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A Word on Strategic Data

Milk recording provides a number of different performance reports, and some are more meaningful than others. Some of the information is considered to be "strategic", because it can have a significant impact on the profit margin of your dairy operation. Among the most important numbers are production data, age at first calving, and udder health.

PRODUCTION DATA

When it comes to herd profitability, production is paramount. Analyzing indicators like peak milk yield, persistency, days in milk (DIM), and changes in milk production can help you identify opportunities to increase production.

Peak milk yield

Peak yield is a good predictor of how much milk a cow will produce during a given lactation. Research shows that a 1 kg decrease in yield at peak lactation is equivalent to an average loss of 175 to 220 kg of milk over a lactation with normal persistency. Benchmarks for different breeds and peak yields can be used as guidelines. If your peak yields are not currently meeting your expectations, you might want to consider involving your dairy production technician to help you find solutions. Adjustments to body condition, rations for lactating and/or dry cows, or cow comfort may be the answer.

TABLE 1. AVERAGE PERSISTENCY (%) BY NUMBER OF DAYS IN MILK AND BREED

Days in milk	Holstein	Jersey	Brown Swiss	Ayrshire
0 – 99	102	100	100	101
100 – 199	95	95	95	94
200 – 305	94	94	95	91
306 and +	92	93	94	90

Persistency

Expressed as a percentage, persistency indicates the change in milk yield between a given test day and the previous test day. It tells you if milk production – of an individual cow or the whole herd – is following a normal lactation curve. Persistency is often linked to health, nutrition, herd management, and even environment. Table 1 presents benchmarks for the different breeds. How does persistency in your herd compare?

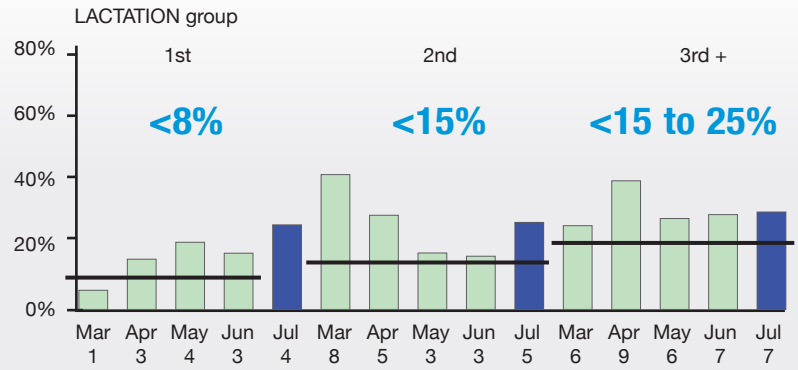
Average number of days in milk (DIM)

Ideally, average DIM should be between 150 and 180. It is often used as an indicator of reproductive efficiency, as it can be influenced by a number of parameters: calving distribution, heat detection, conception rate, and even calving interval. Table 2 presents the average daily gain in milk for every decrease of 10 DIM by breed.

TABLE 2. EXPECTED DAILY GAIN IN MILK PER 10-DIM DECREASE

Breed	Expected daily gain in milk (kg) per 10 DIM decrease
Ayrshire	+0.9
Holstein	+0.8
Jersey	+0.4
Brown Swiss	+0.6

FIGURE 2. PERCENTAGE OF COWS WITH A SCC OVER 200 000 BY LACTATION



Current average and rolling average

Both the current average and the rolling average are reported in the Performance Record - Herd Summary.

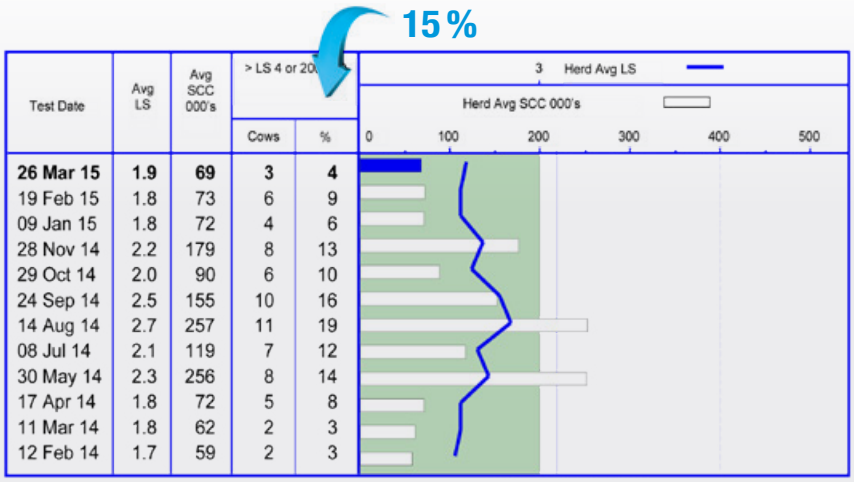
The current average (A) shows the projected milk yield for lactations in progress, while the rolling average (B) represents the average yield of all lactations completed in the past year. In this example, all indications are that herd production is progressing well.

A comparison of production between parity groups is another useful indicator. Considering all the herds enrolled on milk recording, second-lactation cows produce 15 per cent more than first-lactation cows, and cows in their third lactation and greater produce 6 per cent more than those in their second lactation. In the example above, there is a 21 per cent increase in yield between first and second lactation (C) and a 6 per cent increase between second lactation and third and greater (D).

PERFORMANCE RECORD - HERD SUMMARY

DESCRIPTION		PROFILE/LACTATION						
		Test Day				12 Months		
Lactation #		1st	2nd	3rd +	Herd	Herd		
					C = 21%	D = 6%	A	B
Quantity kg	M	8456	10753	11465	10070	9528	9459	10974
	F	365	460	474	427	384	370	427
	P	281	353	360	327	302	302	349
					TARGETS: 15%	6%		

FIGURE 1. SCC REPORT – HERD SUMMARY



AGE AT FIRST CALVING

The target age for first calving is 24 months. Minimum weight targets for first-calf heifers have recently been established at 600 kg for Holsteins and Brown Swiss, 500 kg for Ayrshires, and 400 kg for Jerseys. Thanks to high-performance herd management and enhanced genetics, many farms are now aiming for an average age under 24 months.

UDDER HEALTH

For a quick assessment of udder health in a herd, the SCC Report - Herd Summary is a priority. The objective is to have less than 15 per cent of cows with a SCC over 200,000 (Figure 1).

This information is also provided for each parity group, and the targets vary from one lactation to the next, as shown in Figure 2.

The next time your dairy production technician visits, take a few extra minutes to establish a plan concerning your milk recording data. Adjusting your targets could be more profitable than you think!