

# The Auntie Effect: Presence of an Older Experienced Cow Helps Heifers Learn to Graze When Introduced to Pasture

J. H. Cardoso Costa<sup>1</sup>, W. G. Costa, D. M. Weary, L. C. P. Machado Filho and M. A. G. von Keyserlingk

Animal Welfare Program, University of British Columbia, 2357 Main Mall, Vancouver, BC, V6T 1Z4<sup>1</sup>

Email:[jhcardosocosta@gmail.com](mailto:jhcardosocosta@gmail.com)

Pasture remains important on many dairy farms, but the age of first contact with pasture varies depending on the month of birth, weaning age and farm management. Regardless of age, naïve dairy heifers must learn to graze when first introduced to pasture. This study investigated whether being grouped with experienced dairy cows would affect the development of grazing behaviours. Sixty-three Holstein heifers and 21 dry Holstein cows were assigned into 7 groups of 12 animals (3 dry cows and 9 naïve heifers), and each was divided and assigned to an Experienced (3 cows and 3 heifers) and Non-experienced (6 heifers) sub-groups. Sub-groups were introduced to pasture in different paddocks without visual contact with any other cattle. There was no difference in the time after introduction to the paddock for heifers to first attempt to nibble grass (Experienced: 0:23 (0:17 – 0:43) versus Non-experienced 0:40 (0:35 – 0:46)) [Median (Q1 – Q3); h:min]. However, heifers grouped with Experienced cows showed a shorter latency to begin grazing (Experienced: 0:47 (0:28 – 00:52) versus Non-experienced 2:13 (1:25 – 2:30)). During the first hour after introduction to pasture, heifers in the Experienced treatment showed fewer stomping events (Experienced: 2.5 (1.25 – 4); Non Experienced: 6.5 (4 – 8)) and vocalized less often (Experienced: 3.5 (1.25 – 5.75) versus Non-experienced: 7 (5 – 8.75)). After the initial period animals in both subgroups began to graze normally; treatments did not differ in grazing behaviours over the 3 d observation period. These results indicate that grouping heifers with pasture-experienced cows improves grazing behaviour of dairy heifers in the first hours following introduction to pasture.

**Implications:** Naïve heifers benefit from the presence of older, experienced cows when first introduced to pasture.