

HOW TO ASSESS YOUR HORSE

In order to assess your horse, there are a few steps to be completed.

1. Determine the weight of your horse

Monitoring body weight (BW)

Having an accurate idea of your horse's BW is important for several reasons:

- To calculate your horse's ration
- To accurately identify weight gain or loss and manage accordingly
- To identify sudden weight changes which may indicate a health problem
- To be able to give correct dosage of medications, supplements and wormers

Methods

As most people don't have access to an actual scale for weighing their horse, it is often done using a weight tape or by calculating the weight based on measurements.

When using the **weight tape**, the tape should be placed over the lowest point of the withers passing around the horse as close to the elbow as possible. The tape should be pulled firmly around the horse but not so tight that it dents the flesh. The tape will be on a slight diagonal angle when in the correct position, and not as you would a girth. The reading will be the most accurate if your horse stands squarely on a flat, even surface.



When **calculating** your horses' weight, you will need to take three measurements: circumference, height and length.

Measure the circumference as described above with a regular measuring tape. Record the reading in cm.

Length is measured from the point of the shoulder to the point of the buttock. The tape can be held taut from one point to the other.

Record the reading in cm.



Put the measurements in the following formula:

$$\text{Weight in kg} = \frac{\text{Girth} \times \text{girth} \times \text{length}}{11877}$$

Note

To get accurate information, it is important you use the same method and measure in the same place, ideally at the same time of the day with regards to feed/exercise. That way the information will be more consistent and comparisons can be made accurately

2. Determine the body condition of your horse (BCS)

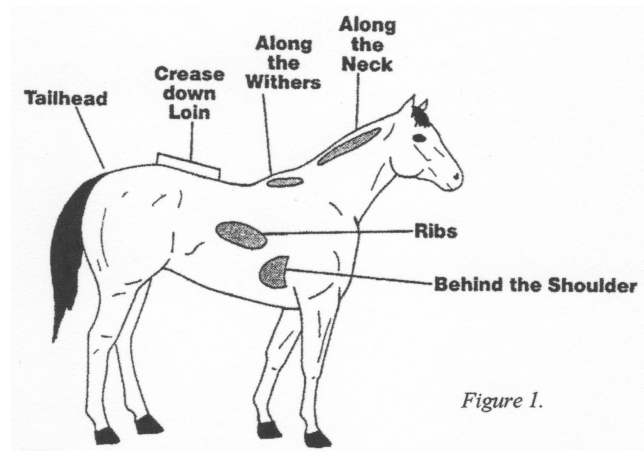
Definition

The body condition measures the balance between intake and expenditure of energy. This can be affected by a variety of factors such as: food availability, food quality, weather, performance, reproductive activities, health, dental problems and feeding practices. The actual BCS of a horse will also affect its health, performance ability and endocrine status. It is therefore important to be able to objectively assess the BCS of your horse over time and manage it accordingly

System

Dr. Don Henneke has developed a scoring system to provide a standard, which can be used on any horse in any discipline at any age.

The system assigns a score from 1 to 9 according to a particular body condition. In order to do this, one must evaluate fat in relationship to body musculature as it occurs in various places on the horse's body. One needs to assess the fat both visually and by palpation in each of six areas: loin, ribs, tail head, withers, neck and shoulders.



See table below.

It has been suggested that the optimum score is 5 out of 9, when the horse has some fat but is not yet fleshy. However, in extreme cold, high stress or during lactation, a score of 6 or 7 would be more desirable.

Important notes

There are two important considerations to be made. One is the basic body type of the horse. Some horses just tend to carry more fat than others (usually easy keepers) and may be perfectly healthy in that way.

It is also important to note that the BCS has nothing to do with muscle tone, cardiovascular fitness or any other measure of athletic fitness and thus does not by any means tell you how fit your horse is for performance.

Table 1. Characteristics of Individual Condition Scores

Condition	Neck	Withers	Loin	Tailhead	Ribs	Shoulder
1 Poor	Bone structure easily noticeable, animal extremely emaciated, no fatty tissue can be felt	Bone structure easily noticeable	Spinous processes project prominently	Spinous processes project prominently	Tailhead (pinbone) and hook bones project prominently	Bone structure easily noticeable
2 Very Thin	Faintly discernable, animal emaciated	Faintly discernable	Slight fat covering over base of spinous processes. Transverse processes of lumbar vertebrae feel rounded. Spinous processes are prominent.	Tailhead prominent	Slight fat cover over ribs. Ribs easily discernable.	Shoulder accentuated
3 Thin	Neck accentuated	Withers accentuated	Fat buildup halfway on spinous processes but easily discernable. Transverse processes cannot be felt.	Tailhead prominent but individual vertebrae cannot be visually identified. Hook bones appear rounded but are still easily discernable. Pin bones not distinguishable.	Slight fat cover over ribs. Ribs easily discernable.	Shoulder accentuated
4 Moderately Thin	Neck not obviously thin	Withers not obviously thin	Negative crease along back	Prominence depends on conformation; fat can be felt. Hook bones not discernable.	Faint outline discernable	Shoulder not obviously thin
5 Moderate	Neck blends smoothly into body	Withers rounded over spinous processes	Back level	Fat around tailhead beginning to feel spongy	Ribs cannot be visually distinguished but can be easily felt	Shoulder blends smoothly into body
6 Moderately Fleshy	Fat beginning to be deposited	Fat beginning to be deposited	May have slight positive crease down back	Fat around tailhead feels soft	Fat over ribs feels spongy	Fat beginning to be deposited
7 Fleshy	Fat deposited along neck	Fat deposited along withers	May have positive crease down back	Fat around tailhead is soft	Individual ribs can be felt, but noticeable filling between ribs with fat	Fat deposited behind shoulder
8 Fat	Noticeable thickening of neck, fat deposited along inner buttocks	Area along withers filled with fat	Positive crease down back	Tailhead fat very soft	Difficult to feel ribs	Area behind shoulder filled in flush with body
9 Extremely Fat	Bulging fat. Fat along inner buttocks may rub together. Flank filled in flush	Bulging fat	Obvious positive crease down back	Building fat around tailhead	Patchy fat appearing over ribs	Bulging fat

From: Henneke et al. Equine Vet J. (1983) 15 (4), 371-372

3. Determine activity level

It is important to determine how hard the horse works for a living since that will influence how much of the energy taken in by diet will be used during work.

The National Research Council has come up with 4 different exercise categories, ranging from light to very heavy work. It also takes into account the Mean Heart Rate, as fitness of a horse will be reflected by its heart rate and that will be a reflexion of expenditure of energy.

Light work

- Mean HR 80 beats/min
- 1-3 h of work per week, 50% at trot
- ex. Recreational riding, beginning of a training program, some occasional showing

Moderate work

- Mean HR 90 beats/min
- 3-5 h of work per week, 55% at trot, 5% skill work
- ex. School horses, recreational riding, beginning of training, more frequent showing, polo, ranch work

Heavy work

- Mean HR 110 beats/min
- 4-5 h of work per week, 50% at trot, 15% canter, 15% gallop, jumping or skill work
- ex. Ranch work, polo, show horses, low-medium level eventing, race training

Very Heavy work

- Mean HR 110-150 beats/min
- 6-12 h of slow work per week or up to 1h per week of speed work
- ex. Racing horses, elite 3 day-eventing, endurance riding

This is a general guideline and although most people tend to overestimate the workload of the horse, not all horses will fall in these categories.

Numerous factors also affect the energy needed by a performance horse, such as level of fitness, skill, climate conditions, breed, weight of the rider and housing conditions when not in work.

The three components together will give you a more accurate assessment of the condition of “the whole horse”.

References

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