Schothorst Feed Research

Preference of porcine mucosa products and plasma in newly weaned pigs

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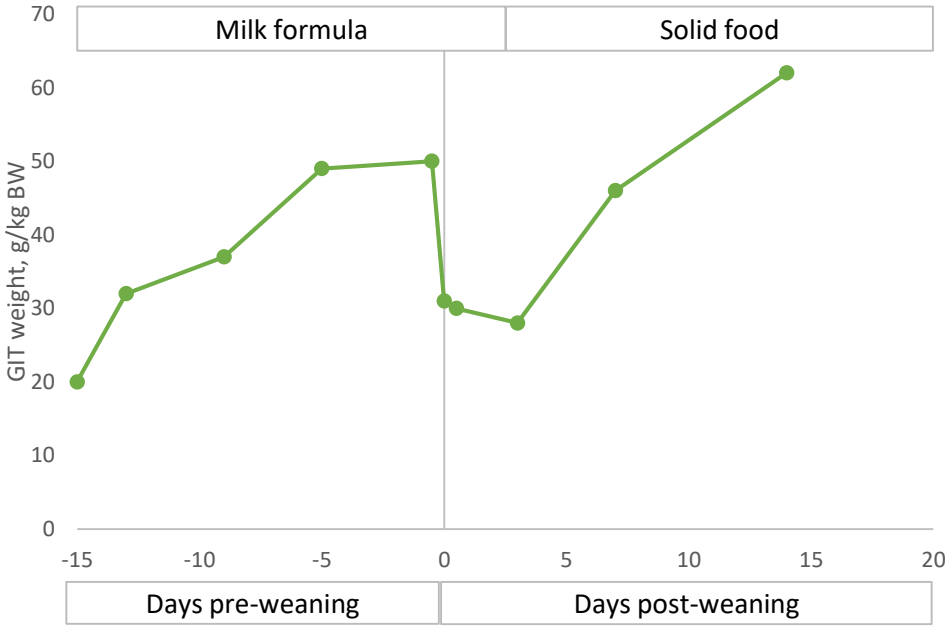
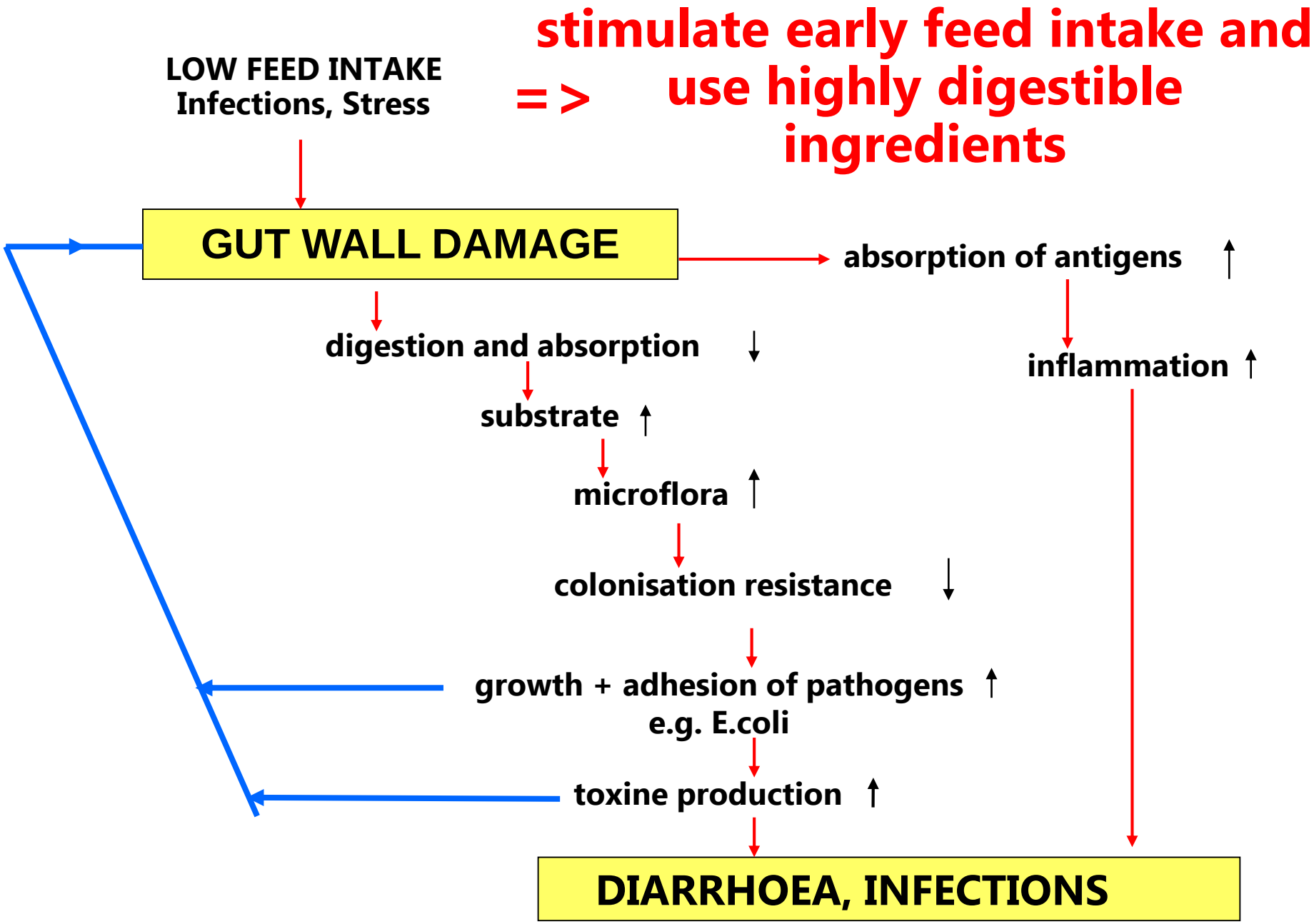
Reduction of feed intake is the main cause of PWD in piglets

Feed and Energy intake is reduced in the first 2 weeks after weaning

Gut development restarts 4-5 days after weaning and takes 10 days to restore





Use of highly digestible ingredients in PW diets is one strategy

- Fish meal
- High-protein SBM products
- Skimmed milk powder
- Spray-dried porcine plasma (SDPP)
- Hydrolysed porcine mucosa (HPM)

Processing generates variability:

- Moisture content
- CP content and digestibility
- Ash content (salt, sulphate)

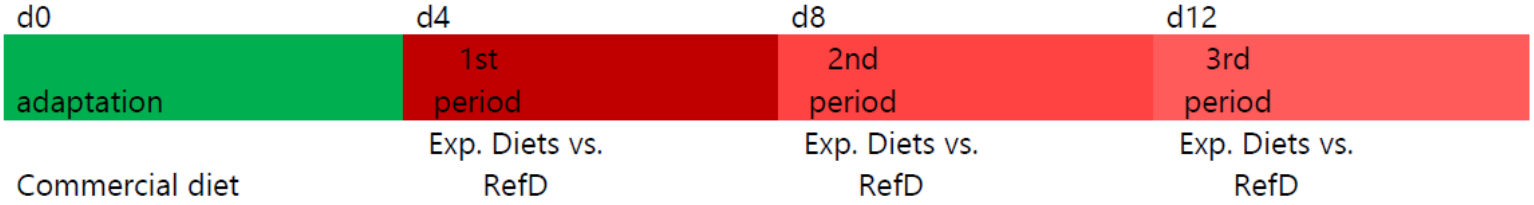
Objective

Investigate the preference of 3 HPM products and a SDPP product by a double-choice feeding trial in piglets

Materials and methods

Double-choice feeding

- 240 twenty-six d-old piglets. iBW= 7.5kg
- 40 pens (6 piglets/pen)
  - 28 pens: Ref. Diet vs. (7) Exp. Diet
  - 12 pens: test control
- Adaptation period 4 d
- Three 4-day consecutive periods (Solà-Oriol et al., 2009)
  - 4 reps/trmt/period => 12 reps/trmt



Reference Diet vs. Experimental Diets

10% skimmed milk powder

- Test product (partial or totally) replaced milk powder
- Lactose- balanced
- Iso-energetic

Exp. Diets	Test Product		Dose
1	HPM: MucoPro® Liquid	(MLiq)	2.5%[1]
2	HPM: MucoPro® Powder 1	(MPro80)	2.5%
3			5.0%
4	HPM: MucoPro® Powder 2	(MPro90)	2.5%
5			5.0%
6	SDPP: Proglobulin® 80P	(Plasma)	2.5%
7			5.0%

[1] DM content 44%; actual inclusion was 5.5%.

Materials and methods

Measurements:

- FI in both feeders at the end of each period
- Preference (%) calculated as:

  Preference, % = [(Test diet intake) / ((Test diet intake) + (Reference diet intake)] x 100

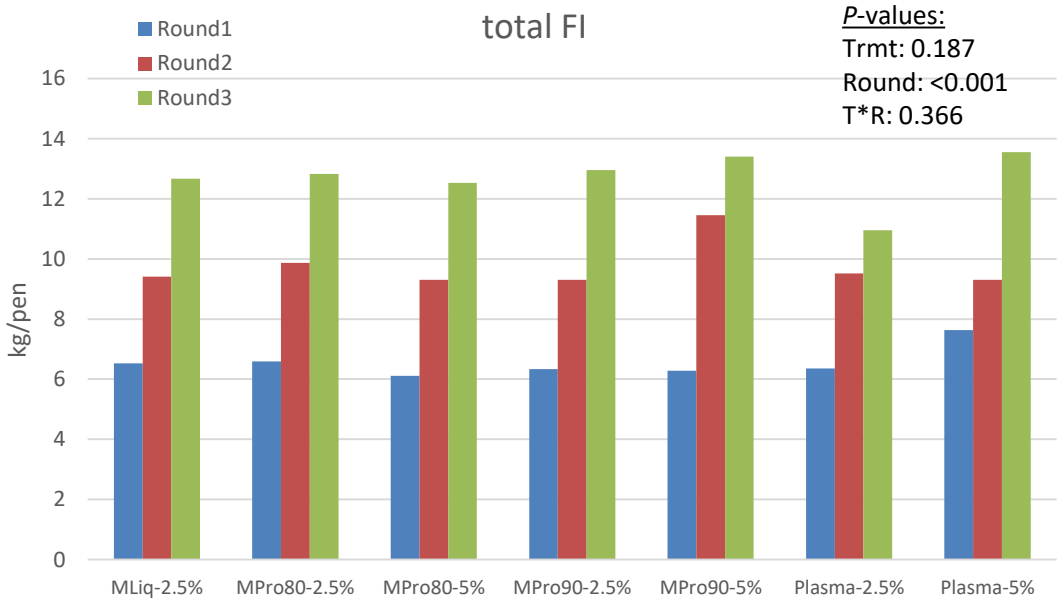
Statistical analyses:

- Mixed model - REML Genstat
  - Treatment
  - Round
  - Interaction (T x R)
- T-Test – preference values compared to 50% (neutral value)

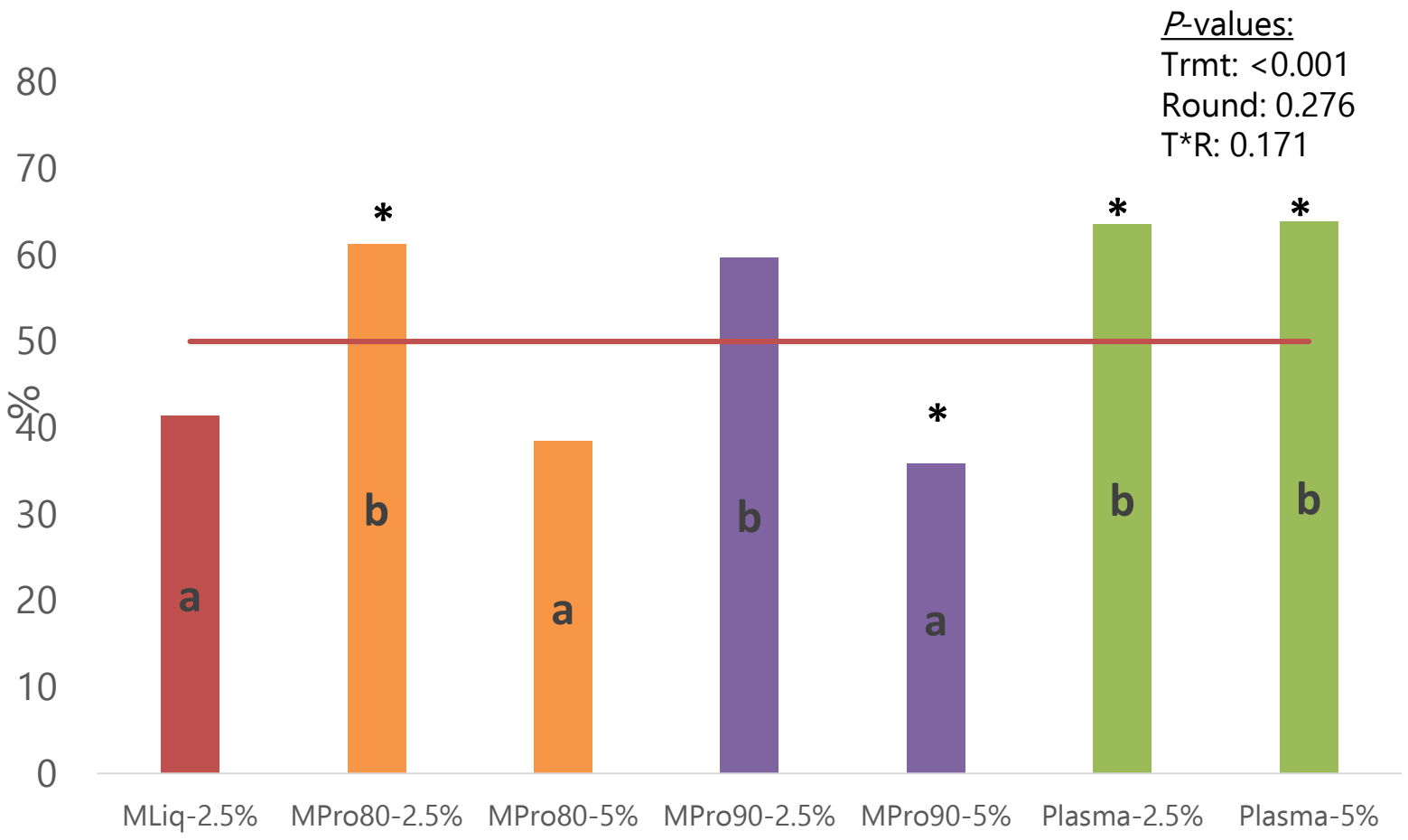
RESULTS

Results: Feed Intake

	MLiq	MPro80		MPro90		Plasma			*P*-values		
	2.5%	2.5%	5%	2.5%	5%	2.5%	5%	LSD	Treat	Round	T*R
FI test diet (kg)	3.86^{ab}	5.81^{c}	3.51^{a}	5.56^{bc}	3.70^{a}	5.79^{c}	6.01^{c}	1.702	**0.001**	**<0.001**	0.11
total FI (kg)	9.54	9.76	9.31	9.53	10.38	8.94	10.16	1.142	0.19	**<0.001**	0.37



Results: Preference %



Conclusion

Moderate (2.5%) inclusion rates of MucoPro80 (and MucoPro90) stimulate feed intake in piglets just after weaning just as well as plasma does at 2.5 and 5% inclusion rates.

Acknowledgements

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Thank you for your attention

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