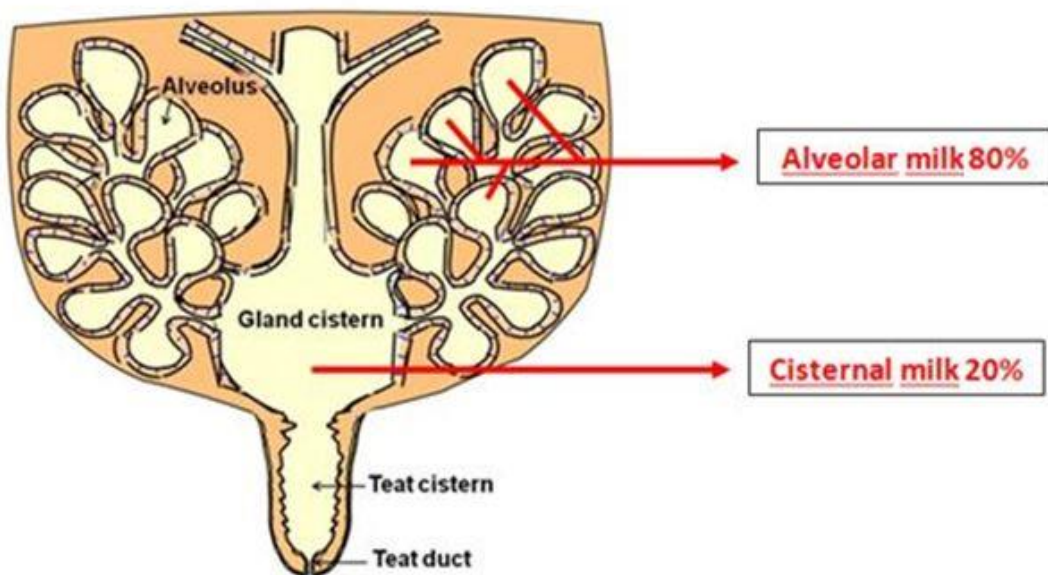


TIME MANAGEMENT IN MILKING ROUTINE

Good timing during milking preparation matter to reach an effective and complete milking. In the udder, the milk is stored in 2 different areas:

- The “cisternal milk” represents only 20% of the total milk available. This milk is directly available, whatever the preparation protocol.
- The “alveolar milk” represents 80% of the total milk. This milk is stored in the udder cells. the udder cells need to be stimulated by a specific hormone named oxytocin to release the milk.



<https://spiritedrose.wordpress.com/jersey-cattle/medicine-box/teaching-a-heifer-to-milk/>

Oxytocin is produced and released in the blood after stimulation. The best stimulation is provided by touching the teats (forestripping, teat cleaning) or by massaging the udder. Once the cow is stimulated, the oxytocin needs around 60 to 90 seconds to be released in the blood and reach the udder. It means that the alveolar milk isn't available before 1 to 1 minute and a half.



TIP : In order to diagnose a stimulation problem in the herd, look at the milk flow **in the milk collector**. If the cow isn't well stimulated, the flow needs few seconds to appear at cluster attachment and it stops after 1 – 2 minutes.

Some farmers do not take the time to stimulate the cows. The cisternal milk will directly be delivered. After a few seconds, the milk flow stops, because the alveolar milk is not yet released. The machine is milking “empty teat”, creating teat end damages and pain. This situation ends up in a vicious circle: the teat end damage is increasing the pain, the pain is increasing the milking time...

In conclusion, it is essential to invest time in a good milking preparation. It allows to reduce milking time per cow, but it is also proven that it increases milk production (see table below)!

Table 4: Summary of six studies on the effect of stimulation on milking.

	No Stimulation	Optimal Stimulation
Milk Yield (lb/milking)	22.9	23.8
Milk Flow Rate (lb/min)	3.9	4.7
Machine on Time	6.3	5.5

Table 1. Benefits of a good milking stimulation comparing to no stimulation.

<http://milkquality.wisc.edu/wp-content/uploads/2011/09/seven-habits-of-highly-successful-milking-routines.pdf>