

# Breaking Down Body Condition

Assess your horse's body condition regularly so you can adjust his diet accordingly and identify potential problems

MAUREEN BLANEY FLIETNER

**T**hink you can tell a horse's body condition and energy status just by looking at him? Think again! That hay belly, ribby barrel, or plump topline might not necessarily represent what you think it does.

Accurately evaluating your horse's body condition can help you determine if your horse is in good form for his intended use and if any health problems are developing. Making the assessment is not difficult, our sources maintain; it doesn't require blood tests or fancy devices. It just involves educating your eyes and sense of touch and applying an objective system.

## Key to Body Condition Areas

The Henneke body condition scoring (BCS) system has become the standard in the United States for estimating metabolically normal horses' condition. It was named after the late Don Henneke, DVM, who was the director of Equine Science at Tarleton State University, in Stephenville, Texas. He led development of the system when he was at Texas A&M University.

The BCS system began as a way to help breeders, says Elizabeth L. "Betsy" Wagner, PhD, PAS, associate professor in equine nutrition at Auburn University, in Alabama. "It was a way to assess fat deposition to estimate success in getting mares pregnant," she explains. "A mare should be in ideal condition—meaning she has enough fat, or energy, reserves—to help her get through early lactation and establish the next pregnancy."

The Henneke system can help all owners—not just breeders—eliminate the good-condition guessing game,



Factor long hair coats and aging into the equation when assessing equine body condition.

allowing him or her to evaluate more than just the ribs or the belly. The six areas where fat is most commonly deposited are the neck, withers, loin, tailhead, ribs, and shoulder.

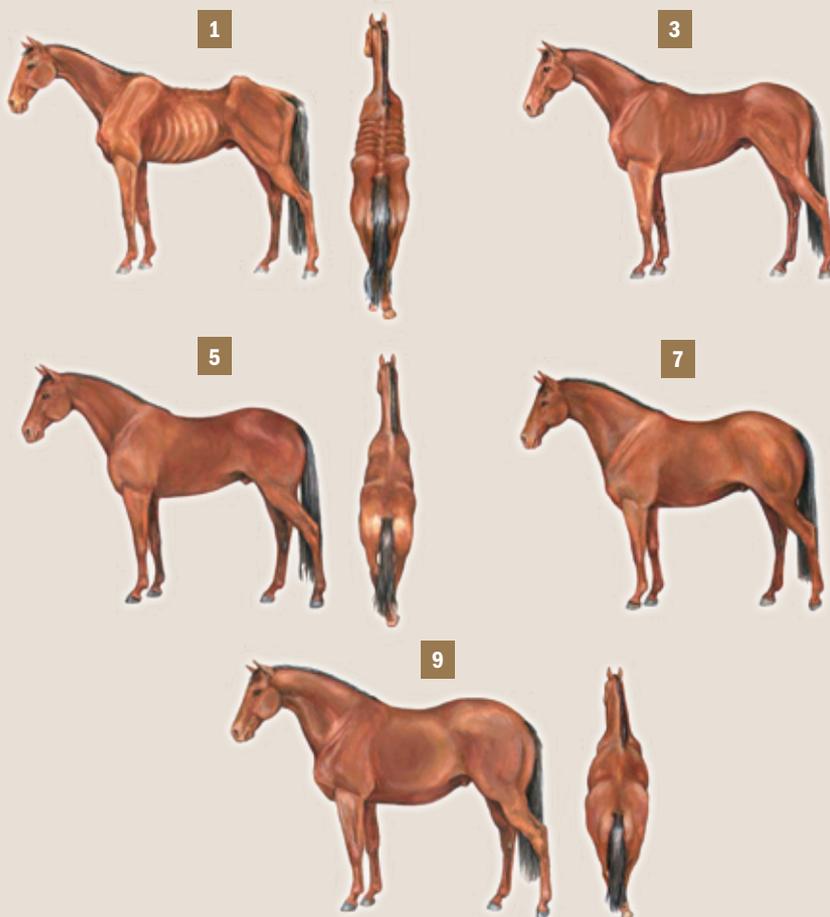
Evaluating a horse's BCS using the Henneke system involves looking at and feeling those six areas, ranking them individually with scores from 1 (emaciated) to 9 (obese), and averaging those scores to determine overall condition. Similar

systems are used in Australia and Europe, scoring from 1 to 5.

Certain characteristics correlate with each Henneke system score. If you look at and feel the horse's tailhead and find it is prominent, for instance, that area might score a 2. However, if the tailhead is prominent but you can't visually identify individual vertebrae, the point of the hip appears rounded but is still easily discernible, and you can't distinguish the point of

## EQUINE BODY CONDITION SCORES

- 1. Poor.** Horse is extremely emaciated. The backbone, ribs, hipbones, and tailhead project prominently. Bone structure of the withers, shoulders, and neck are easily noticeable. No fatty tissues can be felt.
- 2. Very Thin.** Horse is emaciated. Slight fat covering over vertebrae. Backbone, ribs, tailhead, and hipbones are prominent. Withers, shoulders, and neck structures are discernible.
- 3. Thin.** Fat built up about halfway on vertebrae. Slight fat layer can be felt over ribs, but ribs are 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. Moderately Thin.** 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 are not obviously thin.
- 5. Moderate.** Back is level. Ribs can be felt, but not easily seen. Fat around tailhead is beginning to feel spongy. Withers are rounded and shoulders and neck blend smoothly into the body.
- 6. Moderately Fleshy.** The horse might have a slight crease down his 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. Fleshy.** A crease is seen down the back. Individual ribs can be felt, but with 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. Fat.** Crease down back is prominent. Ribs difficult to feel due to fat between them. Fat around tailhead is very soft. Area along the withers is filled with fat. Area behind the shoulders is filled in flush with the barrel of the body. Noticeable thickening of neck. Fat deposited along the inner buttocks.
- 9. Extremely Fat.** Obvious crease down back. Fat is in patches over the rib area, with bulging fat over tailhead, withers, neck, and behind shoulders. Fat along inner buttocks might rub together. Flank is filled in flush with the barrel of the body.



the buttock, then that area would rate a 3. At the other end of the spectrum, the area marked by tailhead fat that is very soft to the touch would rate an 8.

Using this system, one person's scoring should closely match that of others who assess the same horse. It can also help owners determine how much to feed their horses, says Joe D. Pagan, PhD, president of Kentucky Equine Research, in Versailles, Ky.

"Depending on what you are trying to achieve with your horse's weight, you have to adjust the animal's caloric intake," he says. "You may be feeding to maintain, adjusting intake to have them lose weight, or, if they are not in optimal condition, trying to have them gain weight."

An objective scoring system is really the only accurate way to assess how you're doing with managing a horse's diet, says Pagan. A weight tape, for example, might be effective for, say, determining the amount of deworming product a horse needs, but it is not as accurate for assessing a horse's energy balance.

"Compare (BCS) to a body mass index score for humans," says Wagner. "It's not a person's only assessment of health. It's not a tool that is going to tell all the answers. But it is something we should use frequently to assess our horse's condition, like stepping on a scale periodically to check your own weight."

### A Simple Process, With Practice

A body condition assessment should be hands-on to help you validate what you see on your horse's body with what you feel. "Is it fat or muscle? A firm structure or a spongy deposit?" says Wagner.

Monitor your horse's condition by assessing him on a regular basis, such as once a month. You can do this while the horse is standing and eating (provided he is not an agitated eater). First become familiar with the six areas listed previously and the scoring system. Visually examine and feel each area, and then mark down the appropriate score based on the assigned qualities (see sidebar at left). Start with the shoulders, shift to the neck, then move over the withers, across the ribs and loin, and finish over the tailhead.

It's important to be aware of the difference between breeds, our sources advise. "How a Tennessee Walking Horse puts down weight compared to a Quarter Horse is very different," says Wagner. "Some breeds have a more angular structure with

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When assessing body condition, be aware of the differences between breeds and colors; rabicano coloring, for instance, can make some horses look ribby.

a more flat or rafterlike appearance to their topline. That's why it is important to average all the scores."

Know that coat color can play tricks with the eyes, says Wagner. For instance, rabicano coloring, a pattern of white hairs that can spread across the flank and barrel, makes some horses look ribby. That is why touching the horse during the exam is paramount.

The system also can help you assess horses with thick winter coats, which can mask underlying weight problems. Running a hand over each area helps you identify subtleties that eyes cannot. "If the horse is losing weight, it's a lot easier and cheaper in the long run to make corrections right away than try to manage big drops in weight later," says Wagner.

By assessing body condition on a regular basis, you also can look for subtle weight changes that might signal disease or health problems.

### Scores by Age, Activity, and Type

In general, a horse should score in the moderate body condition range. "Optimal is 4.5 to 6.5 for almost every class of horses," says Pagan.

Getting a horse to that moderate range, however, is not an exact science. Horses with certain body types have high caloric needs, while others are well-known easy keepers. Age, activity level, and even seasonal differences (i.e., the horse needs more energy to stay warm in cold climates) can dictate a horse's caloric needs and, thus, impact his body condition.

"If it's a performance horse or a young growing animal, it has to have enough fat to work and to grow," Wagner says. "We would want a steady body condition at that point. Less than that and you start to ques-

tion the horse's health. Does it have enough energy to do what it is asked to do?"

"In general, the more athletic the horse, the slightly lower the body condition score should be," says Pagan. "For a racehorse a

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## TRENDS IN OBESITY

The horse population is getting older and fatter, says Joe D. Pagan, PhD, president of Kentucky Equine Research, in Versailles, Ky. "Now we see more papers dealing with the obese horse," he says. "It's a much worse problem and more common than horses that are too thin. We are under-riding and overfeeding.

"It's a gradual problem," he continues. "The person feeding the horses really doesn't notice the horse gaining weight—it just happens. People allow their horses to sit around all the time and that's a big contributor to the problem. It can be very difficult to take fat off a fat horse. And for easy keepers, the less they eat, the more (metabolically) efficient they become. Muzzling them, locking them up, and giving them poor-quality hay gets them pretty cranky. It's better to never let them get that way to start."

One component of the problem is that horses are commercial products. "You want to produce what the judges are looking for and what is desirable for a client," Pagan says. "Fat is a beautiful color—that saying has been around the show ring for a long time—because it can cover up a lot of imperfections. Unfortunately, it's making animals unhealthy."

However, says Pagan, a new trend away from fat is developing. Yearlings in Thoroughbred sales are more athletic-looking, he says. The sales regimen has changed to put exercise into the prepping process. "They look like little racehorses now, rather than little show horses," he says.—Maureen Blaney Flietner

4.5 or 5; for a sport horse a 6 or 6.5."

A score of 6.5, for example, would be detrimental for an endurance horse, because the extra body tissue doesn't allow him to dissipate heat properly during long rides, says Pagan. Rather, an endurance horse competing at a high level should score about 4.5.

Our sources suggest that a 5.5-6.5 is ideal for a broodmare. At this condition she should have enough energy stores to get pregnant, carry the foal to term, and give birth. A broodmare that scores a 4.5 or less will have a reduced chance of getting in foal and maintaining a pregnancy.

A score higher than 7, Pagan says, is too high for any horse and is the equivalent of being morbidly obese. If the horse scores an 8 or 9, he's consuming more than he is expending and his feed intake should be adjusted accordingly. Such a horse can become predisposed to certain metabolic disorders, similar to humans.

At the other end of the spectrum, when a body condition score dips to 3 or below, you are getting into a neglect situation, and/or the horse is not absorbing nutrients properly.

### Senior Horse Considerations

Senior horse body condition can be a bit trickier to assess, says Pagan. As horses' bodies age and change, they might droop around the middle topline, lose muscle tone, or look ribby. This is another reason why palpating and examining a horse in all six areas is vital; many older horses can

be found to have enough fat in some areas to compensate for lower scores in others. A senior horse that maintains a body condition score of 5 is healthy.

Another confounding factor is that older horses might develop metabolic conditions, resulting in abnormal fat deposits. Assessing body condition regularly can help you detect these types of changes.

If a horse has a biomechanical issue you might want to maintain him at a lower score. For a laminitic horse, for instance, having less weight on the feet is beneficial. However, for any individual besides a super-fit endurance horse, avoid letting him lose enough weight to be a 4 or less, says Pagan.

### Take-Home Message

One of most accurate ways to assess your horse's body condition is to look at and palpate each area defined by the Henneke system, being familiar with his optimal form (based on his breed, age, and use).

Ultimately, a horse should be able to at least maintain his weight. If regular body condition scorings indicate he's not, then this indicates that something might be wrong (e.g., a dental or digestive problem) and requires a veterinary evaluation. 🐾

### ABOUT THE AUTHOR

Maureen Blaney Flietner is a freelance writer, photographer, and designer who has owned and cared for horses for more than 30 years on her Wisconsin farmette.



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