

Feed consumption in lactating Norwegian loose housed hybrid sows

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OBJECTIVE:

Investigating the feeding capacity in loose housed Norwegian Landrace/Yorkshire sows and its correlation to weight loss and litter gain during five weeks of lactation.

Table 1: LS means for feed consumption and key figures for sow weight on day 1 (12-36h after parturition), sow weight loss, number of weaned piglets and litter gain.

	LS mean feed consumption (kg) ± SE	Sow weight day 1 (kg) ± SEM	Sow weight loss (kg) ± SEM	# weaned piglets ± SEM	Litter gain (kg) ± SEM
1 st parity	243.2 ± 6.0 ^a	219.3 ± 2.37	38.8 ± 2.60	11.4 ± 0.23	99.8 ± 3.17
2 nd parity	259.5 ± 8.0 ^{a 1)}	251.2 ± 6.02	37.0 ± 3.31	11.5 ± 0.30	102.3 ± 4.71
3-7 th parity	294.0 ± 3.5 ^b	291.2 ± 2.30	30.3 ± 2.20	11.2 ± 0.17	105.7 ± 1.87

LS means with different lettering within the same column differ significantly from each other ($p < 0.0001$).

1) $p < 0.1$ (tendency).

MATERIALS AND METHODS:

- 148 loose housed sows
- Pelleted lactation feed 9.86 MJ NE/kg feed and 8.26g Lysine/kg feed
- Five weeks of lactation
- Daily feed consumption
- Sow weight
- Litter weight
- Number of weaned piglets
- Ad libitum water access

Average daily feed consumption during lactation

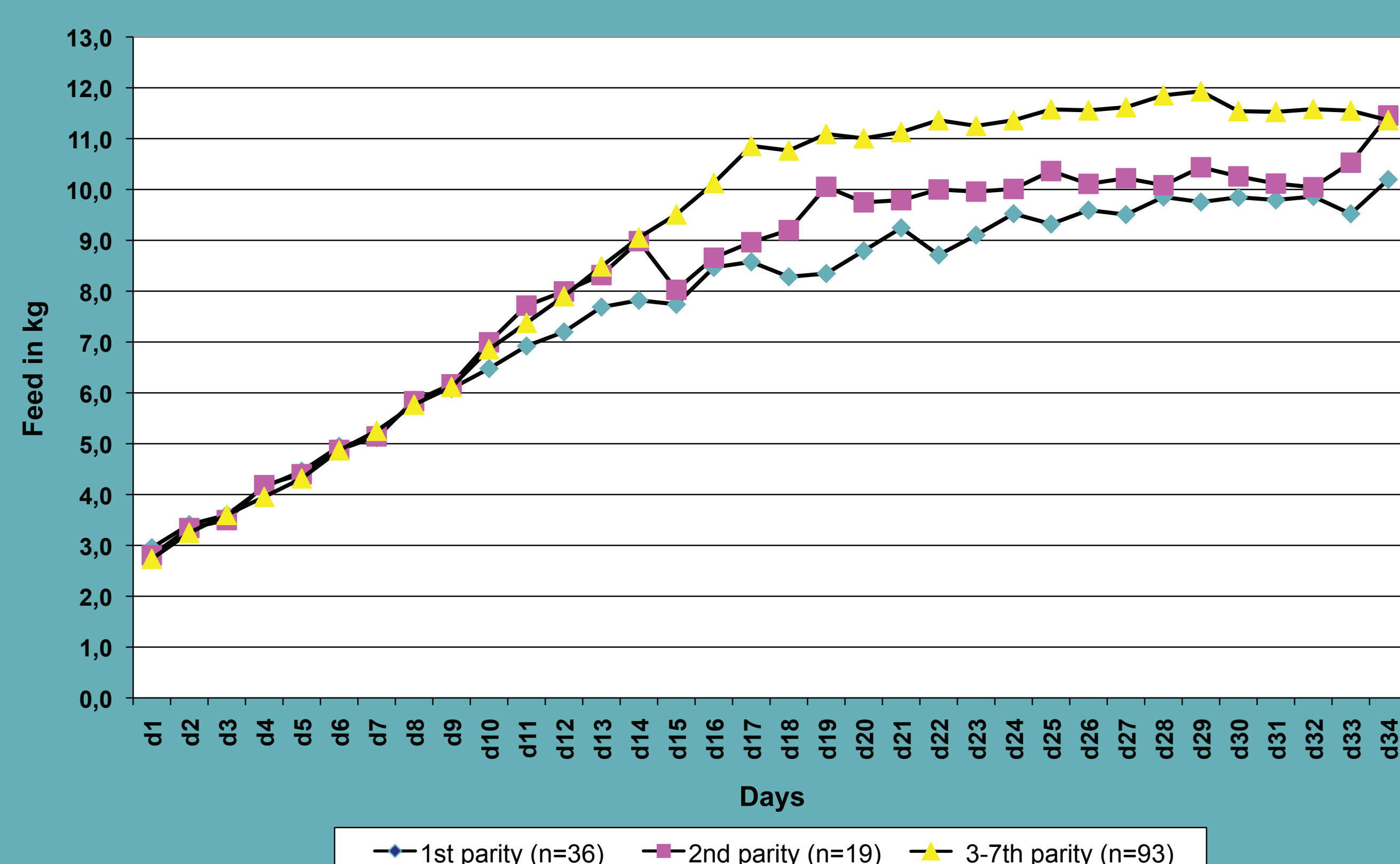


Figure 1: Average daily feed consumption in kg according to parity number.

Correlation between feed consumption and litter gain, and feed consumption and sow weight loss

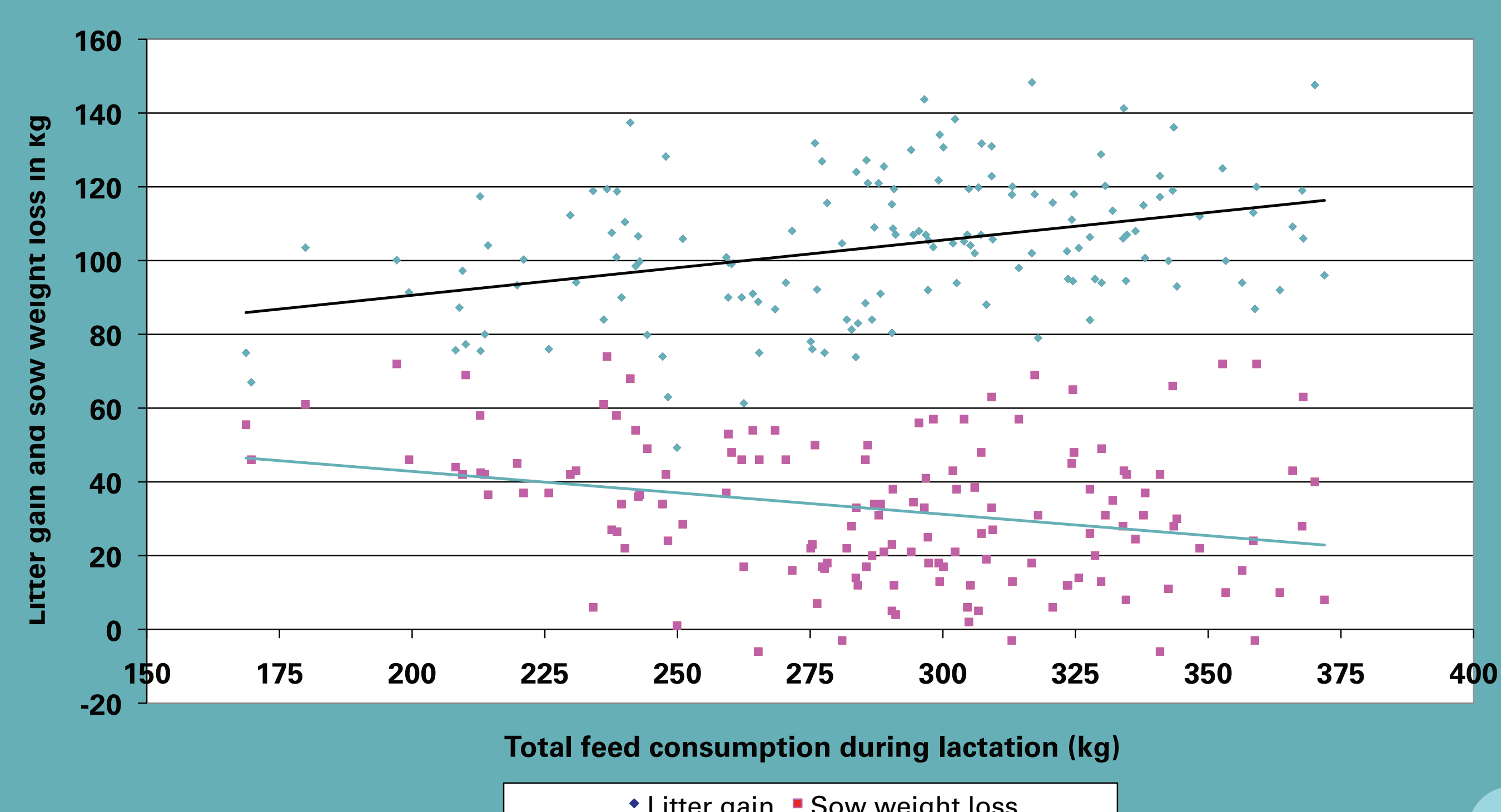


Figure 2: Positive correlation between feed consumption and litter gain; $r = 0.45$, $p < 0.0001$ (feed consumption $277.4\text{kg} \pm 44.0$ SD and litter gain $103.9\text{kg} \pm 18.6$ SD). Negative correlation between feed consumption and weight loss; $r = -0.43$, $p < 0.0001$ (feed consumption $277.4\text{kg} \pm 44.0$ SD and weight loss $32.7\text{kg} \pm 19.1$ SD).

CONCLUSION:

- Feed consumption varies with parity number
- A higher feed consumption is positively correlated with a higher litter gain
- A higher feed consumption is negatively correlated with sow weight loss

Statistical analyses:

The data were analysed in SAS 9.1 2003 edition, using the GLM and CORR procedures. Trial and parity number were used as fixed effects and length of lactation as a covariate.

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