





Your Participation

Open and close your control panel

Join audio:

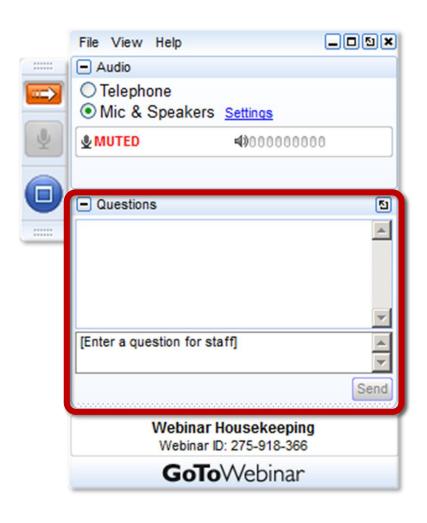
- Choose Mic & Speakers to use VoIP
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Submit questions and comments via the Questions panel

Note: Today's presentation is being recorded and will be provided within 48 hours.







Your Participation

 Please continue to submit your text questions and comments using the Questions panel

For more information, please contact kstarr@standleeforage.com.

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When Quality Hay Is In Short Supply, What Can I Feed My Horse?



DR TANIA CUBITT
PERFORMANCE HORSE NUTRITION







OUTLINE

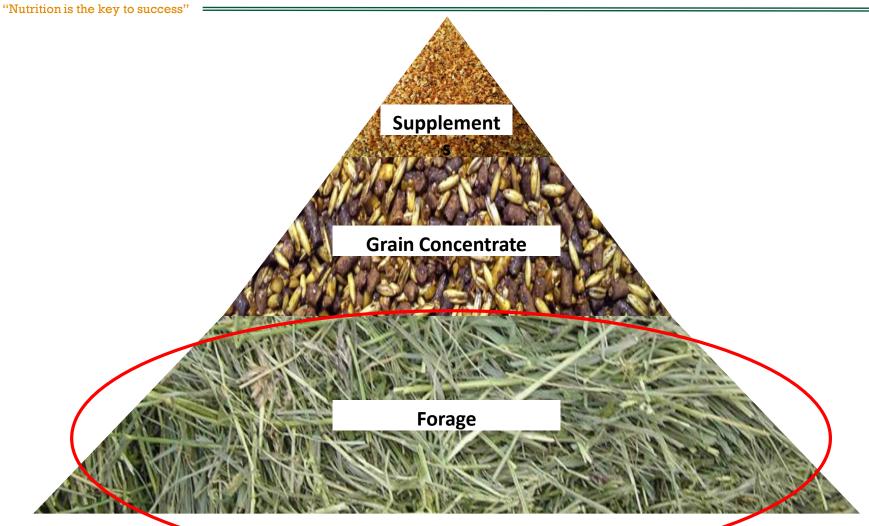
PERFORMANCE HORSE NUTRITION

- Importance of forage
- What are forage pellets & cubes
- How it's made: pellets and cubes
- Pros and cons of bagged forages
- When to add to the diet having a back-up plan when disaster strikes (i.e. fire, natural disaster, etc.)
- How to confidently add forage alternatives to your horse's diet



HORSE FOOD PYRAMID







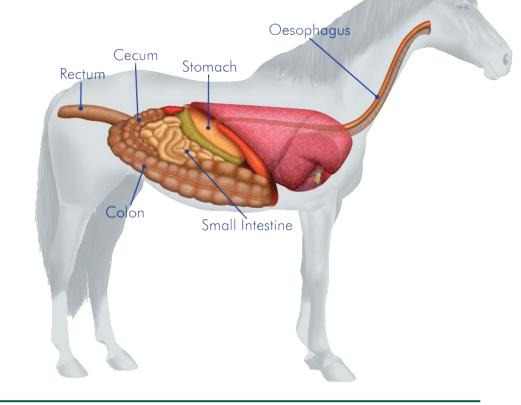
BENEFITS OF FORAGE



"Nutrition is the key to success"

 Fiber from pasture, hay or forage products is necessary for a healthy digestive system

 Horses are anatomically designed to digest and utilize fiber - 65% of digestive capacity dedicated to fiber digestion



FORAGE - AMOUNT



- Absolute minimum = 1% of B.W.
 1000 lb horse = 10 lbs forage (DM)
- Weight loss = 1.2% of B.W. 1000 lb horse = 102 lbs forage (DM)
- <u>Recommended minimum</u> = 1.5% of B.W. 1000 lb horse = 15 lbs forage (DM)
- Normal forage intake = 1.8 to 2.2% of B.W.
- Maximum intake = 3 to 3.5% of B.W.



NOT ENOUGH FORAGE



- Can result in
 - Hindgut acidosis
 - Colic
 - Gastric ulcers
 - Cribbing
 - Wood chewing
 - Behavior issues
 - Weaving, aggression



BENEFITS OF FORAGE



- Forage provides a slow continuous intake of fiber
 - "Trickle Feeding"
 - Stomach designed for small continuous meals
 - Chewing of fiber helps prevent ulcers



BENEFITS OF FORAGE



- Pasture provides opportunity for exercise
 - 24 hr = 8-9.5miles
 - 7 hr = 2.5-3 miles
 - Behavior?
- Pasture provides socialization
 - Manners



HOWEVER.....



- Most Important Dietary
 Ingredient Forage and Pasture
 - Pasture is unreliable
 - Drought
 - Seasonality
 - Availability
- FORAGE IS CRITICAL





How Much Hay?



"Nutrition is the key to success"

 How much hay will your horse need this winter?

• 2.0% BW—1000lb horse = 20lbs per day

• 5 months of winter = 150 days

20lbs x 150 days = 3000lbsor 1.5 tons!!!!







PHYSICAL FORMS OF FORAGE



- Conventional baled forage
- Compressed bales
- Forage cubes
- Forage pellets
- Chopped forage
- What is the nutritional difference between forms?











HOW IT'S MADE: PELLETS AND CUBES



MECHANICAL PROCESSING



- Baled forage to compressed forage
 - requires squeezing and cutting
- Baled forage to cubes
 - requires coarse grinding, heat, steam, bentonite, pressure
- Baled forage to pellets
 - requires fine grinding, heat, steam, pressure
- Baled forage to chop
 - requires coarse grinding + additives (molasses or oil)







POLL QUESTION





MECHANICAL PROCESSING



- Compressing, grinding, pelleting, cubing and chopping
- → Does not change digestibility
- Good quality 2nd cut alfalfa (same forage) has identical digestion in any form
- Why hindgut digestion
- How digestible is good forage?
 50% or less









BAGGED FORAGES





WHY PROCESS FORAGE?



- Convenience
 - Easy to feed
 - Easy to haul
- Consistent product
- Endless supply
- Less storage space
- Less waste
- Certified noxious weed free options



DIGESTIVE FUNCTION - TEETH

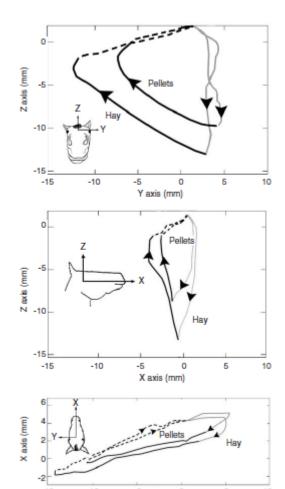


"Nutrition is the key to success"

- 1100lb horse
 - 40mins & 3400 chews per 2.2lb of hay
 - 20mins & 850 chews per 2.2lbs of pellets

Bonin et al., <u>Comparison of mandibular motion in horses chewing</u> <u>hay and pellets</u>. Equine vet. J. (2007) 39 (3) 258-262

- Mandibular motion is greater when chewing forage than when chewing pellets
- Gobel and Duffner (1954) noted that overgrowths could be reduced by a high roughage diet, but their development was encouraged by feeding a high concentrate diet



Y axis (mm)





WHO NEEDS IT?



- Weight gain
- Poor teeth
- Post colic surgery
- Hind gut ulcers



POLL QUESTION







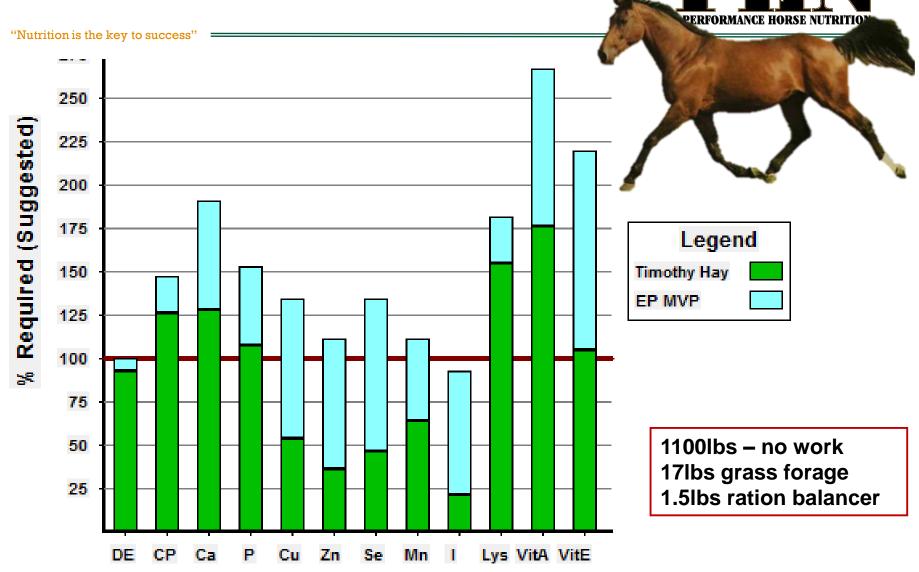
How do I feed it?



- Typically soaked
 - Improves palatability
 - Decreases rate of intake
 - Hydrates GI tract
- 2:1 Water : Forage pellets/cubes
- 15 mins to 2hrs



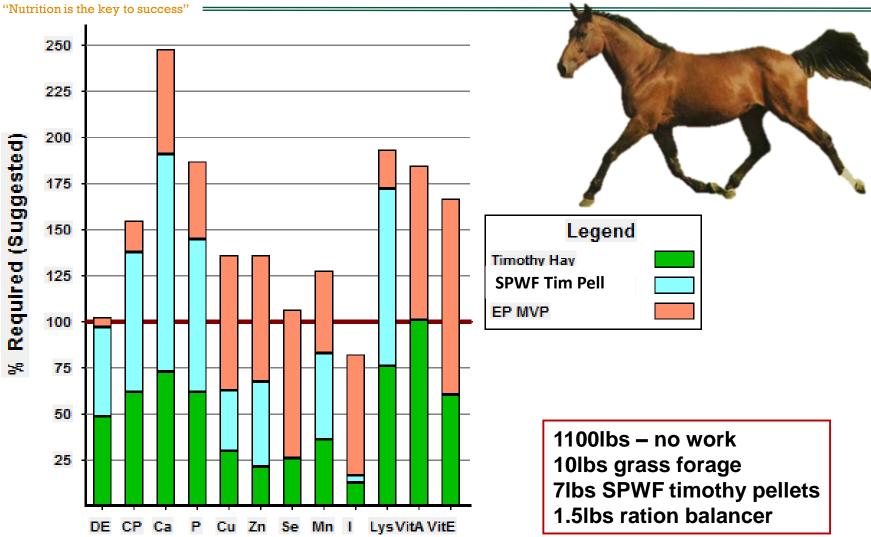
How To Add





NOT ENOUGH HAY



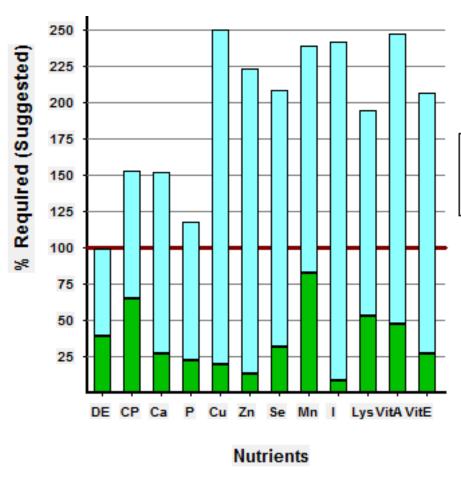




POOR QUALITY HAY



"Nutrition is the key to success"





Thoroughbred

Body Weight 1100lbs

Intense Exercise – exercise done at high speed

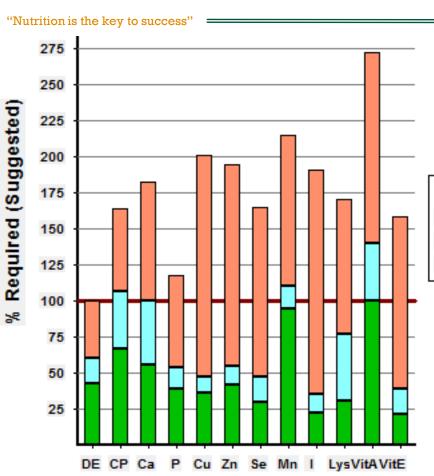
Poor quality hay – 20lbs

EP East Coast race – 15lbs



INCREASING THE QUALITY OF FORAGE





Nutrients



Thoroughbred

Body Weight 1100lbs

Intense exercise – exercise done at high speed

Premium grass forage – 15lbs

SPWF alfalfa cubes – 5lbs

EP East Coast Race – 10lbs



HAY SHED



- Fire
- Flood
- Mold
- Rodent Damage



- If switching from grass forage to grass pellets
- If switching from grass forage to alfalfa pellets/cubes



HAYTHERE

WHICH PELLETS WOULD YOU CHOOSE FOR YOUR HORSE?



TYPICAL COMPETITOR ALFALFA PELLETS STANDLEE PREMIUM ALFALFA PELLETS

QUESTIONS?





Thank you for joining us!

For follow-up questions, please contact our customer relations:

1-800-398-0819

customerservice@standleeforage.com

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