

## FEBRUARY 2023 DAIRY NEWSLETTER

### THE IMPORTANCE OF MONITORING TEAT CONDITION

With mastitis being the costliest health issue facing the dairy industry, teat health becomes a key determinant for good milk quality and preventing udder infections. Monitoring teat condition is a useful tool to assess the milking routine and milking machine operation.

#### Indicators you may have a problem:

##### 1) Cow Behaviour

Previous unpleasant experiences are remembered by cows so monitoring their behaviour in the milking parlour or robot may provide insight into their recent milking experiences. Shifting of feet, stomping, kicking the cups off, delays in milk letdown or agitation after the cups are removed may indicate they are uncomfortable.

##### 2) Teat Skin Condition

Teat skin is the cow's first major defence against mastitis pathogens. Broken skin, cracked, chapped or rough skin harbour more bacterial pathogens and allow colonization of mastitis causing bacteria such as Staph Aureus. Evaluate teat ends by rubbing the surface with your finger. Roughening or dryness may indicate poor dipping or spraying of teats or an improper amount of emollient in the dip. Dryness can also be caused by cold or windy conditions, especially when teats are still wet.

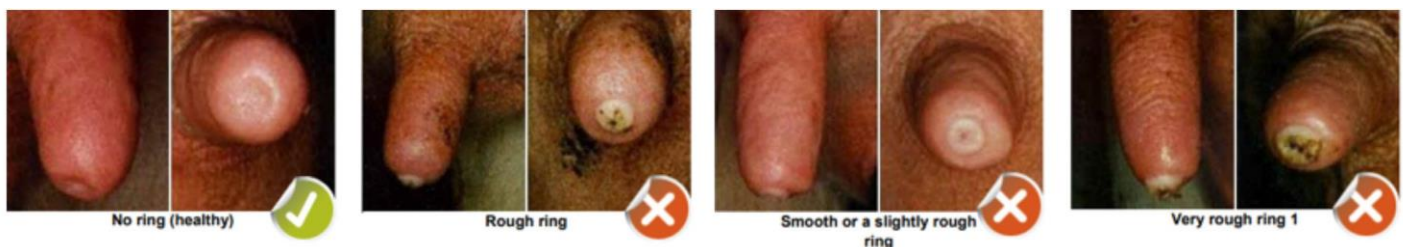


##### 3) Hyperkeratosis- Teat End Damage

Milking machine induced teat damage often occurs at the teat end. It appears rough, raised or calloused. The skin's natural defence against regular damage is to become thickened and produce extra layers of skin protection. This is called hyperkeratosis. Mild to moderate hyperkeratosis looks like a raised, roughened ring around the teat orifice. More severe hyperkeratosis can look like a cauliflower textured growth on the end of the teat.

These roughened areas around the teat opening have cracks and pits where mastitis causing bacteria can survive very close to the teat opening. Roughing can also decrease the elasticity of the skin and prevent the teat orifice from closing after milking.

Factors causing hyperkeratosis of the teats include high vacuum pressure, overmilking due to poor milk let down or incorrectly set automatic takeoffs.





**4) Swelling near the base of the teat**

This is a visible line, raised ring or swelling above the level of the liner. Common causes of this include high vacuum pressure, over-milking or teat cup crawl.

**5) Teat colour at the end of milking**

Red or purple discolouration on the teat after the milker is removed indicates blood flow to the teat during milking was disturbed. Bruising, tiny blood spots or blisters are also a sign of damaged blood vessels caused by the milking unit. Possible causes include high milk vacuum pressure, prolonged overmilking, pulsation failure or an incompatible liner and sheath.

**6) Teat Lesions**

Sores on the teats can be caused by viral or bacterial pathogens as well as trauma. Any lesion can harbour mastitis causing bacteria increasing the risk of infection. Some of the pathogens causing teat lesions are contagious from one cow to another. It is recommended that cows with viral teat lesions are isolated from the rest of the herd and milked last to avoid spreading these pathogens between animals.



**Assessing skin condition and Teat End Damage regularly can help identify emerging issues and allow you to take action.**

**Targets**

Skin condition- >95% normal (no cracking, swelling, roughening or bruising)

Teat End Damage- >90% normal (no hyperkeratosis or a very subtle white ring around teat orifice)

**Additional Considerations for Teat Health**

**1) Teat Dip/ Spray Coverage**

Post-dipping or spraying kills bacteria that cause mastitis and condition the teat to prevent cracked or roughened skin. Teat dip or spray should extend ¾ of the way up the teat on all sides and the teat end should be completely covered.

**2) Cluster Alignment and Liner Slips**

Incorrectly aligned cups leads to uneven milk out. Liner slips, sudden changes in vacuum or rough removal of teat cups can result in the reverse upwards flow of milk when air enters and increase the risk of spreading contagious mastitis pathogens such as staph aureus.

If you notice any issues with the condition of teats in your herd, talk to your herd vet. Our team can perform teat condition scoring or milking equipment evaluations to further investigate any problems.