

## **COUNTDOWN MAX – MAKING PLANS WORK**

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Countdown Downunder began its life in 1998 with a simple but highly effective mantra – provide the industry with clear consistent messages about best practice derived from a sound technical base, ensure the industry has the capacity to deal with mastitis problems on farms, and assist farmers to create mastitis management plans for their farms.

The technical resources that were developed - the Countdown Downunder Farm Guidelines for Mastitis Control and the Countdown Downunder Technotes - are now the Australian industry reference points for mastitis control.

The training resources that were subsequently introduced quickly achieved a reputation for excellence within the industry and achieved a hitherto unseen market penetration. In particular, more than 450 dairy advisers (veterinarians, milking machine technicians, factory field officers, pharmaceutical representatives, etc) have attended the Countdown Downunder Adviser Short Course, and over 1800 dairy farmers have attended the Countdown Downunder Farmer Short Course.

With Countdown-trained advisers in every dairy region of Australia and a supporting network, the resulting capacity to deal with mastitis problems on Australian dairy farms saw a fall in the number of farms with an average Bulk Milk Cell Count (BMCC) above 400,000 cells/mL to below 4.5% of the national herd, and 73% of the national herd achieving an average BMCC below 250,000 cells/mL by the end of 2005 (Countdown Downunder National Milk Quality Awards - 2006).

Additionally, Countdown now has a targeted industry initiative - Countdown Downunder Cell Count Solutions - that supports processors in dealing with the remaining high cell count herds. Hence, mastitis problem farms are now relatively low in number, and well catered for.

Yet economic and mastitis modelling by Countdown has shown that there is still a significant financial benefit from improved milk quality available for virtually every dairy farm in Australia (Figure 1).

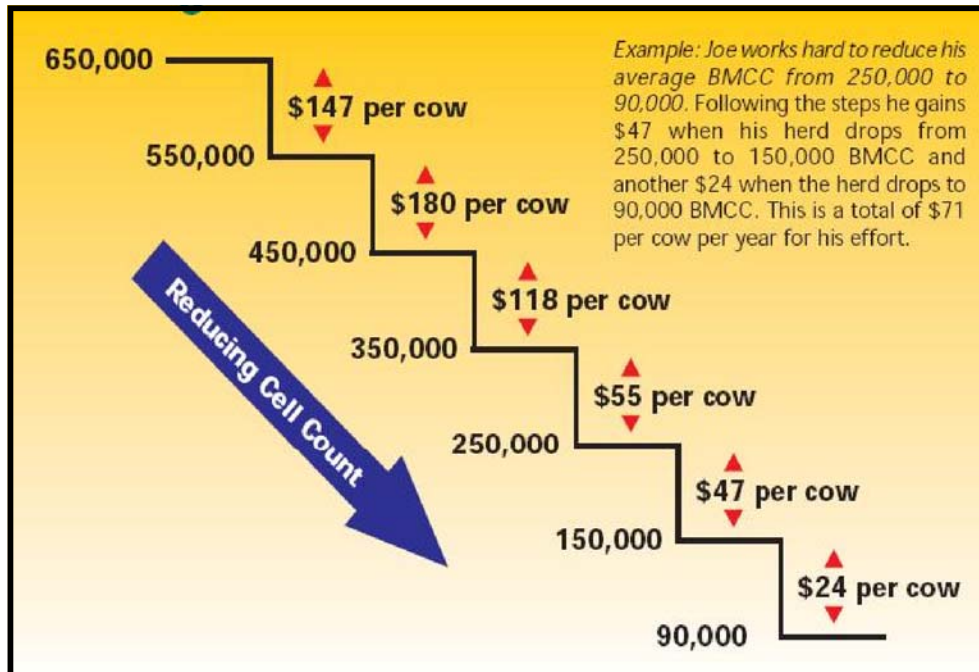
Lowering a herd's BMCC is likely to result in considerable savings from reduced costs of mastitis control and treatment - even in herds already receiving premium payments for their milk.

Furthermore, about one third of Australian dairy farms lie within 50,000 cells/ml of the premium threshold for their processor (Countdown Downunder National Milk Quality Awards - 2006). These herds are at constant risk of missing premium band payments.

Hence farms that can steadily improve milk quality will gain improved profits and also reduce the risk of going out of premium payment for the milk they produce.

However, achieving both incremental gains and risk management in milk quality requires a different approach to a traditional "problem solving" approach (responding to a call for assistance and applying the technical process to establish a diagnosis and

then apply treatment). The benefits of increased milk quality are likely to accrue where farms continue to more closely align the current on-farm practices with known best practice, whilst also having a measuring and monitoring system in place to detect changes in risk and status. The use of professional advice at strategic points in the process will enhance both the likelihood of success and the extent of that success.



**Figure 1 – Average economic benefits of lowering a herd’s BMCC**

They are conservative as the model accounts for costs associated with clinical cases, lost production, milk quality penalties and mastitis control but not labour or the reduced survival, culling and replacement of infected cows.

Note – as these figures represent average benefits, individual farms may vary.

The Countdown Downunder Farmer Short Course was designed for farmers who had an influence on a farm’s management practices, and aimed to assist them to incorporate the Countdown messages on best practice for mastitis control into a mastitis action plan for their farm.

Action planning is a formal process to achieve change by identifying and prioritising needs, setting goals, planning action (deciding the actions required to achieve the goal, when they should be done, who does it, and what support is needed), taking action, reviewing progress, learning and re-planning.

Evaluation of the effectiveness of the Countdown Downunder Farmer Short Course in achieving on-farm change was particularly well informed by the “Insights” report (Insight to the dairy industry’s capacity to manage mastitis – Nettle et al, 2005) commissioned and conducted by Countdown in association with the Centre for Change Management at the University of Melbourne.

The “Insights” demonstrated the success of the Countdown Farmer Short Course in creating an action plan with well defined goals for the farm. However, it also observed

that this process was not being repeated and that changes in farm circumstances and personal goals were not being recognised and acted on.

It clearly showed that sustainable change will generally only be achieved by a repeatable action planning process on the farm – hence the development of Countdown MAX.

### **What is Countdown MAX?**

Countdown MAX provides a framework within which advisers can contribute on a regular ongoing basis to the whole farm plan for milk quality. The MAX package gives the opportunity for a dairy farmer and his adviser to work together using an action planning process to achieve continuing strategic and progressive changes to mastitis and milk quality on farm.

There are three strategic points in the annual lactation cycle that offer the opportunity to significantly influence the milk quality outcome on the farm – drying off, calving, and lactation. These can be thought of as herd level in seasonal and split calving herds, or at individual cow level in year-round calving herds.

For example, at every drying off (cow or herd) there is an opportunity to assess the present position, review what has happened previously and then plan the policy and protocols in the light of current circumstances.

Thus there are three modules of the Countdown MAX service package for milk quality on farms – Countdown MAX at Drying Off, Countdown MAX at Calving, and Countdown MAX in Lactation.

Each module contains four clear steps which, once effectively enabled, become a repeatable cycle -

1. Engage the farmer
2. Develop a strategy
3. Support implementation
4. Track and replan

Whilst Countdown MAX uses the Countdown Downunder Farm Guidelines for Mastitis Control and the Countdown Downunder Technotes as the technical resources, supporting the process itself is a set of specific MAX resources, which are regularly being updated as a result of experience from the progressive roll out of the program in the field - farmer information sheets, “flyers”, comprehensive consultation checklists, one-page action plan templates, track and replan checklists.

The newly developed Countdown Downunder Mastitis Focus Report is likely to be used as a key measuring and monitoring resource.

### **How does Countdown MAX work?**

The fundamental concept behind the MAX process is to use a pro-active planning process at strategic points in the lactation cycle to develop and implement a workable plan towards achieving “best practice” on the farm, and then to regularly track the progress and replan according to progress or changes in the on-farm circumstances.

The planning process is assisted and “prompted” by the availability and use of a comprehensive checklist that can be used to ensure all aspects of the module are covered in the discussion/consultation phase.

A key aim is to position the discussion within the frame of everything that is happening on the farm – this is to ensure that the recommended activities become part of the fabric of *“This is what I do on the farm”*. Advice on milk quality in isolation of an understanding of other issues that must be coped with and which may interact or affect the advice on milk quality is likely to see a plan developed that is subject to easy distraction by those other issues, and a less satisfactory result. The checklist has been constructed with hints and questions to assist this wider scope of discussion.

A one-page plan is then completed and left on the farm as the plan document, whilst the adviser takes a carbon copy for his/her records.

The role of the adviser in the active implementation of the plan is likely to be variable. In some circumstances, it may be quite specific – for example, if a major part of the plan is a training session for milking staff about drying-off and the application of dry cow therapy, it is likely that the adviser will have an active role. However, a continuing sense of progress in the implementation will be highly supportive to the overall process and the ongoing advisory relationship.

Tracking and replanning is assisted by a checklist. The Countdown Mastitis Focus Report will report on many of the major mastitis indices but further data analysis may be required, especially where the Mastitis Focus Report is unobtainable or does not provide a specific piece of information.

However, the nature of the advisory relationship should be such that a key part of tracking and replanning will not be technical, but rather will continue to explore the social impact of the plan – a key goal of the MAX process is to make managing mastitis easier, not just to add extra jobs for already “time poor” dairy farmers.

A clear understanding is inherent from the outset that Tracking and replanning is an essential part of the process. Appropriate diarising for continued contact with the farmer will assist the development of the MAX process into an ongoing “repeatable” process.

Whilst the resources are comprehensive in their coverage they are not prescriptive in their application, allowing the process to be tailored to suit the requirements of the service provider – either at the level of the individual veterinarian or at the whole of business level – and also the requirements of the individual farmer.

Whilst a farmer may choose any or all of the available modules, the greatest benefit is likely to come from the comprehensive approach of all three modules operating cohesively on the farm. In fact, there is a natural progression and “flow” of the modules – particularly from Drying-off on to Calving and then followed by Lactation. Also, there are certain “dependencies” that allow one module to build upon the other (For example, certain aspects of the calving management are highly dependent on what happens at drying-off.)

Successful implementation of Countdown MAX on a farm will result in action planning becoming embedded into the daily routine of what happens on the farm and will also make the dairy veterinarian part of the fabric of planning on that farm.

### **How was Countdown MAX developed?**

Countdown MAX is a direct product of a Dairy Australia funded project – “Achieving Sustainable Change: Enhancing services to dairy farmers through effective

partnerships between public and private sectors.” The project is a partnership between Countdown Downunder and the Centre for Change Management at the University of Melbourne - both are extensively funded by Dairy Australia.

The fully developed MAX process is seen as a template for the development and introduction of enhanced extension of other dairy projects such as InCalf, hence the investment by Dairy Australia.

The Countdown MAX processes and modules were developed by a partner development group that involved four veterinary businesses, two dairy farmers, a farm consultant, a Dairy Australia project manager, Countdown Downunder staff and social research staff from the Centre for Change Management at the University of Melbourne. Veterinary businesses were chosen on the basis of an expressed interest in the concept, and also their location.

Each module was developed at group planning meetings and then “piloted” in the field by the individual veterinary businesses and the dairy farmers. These pilot sessions were debriefed at later group meetings and further changes and enhancements made to the modules. All the support materials are viewed as “living documents” that will continue to be enhanced by experiences from wider application in the field.

The development took place over a twelve months period, and each of the four veterinary businesses has since integrated Countdown MAX into their business, although in some quite different ways, and to different extents. Most now see the potential for the MAX process to provide an avenue for a different way of doing business with dairy farm clients. It is a way of providing pro-active advice on a win/win basis, and an opportunity for the veterinary practice to be seen in a positive light and as more than just a “problem solving” unit (including with all the potentially negative connotations derived from that view).

### **Keys to success**

Successful uptake and utilisation of the MAX service package by dairy farmers is likely to depend on -

- Engagement of the farmer  
A successful demonstration of the “value proposition” that is put before them will be required. Countdown’s modelling of mastitis control shows clearly the financial benefits of improved milk quality to dairy farmers, but the ability to market this concept will be critical. The value proposition will vary from farm to farm and it is important to realise that often it may not be entirely about financial benefits – for example, social and labour benefits may be key drivers on many farms.
- Ease of use of the technical tools by both farmer and adviser
- Ability of the veterinary adviser to converse and discuss milk quality in terms of the farm business and not just the technical issues.
- Support and training opportunities (either separate or integrated)

However, successful uptake and utilisation of the MAX service package by veterinary businesses is another matter.

A critical outcome of the evaluation of the initial phases of the Countdown Downunder project was an understanding that farmers need a service industry capable of supporting their needs beyond problem solving. To be specific, farmers that don’t have mastitis *problems* still have mastitis management *needs*.

This finding is consistent with independent industry reviews. For example, as part of a "Review of Australia's Rural Veterinary Services" in 2002 Peter Frawley stated "veterinary practices need to develop and promote the services they can offer to improve productivity in animal production" recognizing that "the range of services will have to be more innovative".

The ability for a veterinary business to provide such new and innovative services requires a fundamental change in the culture of veterinary service provision – veterinary advisers having the capacity to improve productivity and returns in the day-to-day business of the dairy farm and dairy producers being willing to pay for such service and advice.

To this point in time, veterinary businesses have generally been unable to make the transition to pro-active and advisory service provision. As the development team moves to broaden the usage of Countdown MAX in the industry, dairy practices have a real opportunity to engage with the concept of this type of service provision.

It will be a great loss to the veterinary profession if it fails to take up this opportunity as one way of ensuring that veterinary service provision continues to be relevant to the dairy industry it seeks to serve.

## **References**

Brightling P, Hope AF, Thompson A, Dyson R. *Countdown Downunder 2001-2004 Building industry capacity to control mastitis and manage milk quality*, Dairy Australia, November 2005

Brightling P and Dyson R. *Countdown Downunder Project Brief for 1 July 2004 to 30 June 2007*, Australian Mastitis Advisory Council, Melbourne, Australia, July 2004.

Frawley P. *Review of Rural Veterinary Services Report*, Commonwealth of Australia, January 2003

Nettle RA, Hope AF, Thompson A, Smolenaars F, Brightling P. *Insight to the dairy industry's capacity to manage mastitis*, Dairy Australia, September 2005.