

## **How does cows' activity change after feeding bin change?**

Maria Soonberg, David Arney

*Estonian University of Life Sciences, Kreutzwaldi 46, Tartu, Estonia*

[maria.soonberg@emu.ee](mailto:maria.soonberg@emu.ee)

Understanding the feeding behaviour of dairy cattle in different indoor housing systems is important to optimize production and welfare. Outdoors, grazing cattle walks about 4 km/day, grazes about 4- 14 hours within 24-hour period and lies down for about 9- 12 hours (Broom and Fraser, 2007). Monitoring the locomotion of cows can be used to predict oestrus and lameness. And the same activity monitors can be used to estimate activity and feeding visits by cows. In a system in which cows are grouped and given differential access to feeding bins with different rations, and these groups change over time, it is important to find out how a change in the ration, and a change in the feeding bin, affects the cow's feeding behaviour, and if so, for how long. Ice tag activity monitors were attached to the right hind leg of ten cows. Walking, standing, lying data and health records were used to record changes before and after a change in the feed ration/feeding bin.

## **Acknowledgements**

This article is based upon work from COST Action FA1308 DairyCare, supported by COST (European Cooperation in Science and Technology, [www.cost.eu](http://www.cost.eu)). COST is a funding agency for research and innovation networks. COST Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.