



# Gruel Feeding Nursery Pigs

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## TAKE HOME MESSAGES:

1. Effective tool to transition weaned pigs from a liquid, milk-based diet to solid feed.
2. Greatest benefit for small pigs and sick and fallback pigs.
3. Small amounts should be offered throughout the day to encourage dry feed intake and reduce feed wasted from grueling.

## What is gruel feeding and why is it used?

Gruel feeding is a feeding method in which solid feed is mixed with water to create a gruel. The solid feed used to make the gruel can be the nursery diet in the feeder or highly palatable intensive care diet. Gruel is provided in a separate feeder in addition to the standard feeder containing the first nursery diet. This feed management tool is used immediately after weaning to acclimate pigs from their previous liquid, milk-based diet to solid feed. It is believed that gruel helps pigs begin consuming feed sooner after weaning, therefore reducing the number of fallback pigs, and increasing the number of full value pigs at the end of the nursery.

## Gruel Feeding Practices

### Which pigs should be gruel fed?

Some farms gruel feed all their nursery pigs. However, there are a number of reasons that most farms only gruel pens of small, fallback, or health-challenged pigs. The additional time and labor required to mix gruel often results in farms opting to only gruel feed the lightweight, sick, or unthrifty pigs.

Additionally, gruel feeding may not provide additional value to general population pigs. Therefore, at placement, it is important to separate approximately 10% of the smallest pigs from the general population and house them in designated pens to receive gruel. Likewise, providing an intensive care diet may be beneficial for this population prior to the typical starter diet. Furthermore, a subset of pens should be left empty at placement for sick or fallback pigs that develop after weaning, such that pigs can be moved into these intensive care pens to receive gruel feed and additional care.

### How is gruel made?

Once small pigs are sorted from the general population or sick and fallback pigs are placed in designated intensive care pens, gruel can be offered. Gruel is often fed in a round feeder (Ex. Figure 1) or trough to allow several pigs to eat at the same time. Solid feed (meal or pellet) from the feeder in the pen can be added to gruel feeders and then water mixed on top to create a gruel consistency (water spigots located on pen gates (Ex. Figure 2) make gruel application less labor intensive). It is recommended to start with a more liquid consistency and then gradually transition to a dry consistency. Most farms recommend a mixture of 75% water and 25% dry feed to start, followed by 50% water and 50% dry feed, and then 25% water and 75% dry feed.



Figure 1. Round feeder in which gruel can be fed.

## How much and how often should gruel be fed each day?

Gruel should be offered in small amounts throughout the day to keep bowls clean and reduce the amount of feed that is wasted or could spoil. It is recommended the amount of gruel made should be consumed in a period of 20 to 30 minutes and that it should be provided 2 to 4 times per day. The frequency and amount of gruel feed provided should be based on the number of pigs in the pen.



Figure 2. Spigot used to mix gruel.

## How long should gruel be fed?

The number of days that gruel is fed differs from farm to farm. Although gruel feeding is an excellent tool in getting pigs started consuming feed, pigs need to be transitioned to only solid feed as soon as possible. Most farms make the transition from gruel to dry feed in a period of 3 to 5 days. However, some farms feed gruel to small pigs for 14 days following the last pigs entering the barn. It is important to monitor the progress of pigs in this period as the amount of time gruel feed is provided may need to be adjusted.

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Ideally, sick or fallback pigs should be fed gruel until they have a full belly, at which time they can be graduated to recovery pens. Graduation pens located close to the gruel-fed pens are helpful for this practice. Pigs that are provided gruel feed for too long may struggle transitioning to dry feed and have to undergo a second weaning event.

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