

Normal Physiological Parameters for Equine

Physiological Parameters	Ranges	Additional Comments
Temperature (°C)	37.2 – 38.3	<ul style="list-style-type: none">→ Apply lubricant to the anus→ Measure using a thermometer→ Move the tip of the thermometer to the side of the colon wall to avoid getting the temperature of the faeces
Pulse (beats/min)	30 – 40	<ul style="list-style-type: none">→ Listen the heartbeat using a stethoscope and count the beats (beats in 15 seconds X 4)→ Can also place your fingers against the facial artery just under the jaw bone behind the cheek for the facial pulse
Respiration (breaths/min)	10 – 20	<ul style="list-style-type: none">→ Measure by counting either inhalation or exhalation.→ Can be done by looking at the lung region of the horse or listening with a stethoscope
Capillary Refill Time (seconds)	Less than 2 – 3	<ul style="list-style-type: none">→ Press your thumb against the gum and remove.→ Count how long it takes for the blood to return to that area

Body Weight

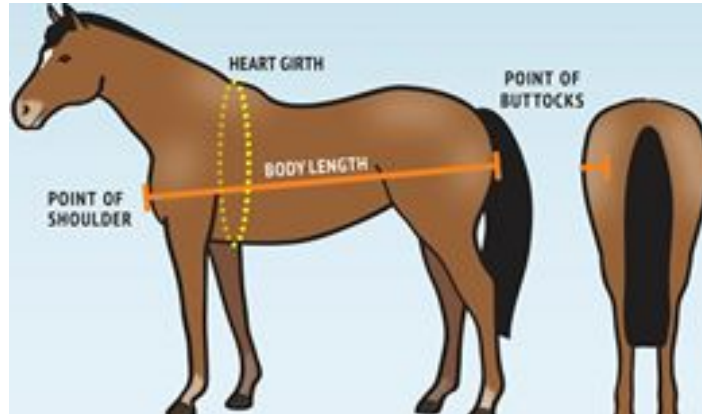
The weight of a horse is obtained by the following ways:

- 1) **Weight Scale:**
 - Most accurate measurement

- 2) **Weight Tape:**
 - A simple and effective way to estimate weight with minimal effort.
 - Wrap the tape around the girth of the horse, directly below the elbow, overlapping the ends of the tape and read the resultant weight.
 - Take the reading with the tape snugly in place when the horse exhales.
 - Accuracy is dependent on the user, size of withers, breed and age.

- 3) **Girth and body measurements:**
 - Use the girth measurement together with the length measurement in the following calculation:

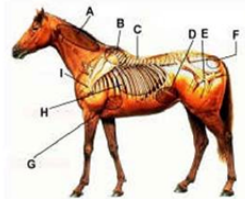
$$\text{Weight} = \frac{(\text{girth measurement in cm})^2 \times (\text{length measurement in cm})}{11,900}$$



Body Condition Score (BCS)



BODY CONDITION SCORING CHART



Areas of Emphasis for Body Condition Scoring

- A: Thickening of the neck
- B: Fat covering the withers
- C: Fat deposits along backbone
- D: Fat deposit on flanks
- E: Fat deposits on inner thigh
- F: Fat deposits around tailhead
- G: Fat deposit behind shoulder
- H: Fat covering ribs
- I: Shoulder blends into neck

1 Poor

Animal extremely emaciated; spinous processes, ribs, tailhead, tuber coxae, and tuber ischii projecting prominently; bone structure of withers, shoulders, and neck easily noticeable; no fatty tissue can be felt.

2 Very Thin

Animal emaciated; slight fat covering over base of spinous processes; transverse processes of lumbar vertebrae feel rounded; spinous processes, ribs, tailhead, tuber coxae, and tuber ischii prominent; withers, shoulders, and neck structure faintly discernable.



3 Thin

Fat buildup about halfway on spinous processes; transverse processes cannot be felt; slight fat cover over ribs; spinous processes and ribs easily discernable; tailhead prominent, but individual vertebrae cannot be identified visually; tuber coxae appear rounded but easily discernable; tuber ischii not distinguishable; withers, shoulders, and neck accentuated.



4 Moderately Thin

Slight ridge along back; faint outline of ribs discernable; tailhead prominence depends on conformation, fat can be felt around it; tuber coxae not discernable; withers, shoulders, and neck not obviously thin.



5 Moderate

Back is flat (no crease or ridge); ribs not visually distinguishable but easily felt; fat around tailhead beginning to feel spongy; withers appear rounded over spinous processes; shoulders and neck blend smoothly into body.



6 Moderately Fleshy

May have slight crease down back; fat over ribs fleshy/spongy; fat around tailhead soft; fat beginning to be deposited along sides of withers, behind shoulders, and along sides of neck.



7 Fleshy

May have crease down back; individual ribs can be felt, but noticeable filling between ribs with fat; fat around tailhead soft; fat deposited along withers, behind shoulders, and along neck.



8 Fat

Crease down back; difficult to feel ribs; fat around tailhead very soft; area along withers filled with fat; area behind shoulder filled with fat; noticeable thickening of neck; fat deposited along inner thighs.



9 Extremely Fat

Obvious crease down back; patchy fat appearing.



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Illustrations by Japan Racing Association

Henneke et al., 1983

(Information adapted from Years 1 to 3 DVM Skills Classes, UWI SVM)

References

- 1) Practice FVE. Body Condition Score-Chart [Internet]. Fox Valley Equine. 2016 [cited 2020Oct4]. Available from: <https://www.foxvalleyequine.com/body-condition-score-chart/>