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An Evaluation of the Effects of Low, Average, and High Postweaning Weight Gains on Short-Term Behavior and Future Growth of Dairy Calves

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An Evaluation of the Effects of Low, Average, and High Postweaning Weight Gains on Short-Term Behavior and Future Growth of Dairy Calves

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The objective of this study was to investigate associations between behavior and postweaning weight gain in dairy calves. Seventy-four Holstein heifers, ages 38–79 days, were moved to a heifer barn into groups of 4–6 calves and weaned to component feeding of hay and calf-starter. Calves were divided into 3 categories for analysis, based on weight gain in the 1st week: Low calves (n = 20) = −4.5 kg to 2 kg/week; Average calves (n = 32) = 2.5 to 6 kg/week; High calves (n = 19) = 6.5 to 10.5 kg/week. Biotelemetry devices (IceTags®) recorded activity from 2 days pre- to 14 days postweaning. Weight gain during the first 7 days versus 28 days postweaning was analyzed controlling for age, group, and preweaning starter intake.

Univariate analysis was used to analyze the activity data. Low calves were less active during the preweaning period versus Average and High calves (p < .05). On Day 1, all calves displayed a twofold increase in activity, which returned to approximately preweaning levels for all calves by Day 4. Standing duration remained elevated and frequency dropped below preweaning levels on Day 3. Postweaning, Low calves stood for longer, displayed fewer bouts of standing, and were less active than Average and High calves (p < .05). Average daily gain for calves from 7 to 28 days postweaning was 0.81 ± 0.09, 0.93 ± 0.07, and

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In conclusion, differences in behavior of Low calves relative to their thrifty herdmates are evident prior to weaning. Their behavioral responses to weaning stress could account for lowered body mass 28 days postweaning. Identification of these calves during the preweaning period could facilitate intervention strategies to mitigate weaning stress.

Running a Welfare Program in an Integrated Poultry Environment Using a Best Practices Approach

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During the past 10 years, there have been a number of welfare guidelines published and as many, or more, welfare audits established. These guidelines and audits attempt to define what is expected at various stages of the live production process to ensure appropriate welfare is maintained. As production companies have moved to implement these guidelines, there has been a need to develop a process that takes all the information and puts it into an understandable program for each person who interacts with live poultry. This paper describes a “Best Practice Program for Welfare” that enables a production company to teach, monitor, correct (if needed), and verify its welfare program in an ongoing, everyday way. Best Practice modules have been developed for Producer, Farm Supervisor, Hatchery, Livehaul, Holding/Receiving/Shackling, and Stun/Kill. The end result is a program that if taught well, monitored, and adjusted appropriately will result in a solid, predictable welfare approach. In addition, it ensures a successful and uneventful audit, if that were to occur.

This paper is about the process of running a program at the production company/farm level and does not focus as much on the actual specifics of the best practice. In addition, this paper would suggest to those researching various aspects of welfare to think of how their research might be implemented into a new “best practice.”

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