



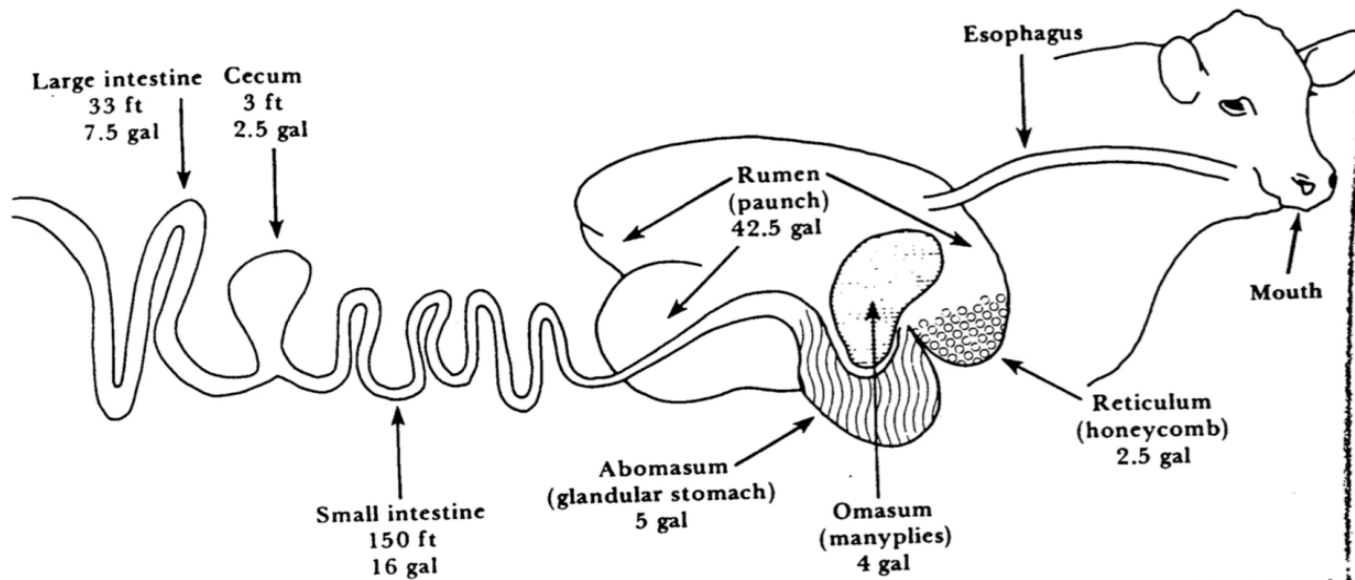
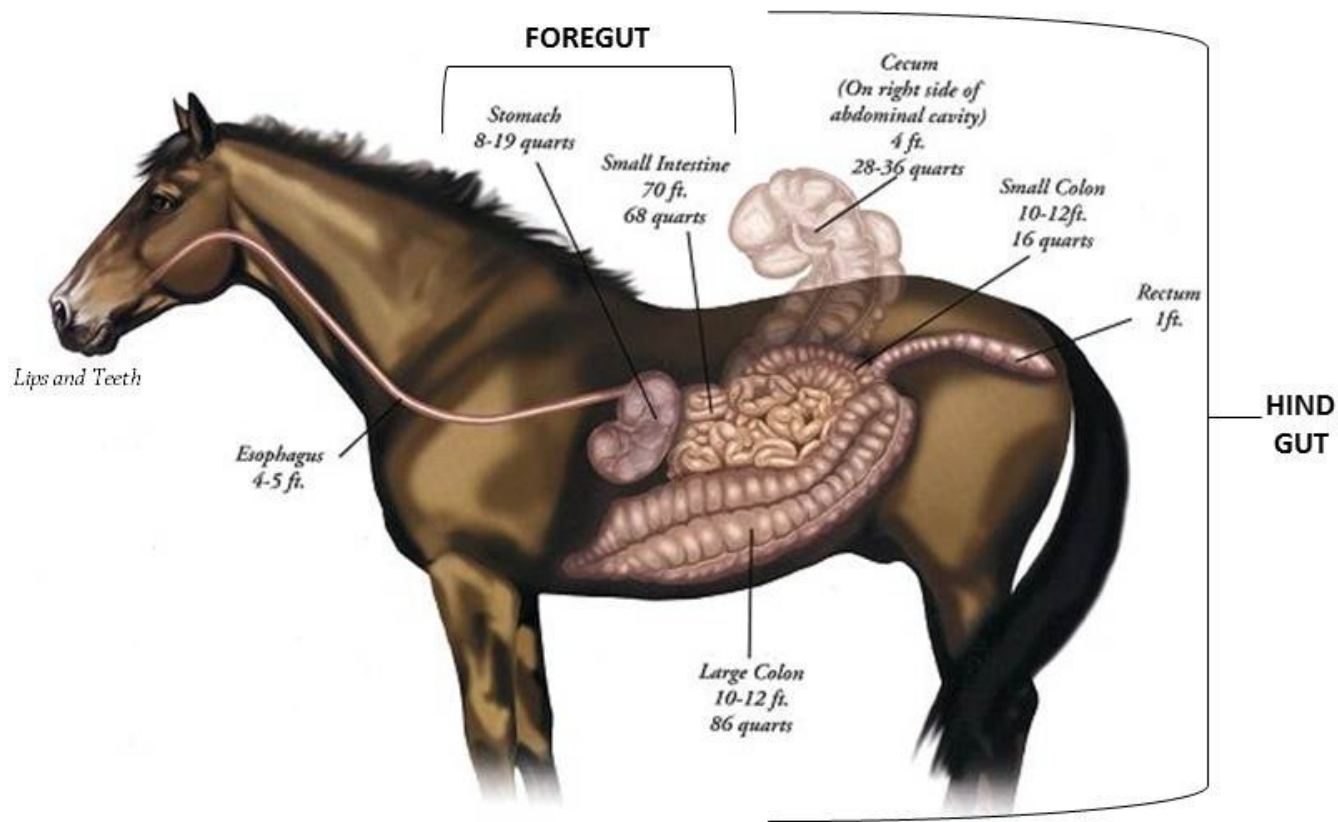
5 Horse Nutrition Misconceptions

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1. Horses can eat what cattle eat



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1. Horses can eat what cattle eat

- Horses don't have microbial fermentation in the foregut
- Very small stomach = need small meals
- Horses can't regurgitate
- Roughage passes faster than concentrates

2. Higher protein feeds are better for weight gain



2. Higher protein feeds are better

- Protein is an essential nutrient
 - Muscle, organ, bone, blood, skin, hair, and hooves
- Protein is the least efficient nutrient for weight gain

Horse Type	Crude Protein Requirements
Mature	7.2-10%
Growing	12-18%
Broodmare	12-16%

2. Higher protein feeds are better

- Horses can tolerate up to 20% fat in their diet
- Fat has 2.25x more energy than carbohydrates

GUARANTEED ANALYSIS

Crude Protein, Min.	14.00%
Crude Fat, Min.	2.50%
Crude Fiber, Max.	10.00%
Calcium, Min.	0.55%
Calcium, Max.	1.05%
Phosphorus, Min.	0.35%
Salt, Min.	0.30%
Salt, Max.	0.80%
Copper, Min.	60 ppm
Selenium, Min.	0.20 ppm
Zinc, Min.	160 ppm
Vitamin A, Min.	6000 IU per lb

This feed is designed to be fed to all classes of horses.

GUARANTEED ANALYSIS

Crude Protein	Min. 15.00%
Crude Fat	Min. 7.50%
Crude Fiber	Max. 5.00%
Calcium	Min. 0.30% / Max. 0.80%
Phosphorous	Min. 0.40%
Salt	Min. 0.15% / Max. 0.65%
Copper	Min. 50 ppm
Selenium	Min. 0.40 ppm
Zinc	Min. 150 ppm
Vitamin A	Min. 6,000 IU/lb
Vitamin D3	Min. 750 IU/lb
Vitamin E	Min. 60 IU/lb

3. Horses need 2 flakes of hay
twice a day

3. 2 flakes of hay twice a day

Not all flakes are created equal!



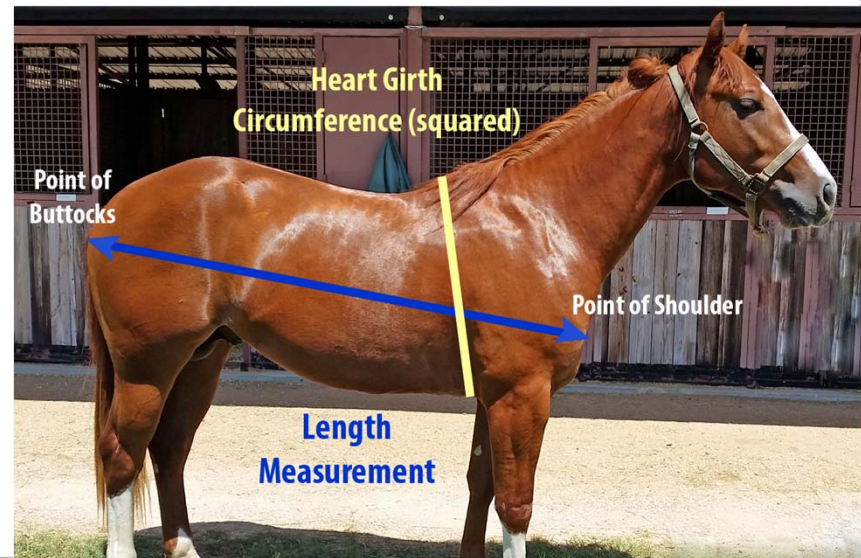
3. 2 flakes of hay twice a day

- **Feed by weight, not by volume**
- Horses should consume at least 1-2% of their body weight in forage everyday
 - 1000lb horse needs 10-20lbs of forage/day
- **Estimate your horse's weight:**

$$= \frac{(\text{Heart girth} \times \text{Heart girth}) \times \text{length}}{330}$$

$$= \frac{(67'' \times 67'') \times 76''}{330}$$

$$= 1,033.8 \text{ lbs}$$



3. 2 Flakes of hay twice a day

- **Lab Analysis of quality**
 - Crude Protein (CP)
 - Acid detergent fiber (ADF)
 - Measure of cellulose and lignin content
 - High ADF = Lower digestibility
 - Total digestible nutrients (TDN), digestible energy (DE), metabolizable energy (ME), and net energy (NE) are calculated for cattle

3. 2 flakes of hay twice a day

- **Visual measures of quality**
 - Color
 - Leafiness
 - Presence of seed heads
 - Dustiness or mold



Grass Hay

Greener hay does not always mean higher quality hay



Alfalfa Hay

- Leafy hay has more energy than stemmy hay
- Look at the texture of the hay as an indicator of quality



Alfalfa Hay

- Look for evidence of blister beetles in alfalfa
 - Cantharidin
 - Northern, southern, and Midwestern states



4. Your horse needs supplements to be healthy



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4. Your horse needs supplements to be healthy

- Forage and grain should meet your horse's requirements
- **Feed companies balance diets to meet vitamin and mineral requirements**
 - Cutting feed with oats – the diet is no longer balanced
- Regulation by the FDA is inconsistent for animal dietary supplements

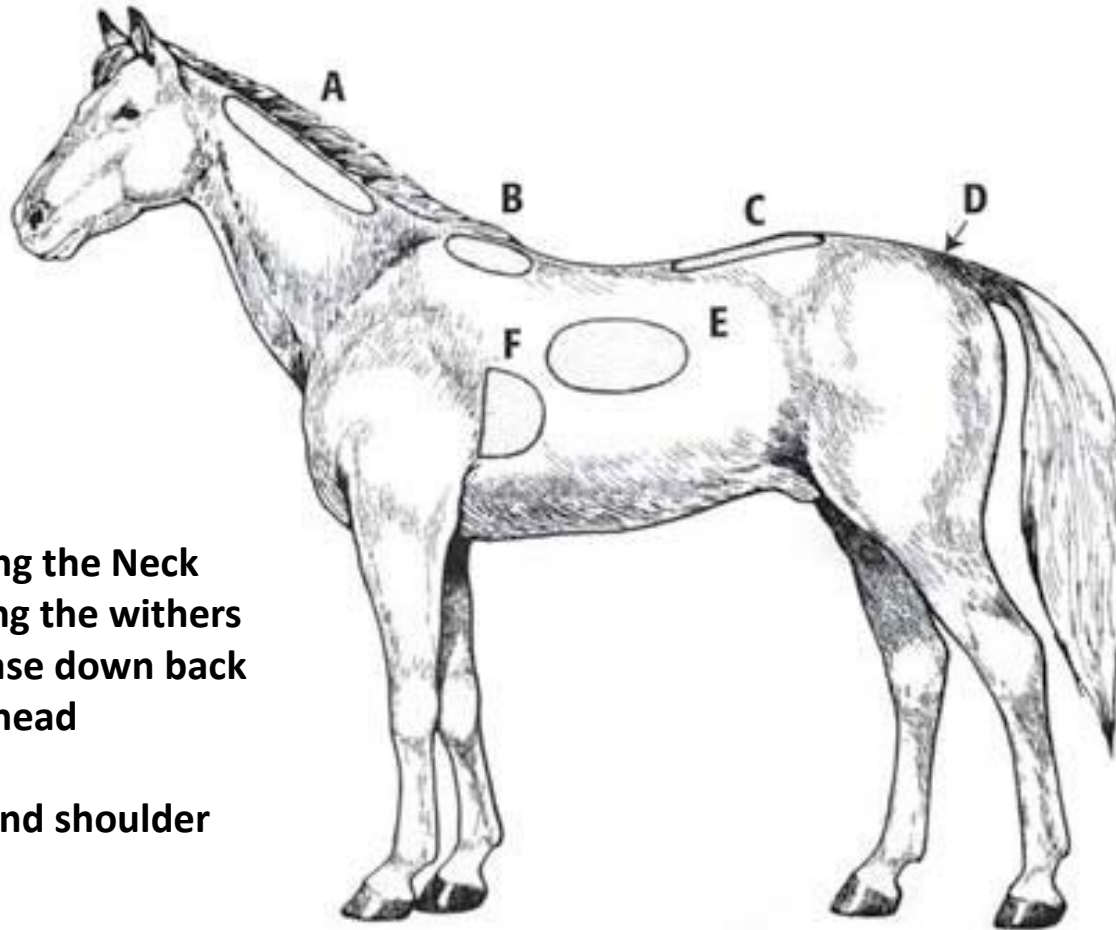


5. A fat horse is a healthy horse



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5. A fat horse is a healthy horse



- A. Along the Neck
- B. Along the withers
- C. Crease down back
- D. Tailhead
- E. Ribs
- F. Behind shoulder

Body Condition Score 1



Body Condition Score 2



Body Condition Score 3



Body Condition Score 4



Body Condition Score 5



Body Condition Score 6



Body Condition Score 7



Body Condition Score 8



Body Condition Score 9



A fat horse is a healthy horse

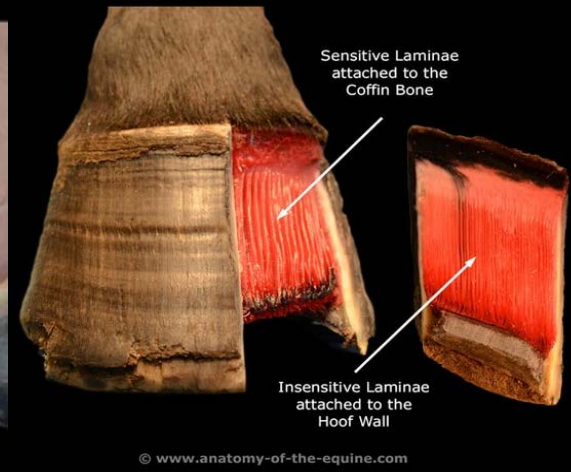
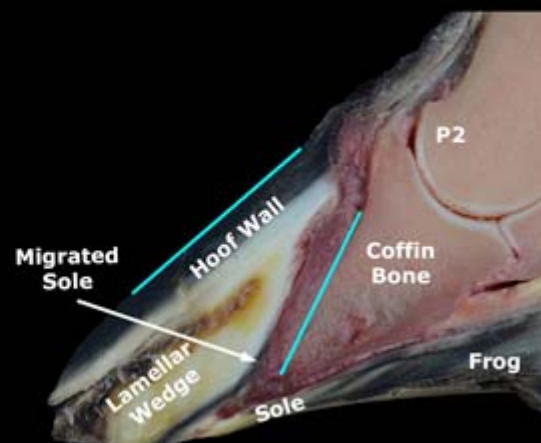
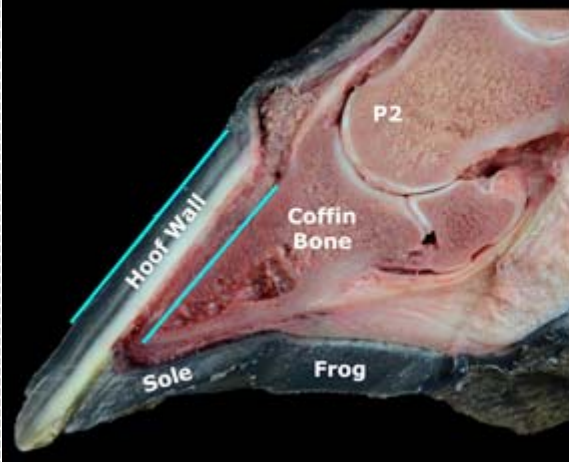
Laminitis (Founder)

- Inflammation of the laminae/ potential rotation of the coffin bone
- Often caused by excessive carbohydrates
 - Lush new pasture in spring and fall
 - overfeeding



Non-Laminitic Hoof

Hoof with Chronic Laminitis



A fat horse is a healthy horse

Equine Metabolic Syndrome

- Symptoms:
 - Obesity
 - Unusual fat deposits, often in neck (Cresty neck)
 - Insulin resistance
 - Chronic laminitis



A fat horse is a healthy horse

- Extra stress on joints
- Predisposing offspring to joint breakdown and insulin resistance



Questions?



an equal opportunity/access/affirmative action/
pro-disabled and veteran employer

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