

What do we know about creep feeding and piglet performance

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Creep feeding is a practice that is widely adopted across the Canadian pork industry. In his presentations from the 2026 PSC Producer Meetings, Dr. Atta Agyekum

highlighted how and why the provision of creep feed can be advantageous, where variations in on-farm and in research settings arise, and what findings have been generated through research on the subject at PSC.

In a poll of the participants, most attendees stated that they have used creep feed in some form. The main reason in providing creep feed is a desire to familiarize the piglets to a pelleted diet; another major factor in providing creep feed was the need to feed large litters. In discussion with the audience, producers said they were able to measure the impact of creep feeding by how well the piglets transitioned once they were weaned, and of course by piglet growth.

With modern genetics, it is common most sows are producing and nursing large litters. This has increased suckling demand during the lactation period, creating more competition between littermates. These challenges can lead to issues with piglet growth and result in a lack of uniformity of piglet size throughout lactation and at weaning. Providing creep feed can also be advantageous if you are weaning later (26-28 days), as larger piglets will continue to demand more milk as the sow begins to dry off. These issues are key points of focus in the drive for additional creep feeding research, as well as what drives the practice of creep feeding in barns.

Why we creep feed

Dr. Agyekum outlined the four main reasons for creep feeding as follows, with no particular order of importance:

- Large litters or low milk supply;
- Helping small or compromised piglets;
- Late-weaning systems; and
- Familiarization with solid feed before weaning.

“Creep feed use seems to have a positive impact on maintaining sow body condition.”

He also highlighted that different goals and motivations will lead to different results, and each approach to creep feeding may look different.

Regarding published literature on research projects, there were three main factors attributed to the variation of results surrounding creep feeding. The first was the most obvious – individual piglet performance. This factor is controlled by genetics, individual growth capacity, litter size, and other hard-to-control environmental factors. The second factor was the application of creep feed, including the duration and timing of creep feeding. Third was variation in the actual intake of the feed provided – oftentimes, piglets will just play with the feed instead of consuming it, pushing it out of the feeder and into the pit; while this is good enrichment, it means that the feed is disappearing, but not supporting piglet growth (feed ‘intake’ increases, but daily gain is not impacted as expected). Some studies will use a fixed mat under the creep feed dish, but ultimately intake is the most variable factor in scientific studies on creep feeding.

Timing

Continuing major findings from the literature, Atta highlights that it has been concluded that creep feed should be offered a minimum of 14 days before weaning, allowing ample time for exploration and acclimatization to the feed. Another major factor is feed quality – the feed should be refreshed as often as possible, and feeders kept clean and dry; this can be tough to



Atta Agyekum presenting in Red Deer at the 2026 PSC spring producer meetings.

maintain on a commercial farm because of the labour necessary. Start with small amounts of feed – as low as 100 grams – to ensure that feed is not wasted, and increasing the amount provided as the piglets become familiar and start consuming it.

Form of feed

Some studies have shown that piglets prefer to interact with and consume larger pellets, a finding which has been confirmed with him by a producer practicing this approach. Related to physical form is formulation, results indicate a simpler approach using ingredients that encourage intake and are easily digestible. He also highlights that recent research has put emphasis on characteristics other than growth performance, such as gut development and resilience, which can set up a piglet for success in the nursery.

Atta took time to outline some research that has been done at the PSC barn in the past few years, as well as discussing some projects he has on the go. First, he discussed a study on feed complexity on pre-weaning performance and nursery performance. In this study, there were 4 treatment groups: control (no creep), simple creep (sow lactation diet), complex creep (nursery diet), and both (simple and complex provided in separate feeders). There was no significant difference in feed consumption between any of the groups, but piglets provided with simple creep had slightly better growth in the second week that the feed was available. After weaning, piglets from the control group grew slower than the other groups, but there was no difference in weight upon nursery exit.

The second study discussed highlighted pellet size, addressing piglet growth performance as well as blood iron status. Since larger pellets tend to use more fibrous ingredients that generally contain more iron, it was hypothesized that these pellets could help reduce the incidence of anemia. Again, there were 4 treatment groups: control (no creep), standard creep, large creep, and mixed standard and large creep. Treatment group did not have any influence on iron status, and there was no preference towards the larger pellets.

Regarding ongoing projects, Atta highlighted a project being completed by his Ph.D. student Isis Lima. This project aims to determine how piglets can be encouraged to eat more, with focus on how creep feeding benefits different birth weight categories of piglets. The pigs used in these studies will be tracked from the teat to market weight, and factors such as gut development and immune status will also be assessed. The first major study is investigating the influence of different creep additives on low (less than 1.5kg) and normal (1.5 kg or greater) birth weight piglets. The three treatments are a control diet (nursery starter), a prebiotic diet (nursery plus a canola based prebiotic compound) and a prebiotic diet plus an oregano-based additive. Based on preliminary results, there was no difference in feed intake between the diets, but only about 40% of the piglets in each litter were consuming the creep. In this study, the main driver in pig weight exiting the nursery was found to be birth weight, but low birth weight piglets from litters given prebiotic creep performed well, indicating adding the prebiotic to creep may benefit low-birth littermates. This has highlighted that more research into targeted creep feeding strategies is necessary. Atta also noted that blood, intestinal tissue and digesta samples were collected to assess gut health and immune status, and that those findings as well as findings on piglet performance through the finishing phase will be presented soon.

In the end, Atta emphasized that creep feeding is beneficial for larger litters or if a sow's milk supply is dwindling; that a simple and inexpensive diet such as lactation diet is sufficient; that providing creep feed for at least 14 days before weaning is suggested; and that creep feeding may be beneficial for factors beyond piglet growth performance such as gut development, resilience, and sow recovery.

For more information on creep feeding, visit www.PrairieSwine.com to reference the Creep Feeding Handbook and other reports on studies from PSC.

