

Herd Health and Production Management Visits on Canadian Dairy Cattle Farms: Structure, Goals and Topics Discussed

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Regular veterinary visits to improve herd health and production management (HH&PM) provide opportunities for constructive veterinarian-farmer conversations and to direct management to proactively optimize animal health and welfare. However, little is known about the structure of HH&PM visits. In this study, our aims were to: describe HH&PM farm visit structure; determine discussed dairy-specific topics; and assess whether the focus of visits aligned with farmers' priorities. Audio-video recordings of 70 HH&PM farm visits by 14 Canadian veterinary practitioners were analyzed.

Consistent with farmers' priorities, the focus of visits was cow fertility; however, dairy-specific discussions were generally relatively infrequent, with only 17% of the HH&PM visit duration spent discussing dairy-specific topics, and short, lasting an average of 2 minutes. Veterinarians raised topics related to the whole herd more often than farmers. Most frequent topics included cow fertility, udder health, calf health/management, and transition diseases. However, answers to an open-ended question revealed that additional aims of many farmers were to receive information, have questions answered, and identify and discuss problems. A farmer's belief that HH&PM farm visits were 'absolutely' tailored toward their goals was positively associated with number of discussions per visit and their conviction that they 'always' voiced their wishes and needs.

In conclusion, opportunities to broaden the focus of HH&PM farm visits and improve veterinarian-farmer communication should be identified and veterinarians trained accordingly. As a result of specific training, veterinarians might become better equipped to add further value in HH&PM farm visits.

Effect of partial exchange of lactose with fat in calf milk replacer fed ad libitum on feed intake, feeding behaviour, and performance in dairy calves.

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Compared to whole milk, commercial calf milk replacers (MR) deliver relatively high levels of lactose and low levels of fat, resulting in lower energy density diets. This study evaluated the effects of partially exchanging lactose with fat in MR on feed intake, growth and feeding behaviour. Thirty-two male Holstein calves (2.1 ± 0.16 d of age, 46.4 ± 0.77 kg BW) were assigned to 16 blocks of 2 calves per block based on arrival date and serum IgG. Within each block, calves were randomly assigned to 2 treatments: a high lactose MR (HL, 17% fat; 44% lactose), or a high fat MR (HF, 23% fat; 37% lactose). Lactose was exchanged by fat on a weight-to-weight basis, resulting in a 6% difference in metabolizable energy (ME) density per kg of MR. The experiment was divided into 3 phases: P1 (0-35 d), P2 (36-56 d) and P3 (57-84 d). For the first 2 wk of P1, calves were in individual pens, fed their respective MR ad libitum through teat buckets, and provided access to water. At 14.2 ± 0.5 d of age, calves were group-housed (4 blocks/pen) for the rest of the study. In the group pens, calves were fed ad libitum MR, starter feed, chopped wheat straw, and water via automated feeders. During P2, calves were gradually weaned until complete milk withdrawal by 57 d and then monitored until 84 d (P3). Measurements included daily intakes and feeding behaviour (rewarded and unrewarded visits), weekly BW and body measurements, and biweekly blood samples. Increasing fat at the expense of lactose decreased MR intake during P1 by 15% ($P = 0.02$), whereas total starter intake was not affected. In P2, HL calves had 41% more unrewarded visits to the automatic milk feeder than HF calves. Despite dietary differences, ME intake remained comparable between treatments, while plasma cholesterol and non-esterified fatty acids (NEFA) levels were higher in HF calves because of the diet. Nevertheless, final BW (84 d) did not differ between treatments. Understanding the effect of energy source on energy metabolism may allow us to reach efficient growth performance, with the ultimate objective to support optimal lifetime performance.