



### What is colostrum & what does it do?

Colostrum is the first milk produced by the doe after birth. It is much thicker than subsequent milking with a yellowish colour. It tends to be much higher in protein, vitamins and minerals than regular milk and provides an extremely high nutrient diet to the newborn kid. But it's the immunoglobulins that are the most important component of colostrum. At birth, kids have virtually no immunity to pathogens present in its new environment. However, the immunoglobulins present in high quality colostrum can provide passive immunity. The doe produces immunoglobulins to protect itself from any diseases it has been exposed to. Therefore if the doe is moved to the nursery area a number of weeks before kidding, it should develop immunoglobulins against any pathogens in the area and pass these to the newborn kid in the colostrum. This also means that kids should only be fed colostrum sourced on their own farm. This will prevent possible transmission of infection (CAE, Johnes) from other farms. In order to maximise immunity the doe should also be vaccinated against clostridial diseases approximately four weeks before kidding.

### 3 keys to feeding colostrum:

1. Feed colostrum as soon as possible after birth.

At birth the intestine of the kid is not mature and can absorb the large immunoglobulin proteins, but this capability diminishes rapidly (gut closure) and is virtually gone after 24 hours. In addition, the kid begins to produce digestive enzymes shortly after birth which can break down the immunoglobulins and destroying their ability to prevent disease. However due to its very high nutritional value, there may still be some benefit in feeding colostrum for a number of days where available.

2. Feed approximately 1 litre

Most literature proposes that a kid should receive 10% of its bodyweight in colostrum in the first 24 hours. However the more colostrum a kid receives, the more antibodies and high energy nutrition it also receives. Therefore work to the rule of feeding the kid about 50mls of colostrum per kg of bodyweight every 4 hours. For a 4kg kid this is 200ml every 4 hours and will provide at least 1 litre in the first 24 hours after birth.

### 3. Feed high quality colostrum

The concentration of immunoglobulins in the colostrum diminishes rapidly after birth, therefore the sooner it is harvested from the doe, the better. In addition, the udder begins to 'bag up' with milk after birth and this dilutes the effect of the colostrum.

#### Storage

If you are lucky enough to have colostrum that is surplus to your requirements, then it may be stored for future use. It should be refrigerated immediately and stored for up to two days. Alternatively it can be frozen for up to a year. Place in small quantities in ice cube trays and move to zip lock bags once frozen. Larger quantities can again be stored in zip lock bags, but remember to allow space for expansion and it is always a good idea to double bag in case the first punctures. It should be thawed gently in a warm water bath in order to protect the immunoglobulins - if the water is too hot to put your hand into, it's too hot for the colostrum.

If there is simply no goat colostrum available then there may be no alternative but to feed cow colostrum. Ideally this should be sourced on the same farm, but this may not be possible. Therefore obtain it from healthy, disease free animals to prevent importing diseases, particularly Johnes Disease. It would also be hugely beneficial if the cows were vaccinated against clostridial diseases.

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