Feed intake during gestation

It has been demonstrated many times that there is a strong inverse relationship between feed intake during gestation and lactation, i.e., the more she eats during gestation, the less she eats during lactation. This is often associated with gilts that are in good body condition and above average P2 at farrowing.

Studies have shown that gilts coming into the farrowing house fat, with a body condition score (BCS) of 4 or above, which have failed to eat enough and have subsequently lost a larger percentage of their body weight compared to medium BCS gilts (3–3.5), who managed to maintain or only lose a small percentage of their body weight, generally perform worst and have a higher level of reproductive failure.

Unfortunately for gilts that are fed as a group and not individually, the more dominant gilts often achieve these higher BCS. Check the gilts’ body condition regularly and remove the poorest gilts where possible so that they can receive special attention. This will enable the group’s daily feed allowance to remain more conservative.

Environment pre-farrowing

The gilt encounters many changes prior to farrowing associated with the move from gestation to farrowing accommodation.

- Confinement
- Separation from pen mates
- Change of floor surface
- Change of personnel
- Change of feed and often the removal of straw
- Possible decrease in water intake if changing from water trough to nipple drinker.

Acceptable faeces should be a glistening, well-formed mass that is soft to the touch, as shown in Figure 1. When constipated, the faeces become hard round balls. A recent study has shown that up to 20% of sows given a lactation diet prior to farrowing can still be constipated for several days post-farrowing, resulting in poor daily feed intake, reduced mammary function with inflammation, discomfort and restlessness.

Some remedial actions taken by producers include providing fibre through the addition or substitution of bran to the daily ration, and/or introducing feed additives such as probiotics and yeast, both of which can reduce the incidence of constipation.

Another intervention could be the provision of hessian ropes attached to the gilt’s farrowing crate, this is a manipulable material and may alleviate some of the stress the gilt is experiencing.
Feeding scale

After farrowing the gilt should have her daily feed intake increased gradually, by 0.5 kg per day as per the Stotfold Feeding Scale. A good visible record (Figure 2) should be kept so that you can see if feed intake falls or plateaus, which can result in the whole lactation becoming compromised as her appetite is rarely fully restored.

Supplementary water should be provided (Figure 3). Remember that a good lactation requires good water intake as 80% of the volume of milk produced consists of water. Water intake is also directly correlated to feed intake. Ensure that gilts are presented with fresh feed and where considered appropriate, the practice of top dressing using appetisers such as fish meal or full fat soya could be introduced after discussion with your nutritionist and vet.

Environment

The lactating gilts will show reduced feed intake with increasing ambient temperature.

- Ideally maintain a room temperature between 16–18°C
- Ensure the ventilation system is well maintained and adjust inlets and outlets as required
- Reduce supplementary heating to the piglets and use only where necessary for young/small piglets
- Consider covering creep areas where possible
- Investigate methods to provide supplementary cooling to the gilts without chilling the piglets
- Feed at least twice a day and increase to three times during the last week
- Feed the largest feed last so that it can be eaten overnight and the smallest feed at midday
- When the temperature rises in summer consider feeding three times a day as routine.

Summary

Every effort must be made to achieve good feed intake during lactation and to minimise body condition loss. This is not only important for subsequent performance, but uneven BCS within a group of primiparous sows post weaning is more difficult to manage and more costly in terms of gestation feed intake (cost per kilogram body weight).