ALABAMA A&M AND AUBURN UNIVERSITIES

ALABAMA COOPERATIVE Extension SYSTEM

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Using Body Condition as a Tool in Feeding Management for Horses

Understanding energy balance and evaluating body condition are critical concepts in evaluating feeding programs for horses. A horse is rather limited in its ability to increase dry matter intake in an effort to increase energy intake. When forages are unable to provide enough energy to meet the horse's needs, concentrates are used to provide a dense source of energy in the diet. Conversely, a horse that is carrying more weight than desired needs to have its feed intake or exercise program adjusted to bring it back to an ideal body condition.

There are eight areas on the horse's body that are evaluated in body condition scoring (figure 1). As the horse gains or loses weight, the amount of fat deposited in these areas will fluctuate. It is important to evaluate the entire horse, and not just focus on one or two regions, as each horse is unique in how it develops fat deposits in relation to its skeletal structure.

Body condition is scored on a 9-point scale, ranging from a score of 1 for poor to 9 for extremely fat (table 1). The system uses a combination of visual appraisal as well as manual palpation to evaluate the areas of concern. Half-point increments may be used for horses that seem to fit between categories.

Most people begin with a visual appraisal of the horse, looking at the fat and flesh covering the ribs and other skeletal structures. This preliminary observation by itself does not provide enough information for a definitive assessment. Breeds with a more angular body structure, such as Thoroughbreds and Saddlebreds, may be mistaken for having a lower condition score than well-muscled stock breed horses with similar amounts of fat deposition. Senior horses tend to lose muscle mass over their topline as they age, which may create the illusion of body condition loss despite healthy fat deposits elsewhere.

The true assessment of body condition comes from palpating the eight areas used to evaluate body condition (figure 1). Using firm, consistent pressure, the evaluator runs his or her hands over the areas of consideration, feeling for changes in consistency of the underlying tissues. At low body conditions, fat deposits are minimal, and skeletal structures are often easily palpable. As body condition increases, the firm, toned feel of muscle gives way to soft, spongy patches of fat. Several body parts need to be evaluated, and the observations averaged to determine the body condition of the horse in question.

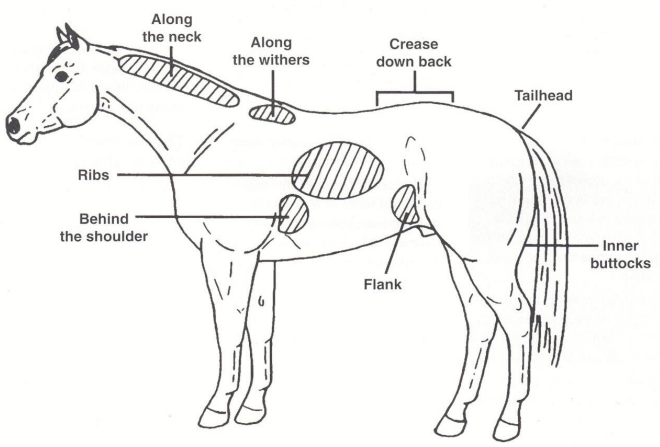

Figure 1. Areas emphasized in the condition score (Adapted from Henneke et al., 1983.)

For most horses, a score of 5 is ideal. At this body condition, the horse has adequate energy reserves to perform the work required of it. Performance horses at a moderate body condition are also more efficient at dissipating body heat than horses that have a fleshy or fat body condition. Pregnant broodmares are best maintained at a score greater than 5. Mares that are at least moderately fleshy take fewer cycles to conceive and are more likely to maintain their pregnancy than thin mares. They are also better able to handle the energy demands of early lactation.

When adjusting body condition, or any aspect of a horse's feeding program, changes must be made slowly. Horses that need to gain weight must consume more calories, whether from better quality forage, additional concentrate, or supplemental fat. Horses that need to lose weight will benefit from a change in their exercise program or a reduction in their concentrate intake.

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Table 1. Condition Score System

Score	Description
1	**Poor.** The horse is emaciated. The spinous processes (backbone), ribs, tailhead, and hooks and pins all project prominently. The bone structures of the withers, shoulders, and neck are easily noticeable, and no fat can be felt anywhere.
2	**Very thin.** The spinous processes are prominent. The ribs, tailhead, and pelvic bones stand out, and bone structures of the withers, neck, and shoulders are faintly discernible.
3	**Thin.** The spinous processes stand out, but fat covers them to midpoint. Very slight fat cover can be felt over the ribs, but the spinous processes and ribs are easily discernible. The tailhead is prominent, but individual vertebrae cannot be seen. Hook bones are visible but appear rounded. Pin bones cannot be seen. The withers, shoulders, and neck are accentuated.
4	**Moderately thin.** The horse has a negative crease along its back, and the outline of the ribs can just be seen. Fat can be felt around the tailhead. The hook bones cannot be seen, and the withers, neck, and shoulders do not look obviously thin.
5	**Moderate.** The back is level. Ribs cannot be seen but can be easily felt. Fat around the tailhead feels slightly spongy. The withers look rounded, and the shoulder and neck blend smoothly into the body.
6	**Moderately fleshy.** There may be a slight crease down the back. Fat around the tailhead feels soft, and fat over the ribs feels spongy. There are small deposits along the sides of the withers, behind the shoulders, and along the sides of the neck.
7	**Fleshy.** There may be a crease down the back. Individual ribs can be felt, but there is noticeable fat between the ribs. Fat around the tailhead is soft. Fat is noticeable in the withers, the neck, and behind the shoulders.
8	**Fat.** The horse has a crease down the back. Spaces between the ribs are so filled with fat that the ribs are difficult to feel. The area along the withers is filled with fat, and fat around the tailhead feels very soft. The space behind the shoulders is filled in flush, and some fat is deposited along the inner buttocks.
9	**Extremely fat.** The crease down the back is very obvious. Fat appears in patches over the ribs, and there is bulging fat around the tailhead, withers, shoulders, and neck. Fat along the inner buttocks may cause buttocks to rub together, and the flank is filled in flush.

Adapted from Henneke et al., 1983.

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