



Feed Intake During Lactation is Important to Improve Sow Longevity

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It is well known that adequate feeding of the sow during lactation is necessary to maximize sow productivity. Deficient feed intake during the lactation period results in sows losing excessive body weight and may reduce milk production and subsequent litter growth. Recent results from the University of Minnesota also indicate that adequate feeding is essential to promote longevity in high-producing sows.

In a study of a 1275 sow Minnesota herd, association of farrowing and lactation factors during lactation were analyzed on the likelihood of sows to be removed from the herd before the next farrowing. Overall, the risk of sow removal declined as feed intake over the first 2 weeks of lactation increased. Removal rate decreased 11% for every pound increase in average daily feed intake. Sows that consumed less than 9 pounds of feed a day during the first 2 weeks of lactation were 27% more likely to be removed from the herd.

Other factors, including litter size born and parity of the sow also influenced the likelihood of removal from the herd. Every additional piglet born alive decreased odds of removal by 7%, while Parity 1 - 2 and 3 - 5 sows were 47% and 44% less likely to be removed from the herd compared to sows Parity 6 or higher. Other factors, including number of mummies, stillbirths, farrowing induction, farrowing assistance, and diseases observed, however, did not appear to influence sow longevity in this study.

These results show very clearly the importance of ensuring adequate feed intake from the start of lactation on sow longevity, but what strategies can be used to enhance sow feed intake, especially during early lactation? First and foremost, it is crucial that sows entering the farrowing unit are in proper body condition. Numerous research studies have shown the strong correlation between overly conditioned sows at farrowing and reduced lactation feed intake. In addition, these sows can have a more difficult time farrowing, recuperate much slower, and are more likely to lay on or crush piglets compared to sows in proper body condition. If sows are too thin entering farrowing, milk production will likely be reduced, and subsequent reproductive performance, including wean to estrus interval and farrowing rate, will be negatively affected.

Gestation feeding strategies must therefore be initiated to ensure sows enter farrowing in correct body condition. This involves evaluating sow body weight and condition (or backfat) during early gestation, and adjusting feed (energy) intake accordingly. Too often, producers may increase or decrease daily feed allotments to sows during early gestation based solely on the perceived amount of fat the sow is carrying. However, two-thirds to three-fourths of total energy needs are for maintenance, which is directly related to sow body weight, not condition. A sow will designate energy to meet body maintenance needs before diverting for reproductive or growth purposes, and therefore not taking sow body weight into account can seriously affect reproductive performance. It is also important to adjust feed intake allowances based on sow body condition, but only after sow body weight is taken into account.

By properly managing sow feed intake of an appropriate diet during gestation, subsequent lactation feed intake can be maximized and therefore contribute towards improving litter and reproductive performance along with enhancing longevity in the herd. For more information on feeding or production management of the breeding herd, or answers to other swine production related questions, be sure to check out the University of Minnesota Swine Extension website at www.extension.umn.edu/swine.

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