

Weaning strategies for suckled calves

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Abrupt weaning is a source of stress for the cow and calf. Weaning breaks the maternal-offspring bond and removes milk from the calf's diet. In a natural environment the cow would initiate weaning gradually by refusing the calf access to suckle at a later time than that which is generally practised by suckler producers.

Weaning stress is often compounded by other husbandry practices occurring at the same time e.g. change of environment, change of diet and transport/selling. This stress often results in reductions in liveweight gain and marked increases in physical activity including pacing, vocalising and a reduction in the time spent feeding during the post-weaning period.

Two step weaning

It has been reported that weaning stress can be reduced by implementing pre-weaning treatments including fence line separation from the dam and anti-suckling devices.

a. Fence line weaning

Fence line weaning involves cows and calves being separated by a fence for over 4 days, before total separation. This allows the cows and calves to still see, hear and smell one another and where possible, have nose-to-nose contact.

A study carried out in America investigated the effects of fence line weaning on calf performance and behaviour. The study found that calves subjected to fence line 7 days before weaning displayed less distress behaviours, including vocalisation, than calves that were abruptly weaned. Furthermore fence line weaning minimised losses in weight gain in the post weaning period, with abruptly weaned calves failing to compensate for these early losses in weight gain up to 10 weeks after the weaning period.

b. Anti-suckling devices

Canada have recently developed an anti-suckling device known as the 'QuietWean' nose flap. The device is made out of lightweight plastic and prevents the offspring from suckling their dam but still allows the calves to eat and have full social and physical contact with their mother. After calves have worn the suckling device for between 4-7 days, the nose flaps are removed and cows and calves are separated as normal.

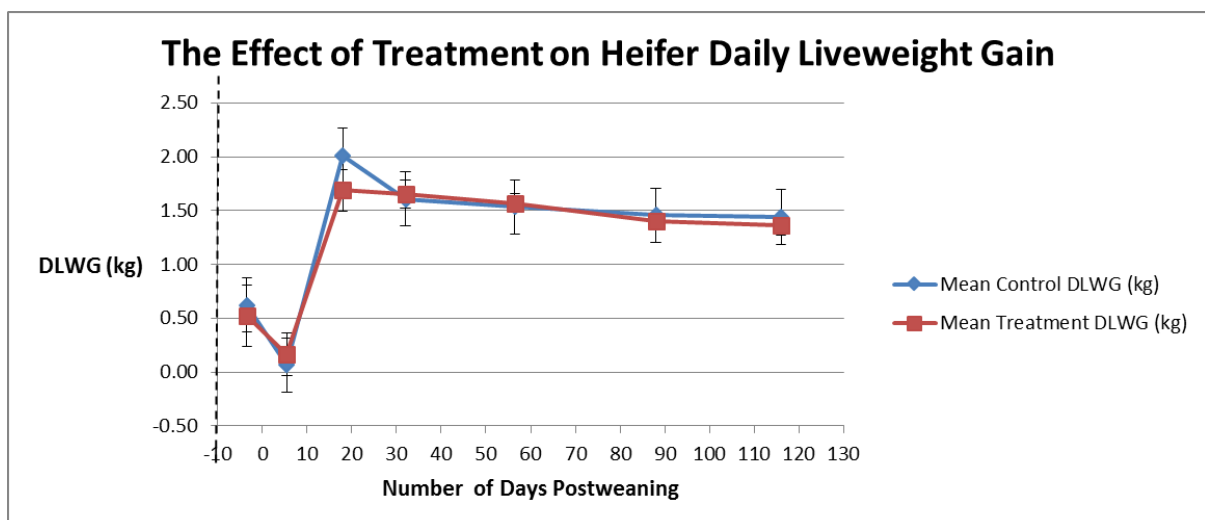
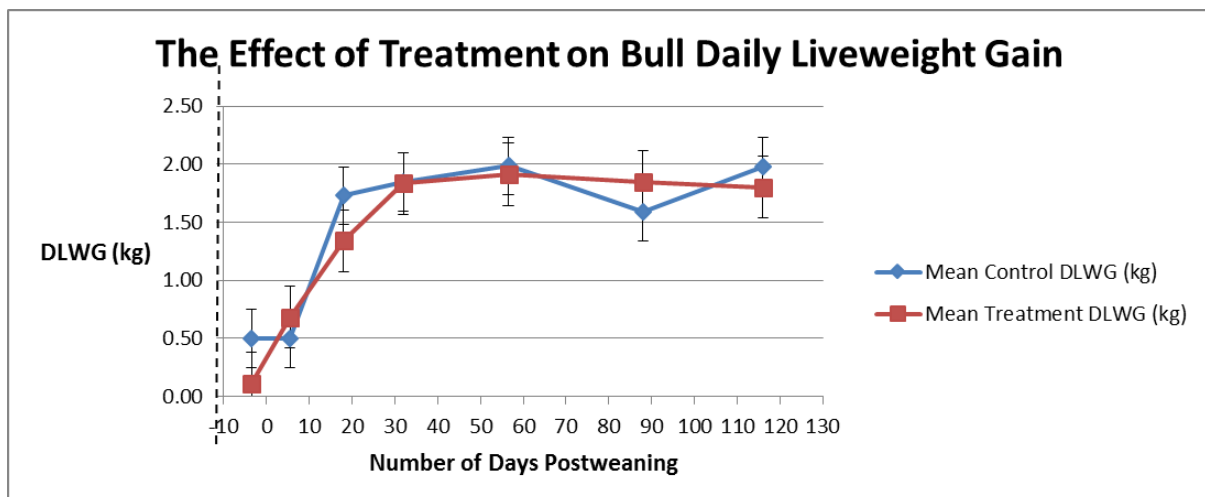


A recent study carried out by Harper Adams University and funded by AHDB Beef & Lamb investigated the effects of QuietWean® nose flaps on weaning stress in suckled calves. The trial was carried out on Robert and Peter Hartley's spring calving suckler herd at Holdgate

Hall, Much Wenlock in Shropshire. It involved 86 calves weighing on average 313kg at 8 months old that had been offered creep feed from September. Half of the calves had a nose flap inserted when they were housed with the cows. Seven days later all of the calves were weaned and put onto an intensive finishing system based on an *ad lib* 14% CP barley based home mix. Harper Adams students Sam Trudgian and Katie Fern observed calf behaviour for 5 days. The nose flaps cost £2.50 each and are reusable.

The results showed that there were no significant differences in behaviour or growth rate between calves weaned using the anti-suckling device and those abruptly weaned.

Despite not being significant, the QuietWean calves showed a reduced liveweight gain in the period when nose flaps were in place compared to controls, this was expected due to the removal of milk from the diet. However, for the 11 days post weaning the QuietWean calves had a greater liveweight gain, compared to the abruptly weaned calves. Despite not being significant, this suggests a reduced growth check at weaning compared to the abrupt weaning method.



Summary of results and conclusions:

1. QuietWear® nose flaps are easily inserted but retention was poor in these housed suckled calves. In a previous study with autumn born calves 50% of flaps fell out. In the trial at Holdgate Hall with spring born calves 30% fell out.
2. Calves did not exhibit any discomfort on having a nose flap.
3. Some calves appeared to be able to suckle with nose flaps in.
4. Growth rate of calves was unaffected by weaning method but results indicated that flaps restricted growth in the first week (by restricting suckling) but once flaps were removed growth rate improved, as opposed to the calves without flaps that saw a growth check at weaning and then subsequently recovered.
5. Behaviour of calves was not significantly different between calves with or without nose flaps. However QuietWear® calves appeared to vocalise less immediately after weaning (days +1, +2 and +3) than control calves. Behaviour was significantly altered by the day of observation pre-and post-weaning.
6. Anecdotal evidence from Canada and the UK suggests that QuietWear® nose flaps are far more effective for calves that are kept outside prior to weaning i.e. there is a reduced opportunity for calves to snag (pull out) the nose flap on a creep feeder, fence, feed barrier etc.
7. Please see the article in the winter 2015 edition of Beef Farmer (pages 14-16) on creep feeding which has a major influence on reducing stress at weaning.

Top tips to reduce stress at weaning

- Do not house calves and wean them at the same time, minimise the number of stressors that calves are exposed to at any one time
- Introduce creep at least 4 weeks before housing
- Do not de-horn or castrate within a month either before or after weaning
- Graze purchased calves for 2-3 weeks prior to housing, ideally in a well fenced sheltered field
- Vaccinate against pneumonia before housing
- House in well ventilated sheds with a low stocking density and plenty of straw and minimal dust. If necessary 'clip out' the backs of the calves.
- Avoid mixing groups of calves