

Topic

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# Colostrum management: give your calves sufficient high quality colostrum to become productive cows

Technical Efficiency

Economic Resilience



## Background

Calves are born without antibodies in their blood and are totally dependent on antibodies in the colostrum they drink after birth. Good colostrum management is extremely important to rear healthy calves, but also productive cows. However, colostrum management is not optimal at many farms, which has of course a financial impact.

## Steps for a good colostrum management

### Dry period

- Dry matter intake (target value (TV): 12kg DM/day)
- Crude protein (TV: 13-14% CP in far-off, 14-15% in close-up)
- Vitamins and minerals (Selenium:  $\geq 1,5\text{mg/day}$ ; vitamin E: 1000 - 1200 units extra in dry period...)
- Access to (clean) water (intake: min. 40L/day)

### Colostrum quality

- Milk the cow directly after giving birth
- Check the colostrum quality (>22 brix or >55IgG/L)

### Colostrum intake

Feed the calf colostrum within 6 hours min. 220g IgG (4L colostrum of good quality). However, strive for 300g IgG!

### Storage

- Store colostrum IMMEDIATELY and HYGENICALLY
- In the fridge (max. 2 days)
- In the freezer (max. 1 year)
- Defrost slowly in a water bath or in the fridge. Never heat above 60°C! (No microwave use!)

## Which equipment do you need?

### Temperature independent



Digital refractometer

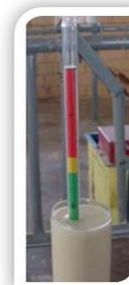


Analog refractometer

### Temperature dependent



Colostro balls



Densimeter

### Be careful, especially on these points:

- Colostrum balls and the densimeter are temperature dependent!
- Do not leave colostrum at room temperature

### Specific advises:

- Use a drencher probe if the calf doesn't drink enough
- A colostrum check can be performed to check your colostrum management (contact your vet)
- Colostrum key words:
  - Quick
  - Fresh
  - Much
  - Often

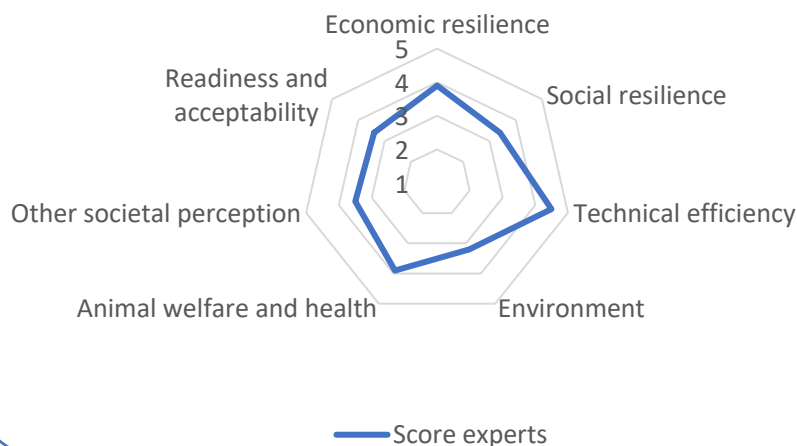
### Positive features:

Good colostrum management leads to less morbidity and mortality, but also to early first calving age, more productive and higher lifetime production of cows and hence a more resilient farm.

### Quote of farmer:

*"Good colostrum management leads to healthy and productive cows"*

## Assessment of method





Refractometer (brix)	Densimeter	Colostro Balls	IgG (g/L)	Litre
14	1028		Give in this situation an alternative, e.g. colostrum stored in the freezer!	
15				
16				
17				
18	1030	● ●		
19				
20	1035	● ● ●	24	9
21			35	6
22	1045	● ● ● ●	47	5
23			58	4
24			70	3
25	1060	● ● ● ● ●	82	3
26			93	2
27			105	2
28			116	2
29	1075	● ● ● ● ● ●	128	2
30			139	2

The goal is to administer minimum 220g IgG within 6 hours after birth!