Four tips to improve your herd’s lifetime daily yield

LDY is continuing to increase among 500 of NMR-record herds. Rhian Price finds out what influences it and how improvements can be made in your own herd.

There has been a rise in lifetime daily yield for a fifth consecutive year, the University of Reading’s ninth annual key performance indicator report of 500 NMR-record dairy herds shows.

Lifetime daily yield is the amount of milk a cow has produced each day of her whole life and is influenced by an animal’s age at first calving along with yield, fertility and health.

The data for the year ending September 2018 shows:

- The top 25% of herds are now achieving 14.7kg of milk a cow a day, up by 2.1kg a day from 12.6kg in 2010.
- The median – or mid-point – is producing 12.5kg a cow a day: a 2kg improvement from 2010.

Reading University’s James Hanik, who co-authored the report with Mohamad Kossab, says: “Looking at the trends is valuable – there are bound to be ups and downs year on year – but as we build on the number of years of records in this survey, the data becomes increasingly valuable as a management tool.”

Dr Hanik believes the figure achieved by the top 25% of herds can serve as a realistic target for other producers in discussions with vets and advisers.

We take a closer look at the parameters that influence LDY and NMR vet Karen Bond offers advice on how other herds can improve.

1. Age at first calving

- In the top 25% of herds, age at first calving is now 2.1 years, a reduction of nearly three months since the survey began nine years ago.
- The midpoint has also fallen over by approximately six weeks to 2.3 years.

How it influences LDY

LDY includes the rearing period.

2.4

How to improve

- Calves have their best feed conversion rates pre-weaning so it is worth taking advantage of this by feeding plenty of good quality milk or milk replacer and a well-managed transition to hard feed will pay off.
- Weigh heifers regularly, targeting the optimum daily gain for the breed and weight at 15 months old when the heifer should be served.
2. Getting cows back in calf

- 68% of cows in top quartile herds served by day 80 post-calving.
- 41% of cows in top quartile herds in calf by day 100 post-calving.

How it influences LDY
A cow that gets back in calf quickly has fewer days when milk yield is lower. This means she is producing good milk yields throughout her lactation and as she gets back in calf “on time” she is a fertile cow and likely to stay in the herd longer.

Target
- Served by day 80: 68%.

4. Udder health

- The midpoint somatic cell count (SCC) for the 500-herd sample is now 178,000 cells/ml – 42,000 less than in 2010.
- Particularly interesting is the reduction in the percent of chronic SCC cows in the herd. These are cows with consecutive monthly SCC tests above 200,000 cells/ml (see below).

How it influences LDY
Udder health will influence how long a cow stays in the herd – older cows will have higher LDYs as they have a higher proportion of productive days than a younger cow; and to become an older cow in the herd she must have good production, get back in calf and have a relatively disease-free track record.
Cows with high SCC and/or mastitis are more likely to be culled. It can also impact on conception rate and abortion if mastitis incidences are happening in early lactation.

Target
- <10% chronic cows (top 25% achieved 7%).
- Individual cow SCC <200,000 cells/ml (top 25% achieved <142,000 cells/ml).

How to improve
- Work with your vet to understand your mastitis patterns. You need to know the origin of clinical mastitis and high SCCs: the dry period or lactation.
- It is important to identify the type of bacteria involved; whether they are contagious or environmental.
- Areas for improvement can then be prioritised. For example, don't charge your whole milking routine if you identify that the problem stems from the dry period.

THE NUMBERS

- <142,000 SCC in top quartile herds is below this.
- <7% Chronic SCC cows in top quartile herds.
- 14% Chronically infected cows in medium herds.