

## Body Condition Scoring Your Horse

### What is body condition scoring?

Body condition scoring is a method of evaluating body fat in relationship to body musculature. The system developed by Dr. Don Henneke assigns a numerical value from 1 to 9 based on the deposition of fat on horses in the areas of the loin, ribs, tailhead, withers, neck and shoulders (see Figure 1 and Table 1).

The system works by **assessing fat both visually and by palpation** in each of these six areas. This body condition scoring system is a helpful management tool that can be used across breeds and by all horse people.

The horse's body condition measures the balance between intake and expenditure of energy. Body condition can be affected by a variety of factors:

- food availability
- reproductive activities
- weather
- performance or work activities
- dental problems
- feeding practices

The actual body condition of a horse can also affect its reproductive capability, performance ability and health. Therefore, it is important to achieve and maintain proper body condition.

Excessively thin horses may be ill, heavily parasitized, underfed or have dental problems. As a rough guide, the ribs of a horse that is carrying the right amount of fat are easily felt but not seen. Feeling for the ribs is especially important in the winter. A long, thick winter hair coat may disguise a thin horse.

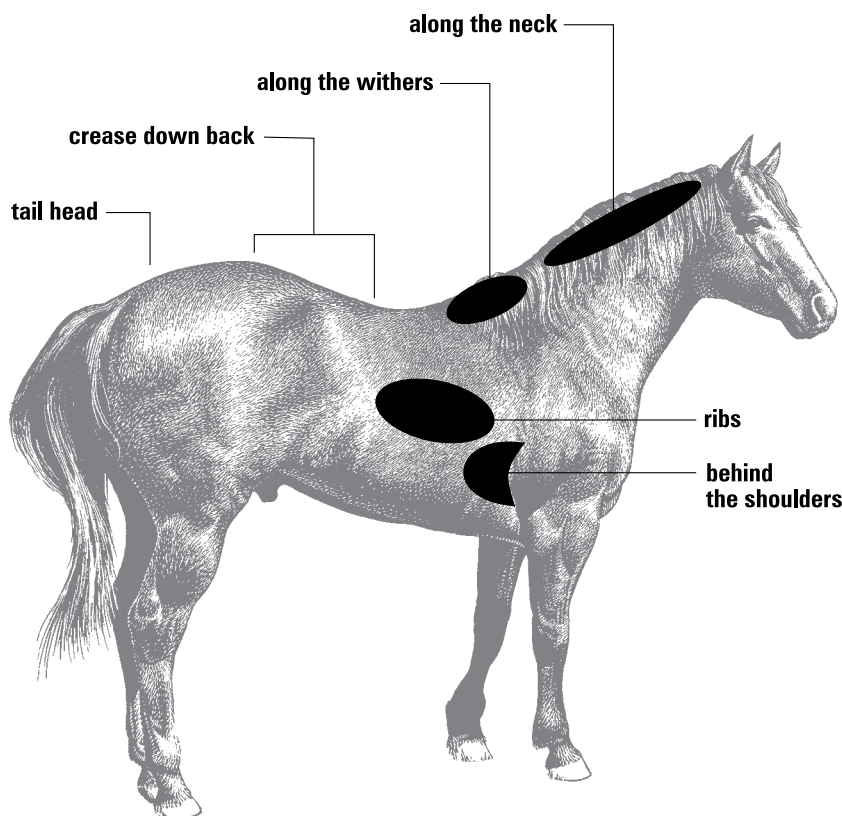


Figure 1. Six key areas to evaluate fat deposition.

### Ideal condition scores for breeding stock and performance horses

#### Mares

Research has demonstrated that the reproductive performance of non-lactating mares is best when they are maintained at a condition score of 5 or higher. Establishing and maintaining pregnancy becomes increasingly more difficult when the body condition score of mares drops below this level.

Gaining weight while nursing is very difficult for the mare. They simply cannot eat enough. Most mares will experience a small to moderate weight loss during lactation. To ensure mares are at a condition score of 5 or more at the time of rebreeding, they should foal

at a condition score of more than 6. This degree of body fatness should be established during the first eight months of pregnancy, since digestive capacity is considerably reduced during the last trimester.

Research has shown that obesity (condition score 9) is not detrimental to reproductive performance and does not increase foaling difficulty. This degree of body fatness, however, severely limits a horse's performance capability and is considered unhealthy.

### Stallions

Research has not demonstrated a relationship between reproductive performance and condition score in stallions. However, an extremely thin (condition score less than 2) or an extremely fat (condition score more than 8) condition would be unhealthy.

Some stallions are quite active during the breeding season. As a result, they lose a considerable amount of weight. For these stallions, establishing a high degree of body fatness

(condition score of 6 or 7) before the breeding season would ensure that they would not become too thin during the breeding season.

## Performance horses

The level of body fat has been shown to affect performance in human athletes. The effect of body fat on the performance of equine athletes has not been studied in detail. Thus, the optimum body condition score for performance horses is unknown.

Horses competing in strenuous and demanding activities, such as racing and endurance riding, require a high degree of fitness. Horses participating in these types of activities are usually maintained at a body condition score of 4 to 5.

**Table 1. Characteristics of individual body condition scores\***

| Score | Description   |
|-------|---|
| 1     | <b>POOR</b><br>Horse is extremely emaciated. The backbone, ribs, hipbones and tailhead project prominently. Bone structure of the withers, shoulders and neck easily noticeable. No fatty tissues can be felt.  |
| 2     | <b>VERY THIN</b><br>Horse is emaciated. Slight fat covering over vertebrae. Backbone, ribs, tailhead and hipbones are prominent. Withers, shoulders and neck structures are discernible.  |
| 3     | <b>THIN</b><br>Fat built up about halfway on vertebrae. Slight fat layer can be felt over ribs, but ribs easily discernible. The tailhead is evident, but individual vertebrae cannot be seen. The hipbones cannot be seen, but withers, shoulder and neck are emphasized.                              |
| 4     | <b>MODERATELY THIN</b><br>Negative crease along back. Faint outline of ribs can be seen. Fat can be felt along tailhead. Hip bones cannot be seen. Withers, neck and shoulders not obviously thin.  |
| 5     | <b>MODERATE</b><br>Back is level. Ribs can be felt but not easily seen. Fat around tailhead beginning to feel spongy. Withers are rounded and shoulders and neck blend smoothly into the body.  |
| 6     | <b>MODERATELY FLESHY</b><br>May have a slight crease down the back. Fat on the tailhead feels soft. Fat over the ribs feels spongy. Fat beginning to be deposited along the sides of the withers, behind the shoulders and along the neck.  |
| 7     | <b>FLESHY</b><br>A crease is seen down the back. Individual ribs can be felt, but noticeable filling between ribs with fat. Fat around tailhead is soft. Noticeable fat deposited along the withers, behind the shoulders and along the neck.   |
| 8     | <b>FAT</b><br>Crease down back is prominent. Ribs difficult to feel due to fat in between. Fat around tailhead very soft. Area along withers filled with fat. Area behind shoulders filled in flush with the barrel of the body. Noticeable thickening of neck. Fat deposited along the inner buttocks. |
| 9     | <b>EXTREMELY FAT</b><br>Obvious crease down back. Fat is in patches over rib area, with bulging fat over tailhead, withers, neck and behind shoulders. Fat along inner buttocks may rub together. Flank is filled in flush with the barrel of the body.   |

\*Modified from: Henneke et al. (1983) *Equine Vet. J.* 15(4):372.

By comparison, activities such as pleasure riding are less strenuous and require only a moderate degree of fitness. Horses competing in these activities usually have a body condition score of 5 to 7.

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