Nutrition News

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Transitioning calves onto solid feed successfully

As every dairy and beef farmer knows, calves are the future of the herd. Good calf rearing in the short term gives long term benefits in herd performance and sustainability. Adequate investment in the early stages is rewarded with healthy growth, reduced risk of disease and the successful transition onto solid feed. Missing this critical period of development increases the time to first calving and impacts the calf's long-term productivity. The aim is to double birthweight by the time of weaning at 8-10 weeks of age.

Making room in the rumen

The transition onto solid feed for calves is all about preparing and developing the rumen. A calf moves from using only one stomach, the abomasum, to digest milk, to using all four, primarily the rumen, to break down solid feed. To do this, the rumen must increase in size from being 25% of the total stomach space available for digestion to 70%.

Starter feeds stimulate this increase in size and the rumen's development. First of all, feed introduces the gut bacteria needed to produce the energy required for the calf's growth. The bacteria also activate the absorption of essential nutrients in the feed. As the rumen becomes more active, its muscles begin contracting, allowing feed to move through between the stomach chambers.



Keeping up a water supply

Water is necessary for calves from birth, but particularly important during the transition onto solid feed. Water is needed in the rumen to help create the right environment for the fermentation of feed by bacteria. As milk bypasses the rumen to be digested in the abomasum it is essential water is offered freely in addition to milk. Keeping water clean and plentiful encourages calves to drink enough, which is roughly five litres for every kg of feed eaten.

Getting the feed right from the start

The main transition phase occurs at 4-8 weeks of age, but small amounts of starter feed can be introduced just a few days after birth to familiarise calves with solids. A starter feed needs to be as palatable as possible and the right texture. A coarse texture is ideal as it helps the calf learn to chew and is less dusty than a fine ground feed. Dusty feeds are a problem to calves, risking respiratory problems. Pellets are an alternative form of starter feed and prevent calves from sorting through the feed constituents. Starter feeds containing added molasses also help to overcome this problem as well as making the ration more palatable.

Feed quality is vital, providing the protein, energy and full range of nutrients required for bacterial development and healthy growth. Look for starter feeds providing the following:

- 18% crude protein
- At least 12 MJ/kg dry matter
- Up to 4% oil
- 7-10% fibre
- · Additives including vitamins A, D, E

Some starter feeds also include B vitamins, live yeast, pro- and prebiotics. After three weeks on a starter feed, the rumen is functioning well enough to supply a calf with the energy it needs to grow.

Rearing calves requires a commitment of time and financial resource and might seem a costly exercise at a time when little is seen in return. It is tempting to prioritise lactating cows or finishing beef stock where the returns are more obvious, but by paying attention to the management of your calves, you'll reap the rewards of a healthy, productive herd for years to come.







"I'm pleased with the good growth I'm seeing in my pedigree calves since using Rock Start. Being a pellet, they can't pick out what they like and leave the rest, and they seem to prefer Rock Start's slightly bigger pellet size." Seamus Shannon, Dairy farmer

Tips for feeding calves successfully

- Aim to double birthweight by the time of weaning
- Offer small amounts of starter feed from a few days after birth to familiarise the calf with solid food
- · Choose a starter feed with added molasses or other flavouring to increase palatability
- Ensure clean, fresh water is always available even when milk is being given

Corby Rock Mill Calf Starter Feeds

Spec No.	Product	Description	Additives
428	Golden Calf Starter Crunch 18%	Coarse texture starter crunch containing toasted barley and flaked maize with 3mm concentrate pellets	Vitamins B1 and B12 Molasses and milk flavour for increased palatability Butyrate for enhanced rumen development Actisaf yeast for aiding fibre digestion and maintaining rumen health
26	Rock Start Pellet	5mm pellet to eliminate sorting ingredients and in a larger size favoured by calves	

Both feeds are suitable from one week of age at a maximum feeding rate of 2kg/head/day. Not to be fed beyond three months. Available in







For more information on calf management and our range of calf starter feeds, contact your local Corby Rock Mill representative.



