



## New generation sow: Nutrition and management

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The modern sow is a highly prolific animal and should be seen as a top athlete. As such, she needs to be managed and fed accordingly.

In the last couple of years, we have seen a steady increase in the number of born alive piglets, from the different genetic breeds. When feeding these high reproducing breeds, we need to consider the recommendations and feeding

manuals of those genetic suppliers. There are different approaches and strategies that are recommended. It is important to analyse this information correctly to then be able to apply it successfully on-farm. The correct on-farm strategy will be determined by management, housing and practical considerations. A "one-size-fits-all" strategy simply cannot just be implemented.

The basic guidelines need to be followed, but the strategy needs to be customised for the specific

scenario.

The customisation and implementation of a feeding and management strategy is actually a combined effort between management, genetic technical services, veterinarian and nutritionist. It is a team effort, to ensure that optimal production is achieved on farm. The genetic potential is available to produce more than 14 pigs born alive per sow and to wean close to 30 pigs per sow per year, even more.

To achieve the genetic potential of our sows, we need to focus on the gilts when they are still very young.

In literature, there are available data that indicate that gilts, which had early diarrhoea in the farrowing house, are already negatively affected with regard to reproduction potential later in life. Early gilt selection criteria is very important in selecting the correct animal for future breeding purposes. The genetic companies have guidelines with regard to these criteria.

### **Manage and feed separately**

It is important to manage and feed the gilts separately from around 10 weeks (70 days) of age. A gilt is not a grower pig and thus needs to be treated differently to unlock their genetic potential.

Gilts need to grow slowly and constantly at between 650 to 750 grams per day. Different genetics have different targets, but in general, mating occurs at 2nd or 3rd oestrus, around 30 to 34 weeks of age and at a weight of between 135 to 155 kg. It is important that these gilts are fed ad lib and that the specifications of the diet and ingredients used in the ration, controls feed intake and growth rate.

By improving our gilts' reproduction performance, we can improve overall herd performance.

The nutritional requirements of the sow herd has changed over the years and we need to be able to adapt our strategies accordingly. The sow herd has an inherent genetic potential for lean meat deposition. When formulating rations, we as nutritionists need to calculate the amino acid requirements and not overfeed on amino acids. The sow has the ability to ferment fibre and different fibre

sources are available to be used in our diets, especially in gestation diets. If we look at literature, there are two extreme strategies with respect to fibre: The American approach, containing very low fibre diets and the European way, where much more fibre is included in diets and different fibre sources are being used. Fibre does play an important role in sows, with a positive effect on constipation, gut fill and stress, especially in group sow housing. We know that there are differences in pigs weaned per sow per year between the American herds and the European herds, even within the same genetic source. Does fibre maybe play a role in this?

#### Varied intake

During the lactation phase the voluntary feed intake between the different genetic lines do vary. The recommended feeding strategies also differ between the genetic suppliers, as well as the composition of the diet. A lot of research has been done on the effect of protein, energy and environmental

conditions on voluntary feed intake and production parameters of the sow. Sows in hot environments vs cool environments, have different feed intake patterns and the diet composition can be manipulated to enhance voluntary feed intake. It is therefore very important to be able to measure feed intake in the farrowing house, even when we are doing ad lib feeding systems.

If sows do not eat enough, or eat too much in the farrowing house, the negative effects are seen on early weans, sow condition, litter weight and reproduction performance in the following litter.

Many swine farmers in South Africa are home mixers. Different ingredients are available across the country for use in swine diets. When formulating diets, the available ingredients, prices and quality of ingredients are very important.

Farm specific ration formulations can be done and specific feed additives can be included when the need arises. When using the Feedtek Macropig Breeder concentrate (Reg. No. V24574; Act

36 of 1947), the following rations can be formulated: Gilt Rearer, Gestation (Dry Sow) and Lactation feeds. Please consult with your Feedtek nutritionist for scientifically balanced feed Formulations. Visit [www.feedtek.co.za](http://www.feedtek.co.za) for further information.

Nutrition and Management of the Prolific Sow, the NEW GENERATION SOW, is a combined plan between, management, veterinarian, nutritionist and genetic supplier.



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