

## The Financial Losses Due to Mastitis

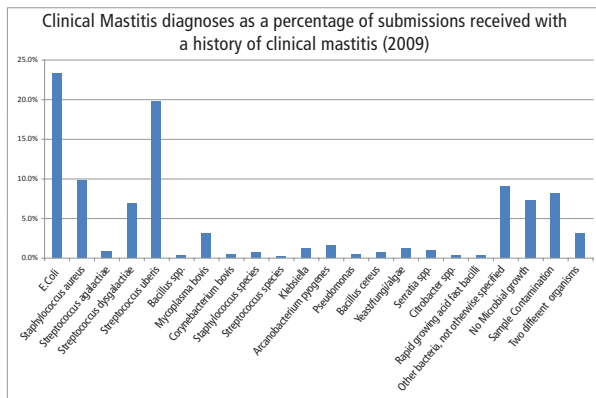
Mastitis remains a major cause of financial loss and animal welfare problem for UK dairy farmers due to:

- **Reduced yields and milk quality from subclinical cases.**
- **Cost of treatment and discarded milk from clinical cases.**
- **Culling and increased replacement rates.**
- **Reduced fertility following the inflammatory response to mastitis.**

A health and culling monitor report 2007/8<sup>1</sup> showed the average cost of mastitis per 100 cows as £4,111 with 17% of cows culled, leaving the herd for mastitis or high cell counts.

A survey<sup>2</sup> of the incidence of clinical mastitis gave an estimated rate of 47-65 cases /100 cows but encouragingly this was reduced by an average of 22% in those herds following the introduction of an integrated mastitis control plan.

The proportion of mastitis cases due to environmental pathogens has increased over the last 20 years and now accounts for nearly 50% of clinical cases<sup>3</sup>. However contagious mastitis remains a significant problem in many herds.



Figure<sup>1</sup>

<sup>1</sup> Kite Consulting: Health and Culling Monitor 2009

<sup>2</sup> DairyCo: www.mastitiscontrolplan.co.uk

<sup>3</sup> SAC 2009

## How does EM Teat Care® Work?

Contagious mastitis pathogens are easily transmitted between cows during the milking routine. The teat's skin is an important part of the cow's own defence against mastitis. Poor teat condition due to sores, cracks, chaps and dry skin can all increase the risk of mastitis. Damaged skin can be caused by mechanical action during milking, aggressive chemical dips, cold weather, bright sunlight or virus infections. These skin lesions can be rapidly colonised by mastitis causing bacteria such as Staphylococcus aureus and Streptococcus dysgalactiae increasing the risk of mastitis.

The teat canal provides an important line of defence for the udder and damaged teat ends are a serious risk factor for both environmental and contagious mastitis.

To prevent transmission of infection between cows and to promote healthy teat condition an effective post milking teat dip is an important part of any mastitis control programme. EM Teat Care® combines the synergistic germicidal activity of lactic acid produced by EM-1 bacteria with the biocompatibility of a natural biopolymer.

## Natural Biopolymer

The fermented natural biopolymer in EM Teat Care® has some remarkable properties and is extremely versatile. It is non-toxic, non-allergenic, anti-microbial and biodegradable.

- **Well tolerated by the skin and is widely used in cosmetics**
- **It has an affinity for damaged tissue and promotes wound healing**
- **It is hydrophilic, drawing water into the skin to moisturise it**
- **It binds to the teat forming a film that fixes the other active ingredients in close contact with the skin**
- **It is anti-microbial**
- **No build up of residues on the teat end**
- **Good dip retention**

## Active Barrier Protection

Lactic acid is a mild natural acid, which makes it an ideal ingredient in teat care products. It is produced by the Lactic Acid Bacteria from EM-1, which provides an active protective barrier on the teat skin. Lactic acid helps to:

- **Regulate the skin's pH, enhancing it's own natural protective acid mantle**
- **Inhibit the growth of opportunistic mastitis causing pathogens**
- **Moisturise the teat's skin, keeping it soft and supple**
- **Soften damaged keratin on the teat end**

EM Teat Care® naturally active ingredients have been proven to be as effective as conventional teat dips with none of the disadvantages.

