



## The Developing Calf

- During the early weeks of the calf's life the rumen is not functioning.
- The process of digestion involves the abomasum and the small intestine.
- The abomasum is also known as the true stomach.
- The pre-ruminant calf is dependent on whole milk or milk replacer for nutrition.
- For the first few months the calf is able to separate food to where it will be best utilised.
- Solid food (concentrate and roughage) to the rumen and milk to the true stomach.
  
- With the stimulus of sucking warm milk, an oesophageal groove is formed.
- The oesophageal groove reflex causes warm milk to by - pass the rumen.
- The milk then enters the true stomach directly where it is partially digested.
- If the oesophageal groove reflex does not work digestive upsets arise.
- Milk will flow into the rumen, it will ferment, whereby acids and gases are formed.
- This results in severe digestive upsets, scouring, sick and dead calves.
  
- Getting the oesophageal groove to work is the key to better calf rearing.
- Only liquid milk feeds can cause the groove to close.
- The oesophageal groove reflex functions better in young calves.
- Rearing calves using teat feeders improves oesophageal groove function.
- Conditioned stimulation is also important and a regular routine is critical.
- Conditioning involves letting the calf know by sound or sight that feeding time is here.
- Buckets placed too low or too far away will result in the groove not closing properly.
- Do not let calves drink too quickly (gulping) as this will lead to digestive upsets.
- Milk temperature is critical, it must be between 38 and 42 degrees Centigrade.
- Irregular intakes and varying amounts of milk or milk replacer must be avoided.
- Calf colds and chills also reduce the grooves effectiveness, avoid draughts.
- Provide clean and fresh water at all times, as calves dehydrate quickly.
  
- Calf milk replacer concentration must be adhered to.
- Overfeeding will cause digestive upsets and sick calves.
- While underfeeding will cause weak calves and poor performance.
- A little extra time spent in preparation will save a lot of time and effort afterwards.
- Get a measure and weighting scales to check feeding levels and concentrations.
- Detailed feeding instructions are outlined on the calf milk replacer bag.

**The GAIN Calf Rearing Programme enhances profitability**