



Feeding of fresh grass to housed dairy cows

Can fresh grass be a viable feed in a continuously housed dairy herd?

The Challenge

Feed costs remain the largest expense for dairy farmers across the UK. Cut and carry systems, where grass is cut daily and fed to high yielding dairy cows, have been proposed as a way of increasing the value of forage in dairy systems to support profitability.

The Research

Research undertaken at SRUC Dairy Research and Innovation Centre as part of an AHDB Dairy Research Partnership monitored 48 cows over a three-month period measuring feed intake, animal performance, behaviour and health.

The research carried out in 2014 evaluated the feeding of fresh grass as part of a Total Mixed Ration (TMR) replacing either 25% or 50% of the ration.

The Results

The full TMR-fed group delivered higher milk yields (by an average of 4.3 to 5.5kg per day) but at a higher cost of production. Adding fresh grass to the TMR diet for housed milking cows, reduced milk yields without affecting milk quality or body condition scores but at a lower cost of production.



Milk yield from both grass fed groups were approximately equal throughout the monitoring period.

While it depends on the TMR and grass production costs, if the milk price was 32ppl or lower then the low cost, 50% grass-fed, strategy delivered the highest surplus. If the milk price was 33ppl or higher then the higher yielding TMR-fed group delivered the highest surplus.

Under all analysed scenarios of feed and milk prices, the 25% grass-fed group produced the lowest surplus. This group did not maintain the benefits of high milk yields but retained the high feed costs associated with the TMR.

The Impact

Techniques to deliver more profitable milk production is a continual and moving challenge. It is further complicated by a trend towards larger herds and seemingly wetter summers, which makes grazing cows more difficult.

In a bid to improve margin over feed this research found that feeding 50% grass silage delivers a higher surplus when the milk price was 32ppl or lower.

Only partial adoption of the technique (in this case incorporation of 25% fresh-grass, fed indoors) resulted in poorest returns.

Project Detail

Project start date: [05/2014], finish date: [03/2016]. Email: dave.roberts@sruc.ac.uk
SRUC Dairy Research and Innovation Centre. Project funded by AHDB Dairy

Further information : <http://dairy.ahdb.org.uk/resources-library/research-development/production-system/project-report-increasing-the-proportion-of-grass-in-high-yielding-cow-diets-newpdf/>

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Further Information

Getting it right will be highly important to the success of your business.

If you would like more information contact your local consultant or SAC Consulting Dairy Specialist at dairy@sac.co.uk