

Body Condition Scoring Guide

Striking a Balance

Nutritional management plays a key role in maintaining maximum performance and productivity of horses. One tool, body condition scoring, can be easily adapted and utilized by all owners to manage the proper timing and the amount and type of supplemental feed needed to maximize performance. Body Condition Scoring (BCS) is a classification system used to determine relative fatness or body condition of horses. The BCS system was developed at Texas A & M University (Henneke and co-workers, 1983) to visually quantify the amount of body fat on a horse. Body condition only refers to stored fat, not to protein, vitamin, or mineral status of the horse. The amount of fat on a horse's body affects many physiological functions, such as reproductive efficiency and work tolerance. The balance between energy intake and energy expenditure is reflected in a horse's body condition. The scoring system can be used for all breeds and classes of horses. Some variation in normal patterns of fat storage exists among different breeds of horses. For instance:

- Thoroughbreds have higher withers and lighter muscling than stock breeds.
- American Saddlebreds can have large deposits of fat on the neck and tailhead, yet the ribs show.

Best Condition

Horses are ranked on a scale of 1 to 9, with 1 being poor and 9 being extremely fat. Horses should be maintained at condition scores of 5-7 for optimum health and performance. Optimum BCS for working horses is 5-6, and optimum BCS for broodmares is 6-7. The difference in the optimum scores is that reproductive efficiency is better when broodmares are maintained at scores of 6-7. Broodmares that have foaled need some fat stores due to the high nutritional requirements of lactation and recovery from foaling. It is more difficult to put needed weight on a lactating broodmare versus keeping the broodmare in optimum body condition.

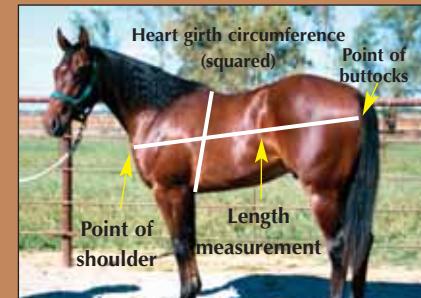
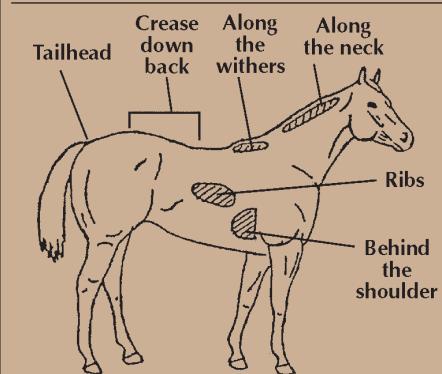
Horses maintained at BCS of 4 or below may suffer from decreased immunity, impaired reproductive efficiency, and lower work tolerance. Maintaining horses at BCS of 8-9 is not economically justified and predisposes them to colic, laminitis, and founder. Overly fat horses also have poorer reproductive performance and decreased work performance.

How to Score

- Visually observe the horse's side profile from a distance of 15-20 feet. This will usually give one a good idea of the general condition of the horse — too thin, too fat, about right.
 - Horses with noticeable ribs will score 4 or lower.
 - If the ribs are not noticeable, the horse will score 5 or greater.
 - Horses with long or thick hair coats will need closer examination by feeling the rib area. Be sure to distinguish between fat and muscle bulk/tone.
- Next, move close to the horse. Observe and feel for fat at the back, ribs, neck, shoulders, withers, and tailhead, comparing the horse's condition to the descriptions listed on the Horse Body Condition Scorecard (see reverse side). Figure 1 shows areas on the horse to evaluate for fat coverage.
- If a horse meets most, but not all criteria for a score, use 0.5 point increments. For example: if a horse meets most criteria for a BCS of 5, and some criteria for a score of 6, a BCS of 5.5 should be assigned.

Make feed adjustments based on condition score. A horse maintained at optimum body condition will achieve better reproductive and performance efficiency.

FIGURE 1



Estimating a Horse's Body Weight

Mature horse: $(\text{Heart girth}^2 \times \text{Length}) \div 330 = \text{Weight in lb}$

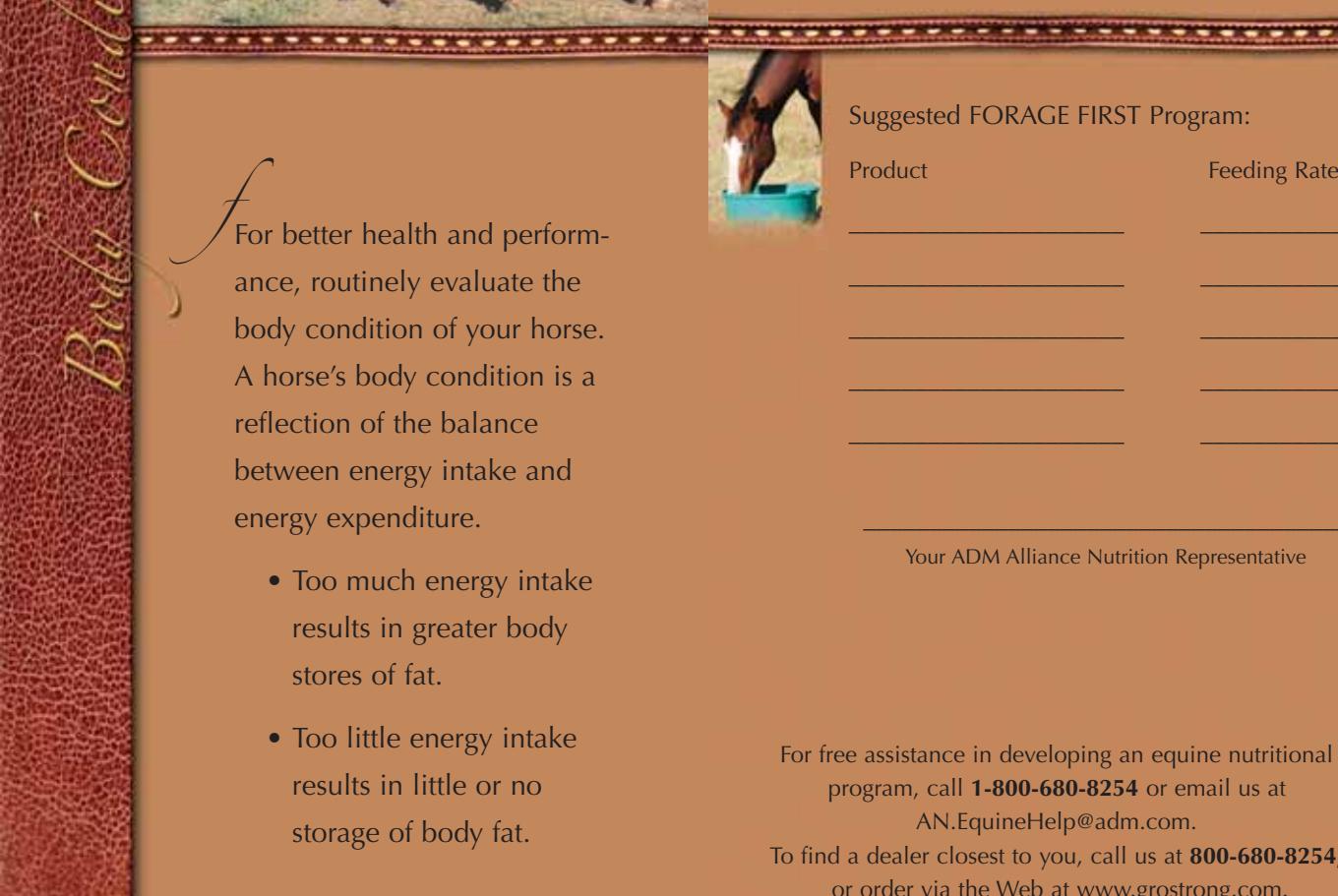
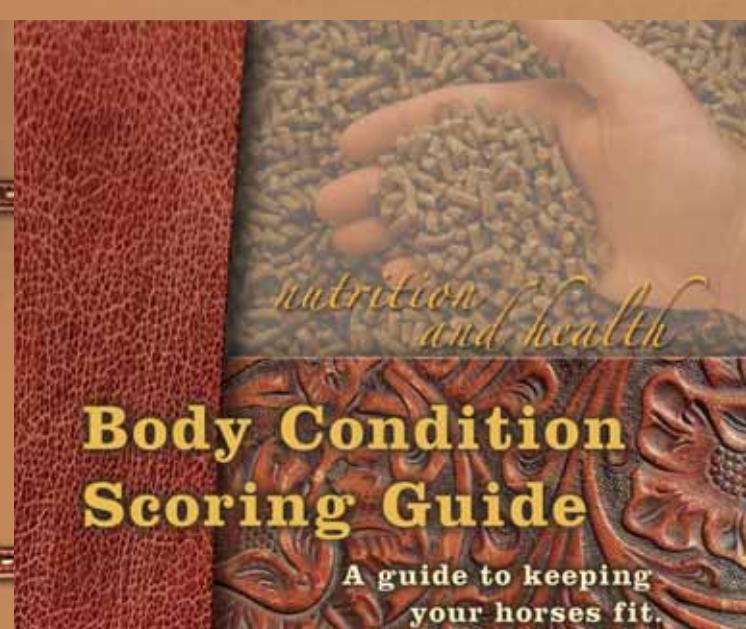
Yearling: $(\text{Heart girth}^2 \times \text{Length}) \div 303 = \text{Weight in lb}$

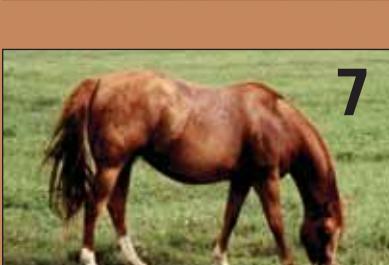
Weanling: $(\text{Heart girth}^2 \times \text{Length}) \div 270 = \text{Weight in lb}$

- Measure in inches the heart girth just behind the withers and elbows
- Measure in inches from point of shoulder to point of buttocks
- This measurement has a 0.90 correlation with actual weight

For Better Health and Performance, Follow these Key Management Suggestions

- Feed according to class of horse and body condition
 - ✓ Consider age, weight, activity level.
- Provide unlimited access to clean, fresh water
 - ✓ A 1,000 lb horse at maintenance will consume approximately 5-10 gallons daily.
- Maximize forage consumption
 - ✓ Forage should be the major component of the feeding program.
 - ✓ Feed good-quality hay, free of mold and dust.
 - ✓ Feed a minimum of 1.5% of the horse's body weight daily as forage.
- Measure feed by weight, not by volume
 - ✓ All concentrate feeds do not weigh the same.
- Feed concentrates safely
 - ✓ Limit concentrates to 6 lb daily and 3 lb per meal for an average-sized horse.
- Make feed changes gradually over a 7-10 day period
- Manage feeding times/rates
 - ✓ Feed a minimum of 2-3 meals/day for stalled horses.
 - ✓ Monitor daily consumption of feeds.
- Routinely exercise stalled horses



Horse Body Condition Scorecard						
SCORE	Back	Ribs	Neck	Shoulder	Withers	Tailhead
Poor 1 	very prominent vertebrae	very prominent vertebrae	extremely thin	very prominent	very prominent	very prominent
Very Thin 2 	prominent vertebrae	prominent	very thin	very thin	very thin	very thin
Thin 3 	vertebrae fat 1/2 way up	see easily	thin	thin	thin	prominent
Moderately Thin 4 	negative crease	can see outline of ribs	moderately thin	moderately thin	moderately thin	some fat
Moderate 5 	level (no crease)	cannot see, easily feel	blend into shoulder	blend smoothly into body	rounded	moderate fat
Moderately Fleshy 6 	slight crease	cannot see, can feel	little fat	little fat	little fat	moderate fat
Fleshy 7 	crease	barely feel	average fat	average fat	average fat	fleshy fat
Fat 8 	obvious crease	difficult to feel	fat	flush behind	fat filled	very soft fat
Extremely Fat 9 	very obvious crease	cannot feel (patchy fat)	bulging fat	bulging fat	bulging fat	bulging fat

BCS adapted from Henneke, 1983. Description source: Texas A&M University.

For custom feeding suggestions to help you maintain or change your horse's body condition score, call the FORAGE FIRST® EQUINE NUTRITION HELPLINE at 1-800-680-8254.