

Normally during lactation the sow is in anoestrus. However, during the lactation period the hypothalamic-pituitary system has to restore its ability to fire high frequency/low amplitude pulses of LH to recruit follicles to grow out to ovulatory sizes and to be able to mount a sufficient preovulatory LH surge. Follicle growth also has to restore during lactation to have good quality antral follicles at the end of lactation. Low feed levels (both in terms of protein and energy) during lactation reduces restoration of LH levels and frequency during lactation, resulting in extended weaning to oestrus intervals. Low feeding levels during lactation also impair follicle growth during lactation, resulting in smaller, less quality follicles at the end of lactation. These follicles result in lower ovulation rates and lower embryo survival. An adequate feed intake during lactation, preventing high losses of body stores is therefore important. Feed intake can be stimulated through good management in which attention should be given to gilt development, feed intake during pregnancy, water intake, ambient temperatures in the farrowing stable, feeding systems and feeding pattern during lactation. Reducing the number of piglets during (part of) the lactation can be successful in improving reproductive results after lactation, but a risk is the occurrence of lactational oestrus. Post weaning feeding of insulin stimulating diets or management can partly restore the negative effects of lactation weight loss on reproductive output. Also extending the time of first service after weaning by using Rebreeding TM or skipping a heat improves subsequent pregnancy rate and litter size.