

# DOWNLAND<sup>®</sup>

PARTNERS IN FARMING HEALTH

## FRESHSTART CALF MILK REPLACER RANGE



# FRESHSTART PRODUCT RANGE

## TIPS FOR CALF REARERS

### Are your calves getting enough colostrum?

It's hard to believe but this question is still relevant because despite farmers focusing on this area it is still a problem on many farms. This is because the modern dairy cow has less maternal instincts than her predecessors and while she produces more colostrum it is more dilute. The cow's colostrum quality also declines by 4% per hour which doesn't sound like much but if you wait to milk the cow through the parlour, on average, the cow's colostrum will be 25% weaker than it was when the calf was born.

Also the calf's ability to absorb antibodies at six hours old is half that of a two hour old calf. So the secret is getting colostrum in quickly within two hours of birth and giving a minimum of 3 and preferably 4 litres in that period. If using a stomach tube be aware that the bag only hold



2-2 ½ litres so it will have to be partially refilled.

Is it worth feeding colostrum after 24 hours? The answer

is yes especially if calves are vaccinated for scour, as calves will get the benefit of antibodies in the intestine. Farm stored colostrum can have a very high TBC which reduces antibody absorption so be careful how it is stored and Johne's disease is also a consideration.

If two cows are calving each day, keep three good stomach tubes on farm at all times and sterilise after use. Discard tubes when the tip becomes brittle and frayed.

### Dry concrete or wet straw?



A young calf spends 19 hours a day lying down and if the bedding is damp, to the extent where you can hear water squelching underfoot, the calf is in trouble.

Trapped air around straw keeps a calf warm by insulating its body thereby preventing heat loss. If the bedding is damp the moisture uses the heat from the calf's body to evaporate into the atmosphere, which means the calf has to use energy to keep warm.

Disease-causing organisms thrive in this situation because they prefer damp air. Also, if the drainage is incorrect in the house, the only escape route for moisture is by evaporation, making the house and the calf cold. In this

circumstance, the calf will need to use energy to keep warm, energy that it could use to fight disease. Disease will also be at higher levels because the air is cool and damp so the calf loses and the bugs win.

A four-week old calf could be excreting 6-8 litres of liquid a day and if there are ten calves in a pen, 80 litres of liquid need to be removed each day.

The only way of achieving this is by getting the fall in the floor right, ensuring calves are fed at the lowest point and can lie at the highest and warmest part of the housing.

A minimum fall of 1:20 is required so for a four metre pen a difference of 20 centimetres from the back to the front of the pen is needed. It is not an exaggeration to suggest that a good floor can save a fortune in terms of time and additional calf weight gain in addition to lower mortality and vet bills.



### Is it necessary to give water to a calf?

A young calf is normally fed 4-6 litres of milk or milk replacer containing 3-5 litres of water. Is it therefore necessary to offer additional water?

The answer is yes. While water contained in the milk goes into the true stomach or abomasum it cannot be used for the digestion of dry feed or roughage.

Cereal grains, soya bean meal, straw and other feeds are all dried to prevent microbial spoilage. When a calf eats these they move into the rumen, the equivalent of a fermentation vat, and can only be broken down by bacterial activity.

Excluding water from a young calf's diet reduces dry feed intakes by 60%, reduces growth by over 25% and increases the cost of rearing by 35%

A calf will require 3-6 litres of water per kg of dry feed consumption, depending on the ambient temperature.

As the cost of water is essentially only the time it takes to supply it to the calf there are few more important factors that should be considered for improving calf performance and live weight gains.

Consideration should also be given to the container used to supply the water. Unless a group of young calves can empty a water trough two or three times a day it is best to use nipple or bowl drinkers instead as this keeps water fresh. It is also preferable to place drinkers outside the pen to reduce contamination of the water by faeces, which can spread diseases such as coccidiosis.

Don't place the water source below a hayrack as hay or straw will contaminate the water. Clean the bowl or trough once a week.



### What's the value of a sick bay for calves?

What is the first thing we do when we see a sick calf? Normally the calf is treated, but in most cases the calf is left among his currently healthy companions.

We know the calf is sick because if it has pneumonia we can see that it is lethargic with dropped ears, possibly runny nose and is most likely coughing. With scour we notice the calf's dung. Watery dung splashing everywhere or a coughing calf, are how a disease spreads.

Leaving the sick calf in the communal pen helps the disease causing bugs to expand and prosper. A shared teat full of saliva is another source of infection.

If new young calves are introduced to the calf rearing area at the same time the disease will take an even greater hold.

To break the chain we need to remove a sick calf regardless of how mild the disease is. This is

best achieved by having a few individual pens or a few calf hutches for calves that are sick and those also considered disease risks. The latter include calves that may not have received enough colostrum, heifer's calves or premature or weak calves. It is best to place these calves downwind of the rest of the calves and to feed last so as not to carry the disease back to the main group.

By implementing this policy all calves will benefit from a cleaner environment so more of their nutrients can be used for growth and development. They will eat more, again improving performance and the farm workload will decline as it is easier to remove one calf every few weeks rather than treating one to two calves every day.

## PRODUCTS

### DOWNLAND ELITE

#### Skim milk and omega 3 for increased calf health

On busy dairy farms with cows calving every day **DOWNLAND ELITE** is the ideal product to maintain health and performance especially when labour shortages, housing and bad weather put calf rearing under pressure.

**DOWNLAND ELITE** helps to ensure your calves win the battle at keeping disease at bay.

#### Skim milk

Containing casein protein it forms curds in the calf's stomach trapping the oil and vitamins allowing for slow release throughout the day. This is the most natural protein to feed the calf increasing the digestion of the nutrients in the milk.

#### Omega 3 plant oils

By including five different plant oils, instead of just the standard vegetable oil (palm oil) found in most calf milks, calves will receive higher levels of digestible energy. These oils have also been shown to reduce calf rectal temperatures during infection, an indicator of higher health status. Finally, the use of five plant oils reduces the time required to digest the oil in the calf encouraging higher intakes of dry feed. Calves fed this oil blend tend to be weaned quicker saving £3-5 per calf reared.

#### Flavours, sweeteners and anti scour agents

**DOWNLAND ELITE** is about attention to detail. Adding the right flavour and natural sweeteners encourages calves to consume their milk and improves digestion as the calf's digestive system will be primed for receiving nutrients prior to the calf being fed.



The addition of organic acids, yeast products and egg proteins makes the calf digestive system a more inhospitable place for bacteria, speeds up the calf immune response to infection and targets specific scour causing agents in the intestine.

#### Mixing and feeding

**DOWNLAND ELITE** is made using evaporated milk that is spray dried to ensure quick mixing and ease of digestion. We recommend using clean feeding utensils. Feed according to the instructions on the back of the bag. When temperatures during the day fall below 10°C in wet, damp weather and 5°C during cold, dry weather offer calves an extra 50-75g milk powder per feed. There is no need to increase the volume of liquid fed.

## PRODUCTS

### **DOWNLAND SUPREME**

#### **An abundance of milk protein and omega 3 for better calf health**

With the increase of production of specialist whey powders for baby food and sport drinks whey protein has become expensive and is often replaced by plant protein in economy milk replacers. Plant protein work best in older calves (three weeks plus) but needs to be limited in young calves diets.

#### **Omega 3 plant oils**

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#### **Flavours, sweeteners and anti scour agents**

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#### **Mixing and feeding.**

**DOWNLAND SUPREME** is made using evaporated milk that is spray dried to ensure quick mixing and ease of digestion. We recommend using clean feeding utensils. Feed according to the instructions on the back of the bag. When temperatures during the day fall below 10°C in wet, damp weather and 5°C during cold, dry weather offer calves an extra 50-75g milk powder per feed. There is no need to increase the volume of liquid fed.

# FRESHSTART PRODUCT RANGE

## PRODUCTS

### DOWNLAND ZERO

#### Growth for less cost

##### Vegetable oils

**DOWNLAND ZERO** contains the correct blend of palm and coconut oil to improve growth and dry feed intake compared to just vegetable oil (palm oil).

##### Flavours, sweeteners and anti scour agents.

**DOWNLAND ZERO** is about attention to detail. Adding the right flavour and natural sweeteners encourages calves to consume their milk and improves digestion as the calf's digestive system will be primed for receiving nutrients prior to the calf being fed.

The addition of organic acids, yeast products and egg proteins makes the calf digestive system a more inhospitable place for bacteria, speeds up the calf's immune response to infection and targets specific scour causing agents in the intestine.

##### Mixing and feeding.

**DOWNLAND ZERO** is made using evaporated milk that is spray dried to ensure quick mixing



and ease of digestion. We recommend using clean feeding utensils. Feed according to the instructions on the back of the bag. When temperatures during the day fall below 10°C in wet, damp weather and 5°C during cold, dry weather offer calves an extra 50-75g milk powder per feed. There is no need to increase the volume of liquid fed.

## ABOUT DOWNLAND

Downland is a national network of independent distributors who supply a wide range of animal health products under the Downland brand. Our products are sourced directly from the manufacturer, allowing us to offer you quality products which are also affordable.

Downland is known for its quality of service and ethos of working in partnership with the farmer.

Local, independent advice enables us to work closely with our farmer customers to ensure the right solution is found to meet their particular situation.



## FRESHSTART CALF MILK REPLACER RANGE

**FEEDING RATES** Do not use Boiling water. Always clean feeding utensils after use to reduce scour.

### Twice a day

**Mixing rates:** Always mix at a rate of 125g per litre of mixed mix or 1 measure of powder to 4 measures of water.

- Offer fresh clean water and concentrates from day 1.
- Wean when calves are eating at least 1kg dry feed/day.
- Reduce feeding rate by ½ L/feed every 2 days over 6 day period.

Age of calves (days)	AM Litres	PM Litres
1-4	Colostrum/ transition milk	Colostrum/ transition milk
5-8	1 ½	1 ½
9-13	2	2
14+	2 ½	2 ½

### Once a day

**Mixing rates:** Always mix at a rate of 125g per litre of mixed mix or 1 measure of powder to 4 measure of water.

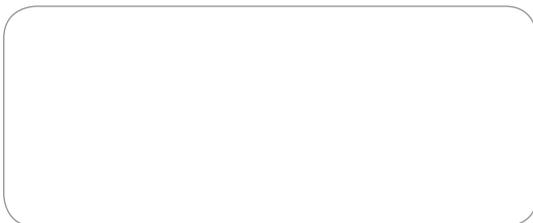
\* For Once a day feeding mix at 200g/L or 1 measures of powder to 2 ½ measures of water.

Age of calves (days)	AM Litres	PM Litres
1-4	Colostrum/ transition milk	Colostrum/ transition milk
5-8	1 ½	2 ½
9-13	2	2
14-27	2 ½	2 ½
28+*	3	

### Computerised feeders

Calibrate machine with every new batch of powder. Downland Calf Milk Replacer is compatible with all computerised feeders.

### Your local distributor is:



For more information on  
Downland please  
call 01228 564498 or email  
bestadvice@downland.co.uk

[www.downland.co.uk](http://www.downland.co.uk)