

# Social Impacts of Once-a-Day (OAD) Milking

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## Executive summary

1. The key factors motivating farmers to adopt once-a-day (OAD) milking are:
  - a. Herd expansion,
  - b. Time needed to build capital,
  - c. Labour management,
  - d. Feed shortfalls, and
  - e. Herd health and management factors
2. Employer advantages
  - a. Reduction in staff turnover, absenteeism, sick leave and accidents
  - b. Staff work faster, take more responsibility and combine jobs in effective ways under OAD milking
  - c. Opportunity to restructure the staffing arrangements and develop new strategies
  - d. Extending the working life of dairy farmers
3. Employee advantages
  - a. Shorter or more acceptable working hours,
  - b. Enhancement of family life,
  - c. Prospect of a more balanced lifestyle

## Introduction

OAD milking has been the subject of research for several decades because it is an effective means of reducing the daily time involved in milking. OAD milking changes the whole working day, freeing up afternoons and evenings and allowing weekends off for the cost of one contracted milking. However, individual cows milked OAD for short periods could lose, on average, 19% of milk yield compared with those milked twice-a-day (TAD) (Davis *et al.*, 1999). Given this, farmers were understandably reluctant to try OAD milking throughout the whole lactation. However the increasing popularity of this system in New Zealand has challenged this thinking. As there was little information identifying what motivated farmers to adopt OAD milking, and the implications of doing this, research was needed. In this paper we outline the results of two studies. In the first, the key factors motivating farmers to adopt OAD milking were explored. In the second study, the social implications of OAD milking were investigated.

## Research Findings

### **Study 1: Why milk OAD?**

We interviewed 21 dairy farmers across New Zealand who were milking OAD. Based on the information gathered, we found the key factors motivating farmers to adopt OAD milking were:

- Herd expansion,
- Time needed to build capital,
- Labour management,
- Feed shortfalls, and
- Herd health and management factors

Using this information farmers were able to be classified into six segments.

#### **Segment 1 – Transitional OAD**

Farmers in this segment had switched to OAD milking to assist in managing the transition to a larger dairy farm. Farmers in segment 1 were developing their farm by expanding herd numbers and/or acquiring more land. This had put some strain on current farm resources. For example, the shed maybe too small to cope with larger cow numbers on TAD milking, the races may need to be upgraded, and extra employees may be needed to help manage the development. However, these farmers were also trying to increase profit so they could invest in developing infrastructure. Farmers in this segment may not be permanent adopters of OAD milking.

#### **Segment 2 – Avoiding capital expenditure**

Farmers in segment 2 were similar to those in segment 1 because they were limited by resources and infrastructure. However, they did not wish to invest in upgrading the farm facilities for various reasons. These farmers had decided to switch permanently to OAD milking in order to manage with a smaller shed, no extra employees and with other existing infrastructure.

#### **Segment 3 – Decreasing own labour**

Farmers in segment 3 wanted to reduce their own labour input. This could be because they wanted more time with their family, or to cope with health problems. Farmers in this segment are often called lifestyle OAD milkers.

#### **Segment 4 – Increasing flexibility**

Farmers in segment 4 were similar to farmers in segment 3 in that they wanted to manage their labour requirements differently. However, they saw OAD milking as a chance to be more flexible with both their own and employed labour. Farmers in this segment were able to reallocate labour to other jobs on the farm at busy times.

#### **Segment 5 – Feed shortfall**

Farmers in segment 5 had adopted OAD milking to manage shortfalls in feed. These farmers were using OAD milking at the start and end of the season. They milked TAD when they were able to fully feed their cows. Farmers in this segment could also use OAD milking as a tool to manage other feed shortfalls experienced during the year. Farmers in this segment tended to be opportunistic adopters of OAD milking

#### **Segment 6 – Herd management**

Finally farmers in segment 6 had switched to milking OAD to help manage their herd. Farmers in this segment may want to improve the condition of a herd, manage health issues or may not want to walk cows a significant distance TAD.

## ***Study 2: What happens when you milk OAD?***

Formal and informal interviews on OAD milking were conducted with 6 farmers who employed staff. Two farmers were milking OAD; two were milking TAD but were considering change, and two were milking TAD and had no intention of changing. In addition, 8 workers on dairy farms were interviewed, and several wives and partners of men involved in dairy farming.

### **Some factors impinging on OAD milking from the point of view of the employer**

#### *Number and level of staff needed*

Farmers who are already milking OAD discussed the pressure from staff to change from TAD to OAD milking. The working day was made shorter, although wages and staffing levels were left unchanged. One employer noted that during the first year of OAD milking profit went down, however, staff turnover went down to zero. Absenteeism, sick leave and accidents dropped dramatically. Another farmer mentioned that staff worked faster, took more responsibility and combined jobs in effective ways under OAD milking. Time for training was also identified as a positive. OAD milking meant there was time to get the staff together for an hour or two each week for training.

#### *Tapping into new sources of labour*

When transferring from TAD to OAD milking, there is an opportunity to restructure the staffing arrangements and develop new strategies. For example, one employer separated his staff into two groups. Members of the first group came on-farm only to milk and were paid contract wages. The second group performed other farm jobs, preferring the variety and stimulus of general farming jobs. This strategy enabled the employer to tap into a pool of local women who were willing to work while their children were at school. OAD milking may produce access to a new source of labour not previously available or utilized.

#### *Extending the working life of farmers*

Some respondents mentioned that local farmers, who would normally have been starting to think about retirement, had switched to OAD milking and reduced their herds, as an intermediate stage between full employment and full retirement. This left them with a home, a familiar and structured lifestyle, status and goals, but also gave them a good few hours of free time each day and made the working load much lighter. If such a pattern were to become a general trend, the New Zealand dairy industry might greatly benefit from the experience and production afforded by such farmers, who would otherwise have been lost to the industry.

### **Some factors impinging on OAD milking from the point of view of the employee or farm worker**

#### *Entering the dairying labour market*

If OAD milking is offered, the work environment changes dramatically. Shorter or more acceptable working hours, enhancement of family life, and the prospect of a more balanced lifestyle, may offset a possible drop in income. Every farm worker interviewed showed a strong interest in this aspect of OAD milking.

#### *Choosing between OAD and TAD milking*

Interviews with farm workers showed that OAD milking is a very topical subject and is being hotly debated. Some cynicism was voiced about the prospect of OAD milking ever taking off, but every worker consulted said that they would love to have a more balanced lifestyle. When asked whether they would take a drop in income in return for shorter working hours there was some hesitation, but several workers pointed out that many of their friends had left the dairy industry and gone elsewhere to work for lower wages in return for "normal" working hours.

### *The possibility of a more balanced lifestyle*

At present, the hours worked on dairy farms vary from employer to employer and sometimes changes from summer to winter. During calving very long hours and a general lack of sleep are norms. It is not unusual for farm workers to start their day at 4 a.m. and to work, with a break after lunch, till 7 p.m. This means that workers only see their families in daylight hours during weekends off, usually every second week or so. However, workers and their wives/partners report a huge improvement in their lives with a change to OAD milking. They talk about taking part in sport (particularly after daylight saving starts), reading the occasional newspaper, and having time to socialise.

## **Farmer Case Study – Rakaia Island Dairies**

David & Margaret and Doug & Helen Turner of Rakaia Island Dairies adopted OAD milking in July 2004 as a strategy to increase milksolids production per ha from their 1550 ha farm at the mouth of the Rakaia River. Milking off the runoff meant they required more cows to improve pasture utilization, however, they were reluctant to invest more capital with a 4<sup>th</sup> milking shed so introduced OAD milking. At the changeover an additional 1400 heifers were introduced to the herds over night but staff were still expected to work a normal eight-hour day.

Morning milking starts at 6 am on all three farms. Prior to adopting OAD milking commenced at 4.45 am. At peak lactation milkings take between 7 and 7.5 hours, reducing to 6 hours in late lactation. There are 7 people per 1700 cows and currently they are achieving 80 000 kg MS per person. By comparison, the Turner Bros TAD milking farm at Woodstock achieves 76000 kg MS per person. Following milking, staff continue with other duties until the end of the business day around 5 pm. By comparison, staff on the Turner Bros TAD milking farm at Woodstock start milking at 5 am and then again at 2 pm and finish around 5.30 pm. Staff in the OAD milking system have an hour off for breakfast and duties are split between getting the cows in and milking to avoid boredom. At Woodstock, staff have a longer break in the middle of the day. While staff on both sites work similar hours per day, the day is longer on the TAD farm because of the earlier start. Staff on both farms work an eight on – two off roster, although there is some flexibility for special events.

Staff turnover on the farm is low. The farm currently employs 24 staff of which only 2 are planning on leaving at the end of the 2006-07 season. One is returning to the Ukraine and the second is moving from his current 2IC position with Rakaia Island Dairies to a management position on another farm. The scale of the operation allows promotion from within. Attracting and retaining staff was not an issue when the farm milked TAD as Doug and David pride themselves on their staff relations. Staff are provided with a well-equipped staff room that includes Sky television and a barbeque area.

Staff work on average 55 hours per week and one of the advantages that OAD milking brings is that the staff are not sitting on bikes following cows to the dairy in the heat of the day. In the afternoons staff are doing odd jobs around the farm, which increases the diversity of the roles and avoids the grind of the afternoon milking. Doug and David believe that the staff aren't as tired with OAD milking and they have very few sick days. With the cows being "happier" and healthier on OAD this has a positive impact on staff morale. Another advantage of OAD milking is that if there is a breakdown at milking it doesn't impact on time spent with family in the evenings. The staff also have more time for hobbies and social activities, e.g., dinner and

movies, as they aren't under as much pressure to get home early for the early morning milkings experienced with TAD milking. Whether they can attribute the current baby boom on the Island to OAD milking is still being debated!!

The key to the success of this system is the management of the long milkings. Two people milk the first 2 herds, and then a second pair comes in for the next two herds. Managing the long milkings could be achieved two different ways:

- A small shed with a large enough team of staff to allow the milkings to be split between two teams of staff – Rakaia Island model.
- A large shed with quicker overall milkings, but with a smaller team of staff doing all of the milking.

## **Implications and Conclusions**

The considerable benefits from switching to OAD milking were highlighted in both studies. Given the segments identified, case studies need to be developed that reflect the motivations or goals of farmers adopting OAD milking. In particular, stories that reflect short-term adoption of OAD milking to develop the farm are important (segment 1).

OAD milking is unlikely to resolve all employment, recruitment and retention problems currently facing dairy farmers. However, the significant benefits of OAD milking indicate a potential benefit to the industry that merits further research.

## **References**

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