6	Calving, youngstock management	61	6.1	Selection of bulls, use of sexed semen, feeding management of dry cows
		62 A	6.1.1	The calving process
		62 B	6.1.2	Use of equipment around calving
		62 C	6.1.3	Care of cow and calf after calving
		62 D	6.1.4	Colostrum management
		63	6.2	Milk (replacer) feeding schedule
	Combined 64-67	mbined 64-67 64 6.3 From birth		From birth to weaning
		65		moved and part of Theme 6, topic 64
		66		moved and part of Theme 6, topic 64
		67		moved and part of Theme 6, topic 64
		68	6.4	Disease & health management
		69	6.5	Handling of calves after difficult birth
	In case one previous title is dropped	70	6.6	Youngstock rearing info & KPIs
		71		Part of Theme 6, topic 70



https://www2.sprayfo.com/calf-rearing

#### INTRODUCTION;

https://www.cast-animal-health.com/portfolio/colostrum-management-animation/



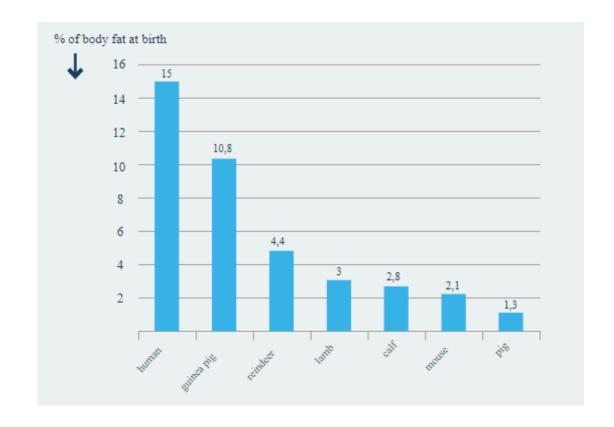
Learning activities, you will learn about;

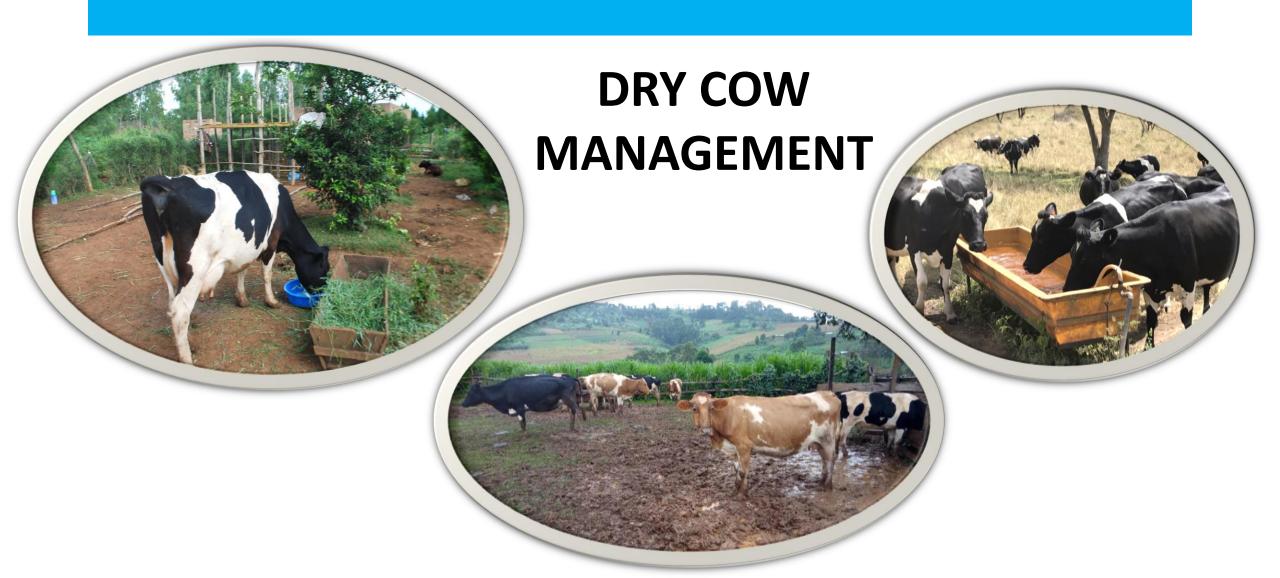
- how to influence the quality of colostrum
- the uniqueness of colostrum
- the importance of colostrum
- how to ensure the quality of colostrum.
- how to maintain the quality of colostrum outside the cow's udder.



#### Background.....

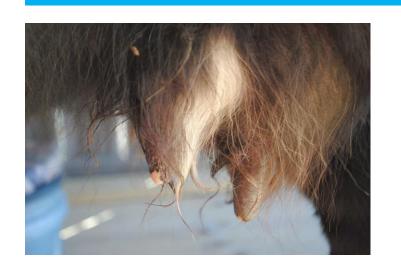
- To raise a calf without colostrum is impossible.
- Colostrum is a valuable "piece of gold" that plays an important role in the future live of the calf.
- Future performance of the calf depends on the quality and quantity of the cow's colostrum on the moment of calving.
- A well-known fact is that a dairy calf is born with a low energy reserve, meaning that al the resistance against foreign pathogens comes from the colostrum(see picture)
- The management is responsible for the quality and quantity of the colostrum produced by the cow.



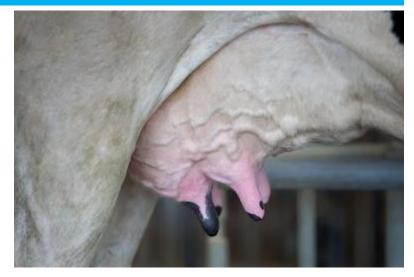














HYGIENE !!!!.

Before colostrum collection you must take away all the risks of contamination by bacteria.

- Wash the udder and teats.
- Clip the udder.

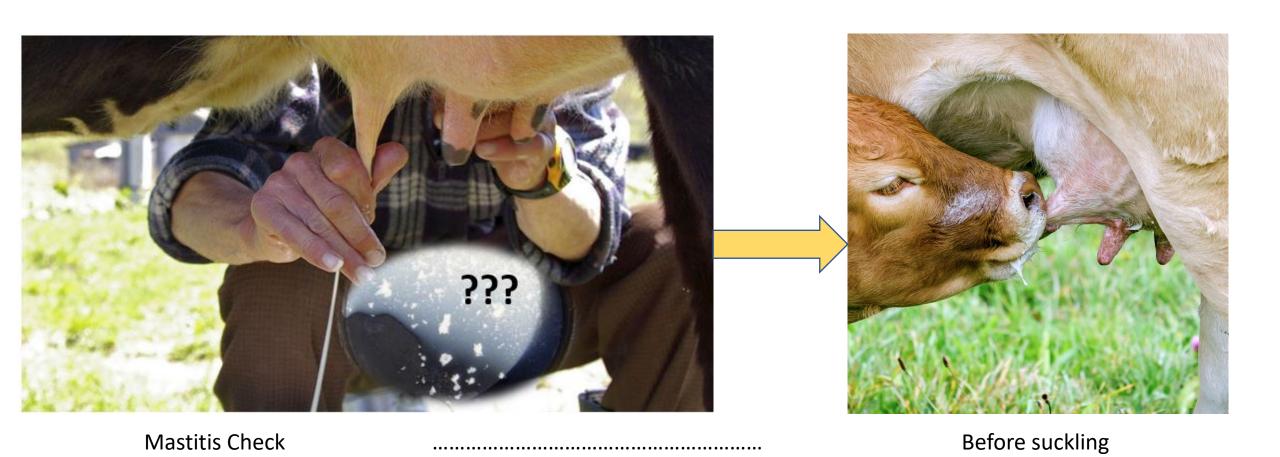


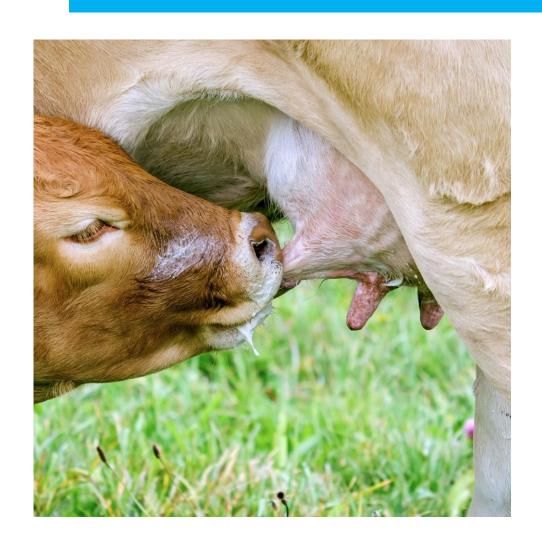




















No/poor



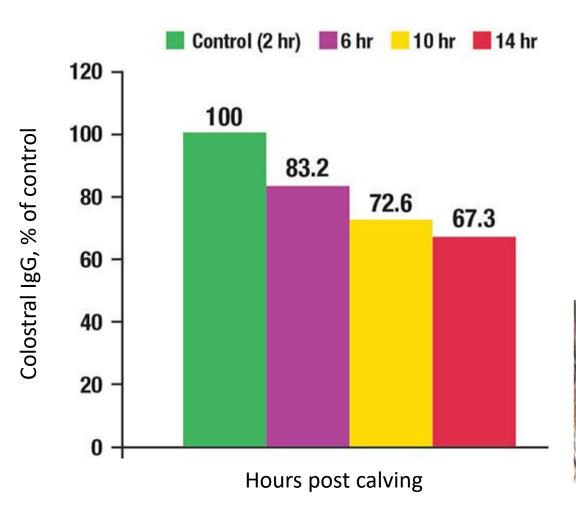








After calving; the cow must be milked as soon as possible to harvest the highest quality colostrum. Immediately after calving the dilution process starts and the quality will decrease rapidly.



The effect of delayed colostrum collection relative to calving on colostral IgG concentration(% of control) in Holstein cows (Moore et.al 2005).

After collection quality will remain the same. Storage in a cool (refrigerator) place required.



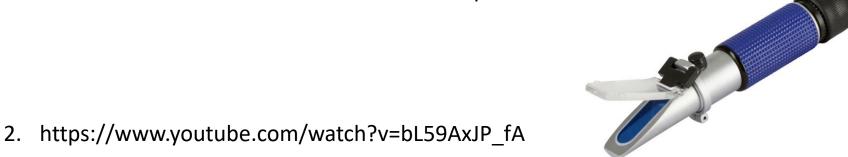






#### Quantity Check;

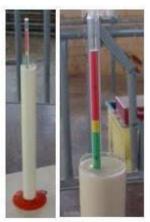
1. 6 litres of colostrum within 30 minutes after parturition





#### Quality Check;

- "yellow" colour is an indication of good quality.
- Thickness is also an indication of good quality.
- Colostrum balls.
- Colostrum density meter is a very helpful tool to determine the quality (IgG's)
- Brix meter is reliable tool as well. (https://youtu.be/FIPModu8uzY)





#### Manual MS Colostro Balls

The MS Colostro Balls measures the density of the colostrum. Throw the MS Colostro Balls in the colostrum and read how many MS Colostro Balls will float.

Colostro-Balls to the surface	Density gr/dm <sup>3</sup>	Quality
•	Ca. 1025	Bad
• • -	Ca. 1030	Moderate
• • •	Ca. 1035	Reasonable
	Ca. 1045	Good
	Ca. 1060	Managed
	Ca. 1075	Very good

Measuring temperature: 20°C - 30°C

After use, clean up immediately. Not warmer than 60°C. Do not freeze or microwave.

Do not administer the MS Colostro Balls to the calf.

The MS Colostro Balls consists of 2 red, 1 orange and 3 green cylinders.

