









# The importance of colostrum for calves

Colostrum is important for calves.
It contains antibodies and a number of other substances that are very important for an optimal start. A quick and hygienic provision of colostrum of high quality is therefore crucial.

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Good quality colostrum contains 50 grams of antibodies per litre. A calf needs **200 grams** of antibodies to ensure it remains healthy during the first few months of life. Therefore, it should be fed at least **4 litres** of good quality colostrum within a few hours after it is born.

This is however easier said than done. Studies show that between 40 and 60% of colostrum samples contain insufficient amounts of antibodies (see figure 1). As a result of poor colostrum management and/or poor colostrum quality, up to 50% of calves will not have sufficient levels of antibodies transferred to their circulation.

#### Feeding colostrum of optimal quality

Colostrum of the mother is basically the best, because it contains farm-specific antibodies. It is however not always possible to obtain colostrum of optimal quality from each cow. Avoid colostrum from cows:

- That are suffering from disease
- After a dry cow period shorter than 3-4 weeks
- After leakage of large quantities of colostrum before calving
- If the yield is more than 10 liters of colostrum at their first milking
- If the colostrum contains clots or antibiotics

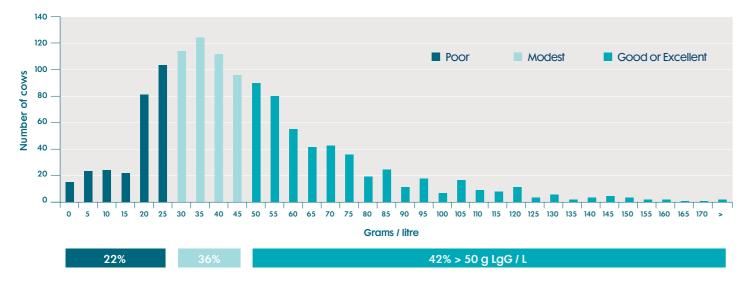


Figure 1, Antibody levels in colostrum samples from 1250 cows. In this particular study, only 42% of samples have an antibody level of 50g/L or higher. Other studies show different percentages, but in general, only 40-60% of colostrum is suitable for use.



### Testing the quality of colostrum

Colostrum quality can be measured in a fairly simple way by using a brix refractometer. Colostrum with a brix value of 22 or higher contains at least 50 grams of antibodies per liter and is suitable to be fed to calves. If the brix value is 18 or below, the colostrum tested should not be used. If the brix value is between 19 and 21, it is possible to enrich the colostrum by adding **Sprayfo Colostrum** according to the table below.

#### Sprayfo Colostrum

**Sprayfo Colostrum** is a colostrum supplement, based on colostrum from cows vaccinated against the most important diseases of calves. It contains at least 20% IgG, which is considered to be the most important antibody for young calves. It can be used to **enrich** the quality of colostrum or as a colostrum **replacer**.

Brix value	IgG in g/I	Color of colostrometer	DM % of milk solution	Add g/l FOS Colostrum	Final IgG in g/l
26	73	•	26,7	Colostrum quality is good to excellent and can be fed to calves as it is	73
25	68	•	25,6		68
24	62	•	24,5		62
23	56	•	23,4		56
22	50	•	22,3		50
21	45	•	21,2	25	50
20	39	•	20,1	50	49
19	33	•	19	75	48
<19	<33	•	very poor colostrumquality, do not use this colostrum to feed calves		

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## General information about Sprayfo Colostrum

#### When to use Sprayfo Colostrum?

**Sprayfo Colostrum** is a freeze-dried colostrum powder that can be added to colostrum of insufficient quality or mixed with warm water. Uptake of calves is excellent.

Provide **Sprayfo Colostrum** immediately after birth when natural colostrum is unavailable or of poor quality.

#### **Sprayfo Colostrum** can be used to:

- Enrich colostrum with insufficient levels of antibodies
- As a colostrum replacer when there is no colostrum of sufficient quality available

#### **Enrichment of colostrum of poor quality**

If **Sprayfo Colostrum** is used for **enrichment** of colostrum of insufficient quality, add the amounts calculated using the brix value dosage table to the colostrum fed to the calf.

#### Replacement if no colostrum is available

If **Sprayfo Colostrum** is used as a colostrum **replacer**, dissolve 500 gram in 2-2.5 litre of water (± 45°C) and administer directly after birth, within 6 hours.

#### Composition

#### Per kg of product:

 Crude protein
 50,0%

 Crude oils and fats
 2,0%

 IgG
 >20,0%

 IgA
 1,5 - 3,0%

 IgM
 1,0 - 2,5%



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Sprayfo is a brand of Trouw Nutrition, a global leader in animal nutrition, specialising in the development of innovative feed technologies, premixes and unique software solutions. Quality, innovation and sustainability are the guiding principles behind what we do – from research and raw material procurement, to the delivery of cutting-edge products and services designed to increase animal production efficiencies.