

Giving calves ‘the best start’: Perceptions of colostrum management on dairy farms in England

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Abstract

Good colostrum management can confer protective immunity to newborn calves, making calves less susceptible to infectious disease, and fundamentally improving both their short- and long-term health, welfare and productivity. Industry recommendations commonly refer to ‘The Three ‘Q’s’ of colostrum management: the need for calves to receive sufficient ‘Quantity’ of high ‘Quality’ colostrum ‘Quickly’ after birth; some also include ‘sQueaky clean’ and ‘Quantification of passive transfer’. However, research to date suggests that the failure of passive transfer of colostral antibodies is common on commercial dairy farms, contributing to sub-optimal calf health and mortality. This paper explores why this may be the case by investigating stakeholder perceptions of colostrum management and how these perceptions might affect the practice of ensuring adequate colostrum administration to newborn calves. Calf rearing and youngstock management practices on English dairy farms were investigated using 40 in-depth semi-structured interviews: 26 with dairy farmers and 14 with advisors (including veterinarians, feed and pharmaceutical company representatives). Interviews were audio-recorded, transcribed and thematically coded for analysis. ‘The Three ‘Q’s’ were found to act as useful reminders about the goals of colostrum management, and a case can be made for further publicising the inclusion of ‘sQueaky clean’ and ‘Quantification of passive transfer’ as there remains a lack of focus on colostrum hygiene and measurement of successful antibody transfer. Knowledge of the ‘Q’s’ did not guarantee implementation, and time and labour constraints alongside farmer misconceptions must be addressed when offering professional advice on improving calf health. Further research to encourage on-farm collection and analysis of monitoring data including rates of passive transfer is particularly needed. Advisors must not overlook the importance of colostrum management when assessing farm practices and ensure that they promote evidence-based recommendations if dairy calf morbidity and mortality is to be reduced.

Keywords: animal welfare, colostrum, dairy calf health, dairy calf welfare, qualitative research, stakeholder perceptions