

## **Feeding of sows from weaning until 4 weeks after service.**

One of the reasons, to feed sows, from the weaning time until service, is to maximize the reproduction. There is a lot of different ways of feeding these sows but also a lot of misunderstanding of what not to do.

One of my fundamental rules for the sows, have always been, that most of the sow's reproduction is established in the faring stable.

The most important time in there, is in the first few days: around 5-10 days after faring, but also the later lactation period is important. Most often I say, that total born are establish in the lactation period and the faring rate/ pregnancy rate are established by how you feed before service, insemination technique, stress in the implantation period and the feeding in the first 4 weeks after service.

I think that there has been a misunderstanding for many years, that if you feed the sows too much in the implantation period, you will lose both total born and pregnancy rate.

## **THIS IS NOT TRUE.**

Today we have extremely high- performance in the faring stables, where the sows milk performance is bigger than the sow's ability to eat and digest the food ration that they are being offered. That gives us the challenge that many of the sows have lost too much body weight and back-fat. Which also gives us some challenges, when we feed the sows later for greater reproduction and greater condition of the sows. It is also expensive, because a sow needs approximately 3,2 kg of feed to put on 1 kg of body weight plus the needed feed for maintenance of body condition and need for maintenance of the pregnancy. The norm for maintenance of body condition is approximately 2,4- 2,6 kg of feed a day. Which means: if we have lost 1 kg of body condition and must maintain the sows needs, she should at least have 5,6 kg feed a day (3,2 kg + 2,4 kg). That is a lot of feed.

If this sow is also a young sow, that still must grow her body condition that would mean a lot of feed which would be expensive. That is why we need to decrease the weight loses inside the faring stable or at least make sure that the sows are in better/greater condition as fast as possible after service.

I think that we still have a huge challenge in optimizing and making the research, how to optimize feed intake but also how to optimize so the sows doesn't lose so much body weight together with we still increase the sows milk ability.

I believe that every loss of body weight is negative stress and therefore have negative influence on the reproduction, but at the same time, we want optimal reproduction.

That is why I want to feed all sows ad libitum, from weaning until service. Some would say that sows that haven't lost body weight in the faring stable don't need this. But as you see below, from a trial, also "normal" sows take benefit from this extra feed, so I don't think that the expenses are there, when we give that extra feed.

## How to feed from weaning until service?

My goal would be 20- 25 kg from weaning until service. I would recommend, that the feed on weaning day (day 0) that this is done normally inside the faring stable and then after 1 hour move sows to service stable and "jump over" the feeding next time. Reason is that the sows are stressed because of the pressure on the udder (that is also what started up the heat). Also, no boar exposure on day 0, for the same reason. Feeding 2 time a day will be enough.

My recommendation:

Day 0	0 kg
Day 1	4 kg
Day 2	6 kg
Day 3	7 kg
Day 4	6 kg
Day 5 (service)	2 kg

## How to feed from service until 4 weeks after service?

My goal is clear.

I want the sows to eat as much as needed for them to be in perfect shape as fast as possible.

- That means that thin sows would be fed ad libitum until their body condition and their back-fat are at its highest, which would be: 14-17 mm of back-fat.
- Normal sows with 2,4- 3,6 kg a day until back-fat are at its highest.
- Fat sows with 2,4- 2,8 kg a day, so they keep their back-fat and condition that they have at service time. It is important to say, that there are NO PLACES in the sow's circle that a decrease in body condition or back-fat will decrease reproduction! That is why it is so important to make the gilts in perfect shape at service and keep the body condition and back-fat level as uniform as possible.
- If any sows are stressed (standing and looking with empty trough), she must be given more feed.

FOR GILTS IT WILL COST REPRODUCTION IF THE FEED IS TOO HIGH, SO THEY HAVE TO BE GIVEN 2,4-2,6 KG OF FEED A DAY THE FIRST 4 WEEKS AFTER SERVICE.

Food per day	Low ( 2,3 kg a day)	Medium ( 3,6 kg a day)	High ( average 4,6 kg a day)
Below 13 mm of back-fat at service time	17,3	17,2	17,6
13- 16 mm of back-fat at service time	18,0	17,7	17,8
Over 16 mm of back-fat at service time	17,9	18,0	18,6
Source: VSP- 4 April 2014			

The conclusion on the trial was that it was only needed to feed sows ad-lib when they had below 13 mm of back-fat at service time.

Trial also shows that it is possible to increase back-fat with 1,4+/-1,5 mm, the first 4 weeks with ad libitum feeding and the body weight with 13,1+/-12 kg.

There were nearly 4600 sows in this trial.