

**DO** Score dairy cows regularly; preferably at the beginning and end of their dry period and a few times during lactation.

**DO** Aim for the following ideal BCS ranges:

- dry off 3.25 to 3.75
- calving 3.25 to 3.75
- early lactation 2.50 to 3.25
- mid-lactation 2.75 to 3.25
- late lactation 3.00 to 3.50
- growing heifers 2.75 to 3.25
- heifers at calving 3.25 to 3.75

**DO** Identify cows with poor body condition scores early to make important treatment or culling decisions in a timely and responsible manner.

**DO** Employ corrective measures **if more than 15% of the herd** is above or below ideal BCS for their stage of lactation.

**DO** Keep records - identify animals that are too thin or too fat, ascertain the cause, and correct.

*The Code of Practice for the Care & Handling of Dairy Cattle REQUIREMENT: Producers must take corrective action for animals at a BCS of 2 or lower.*

# Too Thin - Too Fat - Or Just Right?



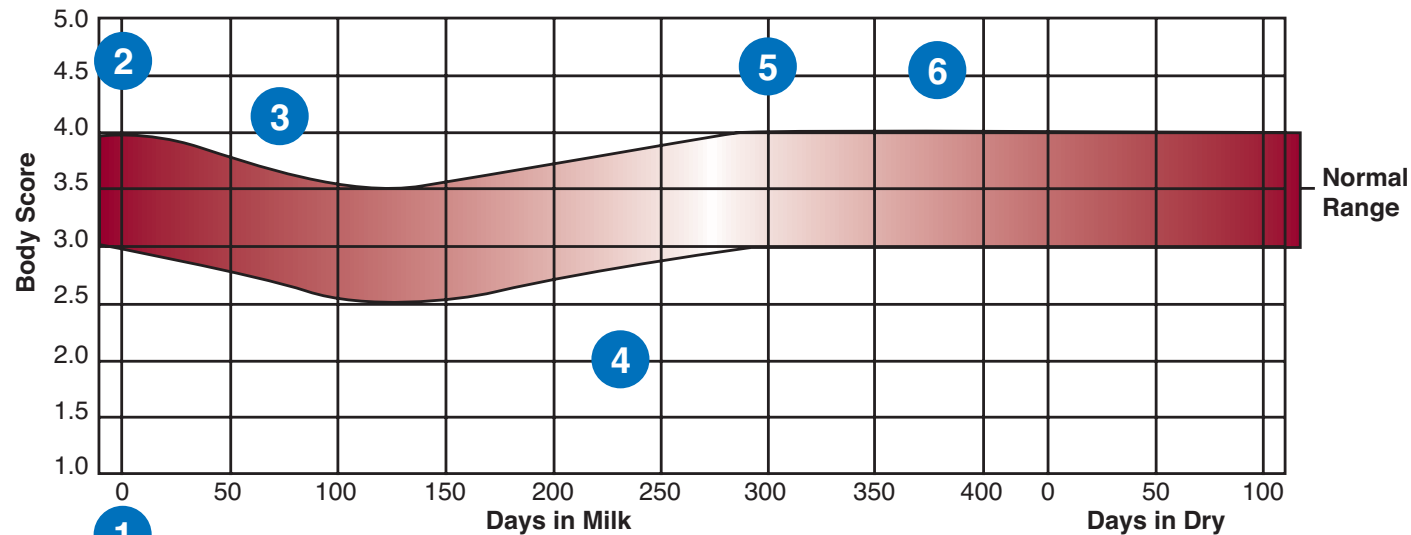
## A PRACTICAL APPROACH TO BODY CONDITION SCORING OF DAIRY COWS

Most dairy producers are very familiar with body condition scoring – and most likely are doing it every day without even thinking about it.

Identifying cows that are too fat or too thin and taking immediate action is a critical management tool on the farm to help with disease treatment, milk production, profitability and fertility. The Body Condition Scoring (BCS) system scores the animals' body fat reserves from 1 to 5, from extremely thin to just right to very fat. Of course "ideal" BCS is a range and will vary depending upon stage of lactation.

Cows should be scored both by looking at and handling the backbone, loin and rump areas. This factsheet will focus on the visual judging of animals using real pictures to compare a number of animals and categorize the animals as too fat, too thin or just right.

## BODY CONDITION SCORING THROUGH THE LACTATION CYCLE



- 1** Cows that are too thin at calving (BCS < 3.25) may not have sufficient body reserves to support high levels of milk production. Cows that lose more than 1 BCS experience reduced fertility, particularly if the loss is too rapid.
- 2** Cows that are too fat at calving (BCS > 4) are more prone to reproductive and metabolic diseases (e.g., difficult calving, retained placenta, cystic ovaries, uterine infections, ketosis, displaced abomasum, milk fever).
- 3** Post calving (calving to 120 days) cows can be expected to lose 0.5 to 1 unit of BCS.
- 4** BCS should remain constant or begin to increase during mid-lactation. During late lactation cows should gain back the BCS lost during the post-calving period.
- 5** Cows should not lose more than 1 BCS at any time.
- 6** Cows should be at an ideal BCS at dry off and should be fed to maintain this condition until calving.

### Sources & For More Information:

- Code of Practice for the Care & Handling of Dairy Cattle 2009. Dairy Farmers of Canada [www.dairygoodness.ca](http://www.dairygoodness.ca) (613) 236-9997 National Farm Animal Care Council [www.nfacc.ca](http://www.nfacc.ca)
- What's the Score? Body Condition Scoring for Livestock CD-ROM. Alberta Agriculture. Order online at [www.agric.gov.ab.ca](http://www.agric.gov.ab.ca).
- Ontario Ministry of Agriculture, Food and Rural Affairs, Factsheet: Body Condition Scoring of Dairy Cattle [www.omafra.gov.on.ca](http://www.omafra.gov.on.ca) 1-877-424-1300
- LivestockWelfare.com. A searchable farm animal welfare database and resources. Canada's Farm Animal Councils.

## BODY CONDITION SCORES FOR DAIRY COWS

### BCS 1

#### SHORT RIBS:

- Loin prominent, shelf-like appearance
- Obvious scalloping over top and ends

#### BACKBONE:

- Vertebrae prominent in chine, loin and rump area
- Individual bones easily visible

#### HOOK AND PIN BONES:

- Sharply defined, very angular in appearance
- No discernable fat pad

#### TAIL HEAD:

- Sunken and hollow on either side of tail head with obvious folds of skin; Vulva prominent
- Ligaments connecting pin bones to spine are sharply defined

### BCS 2

#### SHORT RIBS:

- Ends not as prominent as BCS 1
- Edges have slight fat cover, and slightly more rounded appearance
- Overhanging shelf effect less apparent

#### BACKBONE:

- Vertebrae in chine, loin and rump area, less visually distinct

#### HOOK AND PIN BONES:

- Bones still prominent, angular
- No fat pad palpable

#### TAIL HEAD:

- Both sides of the tail head are sunken and hollow
- Sharply defined ligaments connecting pin bones to spine

### BCS 3

#### SHORT RIBS:

- Ribs appear smooth without noticeable scalloping
- Overhanging shelf effect much less apparent

#### BACKBONE:

- Vertebrae in chine, loin and rump area appear rounded
- Backbone visible, but individual vertebrae not distinct

#### HOOK AND PIN BONES:

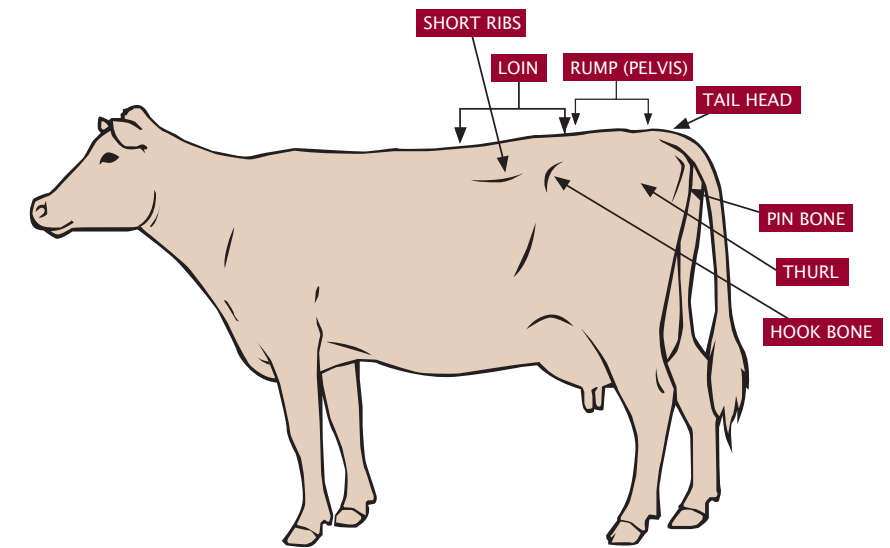
- Visible, but smooth, with rounded appearance

#### THURL (area over pelvis):

- Forms "U shaped" depression

#### TAIL HEAD:

- Both sides of tail head somewhat hollow, but skin folds not distinct
- Ligaments connecting pin bones to spine are rounded in appearance



### BCS 4

#### SHORT RIBS:

- Individual rib ends not visible
- Overhanging shelf effect slight, barely visible

#### BACKBONE:

- Vertebrae in chine rounded, smooth
- Loin and rump areas appear flat

#### HOOK AND PIN BONES:

- Rounded, with obvious fat covering

#### TAIL HEAD:

- Sides of tail head not hollow, no skin folds

### BCS 5

#### SHORT RIBS:

- Ends can't be seen
- No overhanging shelf effect

#### BACKBONE:

- Vertebrae in chine, loin and rump not visible

#### HOOK AND PIN BONES:

- Very round, buried (almost disappearing) in fat tissue

#### TAIL HEAD:

- Hollow filled in
- Areas on both sides of tail head buried in fat tissue



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- Identify these cows early. Determine the cause. Treat, cull or euthanize.
- If more than 15% of your herd is too thin, consult a nutritionist and/or a veterinarian for advice.
- In-transit; Very thin cows **may** have other health problems or may not have the energy to make it to the final destination. Is she fit to withstand the journey?



- On the farm: cows that are too fat are prone to several issues (i.e. reproductive, metabolic).
- In transit: these animals are good to be transported to a salesbarn or abattoir.
- Heavy cull cows usually yield a greater return for the producer.



Vertebrae and short ribs visible; "shelf like" appearance.



Very prominent hip bones, no fat covering. Compare to Cow **E**



Obvious body condition score <1; all short ribs visible. Compare to Cow **G**

**Did you know...**

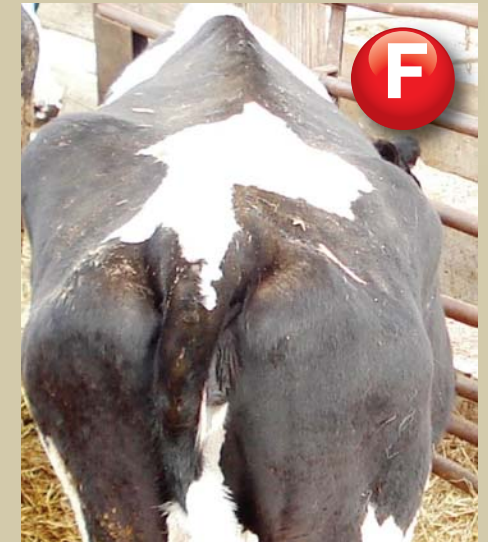
Cows that lose 1 or more BCS units from calving to 60 days in milk are much more likely to be anovular (not cycling) compared to cows that lose less than 1 BCS unit (40.6% vs. 17.9%; [www.dairyherd.com](http://www.dairyherd.com))



Large visible hollows around tail head. Compare to Cows **F** and **H**



No ribs visible; lots of fat covering.



Compare to Cows **C** and **A**



Note the fat covering the tail head.