

Opgaver ved optagelse

Ekspert: Peter Raundal

Filmoptagelse/instruktion: Merete Martin Jensen og Kirsten Marstal

Start kl. 8.30

Husk at gøre de enkelte klip meget lange, så vi kan speake tilstrækkeligt

Oversættelse: Stewart Grant

Arbejdstitel: Smittebeskyttelse – råmælkshåndtering Protection from Infection – Handling of Colostrum

1. Udmalkning af råmælk
Milking of newly calved cows
2. Opbevaring af råmælk
Storage of colostrum
3. Kvalitetstjek
Quality control
4. Udfodring
Feeding calves with colostrum

	Handling/billeder	Speak/ekspert/landmand
intro	Kalv(e), der drikker råmælk Peter præsenterer problemstillingen	Good hygiene in the handling of colostrum is important to secure the new born calf a good and healthy start in life. New born calves are very susceptible to infection after birth because they are born without any protective antibodies. In this video we look at how to

	Sunde kalve leger i boks	ensure good hygiene when handling colostrum when milking, storing and feeding.
1. Udmalkning af råmælk		
Klip 1	<p>Peter fortæller</p> <p>Viser rent udstyr til udmalkning af råmælk (spandemalker)</p> <p>Rengøring af udstyr</p>	<p>It is important to limit the contamination of colostrum during initial milkings of the newly calved cow as much possible. Use a dedicated set of clusters for milking newly calved cows.</p> <p>The milking equipment for collection of colostrum must be completely clean. This applies to both the cluster set and the collection container. It must be effectively cleaned after each milking and stored under good hygienic condition.</p>
Klip 2	<p>Rengøring af patter og yver</p> <p>Påsætning af spandemalker</p> <p>Udmalkning af råmælk</p> <p>Mælken hældes over i mælketanken til kalvemælk og låget lukkes</p>	<p>The first colostrum must be collected within 5-6 hours after calving. After this time the concentration of active antibodies in the milk decreases significantly.</p> <p>The newly calved cow needs to be well prepared. Udder and teats are cleaned before the cluster is attached. Remember to teat dip after milking.</p> <p>After milking the colostrum must not be left uncovered in, for example, buckets, because there is high risk of the colostrum being contaminated with manure.</p>
2. Kvalitetstjek		
Klip 1	<p>Peter viser Brix-måler</p> <p>Man ser måling af mælken med brixmåleren</p> <p>Nærbillede viser 22</p>	<p>After the colostrum has been collected it must be tested to determine whether it has a sufficient level of antibodies. Typically, up to a third of the cows in a herd have an insufficient level of antibodies in the milk. Testing is best carried out with a Brix meter and the value should be at least 22.</p>
	<p>Pasteurisering</p> <p>Er det noget vi kan vise ? – fx hælder mælken i pasteuriseringsmaskinen??</p>	<p>It is possible to pasteurise the colostrum by heating it up to 60 degrees for 30 minutes. But it requires a very precise control of temperature and time. If it is slightly too high, there is a risk of destroying the antibodies. And if it is slightly too low, there is a risk that the bacteria will not be destroyed.</p>

3. Opbevaring af råmælk		
Klip 1	<p>Peter står med en flaske med råmælk.</p> <p>Køleanlæg til råmælk (kan ikke huske om det er der eller der fyldes direkte i kassette, der nedfryses)</p>	
Klip 2	<p>Peter kommer gående og sætter mælk ind i køleanlægget eller hældes mælk i kassette, som lægges i fryser</p> <p>Fryser med kassetter.</p>	<p>Normally the colostrum will need to be stored temporarily before being used. If so the milk must be cooled down immediately after milking, to avoid bacterial growth.</p> <p>One can store colostrum in the freezer, and it will be usable for the next 12 months. It can also be refrigerated at 1-3 degrees and then it should be used within 7 days.</p>
Klip 3	<p>Fyldestation, kassetter, engangsposer.</p> <p>Fryser åbnes og man ser Peter lægge tomme kassetter ned.</p> <p>Nærbillede af hånd der lægger kassetter ned.</p>	<p>All the equipment that is used for handling and storage of the colostrum must be kept clean by frequent cleaning after use.</p>
4. Udfodring		
Klip 1	<p>Optøning og opvarmning</p> <p>Kassette lægges i vandbad eller sættes i mikroovn.</p> <p>Peter kontrollerer temperaturen med termometer</p> <p>Nærbillede af hånd og termometer, der viser 40 grader</p>	<p>Defrosting and heating of colostrum must be done gently to prevent the destruction of antibodies. A water bath can be used for this purpose. The colostrum must be warmed to 40-42 degrees.</p>
Klip 2	<p>Vi ser mælkefodring af kalven med handsker</p>	<p>All the good work with the milking, quality checks and storage of colostrum can be wasted if the procedure for feeding is not good enough. So here it</p>

	<p>Peter står i kalvekøkkenet og viser de rene skåle (evt sutteflasker såfremt de er der)</p> <p>Panorering hen forbi rene skåle</p> <p>Vask af skåle og narresutter</p>	<p>is also important to maintain high hygiene levels and ensure that the calf drinks up a sufficient quantity of colostrum within 6 hours after calving.</p>
Afslutning	<p>Peter runder af foran en boks (bokse) med sunde kalve.</p> <p>Nærbillede af sunde veltilpasse kalve, evt. som løber rundt og leger</p>	<p>We have looked at how the new born calf can be provided with a good start of life by ensuring a good hygiene and by treating colostrum correctly. Consider the whole procedure as a continuous chain from the initial milking to feeding and make sure there is not a single weak link which may have an otherwise strong chain to burst.</p>