

**ACTION**



**ON  
ANIMAL  
HEALTH  
AND  
WELFARE**

# Condition scoring of dairy cows



**DEFRA**

Department for  
**Environment,  
Food & Rural Affairs**



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## Introduction

The purpose of this booklet is to show how the simple technique of body condition scoring can contribute significantly to good husbandry and management of dairy cows. This will help to ensure that the cow is in the correct condition for each stage of her annual cycle and that appropriate dietary changes can be made in order to correct any deficiencies.

For dairy cows the crucial periods are at calving and during early lactation. Achieving correct body condition at calving is important in order to avoid calving difficulties and losses. While in early lactation it is important to prevent excessive weight loss when meeting the extra nutritional demands of high yielding cows.

The technique links together three major factors:

- Good Welfare
- Good Husbandry
- Good Performance

## Why Condition Score ?

Condition scoring is a technique for assessing the condition of livestock at regular intervals. The purpose of condition scoring is to achieve a balance between economic feeding, good production and good welfare.

Condition scoring is particularly useful as an aid to dry cow and pre-calving management. The objective is to ensure that cows calve down safely whether they are on a controlled diet indoors



or outdoors at grass. Subsequently in early lactation the cow is under considerable nutritional pressure and body condition is a vital indicator of excessive weight loss. This can lead to metabolic disorders and other welfare problems and should be avoided.

Most trial work on cow condition has had the objective of showing the ideal condition for maximum production e.g. linking condition at calving with milking potential or fertility, but equally important is establishing the correct score for ease of calving.

## Importance of Body Condition

The important stages of production are:-

- |                                    |   |
|------------------------------------|---|
| <b>Pre-calving</b><br>(drying off) | Condition should be “fit not fat”, and should be such to allow a moderate level of supplementation to prepare cows for early lactation.   |
| <b>At calving</b>                  | Cows should not calve in an excessively fat condition. Fat cows may develop fatty liver disease or ketosis and are more prone to milk fever, mastitis, lameness and infertility.                              |
| <b>Early Lactation</b>             | Dairy cows are under considerable nutritional stress and adequate feeding is essential to avoid excessive weight loss. Excessively thin cows can suffer discomfort in a housing environment such as cubicles. |
| <b>At service</b>                  | Dairy cows should not be in energy deficit by this stage as this may result in low fertility.   |



## How to Body Condition Score

Scoring consistently requires handling cattle in order to assess body reserves but an overall visual inspection is also important. The scoring system is designed to cover all cattle but some allowance should be made for different breeds.

The scoring method involves a manual assessment of the thickness of fat cover and prominence of bone at the tail head and loin area.

You should stand directly behind the cow to score both areas and always handle the animal quietly and carefully using the same hand.

The tailhead is scored by feeling for the amount of fat around the tailhead and the prominence of the pelvic bones.

The loin is scored by feeling the horizontal and vertical projections of the vertebrae and the amount of fat in-between.

Assessment relies mainly on the tailhead but is refined by the loin score if both are very different. On a scale of 1-5, a score of 1 is extremely thin and a score of 5 is extremely fat. If possible assess the scores to the nearest half point.

Consistency in the technique is the key to good condition scoring.



## Description of Scores

Score	Condition	Detailed Description	Visual Guide
1	Poor	<p><i>Tail head</i> – deep cavity with no fatty tissue under skin. Skin fairly supple but coat condition often rough.</p> <p><i>Loin</i> – spine prominent and horizontal processes sharp.</p>	
2	Moderate	<p><i>Tail head</i> – shallow cavity but pin bones prominent; some fat under skin. Skin supple.</p> <p><i>Loin</i> – horizontal processes can be identified individually with ends rounded.</p>	



Score	Condition	Detailed Description	Visual Guide
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2.5



**3**      Good

*Tail head* – fat cover over whole area and skin smooth but pelvis can be felt.

*Loin* – end of horizontal process can only be felt with pressure; only slight depression in loin.



Score	Condition	Detailed Description	Visual Guide
4	Fat	<p><i>Tail head</i> – completely filled and folds and patches of fat evident.</p> <p><i>Loin</i> – cannot feel processes and will have completely rounded appearance.</p>	 
5	Grossly Fat	<p><i>Tail head</i> – buried in fatty tissue, pelvis impalpable even with firm pressure.</p>	



## When to Condition Score

A management programme that allows time for any corrective action to be taken is essential.

### Scoring should be done at:

1. Drying off ( 7–8 weeks pre-calving)
2. Pre-calving ( 3 weeks pre-calving)
3. Pre-service

## Target Scores

Dairy Cows	Cows	Heifers
pre-calving	2.5–3	2.5–3
pre-service	2–3	2–2.5
drying off	2.5–3	

For dairy cows, ideal condition at drying off should be close to that for calving and ideally not more than half a score above. This “fit not fat” condition avoids having to slim cows off as this leads to metabolic disorders. Maiden dairy heifers require special attention as they are ‘nutritionally’ on a knife edge. An example of this is that the loss of one condition score equates to 15 kg liveweight in a heifer, versus 30 kg in an adult cow, and similarly when gaining condition in mid-lactation, heifers need to gain 90 kg for one condition score versus 60 kg in an adult cow.

## Modifying Condition Score

Body condition cannot be altered rapidly. **Specialist advice should be obtained whenever there is concern about the general condition of the herd.**

If condition is excessive, cows should be kept on bare pasture with straw to maintain rumen function. These animals should be closely monitored.



Feeding a high protein supplement pre-calving prepares the cow for lactation and also makes a convenient magnesium carrier. Thinner cows respond well to this technique.

## Conclusion

Condition scoring is an easy technique to learn and can easily be applied even to groups of animals in the field. It allows essential management decisions to be made to enable high standards of husbandry to be achieved - and ensures costly welfare problems are avoided.

## Remember:

It is unacceptable to neglect or ignore any “at risk” thin, weak or excessively fat cows. It is the responsibility of all herdsmen or herd owners to take all practical measures to ensure that the body condition of all cows is appropriate to the production system employed.

Farmers are reminded to apply the provisions of DEFRA’s Code of Recommendations for the Welfare of Cattle (Ref: PB0074).



**For further advice and information on farm animal welfare.**

For advice on cattle welfare and on any outbreak of disease – consult your veterinary surgeon.

General welfare advice on cattle welfare may also be obtained from:

- The State Veterinary Service (Local Animal Health Office – address and telephone number in your local telephone directory).
- Specialist consultants.

Other publications available from DEFRA that may be of interest

**PB**

<b>Number</b>	<b>Title</b>
0074	Codes of Recommendation on the Welfare of Livestock (Cattle)
0621	Farm Fires: Advice on Farm Animal Welfare
1147	Emergencies on Livestock Farms
1151	Lameness in Beef Cattle and Dairy Followers
1381	Guidance on the Transport of Casualty Farm Animals
1875	Condition Scoring of Sheep
2531	Summary of the Law relating to Farm Animal Welfare
2594	Explanatory Guide to the Welfare of Animals (Slaughter or Killing) Regulations 1995
3335	Improving Calf Survival
3426	FAWC Report on the Welfare of Dairy Cattle
3480	Condition Scoring of Pigs
4020	Lameness in Dairy Cattle
4516	TB in Cattle – Reducing the Risk
4517	Farm Biosecurity – Protecting Herd Health
4661	Mastitis in Dairy Cows

Copies of the above publications can be obtained, free of charge from:

DEFRA Publications  
ADMAIL 6000  
LONDON SW1A 2XX  
Tel: 0645 556000

The Welfare of Farmed Animals (England) Regulations 2000 can be viewed on-line at [www.legislation.hmso.gov.uk/si/si2000/20001870.htm](http://www.legislation.hmso.gov.uk/si/si2000/20001870.htm)

Printed copies (ISBN 0 11079 290 4, Price £3.00) are available from HMSO.  
Tel: 0870 600 5522 or contact any Stationery Office Bookshop/Agent.

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