



## Calf rearing pencils

### General feeding calves

Calf rearing is an important job as the young calf is the future of the herd. Well reared, healthy calves will produce high yielding, healthy adult dairy cattle and fast growing beef animals. Calf rearing pencils are highly palatable and are formulated to maximize intake of top quality ingredients, optimizing performance at this most critical time. Our approach to feeding calves is to encourage the development of a strong immune system which promotes health at a time in the animal's life when it is most vulnerable. We aim to promote effective rumen development so that calves can go on to maximize their genetic potential. The ultimate starter diet designed to produce exceptional cattle.

### Feeding rates & guides

Calf rearing pencils are suitable for feeding ad-lib from around 6-8 weeks of age. Calf rearing pencils promote early rumen development leading to high growth rates and earlier weaning of a healthy calf.

### Key components and reasons for inclusion

Only high quality ingredients are included, such as rapeseed meal, malt residuals, wheat, palm kernal, molasses, sugarbeet. Poorer quality ingredients such as oat feed, sunflower etc are not included; as calves are not able to utilize these materials as efficiently.

Calf rearing pencils contain specific levels of vitamin A and D and is also fortified with vitamin E which is particularly important for the immune system of the calf. Selenium is also needed for optimal functioning of the immune system and our calf rearing pencils contain good levels of selenium.

Both crude protein (17%) and metabolizable energy (12.8 MJ/kg DM) are high, providing the calf with the best opportunity for successful lifetime production.

### Disclaimer

Rations should be carefully balanced in terms of nutrient content. They should contain sufficient forage to develop rumen function. Animals must have constant access to clean water. Suggested feeding rates are produced as a guide only and many other factors may have an overriding effect on animal response; no performance guarantee can be given. Ingredients are generally as in the table, but are subject to change.





## Ingredients

Typical Ingredients	Metabolizable Energy	Crude protein	Benefits / Reason for use
Wheatfeed	11.7	18.0	Good source of starch for calf growth. Starch, fibre and protein provide the building blocks for liveweight gain.
Rapeseed meal	12.1	38.5	A good source of high quality protein includes both rumen by-pass and rumen degraded protein.
Malt residuals	11.6	24.5	A good source of fibre, whilst maintaining reasonable levels of energy and protein.
Palm kernal	12.5	17.0	Good supply of non-starch digestible fibre energy. Allows energy intakes to be maximized without increasing the risk of acidosis associated with cereal feeding.
Wheat	13.8	13.0	High in energy, stimulating efficient growth.
Molasses	11.3	20.0	High in sugar making it very palatable.
EU distillers	13.8	34.0	Intakes of other less palatable feeds can be stimulated. Good sources of energy and protein. Can stimulate rumen activity, encourages fibre digestion and feed efficiency. Allows energy intakes to be increased without increasing the risk of acidosis associated with high starch feeds.
Sugarbeet	12.5	11.0	Can stimulate intakes of less palatable feeds. Assists in maintaining an optimum rumen pH, kind to the developing rumen.
Calcium carbonate			A major source of supplementary calcium
Calcined magnesite			A good supply of supplemental magnesium.
Fat spray			A good source of energy
Salt			Salt is included to promote saliva production which helps buffer acid in the rumen.
Fat spray			A good source of energy.
Vitamins & minerals			Well balanced mineral supplement.
<b>Element</b>	<b>Reason for inclusion</b>		
Vitamin A	Essential for eye function and beneficial to reproduction / fertility in cattle.		
Vitamin D <sub>3</sub>	Essential for bone formation and hence growth, involved with calcium and phosphorous absorption.		
Vitamin E	Antioxidant working closely with Selenium in preventing formation of peroxides. Peroxides damage cells. Essential for fertility and for pregnant animals to pass onto young calves.		
Selenium	An antioxidant plays a vital role in immunity. Benefits reproduction and growth. Protects muscles from degeneration. Helps to prevent retained placentas.		
Copper	Essential for bone formation, cardiac function, immunity, reproduction and fertility.		
Magnesium	Essential for growth, repair of body tissue, bone development and milk yield. Needed for enzymes, muscle and nerve function.		
Phosphorous	One of the most important elements being involved with energy production, bone and teeth formation, milk production, appetite and reproduction.		

