

PIGS WEANED AT 14 D REACH SLAUGHTER WEIGHT AT THE SAME TIME AS PIGS WEANED AT 28 D BUT ARE FATTER

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Pigs are commonly weaned at 23-27 days of age. However, sow milk production peaks at 10-14 days of lactation after which it is only sufficient for pigs to attain about 50% of their growth potential (Dunshea *et al.*, 1995). By weaning earlier and providing pigs with a suitable diet, it may be possible to capitalize on their potential for rapid growth. The present study was designed to determine the interrelationships between sex, weaning age and weaning weight on subsequent growth performance.

Forty eight Large White x Landrace pigs were used in a factorial experiment with the respective factors being; age at weaning (14 or 28 d), weight at weaning (heavy (H) or light (L)) and sex (male or female). Pigs were weaned into individual pens and given a diet containing 15.5 MJ DE/kg and 0.95 g available lysine/MJ DE *ad libitum*. From 3 weeks post weaning, pigs were penned in groups and fed commercial rations.

Table 1. Effect of sex (S) and age (A) and weight (W) at weaning on pig performance.

	Male				Female				sed	Significance ²
	28 d		14 d		28 d		14 d			
	H ¹	L ¹	H	L	H	L	H	L		
<u>Live weight (kg)</u>										
Birth	1.9	1.4	1.8	1.5	1.9	1.3	1.9	1.4	0.15	W***
2 weeks	5.4	3.3	5.4	3.3	4.8	3.3	5.3	3.4	0.29	W***
4 weeks	9.9	5.9	8.2	4.4	8.6	5.7	8.1	5.7	0.47	A**,W***,SxW**SxA*
7 weeks	19.7	13.4	16.2	12.7	18.9	14.3	16.9	14.0	1.0	A**,W***, SxA**
15 weeks	62.2	52.7	60.5	52.3	58.5	53.3	58.8	53.4	2.5	W***
19 weeks	85.3	71.7	84.8	71.5	79.2	72.1	79.7	71.7	2.8	W***, SxW*
23 weeks	109.6	94.4	112.9	91.5	102.9	95.2	104.4	93.2	5.3	W***
<u>P2 backfat (mm)</u>										
23 weeks	10.6	11.2	15.0	12.8	10.7	11.1	12.8	11.6	1.65	W**

¹Weight at weaning, H=Heavy; L=Light. ²*P<0.05; **P<0.01; ***P<0.001.

At 4 and 7 weeks, pigs weaned at 14 d were lighter than those weaned at 28 d. By 15 weeks, these differences were no longer apparent. Pigs which were heavier at weaning were also heavier at every age, but by 19 weeks, there was a significant SxW interaction which tended to be still apparent at 23 weeks (P=0.11). Thus, at 23 weeks H boars were heavier than H gilts (110.4 vs 103.8 kg, P=0.027) whereas this was not the case for L boars and gilts (94.3 vs 94.0 kg, P=0.96). It is hypothesised that the greater number of muscle fibres present in H pigs at birth (Dyer *et al.*, 1993) may allow androgenic benefits to be expressed later in boars. While there were no effects of sex or weight at weaning on fatness, pigs weaned at 14 d had a greater P2 backfat depth at 23 weeks than pigs weaned at 28 d (13.1 vs 10.9 mm, P=0.009). While not measured, it is suggested that increased feed intake during the finisher phase may have contributed to the increase in fatness. Although pigs can be weaned at 14 d and grow well, there is a potential for increased fatness.

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References

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