

YOUNG STOCK MANAGEMENT



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represented by many distributors. This guide is an addition to CRV's semen portfolio of many breeds and breeding programmes. The dairy management guide consists of ten issues. The guides concern the whole spectrum of dairy management and varies from young stock management to milking machines, health care and more. CRV is very dedicated to support farmers to manage and breed "better cows for a better life".

Acknowledgement

CRV developed this Dairy Management Guide to ensure the farmers of practical and well-stated information. To create this guide some information was used from external sources. Therefore thanks go out to Veepro Holland and PTC+.

Veepro Holland is the Information Centre for Dutch Cattle. Main goal of the organisation is to support the export of Dutch genetics. Dutch genetics refer to breeding cattle (mainly pregnant heifers of the Holstein-Friesian breed), semen and embryos. Veepro is in close contact with many (international) authorities. Veepro has a supporting and advising function. Veepro has various publications like Veepro magazine but also seminars, exhibitions, trade missions, excursions, receptions, brochures, videos and their website.

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Other references

- The Agricultural Notebook, 20th edition, 2003, Richard J. Soffe, University of Plymouth
- Beslissen van kalf tot koe
- Veeteelt
- CowManagement

INTRODUCTION

This edition of CRV Dairy Management Guide consists of practical information on young stock management. As every farmer knows, healthy and well performing cows start as healthy

calves and heifers. This edition will give you practical advice to make sure your young stock will grow up to be successful dairy cows.

When the information from this publication is implemented in your daily management:

- Less birth problems will occur
- Diarrhoea among young calves can be recognised and treated fast and efficiently
- The rearing and growth period of the young stock can be monitored with clear parameters
- The insemination management on heifers will improve
- Heifers will have an excellent preparation on their first calving
- An economic cow with good milk production will be created
- Young stock housing is optimized.

This publication is part of the series CRV Dairy Management Guide. Other publications are:

- **Young stock management**

- Reproduction management
- Breeding management
- Feeding management
- Health management
- Udder health management
- Hoof health management
- Milking systems
- Housing management
- Dairy farm economics



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CHAPTER 1

BIRTH

In the period between forty days before calving and sixty days after calving the cow is the most vulnerable. During this period she needs extra attention because she is going through many changes that can influence health, fertility and production. The amount of stress that cows endure in this period should not be underestimated.

When a cow gets through these hundred days without problems, she will enjoy a much better lactation, with fewer problems for herself and the farmer. The focus of this chapter will be on the newborn calf. The transition period of the cow will be described in the CRV Dairy Management Guide 'Feeding management'.

1.1 PREPARATION

To prevent stress as much as possible the cow should not be separated from the herd during calving. It is best to use a large calving pen with straw or sand bedding where the calving cow can maintain visual contact with the rest of the herd.

The cow is very susceptible to infections during the calving process because the cervix opens up and little wounds may occur in the birth canal. Make sure all measurements are taken to ensure a hygienic calving process!

Make sure the calving takes place in the most optimal circumstances



CHAPTER 1 BIRTH

1.2 CALVING EASE

Heavy or large calves will have a negative influence on the health of the cow and will cost the cow more time to recover. Heavy or large calves will cause a difficult calving process with more stress, pain and a higher risk of infections and related problems, such as, retained placentas. Heavy calves can be caused by genetics of the cow, genetics of the bull, miss feeding during the dry-off period or a combination of these factors.

The calf grows very fast during the last two weeks of pregnancy. Feeding lots of protein and energy to the close-up cows will increase the risk of heavy calves. Remember that 95% of all calving should take place without the help of the farmer. Help is required only with very heavy calves or when the calf is born with its rear first (posterior). Health complications after birth are described in the CRV Dairy Management Guide 'Health management' and 'Reproduction management'.

Feeding

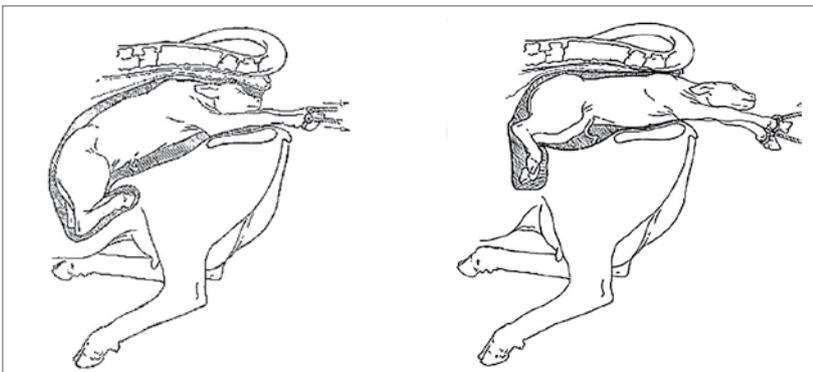
- Avoid overfeeding of the cow during dry off, especially during the first 5 weeks. Provide silage or hay with high structure and straw, also avoid concentrates.
- The last 3 weeks of the dry off period, corn silage and a little amount of concentrates can be added. Provide the same ration until 3 weeks after calving.

1.3 AFTER BIRTH

After the calf is born, make sure the calf can breathe freely. Check the heart for regular and firm contractions and check if the calf is breathing constantly. When a calf is not responding, try to pour some cold water on its face and ears to activate it.

STANDARD OPERATING PROCEDURES: CALVING

- Provide a large and hygienic calving pen with fresh straw.
- Use a different pen for calving cows and cows that are ill, to



- prevent infections of calving cows and new born calves.
- Clean and disinfect the rear of the cow just before calving.
- Never conduct an internal research of the cow without washing and disinfecting the hands.
- Do not examine the cow internally too early. Allow the cervix to open up.
- Use lubricant and make sure nails are clipped and all rings and jewellery are off.
- Only use clean tools to help in the calving process.

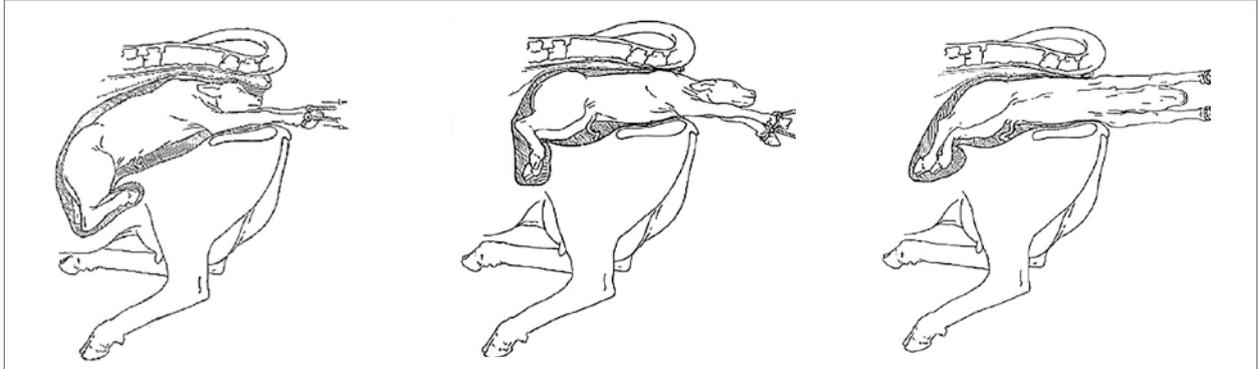
STANDARD OPERATING PROCEDURES: CALVING EASE

- Pay attention to the breeding trait 'calving ease'.
- Only use bulls with 102 or higher on 'calving ease' on maiden heifers, they are smaller and have narrower birth canals than older cows.
- Heifer calves are usually smaller than bull calves. Sexed semen can be used to improve calving ease.



STANDARD OPERATING PROCEDURES: DIFFICULT CALVING

- Start helping the birth process only when the calf's eyes are visible.
- Try to quarter turn the calf when calving is difficult.
- Always pull the calf towards the udder.
- Remain pulling with constant intensity.
- If necessary try to expand the birth canal with your (clean) hands and some lukewarm water.



To remove mucus from the lungs, calves can be hung upside down for 5 minutes over a fence for example. Move the front legs sideways to massage the heart (see picture). When the calf is breathing on its own, dry the calf or let the mother dry the calf. It is recommended to remove the calf from the mother within 24 hours. Make sure to provide the calves with warmth lamps during cold periods. When temperatures are lower than 10°C (50°F) calves require a warmth lamp to make sure the calf dries up without evaporation. This evaporation will cause the body temperature to drop with 0,5°C which negatively influences the calf's well being.

Do not remove mucus from the calf's mouth with your hands, but hang the calf over a fence with its rear legs



CALCULATION

BREEDING FOR CALVING EASE

Sires have a breeding value for calving ease. This breeding value has an average of 100 and a standard deviation of 4. This breeding value is formulated on data from maiden heifer calving. Using a sire with calving ease of 104 means that 1,8% less difficult calving will occur in comparison to a sire with a calving ease breeding value of 100.

The breeding value 'maternal calving process' focuses on the calving ease of the daughters of a sire. Daughters of a sire with a breeding value of 104 for MCP will have 1,7% less difficult births compared to a sire with a breeding value of 100.