

Merits of Having First Lactation Dairy Cows in a Separate Management Group

By: Gustavo Mazon, Dairy Challenge Student and Donna M. Amaral-Phillips, Ph.D.

First-lactation dairy cows may benefit from being housed together but separate from the remainder of the mature lactating cows. Studies have shown that first-lactation cows have different feeding and resting behaviors than mature cows and may compete better when housed separately from mature cows. When housed separately from the mature cows, they tend to give 10% more milk and increase resting time by 20%. Some key points as to why first-lactation cows should be housed separately include the following.

Feeding behavior: First-lactation cows tend to eat slower and take smaller bites. Therefore, they spend more time eating than mature cows. Generally, mature cows are more socially dominant than younger cows. When housed together, the younger cows may not have enough time to eat during the day, which will decrease milk production.

Nutrition: First-lactation cows still need to grow and growth occurs at the expense of body condition if inadequate energy is supplied. Thus, these cows enter their second lactation thinner than expected and, as a consequence, do not peak as high in milk production. Also, they eat 10 to 15% less when housed with mature cows.

Cow comfort: When first-lactation cows are housed separately from mature cows, these younger cows tend to spend 20% more time resting than when they are housed together with mature cows. By decreasing standing time the incidence of lameness is also reduced, which may lead to a higher milk production.

Cow health: First-lactation cows that are housed together with mature cows eat, rest, and ruminate less than when housed in a separate group. When first-lactation cows do not have enough time to eat and rest, the chances of acidosis, ketosis and lameness are increased, which will decrease milk yield and reproductive performance.

Although it might seem contradictory first-lactation cows and mature cows can be housed in the same group without major issues. Make sure to never go over 100% stocking rate and allow at least 24 inches of bunk space per cow. However, achieving these two management parameters is difficult on most dairies. Thus, housing first-lactation cows separately may be a better option, if facilities allow for two groups of cows.