

**EARLY AND LATE GESTATION** 

MIXING SOWS - HOW TO MAXIMISE WELFARE AND BEST PRACTICE GILT MANAGEMENT FOR FERTILITY AND LONGEVITY PROVIDE THE BEST PRACTICE GILT AND SOW FEEDING RECOMMENDATIONS FOR EARLY AND LATE GESTATION

# **Project Participants**

Through the Pork CRC, Dr Ray King, Dr Roger Campbell, Dr Paul Hemsworth, Dr Pat Mitchell, Graeme Crook, Brendon Cant, Imogene Gardiner, Dr Rebecca Athorn and Dr Kate Plush

#### **Problem**

Due to differing nutrient requirements throughout the length of gestation, sows and gilts need to be fed differently depending on what stage of pregnancy they are in. Insufficient and inappropriate feeding management of gilts and sows in early and late gestation can result in embryo and foetal losses.

# **Background**

Feeding management for sows and gilts during gestation focuses on minimising embryo and foetal losses and preparing the animal for farrowing and lactation. In the early stages of gestation, just after conception, the first objective is to provide conditions which will ensure embryo survival and favour a large litter size at farrowing. Ensuring the growth of the developing foetuses and providing sufficient nutrient stores to replenish the sow is the objective during mid gestation. In late gestation, foetal growth continues at a rapid rate and mammary development occurs in preparation for upcoming lactation.

Appropriate feeding programs need to be implemented to satisfy these nutritional needs and ensure continued reproductive performance of sows while remaining profitable.

## Value for Producers

Providing the correct diets and levels of feed to gilts and sows during early and late gestation ensures they have the required nutrients for embryo growth and development. It also helps to prepare them for farrowing and lactation. This will aid in maximising reproductive performance on-farm, increasing overall productivity and profitability for producers.



### **Recommendations**

Gilts should be fed a gilt developer diet ad libitum from selection until mating. If there are heavy gilts at mating, they should be restricted to only 80 to 85 per cent of ad libitum intake. Oocyte or egg quality in gilts is optimised when a gilt is fed a high level of a good quality gilt developer diet for two or more weeks prior to mating. This is known as the 'flushing effect'.

A standard dry sow or gilt developer diet should be fed at 2.4 to 2.8 kilograms per day for the first four weeks of gestation to optimise growth and reproductive output. During the second month of pregnancy, the feeding objectives for gilts are to maintain pregnancy, maintain litter size, optimise piglet birthweights, maximise sow feed intake in lactation and maximise post-natal piglet growth. Feeding a dry sow diet from 2.2 to 2.5 kilograms per day to gilts and sows in mid-gestation will ensure sufficient energy and protein intake, facilitating faster post-natal growth.

In the last three to four weeks of gestation, it has been common to 'bump feed' or increase feed levels by 1.0 kilogram per day to meet the increasing demands of the growing foetuses, prepare the gilt for lactation and to ensure a prompt return to cycle following lactation. However, producers should discuss this with their nutritionist.

#### **More Information**

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