

Farrowing Day Strategies to Maximize Colostrum Intake

One of the most critical times in a pig's life occurs within a few minutes after birth. At SwineTex, we talk about focusing on early pig care and our immediate concern at birth is to get pigs dry, warm and suckling. This focus is based on the importance of colostrum intake. Colostrum or, first milk, is the primary source of immunity and nutrients for piglets in the first few hours of life. It is well established that ensuring sufficient colostrum intake is the best way to minimize pre-weaning mortality and maximize piglet performance. Research has shown that pigs that do not receive a sufficient dose of colostrum (at least 200 grams) are six times more likely to die in lactation (Devillers, Dividich, Prunier, 2007). In most analysis, crushing and starvation are the leading causes of pre-weaned mortality. Both of these causes are directly related to colostrum intake and it is believed that a large percentage of pre-weaning mortality could be avoided if all piglets received an acceptable dose of colostrum.

Improving colostrum intake is an important focus area for a sow farm and it involves evaluating performance during several phases of production including gilt development, gestation and lactation but for the purposes of this article, we're just going to focus on actions that can be taken on the day of farrowing. As I mentioned before, at SwineTex, our goal is to get pigs dry, warm and suckling. In order to achieve these goals, the first step is making sure someone is attending the farrowing. It may seem obvious but one of the biggest reasons these steps don't get taken is because nobody is present during farrowing. While it's not always possibly for every farrowing to be attended, steps should be taken to maximize the number of litters that are born under supervision of the farrowing staff.

Dry

The first step is to ensure that the pigs are dry. There are several ways to achieve this goal but the primary ones are using towels or drying agents. Towels can be an effective way to get newborn piglets dry but it is important to make sure that they towels themselves are clean and dry prior to use. It's also important to not utilize the same towels across multiple litters. Towels must be laundered prior to reuse and this may become a challenge to do all the laundry. If the laundry is too much of a challenge, you can consider the use of commercial drying agents. SwineTex recommends a drying agent called Mistral®. Mistral® is a powder that pigs can be dipped in immediately after birth that gets the pig dry very quickly and effectively. It has additional benefits including reducing umbilical chord infections and reducing

overall pathogen load, but its primary benefit is getting pigs dry very quickly which helps managers improve colostrum intake. Dry pigs lose less body heat to evaporation and are less susceptible to chilling due to drafts.

Warm

The second step in the process is to ensure that the pigs are warm. Newborn pigs have very little body fat and have poor ability to regulate their own body heat for the first few days of life. When pigs are born, they are accustomed to a temperature of about $103^{\circ}F$ ($39^{\circ}C$). As managers, we need to minimize the chilling effect by first drying the pigs and then immediately warming them up. There are a few ways to achieve this goal. The first is the use of a butt lamp. A butt lamp is a supplementary heat lamp that is placed at the back of the farrowing crate during farrowing. This heat lamp warms up the area where pigs are born and can reduce the temperature shock. It also provides a little insurance during busy farrowing times if it takes the technician a little extra time to get the pigs dried off. The second strategy is to make sure the main heat lamp/other heat source is turned on and warmed up prior to farrowing. Once newborn piglets are dried, they should be immediately put in the creep area to warm up. Temperatures of around $98^{\circ}F$ ($37^{\circ}C$) should be maintained on the day of farrowing. Temperatures should be adjusted based on piglet behavior. The third and final strategy that can be used is a hot box. A hot box is an enclosed box with a heat source that pigs can be placed in immediately after farrowing to get them warm quickly. Hot boxes are often used when implementing split suckling (more on that later) but can also be used as a quick way to get pigs body temperature back up after birth.

Suckling

Once pigs have been dried and warmed up, it's time to get them suckling. Most pigs, once they're warm and dry will very quickly begin looking for a teat to suckle. As technicians, we should be looking for opportunities to assist with this process. If you see a pig that is struggling to find a teat, pick them up and put them on a teat. Time is of the essence and if you can save the pig a few minutes allowing it to find a teat quicker, that's a big advantage. At SwineTex, we also recommend a strategy that involves marking pigs that have been observed suckling. This is usually a very simple process of marking a dot on the tail or back of every pig that you've observed suckling. This procedure allows you to easily identify pigs that may not have gotten a dose of colostrum and you can work with them individually to make sure they do get at least one dose within the first 6 hours.

Split Suckling

At SwineTex, we highly recommend split suckling as a strategy to improve colostrum and early milk intake. It is especially useful on large litters but can be implemented to good effect on any size litter. We recommend that piglets be allowed to nurse on the natural mother for at least 6 hours after birth. This sometimes means that large numbers of pigs are trying to get colostrum from a relatively small number of functional teats. Generally, we recommend mandatory split suckling on any litters larger than 12 and optional split suckling on smaller litters. Split suckling is a simple procedure, simply divide litter into two groups and place one group with the sow for 1-2 hours and keep the other group in a hot box during that time. At least one cycle for each group should be completed within 6 hours of birth and at least one more cycle within the first 24 hours. Many producers simply rotate the groups every hour within the first 6 hours.

It may seem very simple and it is, but these are very powerful tools if they're implemented effectively and consistently. By following these simple procedures, you can have a dramatic impact on colostrum intake and ultimately, pre-weaning mortality on your farm.

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Sources:

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