

## Body Condition Scoring

The dairy cow must calve with adequate body condition to milk to her genetic potential. Proper body condition will also help with health and reproductive performance. Early lactation is associated with a shortage of energy intake due to peak milk production occurring before peak dry matter intake. The cow relies on mobilizing and utilizing the fat deposits on her body (body condition) in order to make up for this early lactation negative energy balance, thus the normal weight loss. If inadequate energy reserves are available, a cow will fall short of her true potential milk production. A cow can be over-conditioned, which is also detrimental during early lactation. Heavy cows typically have poorer appetites, which demands that more calories come from mobilization of body fat sources. Excessive fat mobilization is associated with "fat cow syndrome" or fatty liver disease. Cows over-conditioned at calving are more prone to ketosis, retained placentas, metritis, displaced abomasums, and milk fever. Many of these problems can be avoided with proper nutrition during late lactation and the dry period. Body condition scoring of cows is a good method of tracking the accuracy of the nutrition program.

### Scoring the Cows

In a general sense, it's important to record the body condition of a cow throughout lactation since condition changes from freshening to dry-off. Cows should be scored five times during lactation, including: freshening, 60, 120, 240 days-in-milk, and at dry-off. Individual scoring of all cows is suggested; or in larger herds at least 20% or the herd or groups. Make sure you score both mature cows as well as first-calf heifers. If heifers do not grow and put on body condition as needed in the first lactation, they are likely candidates for "sophomore slump". This phrase refer to heifers who are below expectations during their second lactation, largely attributed to the lack of size and body condition at the second freshening.

The areas of interest when body condition scoring the cow are the tail-head, loin and back area.

Ideally, cattle should be palpated as well as visually inspected. Palpation will allow one to feel the amount of tissue covering over the bones. This is obviously done more easily in tie stall barns than free-stall operations. Scoring charts have been developed for on-farm use and application. A five point scoring system is typically used. Pluses (+) or minuses (-), or quarter and half points are used to refine the scores.

More details of how to score dairy cattle can be gotten from any of the listed references. A record sheet for reporting body condition scores is a good way to summarize individual cows, (Figure 1). Herd or group body scores can be done quickly and easily using a score sheet shown in Figure 2. Remember when body scoring cows it's a subjective system. There is no right or wrong. Two people will score the same cow slightly different. The key is to be consistent in the scores given, regularly score cows, and then keep some type of records.

### Recommended Body Condition Scores

<b>Calving:</b>	3.5 - 4.0, first calf heifers slightly less.
<b>60 Days in Milk:</b>	2.5 - 3.0, maximum loss of one unit of condition score from calving.
<b>120 Days in Milk:</b>	2.5-3.5
<b>240 Days in Milk:</b>	3.0-3.5
<b>Dry-off:</b>	3.5-4.0
<b>Dry period:</b>	Maintain 3.5 - 4.0





## *Feeding For Condition*

In the case of thin cows, energy intake should generally be increased during early lactation to minimize body weight loss. To add body condition focus on late lactation. Dry cows can be fed to gain a small amount of body condition. Remember that fetal weight gain in dry cows is different from increased body condition. There is a distinct difference between weight and condition. Increasing energy intake is a function of energy density (calories per pound) and actual pounds of feed intake. Improving forage quality, feeding fat and addressing management factors that affect intake will all increase energy intake and body condition.

In situations where body condition is above recommendations, cows should never be limit fed. The recommended method of reducing body condition is to reduce the energy density of the diet by feeding less grains and fat, or introducing a lower quality forage. This may be difficult if feeding a group of cows which may require a "heavy group" be established or cows be culled. Dry cows should never be allowed to lose body condition during the dry period. The balancing of non-fiber carbohydrates (NFC), NDF from forage, fat level and net-energy of lactation (NEL) will address the necessary changes to either increase or decrease body condition.

### **References**

"Body Condition Scoring: a Useful Tool for Dairy Herd Management", Perkins, B.L., R.D. Smith, and C.J. Sniffens, department of Animal Science, Cornell University, Fact Sheet #150.

"Troubleshooting your Herd with the Body Condition Scoring System", Perkins, B.L., R.D. Smith, and C.J. Sniffen, Department of Animal Science, Cornell University, Fact Sheet #151.

"Body Condition Scoring - A Management Tool", Patton, R.A., H.F. Bucholtz, M.K. Schmidt and F.M. Hall, Department of Animal Science, Michigan State University, East Lansing, MI, September, 1988.

