DIETARY FIBER INCLUSION IN TRANSITION DIET MODULATES SOWS' BODY CONDITION AT FARROWING AND WEANING

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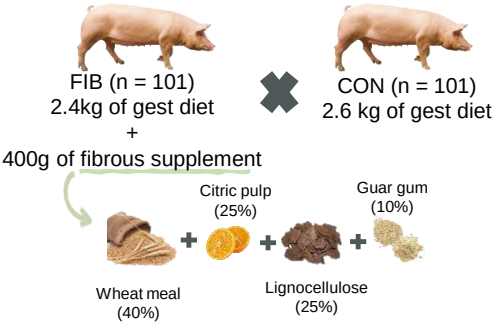
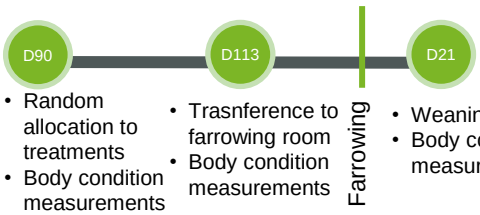
Background and Objectives

- Improper maternal body condition is amidst the main causes of poor reproductive health, decreased longevity, and increased perinatal mortality.
- The aim of this study was to evaluate the effects of including a fibrous supplement in the transition diet on sows' corporal composition until weaning.

Material and Methods





Calculated composition of gestation feed, kg

Iten	CON	FIB
ME, kcal	3.210	2.963
Crude fibre, g	22.5	60
NDF, g	10.1	14.8

- Body condition measurements: body weight (BW), backfat thickness (BFT) and loin depth (LD) by ultrasound.
- During lactation, all sows were fed the same lactation diet *ad libtum*.
- Variables were analyzed by ANOVA and statistical differences were set at $p<0.05$.

Results

- At day 90 of gestation, the BW, BFT and LD were similar between groups.
- At pre-farrowing, the BW and LD were greater in sows from CON, whilst the BFT was similar between groups.
- At weaning, LD was greater in sows from FIB, whilst the BFT and BW were similar between groups.

Body condition results of experimental groups

	Treatments		SEM	P-value
	FIB	CON		
Pre-farrowing				
BW	271	277	1.8	0.006
BFT	16.8	17.2	0.4	0.485
LD	58.9	61.1	0.7	0.026
Weaning				
BW	237	239	2.1	0.536
BFT	14.2	14.3	0.6	0.870
LD	53	51.4	0.6	0.028

Discussion and Conclusion

Feeding sows with transition diet rich in fiber may modulate sows' metabolism even with similar energy intake. These effects in metabolism led to changes in body composition at farrowing and weaning