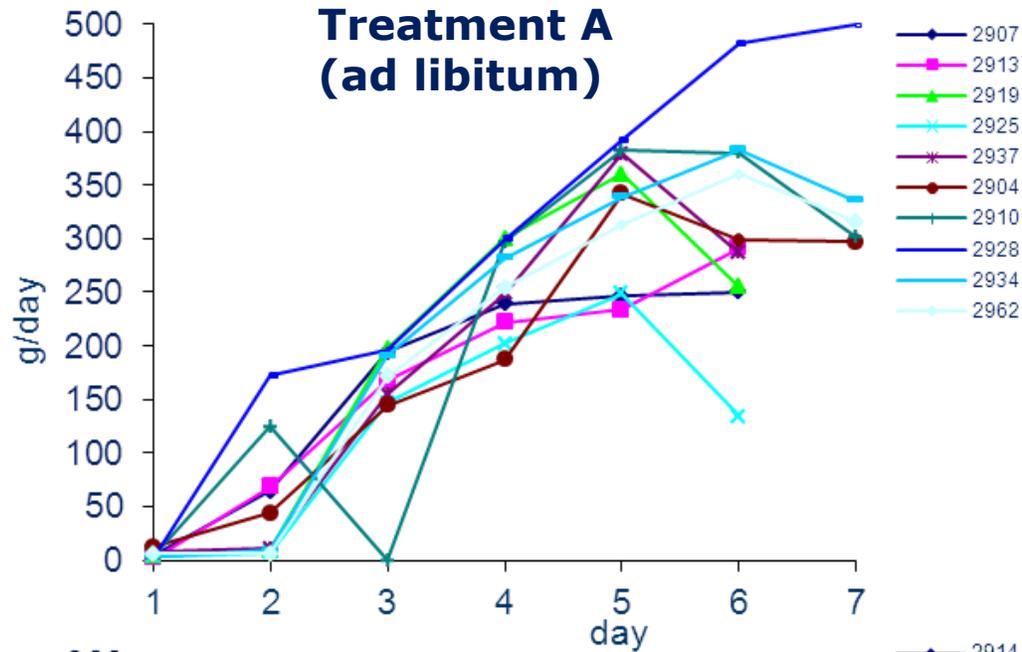
- Weaning diet
- Dry crumble (Milkiwean)

■ Treatments

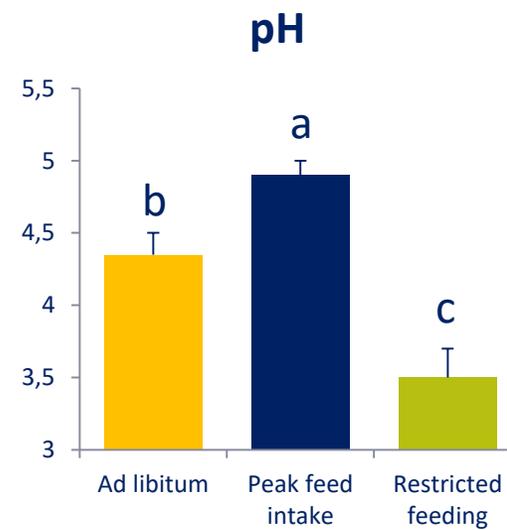
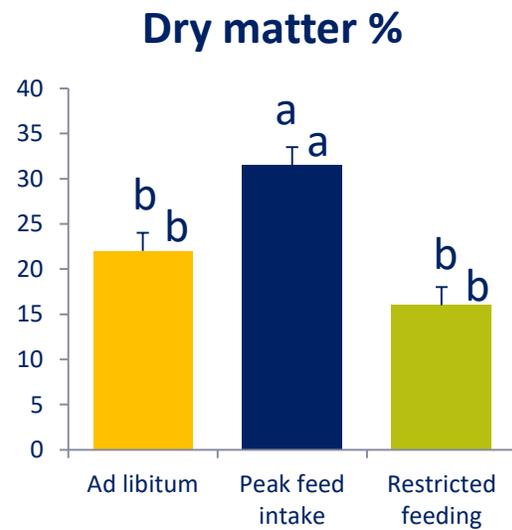
- **A** - Ad libitum during the whole day
- **B** - Ad libitum during 1½ h in the morning, no feed rest of the day
- **C** - Restricted based on a feeding curve



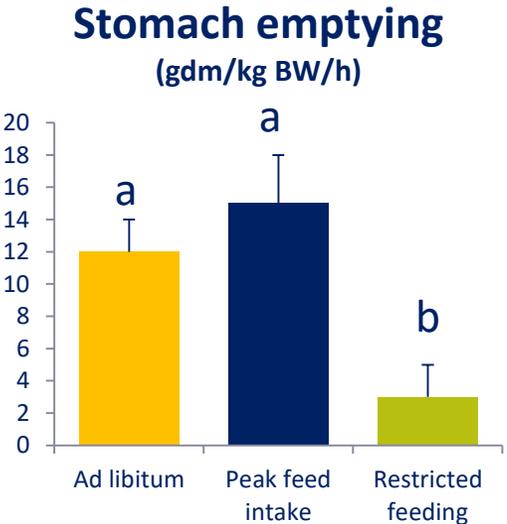
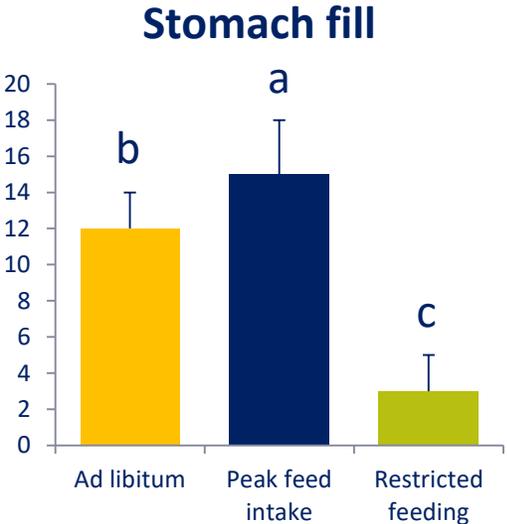
Individual feed intake



Stomach contents 4 h after meal

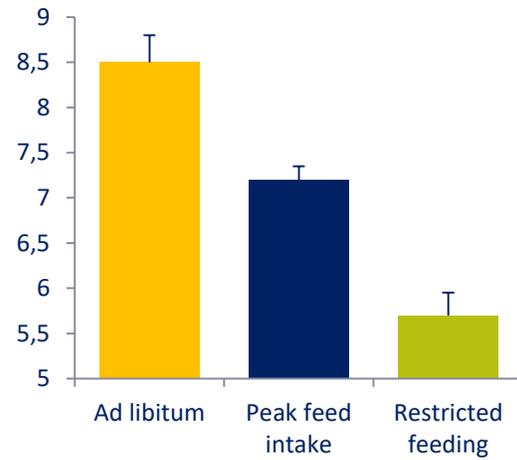


Dynamic stomach emptying

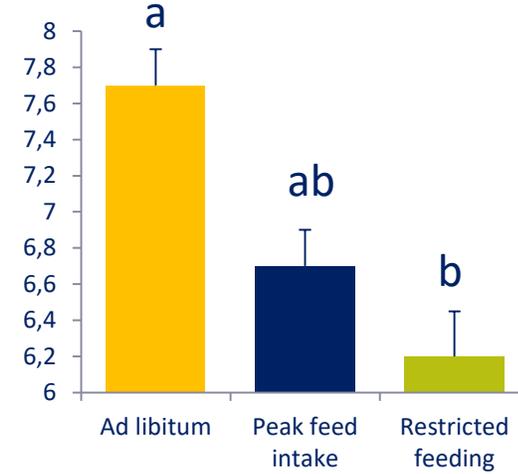


Jejunum

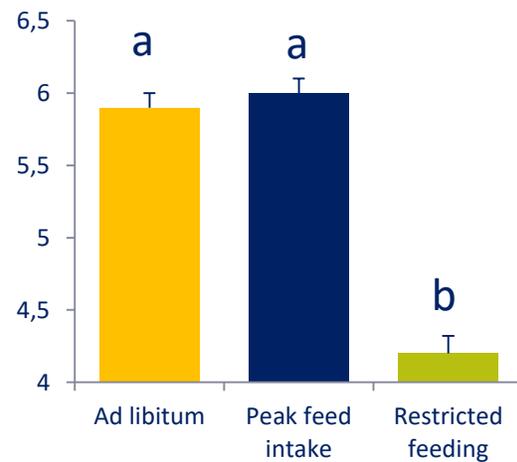
E. coli



Lactobacilli



Yeast



Conclusions

1. A too high or a too spiking increase in feed intake is responsible for the dip in feed intake.
2. A too fast feed intake is not beneficial for the development of a the microflora in the intestines.
3. The functioning of the stomach seems to be important.