



## DISBUDDING OF DAIRY CALVES – SUMMARY

**DISBUDDING** - Is the term that is used when the horn bud is removed before the horn attaches to the underlying skull bone.

### HORN DEVELOPMENT

For the first 8 weeks the horn buds are not attached to the skull but are free floating within the skin. At that stage the only nerve supply to the horn bud is the corneal nerve. The site of horn production is by cells within the corium located at the junction of the horn and skin. If the bud is removed but the corium is not, horn growth will continue to take place. From approximately 6 to 8 weeks of age onwards, the horn bud attaches to the underlying frontal bone of the skull and starts to grow. The frontal sinus of the skull starts to grow into the horn from approximately 6 months old causing the horn to become hollow and the nerve and blood supply also starts to develop, which can cause problems and makes it extremely painful if dehorning is delayed to this stage. By this time, the corneal nerve also provides sensation to the skin of this region, thus the need for additional nerve blocking techniques when dehorning is done at later stages of a calf's life.

### GUIDELINES FOR DISBUDDING

Hot iron disbudding is preferred above caustic paste since the pain seems to subside slightly faster after hot iron disbudding. With caustic paste the danger exists that it can leak caustic chemicals from the site of application, damaging the skin and eyes of the calves, the udders of mother cows and even the skin of other calves.

The SABS SANS 1694 – WELFARE OF DAIRY CATTLE par. 8.6.1 stipulates - *“Disbudding of a calf after 2 months of age is prohibited unless an appropriate analgesia and sedation is applied under supervision of a veterinarian and competent person”*. In other words, disbudding without painkillers or anaesthetic is only allowed up to 8 weeks old.

The ideal age for disbudding is 2 to 6 weeks of age.

It should only be done by properly trained personnel.

This is a 2-person job. The calf needs to be properly restrained to protect the calf as well as the handler.

Disbudding is a painful procedure. Therefore, pain mitigating measures are strongly recommended even in calves younger than 8 weeks old.

It is advisable to administer a sedative to prevent the calf from struggling and injury to the handler and calf. Sedatives are scheduled drugs and by law may only be administered under direct supervision of a veterinarian.

It is advisable to give a local anaesthetic to numb the pain during the procedure. Local anaesthetic are schedule 4 drugs in South Africa and may only be administered by a veterinarian.

It is advisable to give the calf an analgesic (painkiller) at the time of disbudding. At the very least give the calf an analgesic (painkiller), even if you are not using sedatives and/or local anaesthetic during disbudding.

Do not perform other painful procedures (such as castration) at the same time as disbudding. Research has shown that the pain reaction is additive, meaning that the procedures are more painful if performed together than if they are performed separately. At least 2 weeks apart is preferred.

