

SOP-Drying off

SOP-Drying off describes the working steps which ensure best practice regarding drying off.

Among the topics are:

- Selection with application of body condition scores and gland sampling.
- Procedures regarding drying off and the last milking
- Information that has to be entered into the computer
- Management and supervision in the dry period
- Transition feeding of the cow.

All topics are illustrated with pictures and short texts, which you can adjust depending on the conditions on your farm.

When you adjust and implement SOP on your farm, it is an advantage to involve a SOP-certified cattle adviser. You will find them on www.leankvaeg.dk. Experience shows that an introductory course with the help of an expert is crucial for the output of SOP in the long run.

The guide 'Getting started with SOP' (attached) includes some guidelines you can consider before you begin to adapt SOP for your work procedures.

Enjoy your SOP.



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1. Drying off – selecting dry cows

1.1 **Assess cows regarding drying off no later than _____ (10-14) weeks before calving**

Dansk Kvæg		Malkekvæg		Goldningsliste 8-10 uger		
		Kortloddato 13-02-09 5 Udskriftsperiode		Udskrevet 18.03.09 15.25 Side 1		
				Kvæg It, Dansk Kvæg 87 40 50 00 9900		
CR-nr.	Kvie/ Lakt.nr.	Forv kalv.	Gold 10 uger	Gold 8 uger	- Seneste kontrol - Kg.EKM Celler CTV	
01216	5 lak	10.03.09	30.12.08	13.01.09		
01477	2 lak	20.03.09	09.01.09	23.01.09		
01591	1 lak	20.03.09	09.01.09	23.01.09		
01581	1 lak	25.03.09	14.01.09	28.01.09		
01711	Kvie	26.03.09				
01709	Kvie	05.04.09				
01698	Kvie	06.04.09				
01705	Kvie	06.04.09				
01375	4 lak	10.04.09	30.01.09	13.02.09		
01716	Kvie	10.04.09				
01622	1 lak	11.04.09	31.01.09	14.02.09		
01313	4 lak	14.04.09	03.02.09	17.02.09	12,5	585 3
01490	2 lak	14.04.09	03.02.09	17.02.09	20,3	226 3
01623	1 lak	18.04.09	07.02.09	21.02.09	15,5	311 3
01536	2 lak	30.04.09	19.02.09	05.03.09	23,5	61 1
01557	1 lak	01.05.09	20.02.09	06.03.09	16,2	49 1

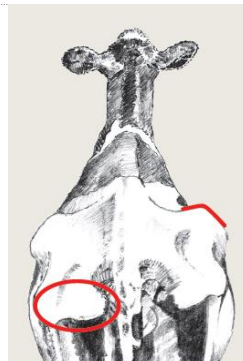
1.2 **Dry off cows based on parity and/or body condition score:**

BCS > 3.5

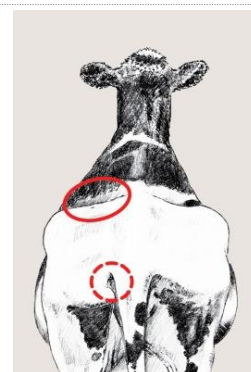
- 1st calf cow = _____ (7-8) weeks before calving
- Other cows = _____ (7) weeks before calving

BCS < 3.5

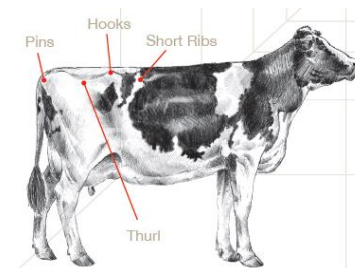
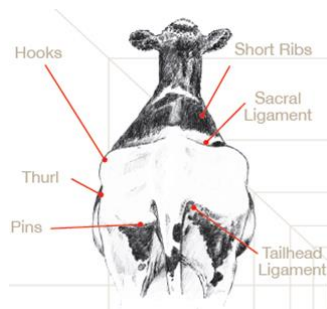
- 1st calf cow = _____ (7-8) weeks before calving
- Other cows = _____ (7) weeks before calving



BCS 2.75
Hooks angular.
More prominent padding on pins.

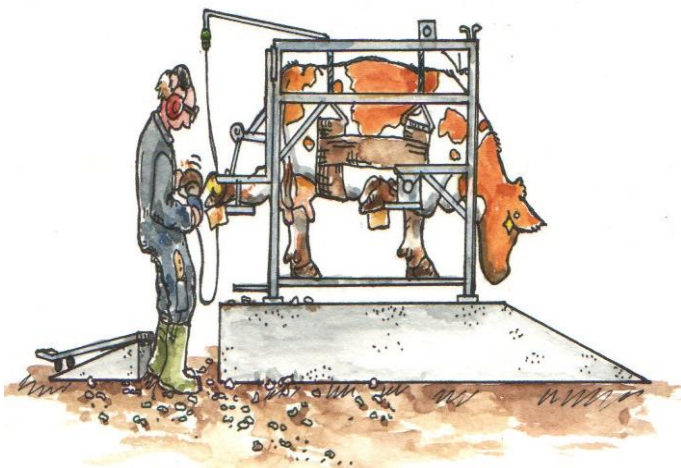


BCS 3.5
Sacral ligament visible.
Tailhead ligament barely visible.



Source: Elanco. Body condition scoring

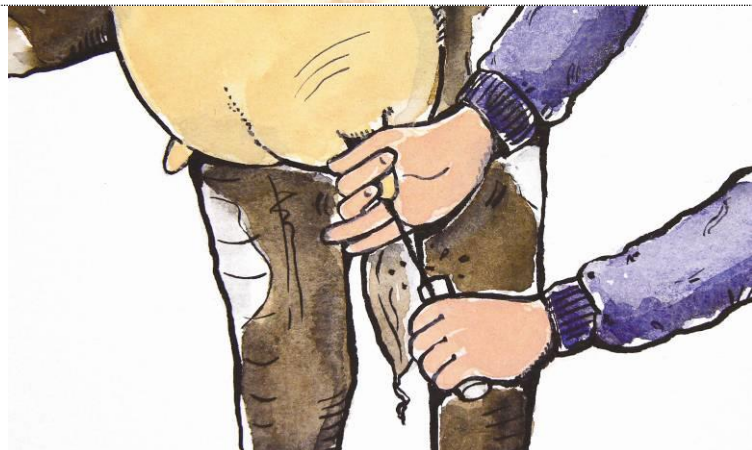
1.3 **Trim hoofs 2-3 months before expected drying off time**



1.4 _____ (veterinarian/farmer) **takes out milk samples**
_____ (weekday) **from all cows with:**

- SCC above _____ (100 000)
- CTV above _____ (1)
- CMT above _____ (1)

Place samples: _____
_____ (in fridge)



1.5 **At the last milk control before drying off PCR samples are taken from all cows with:**

- SCC above _____ (100 000)
- CTV above _____ (1)
- CMT above _____ (1)

Sundhedsstatus

Tilmeldt PCR

Tilknyttede bes.nr | Staldopdeling | Indlæs | Udles | Fremkøbsbestilling | Sundhedsstatus

Prægetype: Salmonsø Dublin

Sygdom | Dørvåb anskaffelse | Dørvåb tankvask | Bøjt. fund | Dørvåb slægtelod | KVR | Journal | ParaTB oversigt | ParaTB tilmeld | PCR tilmeld

Tilmelding automatisk udpegning af gælder til PCR

Periode		Dyrlæge				Konsulent				Ajourført			
Fra dato	Til dato	Aut.nr.	Navn	E-mail	Telefon	Mobil	Nr.	Navn	E-mail	Telefon	Mobil	Dato	af bruger
04/23/2012												06/01/2012	RIN2425

Kriterier (celletal angives i hele tusinder - i alt: 200 for 200.000)

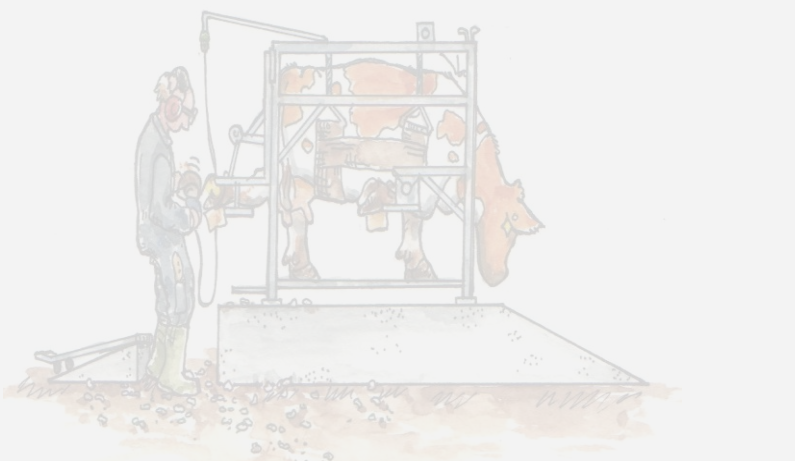
Fra dato	Til dato	Celletal forrige	Celletal forrige til	Celletal ved forrige	Celletal ved forrige til	Celletal ved forrige til	Ajourført
		ydelserkontrol over:	ydelserkontrol over:	ydelserkontrol over:	ydelserkontrol over:	af bruger	dato
04/23/2012		290	300			RIN2425	04/23/2012

1.6 **Reduce amount of concentrate in AMS or concentrate feeder to _____ (0.5) kg/day ____ (1) week before drying off**





2. Drying off – drying off day 1




2.1	Overview of drying off procedures	Time	Duty	Responsible
		Monday 06.00 am	Last milking for future dry cows	Jette (21717717)
		Monday 10.00 am	Move to drying off group (separation unit)	Peter (21777777)
		Wednesday 06.00 am	Milking and treatment of cows	Peter (21777777)
		Wednesday 10.00 am	Move to dry cow group	Peter (21777777)
2.2	The cow is milked <hr/> (Monday morning)	 <p style="text-align: center;">Vil du vide mere – køb hele SOP'en HER</p>		
2.3	Cows due to be dried off are moved to the separation unit on <hr/> (Monday)			

<p>2.4</p>	<p>The cows' hoofs are _____ (trimmed/examined) before they are moved to the drying off group</p>	
<p>2.5</p>	<p>Only feed straw, water and _____ (5) kg dairy cow ration pr. cow the first _____ (2) days</p>	
<p>2.6</p>	<p>Frequent udder examination after drying off</p> <p>Check udder and glands for swelling and asymmetry _____ (every morning/evening)</p> <p>Teat dip _____ (once to twice daily)</p> <p>Treat/inform _____ (manager) if udder is swollen, sore and/or secretion from teat has changed.</p> <p>Repeat udder examination tomorrow</p>	



Vil du vide mere – køb hele SOP'en [HER](#)

3. Drying off – drying off day 3

3.1	<p>The cow is milked for the last time on _____ (Wednesday morning)</p>																																																															
3.2	<p>Decide whether the cow needs drying-off-treatment or not by looking at 'besætningsdiagnosen';</p> <p>1) cell culture (veterinary) - if infected</p> <p>2) PCR if results < 37</p> <p>Vil du vide mere – køb hele SOP'en HER</p> <p>This farm is treating against _____ (staf. Aureus)</p> <p>Besætningsdiagnosen' shows whether all cows with infection are treated or if only certain infections are treated (e.g. staf. Aureus)</p>	<table border="1"> <thead> <tr> <th>Dansk Kvæg</th> <th>Malkekvæg</th> <th>PCR - Enkelt dyr</th> </tr> </thead> <tbody> <tr> <td></td> <td>Kontrol dato 01.08.13 9</td> <td>Udskrevet 09.08.13 06.35 Side 1</td> </tr> </tbody> </table> <p>Enkelt dyrs undersøgelser</p> <table border="1"> <thead> <tr> <th>CKR-dy nr Dato</th> <th>DEK</th> <th>Staf a</th> <th>Staf sp</th> <th>Lac- tam</th> <th>B-str</th> <th>Str d</th> <th>Str u</th> <th>Ent</th> <th>C. Bovis</th> <th>E. Coll</th> <th>Kle</th> <th>S. Mac</th> <th>A. pyo</th> </tr> </thead> <tbody> <tr> <td>4400 15.08.2012</td> <td>733</td> <td>32</td> <td>31</td> <td>37</td> <td>40</td> <td>40</td> <td>40</td> <td>35</td> <td>31</td> <td>30</td> <td>40</td> <td>40</td> <td>37</td> </tr> <tr> <td>5141 15.08.2012</td> <td>256</td> <td>40</td> <td>35</td> <td>38</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> <td>32</td> <td>40</td> <td>40</td> <td>40</td> <td>37</td> </tr> <tr> <td>5261 15.08.2012</td> <td>326</td> <td>40</td> <td>33</td> <td>40</td> <td>40</td> <td>40</td> <td>39</td> <td>40</td> <td>33</td> <td>39</td> <td>40</td> <td>40</td> <td>40</td> </tr> </tbody> </table> <p>DEK = Dage efter kælvning</p>	Dansk Kvæg	Malkekvæg	PCR - Enkelt dyr		Kontrol dato 01.08.13 9	Udskrevet 09.08.13 06.35 Side 1	CKR-dy nr Dato	DEK	Staf a	Staf sp	Lac- tam	B-str	Str d	Str u	Ent	C. Bovis	E. Coll	Kle	S. Mac	A. pyo	4400 15.08.2012	733	32	31	37	40	40	40	35	31	30	40	40	37	5141 15.08.2012	256	40	35	38	40	40	40	40	32	40	40	40	37	5261 15.08.2012	326	40	33	40	40	40	39	40	33	39	40	40	40
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3.3	<p>Treat dry cows after milking _____ (Wednesday morning) by _____ (veterinary/person) with _____ (drug)</p> <p>Mark treated cows with _____ (2 red bands)</p>																																																															

3.4	Seal teats of cows with: <ul style="list-style-type: none">• SCC above _____ (100 000)• CTV above _____ (1)• CMT above _____ (1)	
3.3	Enter data into computer in the _____ (‘Dyreregistrering’ and management program) program <ul style="list-style-type: none">• CKR.-no. of the cow• Drying off date• End date for milk withdrawal• Drug used	
Respon Vil du vide mere – køb hele SOP'en HER		
3.4	Move cows to dry cow group _____ (Wednesday)	

4. Drying off – Supervision in dry period

<p>4.1</p>	<p>The cow is fed dry cow ration</p> <p>Mixing recipe at _____ (mixer wagon)</p> <p>shows amount of kg per cow.</p>	
<p>4.2</p>	<p>Supply dry cow minerals _____ (daily) at _____ (120) g per dry cow</p> <p>Other _____</p>	
<p>Vil du vide mere – køb hele SOP'en HER</p>		
<p>4.3</p>	<p>Clean cubicles every _____ (morning)</p>	
<p>4.4</p>	<p>Bed cubicles every _____ (day)</p> <p>Bed with _____ (measuring unit – handful, shovelful) per cubicle</p>	

4.5 **Udder examination:**

Check the udder and glands for swelling or asymmetry

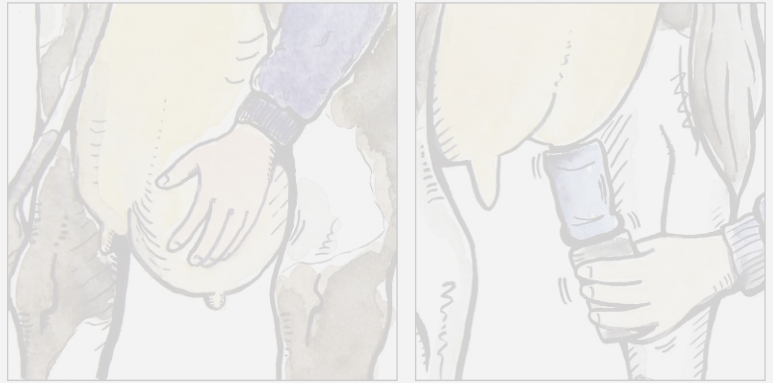
_____ (daily)

Dip teats _____

(once to twice daily the first two weeks after drying off)

Treat/inform _____ (manager) if udder is swollen, sore and/or secretion from teat has changed.

Repeat udder examination tomorrow



Vil du vide mere – køb hele SOP'en [HER](#)

5. Drying off – Last 2 weeks

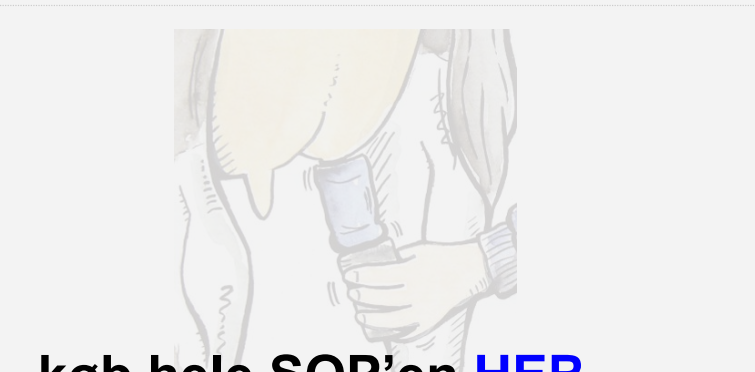
5.1 Supply dry cow minerals
 _____ (daily) at _____ (100) g per dry cow

Supply _____ (other) _____
 (daily)
 at _____ (200) g per dry cow

Other:



5.2 _____ (1-2) week(s) before calving
 teat dip udder _____ (1-2) times daily



Vil du vide mere – køb hele SOP'en [HER](#)

5.3 Move to calving box/unit
 _____ (2) days before the expected calving day

CKRdyrnr	Kælve dag	Status	Kg EKM	CTV	Golddato	Præp. kælving	Inseminering/Løbn. Tyr	Køns- sort	ParaTB inf.gr
September 2013									
05492	16	Ko	-	-	15.07.13	-	11.12.12	VH Rubak	-
05419	18	Ko	-	-	17.07.13	-	13.12.12	VH Miracle	-
05029	19	Ko	-	-	18.07.13	-	14.12.12	VH Miracle	-
05063	21	Ko	-	-	20.07.13	-	16.12.12	AlfaEsquir	-
05308	21	Ko	-	-	20.07.13	-	18.12.12	VH Song	-
05641	24	Kvie	-	-	-	13.08.13	19.12.12	VH Osmus	-
05739	26	Kvie	-	-	-	15.08.13	21.12.12	VH Meno	-
05841	29	Kvie	-	-	-	18.08.13	19.12.12	VH Lumb	-
Oktober 2013									
04649	02	Ko	-	-	31.07.13	-	27.12.12	VH Loop	1
04967	02	Ko	-	-	31.07.13	-	27.12.12	VJ Atric	-
05834	03	Kvie	-	-	-	22.08.13	29.12.12	VH Osmus	-
05439	06	Ko	-	-	04.08.13	-	31.12.12	VH Lumb	-

5.4 Monitor for calving signs
 _____ (daily)

- Restlessness, swollen udder, soft/swollen vulva, relaxation of pelvic ligaments
- Restlessness, release of amniotic fluid, appearance of limbs.

Move cow to _____ (calving unit/box) or contact _____ (manager)



6. Drying off – Body condition score (BCS)

<p>6.1 BCS < 2.75</p> <p>→ Thin cow</p> <p>Line from hooks to thurl to pins is a flattened V-shape</p>	
<p>6.2 BCS 2.75 – 3.25</p> <p>→ Normal cow</p> <p>Hooks rounded</p> <p>Vil du vide mere – køb hele SOP'en HER</p>	
<p>6.3 BCS > 3.25</p> <p>→ Fat cow</p> <p>Line from hooks to thurl to pins is a flattened U-shape</p>	 <p>Kilde: Elanco. Body condition scoring</p>

Read more about estimating body condition scores on https://www.landbrugsinfo.dk/Kvaeg/Malkekoeer-og-opdraet/Fodring-og-pasning/Sider/Huldvurdering_af_malkekoeer.aspx (remember to log on)