Milking 10 times per week: Can it work for you?

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Summary

- Milking frequency can be adjusted to provide more flexibility for farmers
- Milking TAD for the first half of lactation before switching to 10in7 results in small reductions in cumulative milk (5 %) and milk solids (4 %) yield
- Milking 10in7 for the full lactation reduces milk yield by approximately 14 % and milk solids yield by 11 %

The current perception of work on dairy farms in Ireland is one of long hours and physically demanding work. Creating desirable places to work will be among the main factors in attracting and retaining people to work on Irish dairy farms in the future. The most labour demanding task on Irish dairy farms is milking, accounting for on average one third of the total hours to run the farm. Altering milking frequency could provide more flexibility for farmers and allow for a better work life balance, potentially making dairy farms more attractive workplaces. However, changes in milking frequency must consider a number of aspects before they can be recommended (e.g. milk production, cow health and welfare).

What is flexible milking?

Flexible milking is a term given to milking intervals that differ from TAD milking. It refers to flexibility in both the timing of the milking during the day as well as the number of milkings in a week. Milking once-a-day (OAD) is one flexible milking option to reduce farm labour requirements and increase flexibility as milking can occur at any time during the day, as long as it is the same time each day. Other options are milking three times in two days (3in2) which can provide increased flexibility for farmers without the milk production losses experienced with OAD. In this scenario milking interval can be, for example, 10-19- 19 hours or 12-18-18 hour intervals. A third option is to milk ten times in one week (10in7), which could provide improved flexibility and minimise milk production losses compared to OAD, while employing a more structured and socially appealing milking routine (Table 1).

Table 1. Example of a 10 in7 milking schedule compared to twice-a-day (TAD) milking

		Mon	**Tues**	**Wed**	**Thurs**	**Fri**	**Sat**	**Sun**
10in7	AM	7	10	7	10	7	10	8
	PM	4		4		4		
TAD	AM	7	7	7	7	7	7	7
	PM	4	4	4	4	4	4	4

Milking 10 times per week

In 2022, a new study was undertaken at Teagasc, Moorepark and it was repeated again in 2023 – it investigated:

i) milking 10in7 for the full lactation,
ii) milking TAD for the first half of lactation, switching to 10in7 for the second half of lactation (i20 weeks into lactation; early July)
iii) milking twice-a-day for the full lactation

Although this year's experiment/lactation is not, yet completed results appear similar for both years of the study. Preliminary results across the two years suggest milking cows 10 times per week for the full lactation reduced milk yield by approximately 14 % (~730 kg/cow) and reduced milk solids yield by 11 % (~55 kg/cow). Although substantial reductions in production resulted from milking 10in7 for the full lactation it should be noted that the reductions were approximately half that observed with milking once-a-day for the full lactation (26 % reduction in milk yield and 21 % reduction in milk solids yield with fulltime once-a-day milking compared to TAD).

Interestingly, very small reductions in production are observed when cows switch from TAD milking to 10in7 milking half way through lactation. Preliminary results indicate that milk yield is reduced by approximately 5 % (~300 kg/cow) across the whole lactation while milk solids yield is reduced by approximately 4 % (~15 kg/cow), again across the entire lactation. Milking cows 10in7 for the second half of lactation is a way of reducing labour demand on the farm thereby improving work life balance; it will also contribute to water and electricity savings.

Conclusions

Milking frequency can be changed on farms to reduce labour input and improve work life balance. However, the longer the period of reduced milking frequency the greater the milk production losses. Therefore, the degree to which costs can be reduced to offset losses in production needs to be considered before altering milking strategies.