# Calf-Link

Clutha Vets Newsletter for Calf Rearers

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Supplements for optimal nutrition & growth | Issue 4, 2023

With longer days and calf sheds filling up, the next challenge is to help your calves make a smooth transition from "liquids" to "solids" in preparation for weaning. Supplementing their milk to ensure consistent and correct nutrition will lead to the following:

- Faster rumen development
- Increased growth rates
- Fewer health issues in calves
- Lower growth check at weaning
- Earlier calving age & improved milk production in future lactations

Oesophagus
Oesophagal groove
Rumen
Abomasum
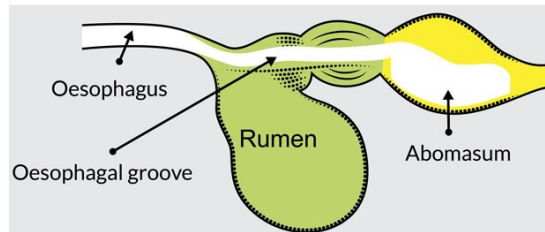
Milk causes NO ruminal development as it bypasses the rumen and goes straight to the abomasum!

Rumen Development

Diet: milk only - 6 weeks
No papillae

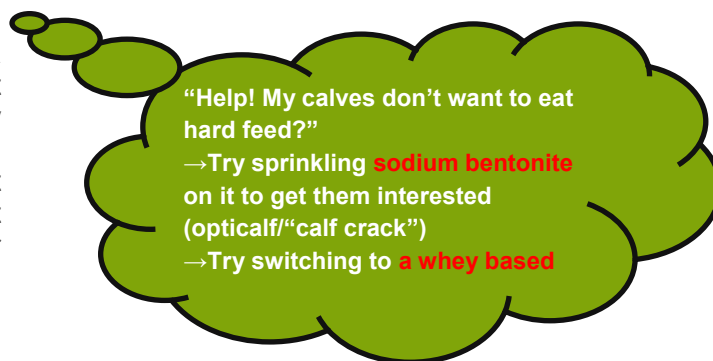**Diet: milk & hay - 6 weeks**

Diet: milk & grain - 6 weeks
Good papillae development

Grain / Pellets / Muesli

A well developed rumen has more papillae than a poorly developed rumen. These are projections that grow on the rumen wall and absorb nutrients. Early introduction of quality grain and grain based concentrates stimulates the growth and development of papillae. These papillae are extremely important when moving to a grass based diet. In order for your calves to absorb nutrients and continue gaining weight, the rumen needs to be developed.

<u>**Bottom line: Feed hard feed early for better growth and earlier weaning!**</u>

"Help! My calves don't want to eat hard feed?"
→**Try sprinkling sodium bentonite on it to get them interested (opticalf/"calf crack")**
→**Try switching to a whey based**

Fibre: Roughage containing high amounts of fibre (hay, straw) promotes growth of the muscular layers of the rumen and helps maintain papillae in optimal condition.

Water: Must be CLEAN and available to all calves (bobbies and replacements) from birth. It is an integral part of EVERY cell in a calf's body and is needed for the rumen to function properly.

Calves not offered water have been shown to eat 31% less dry feed and gain 38% less weight over a 4 week period compared to calves with constant clean water access.

Moving calves outside

The torrential downpours and wild winds this month have provided a timely reminder of the importance of providing shelter to the animals in our care! Hypothermia causes growth rates to drop as energy stores are used by calves to keep warm rather than grow muscle and bone. It can also cause sickness as cold-stress leads to immune suppression. However, when calf sheds are full we don't have a choice and some must make the move outside. As these young animals are much more susceptible to cold than adult stock, it is crucial that adequate shelter is provided. Even baleage or straw bales as wind breaks are better than nothing in a bare paddock. And with a 27 degree day in September, shelter also provides the bonus of valuable shade!

Some tips for a smooth transition outside:

- Avoid putting calves <3 weeks old outside

- Tree lines, dense vegetation & purpose built shelters all help improve the calves environment

- Where infrastructure allows, having some transitional pens where the calves can be outside but still access the calf shed at night is ideal

- Don't change too much at once! Try and keep the feed and routine the same for a few days once outside to help calves adjust slowly

- Calves still need ad-lib clean water when outside

- Ensure grass cover is adequate (~3000kg DM/ha) so calves can eat the tops off

- Protect calf meal from birds and ducks (covers, plastic flaps, scarecrows)

- Ensure your meal contains a coccidiostat– this prevents coccidiosis- a nasty disease causing scours.

Disease watch:

- Paddocks repeatedly used for young stock may get a build up of disease causing bugs such as parasitic **worms** and **coccidia.**

- Calves don't usually get sick until after weaning as they are eating coccidiostats in meal and not grazing hard on the grass. BUT it should still be in the back of your mind if calves start to get sick when outside.

- Coccidia survive well in mud, so move meal feeders around the paddock regularly to minimize exposure.