

## Newsletter July 2019

### Colostrum is Gold: Science and Facts

#### About Colostrum:

- Provides antibodies that form the main parts of an acquired immune system. This can reduce or prevent the need for antibiotic treatments in the new-born or older animal.
- The new-born animal has little body fat, which means it is highly dependent on the fats and carbohydrates in colostrum as a source of energy to maintain body temperature and growth. Insufficient energy supply at birth can lead to hypothermia.
- Colostrum provides other nutrients, including: vitamins A, D and E which help increase the absorptive and digestive capacity of the digestive system; enzymes and proteins which suppress growth of certain bacteria and contribute to the immune system.



#### Feeding Guidelines:

Calves: Feed high quality (>50mg/ml of antibody) colostrum at 10% of body weight ideally within 2 hours of birth but definitely within 4.

#### Cattle Facts:

- Over 30% of dairy farmers now test the quality of the colostrum before feeding it, but just 5% of dairy farmers are feeding colostrum in the first 2 hours of birth (the ideal time frame).
- It is estimated that almost a third of pre-weaning calf deaths occurring in the first 3 weeks of life can be attributed to failure of passive transfer.
- Up to 50% of calves do not receive enough colostrum, and only 30% have sufficient levels of colostrum immunity.
- A calf needs to suck continuously for approximately 20 minutes to consume enough colostrum from the cow. 46% of calves born to second parity or older cows, and 11% of calves born to first-calf heifers failed to suckle within 6 hours after birth.
- Calves with low antibody levels are more likely to become ill and more likely to die before weaning. Conversely, higher concentrations at 1-2 days of age are linked to better health, lower mortality and higher daily liveweight gain, with animals reaching target weights more quickly:
  - ⇒ Calves with low antibody levels were 1.6 times more likely to become ill and 2.7 times more likely to die before weaning. Higher antibody concentrations were linked to better health, lower mortality and higher liveweight gain; at 205 days calves were on average 3.5kg heavier.
  - ⇒ Calves with high antibody levels from colostrum reached target first service weights sooner.
  - ⇒ Antibody concentration in the calf at 1-2 days old significantly affected average daily weight gain through to 6 months of age (**article continued overleaf**).

## Colostrum is Gold.....continued

- ⇒ Calves fed sufficient colostrum quickly enough more than halved their risk of pneumonia.
- ⇒ Brown Swiss heifer calves given 2 or 4 litres of colostrum at birth were monitored for two lactations after calving. Those given 4 litres showed a 30% increase in pre-pubertal growth rate, a 16% increase in survival to the end of the second lactation, and 1,026kg more milk production than those given 2 litres.
- ⇒ Antibodies from colostrum helped protect calves from death and poor performance from septicaemia and pneumonia, with effects lasting up to 6 months of age.
- ⇒ Calves with good colostrum status were a third less likely to die and half as likely to experience illness.

Colostrum status ZST units (ZST = Zinc Sulphate Turbidity)	Low (0-10)	Marginal (10-20)	Good (>20)
% of calves	18	32	50
Mortality %	9.8	4.1	3.2
Illness %	31.6	23.0	15.1
Pneumonia	5.2	3.2	1.4

## Remember to vaccinate for abortion NOW

Three types of infectious abortion are responsible for **86% of all sheep abortions**. These are **Enzootic Abortion (52%), Toxoplasmosis (25%) and Campylobacter (9%)**. Through vaccination we can prevent 77% of these abortions. Cost-benefit studies carried out by ADHB showed an increase in income of £21.27/ewe where flocks were vaccinated against Enzootic Abortion and Toxoplasmosis.



These vaccinations need to be administered in advance of tugging so contact us ASAP to speak about a vaccination programme for your flock today.

## Honiton Show 2019

**It's that time of year again.....we will be at  
Honiton Show on Thursday, 1st August (Stand 135 Avenue B)**

This year's competition is to draw a picture of your **VET** (should be interesting...)

There's a prize for everyone who enters and a prize for the winner - so get drawing!

Drop your pictures in to any of our offices and they will be displayed on our stand at the show.

We hope to see you on the day.



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