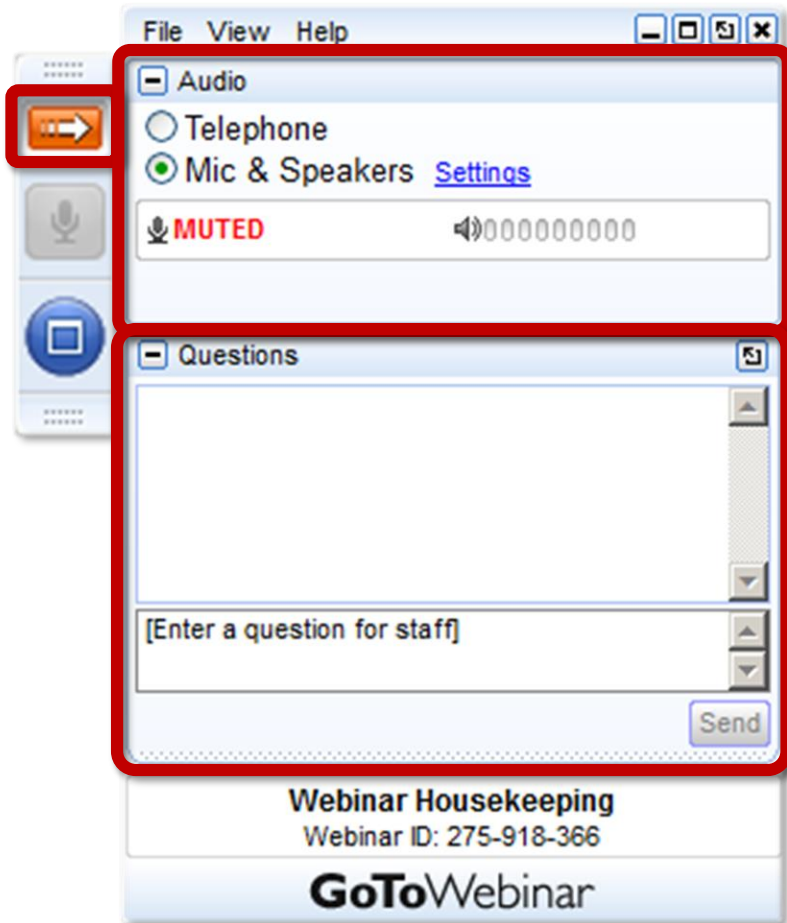


How Can I Safely Feed a Neglected/Starved Horse Back to Health?



“Nutrition is the key to success”



Your Participation

Open and close your control panel

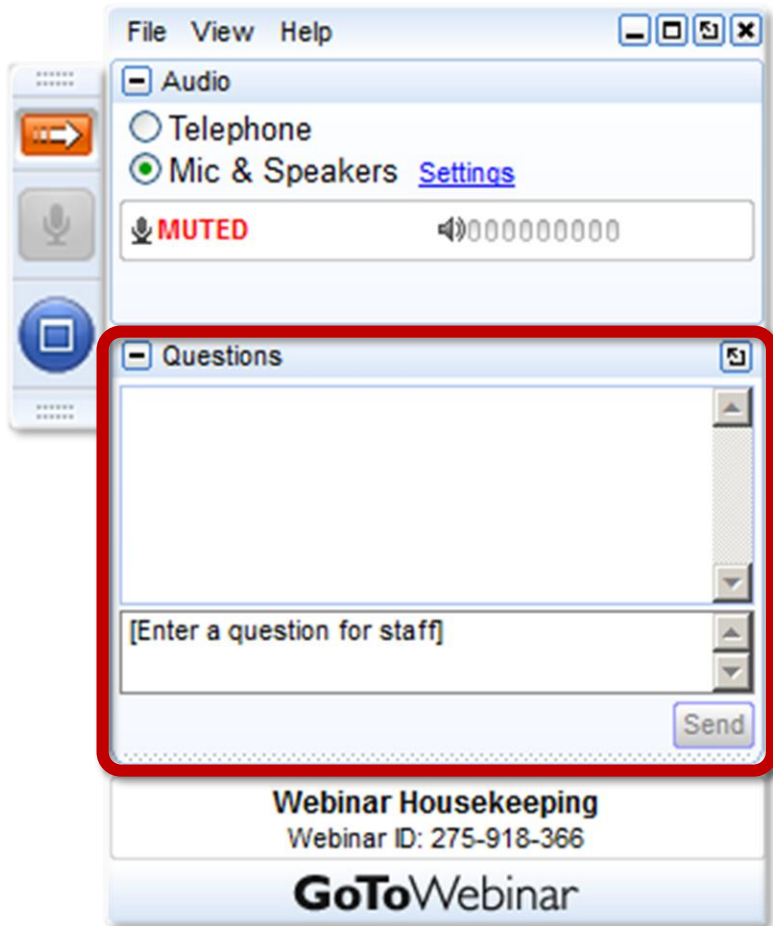
Join audio:

- Choose **Mic & Speakers** to use VoIP
- Choose **Telephone** and dial using the information provided

Submit questions and comments via the Questions panel

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

“Nutrition is the key to success”



Your Participation

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

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

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

NUTRITIONAL RESOURCES



“Nutrition is the key to success”

standleeforage.com

HOME

PRODUCTS

NUTRITION

- Why Premium Western Forage
- Nutrition Overview
- Forage Finder
- Feed Calculator
- Feeding Instructions
- Nutritional Resources**

COUPONS

BLOG

COMPANY

RESOURCES

FIND A STORE FORAGE FINDER FEED CALCULATOR READ THE BLOG

Search

NUTRITIONAL RESOURCES

Standlee Premium Western Forage® creates and maintains a wealth of nutritional resources to help you maintain the nutrition of your horses. You can find those resources here.

Nutritional Webinars

- ▶ How to Decrease Your Horse's Risk of Colic with Nutrition Management ([Watch Video Recording Now](#))
- ▶ Winter Feeding ([Watch Video Recording Now](#))
- ▶ Gastric Ulcers in Horses ([Watch Video Recording Now](#))
- ▶ Metabolic Disease Prevention and Management ([Watch Video Recording Now](#))
- ▶ What Do I Need to Know About Raising Chicks? ([Watch Video Recording Now](#))
- ▶ When Quality Hay Is In Short Supply, What Can I Feed My Horse? ([Watch Video Recording Now](#))
- ▶ Beet Pulp – What Is It and Why Do Horses Need It? ([Watch Video Recording Now](#))



How Can I Safely Feed a Neglected/Starved Horse Back to Health?

How Can I Safely Feed A Neglected/Starved Horse Back To Health



DR. TANIA CUBITT
PERFORMANCE HORSE NUTRITION



OUTLINE

“Nutrition is the key to success”

- Signs of Starvation
- Body Condition Scoring
- Complications of Neglect
 - Refeeding Syndrome
- Nutritional Rehab Program



Signs of Starvation or Neglect



Standlee
PREMIUM WESTERN FORAGE®

“STEP 1” - DETERMINE WHY HORSE IS THIN

“Nutrition is the key to success”

- Intentional Neglect
- Ignorance
- Economics
- Disease
- Dentition
- Pecking Order
- Parasites
- Feed Quantity or Quality



DEFINING THIN HORSES

“Nutrition is the key to success”

- Nutritionally
 - Expending more calories than taking in
- Net result
 - Body will sacrifice
- Burn itself to produce energy
 - Stored carbohydrate
 - Stored fat
 - Stored protein
 - Muscle
 - Organs

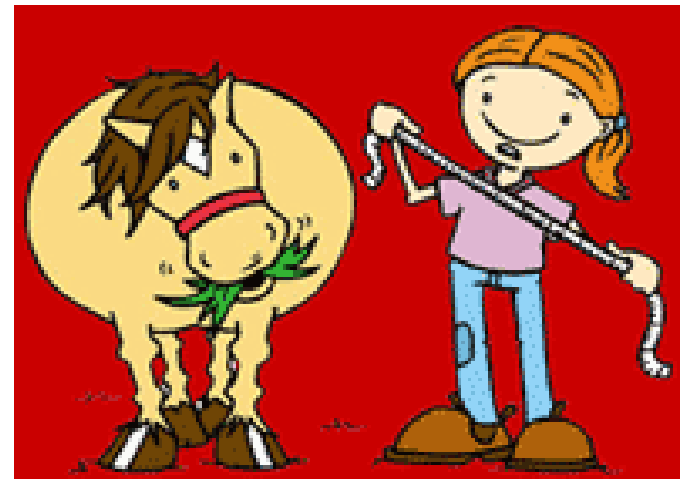


Image Credit: Four Legged Friends and Enemies

CLASSIFYING THIN HORSES

“Nutrition is the key to success”

- Body Weight
 - Ideal weight not determined for all horses
 - Different body types influence weight
- Body Condition Score
 - Most common
- Visual estimate of fat and muscle deposition



Body Condition Scoring



Standlee
PREMIUM WESTERN FORAGE®

BODY CONDITION SCORE

“Nutrition is the key to success”

- Body Condition Score (BCS)
- Used as a replacement for body weight
 - Visual estimate
 - No scales needed
- Numeric system to establish fatness or thinness
- Most common “1 - 9”
 - Low numbers = thin
 - High numbers = fat



JUDGING BODY CONDITION

"Nutrition is the key to success"

- Areas to look for fat

A. Neck

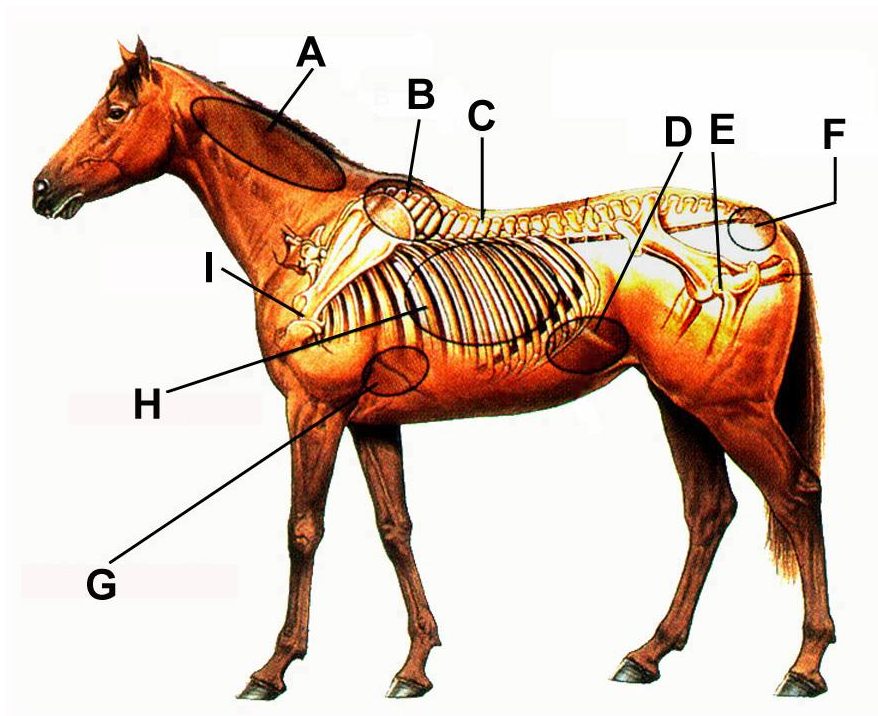
B. Withers

C. Back bone

D. Flank

E. Inner thigh

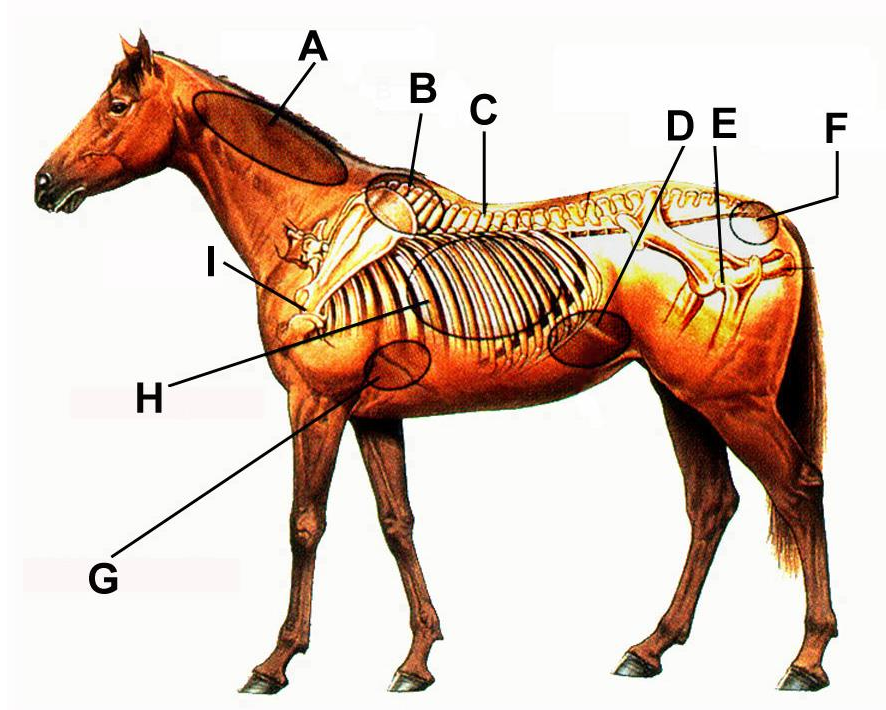
F. Tail head



JUDGING BODY CONDITION

“Nutrition is the key to success”

- Areas to look for fat
 - G. Behind shoulder
 - H. Ribs
 - I. Shoulder blade



BODY CONDITION SCORE “1”

“Nutrition is the key to success”

- Extremely emaciated
- Spine, ribs, tailhead, tuber coxae, tuber ischii – projecting
- Bones easily visible in neck, withers and shoulder
- No fatty tissue can be felt



BODY CONDITION SCORE “2”

“Nutrition is the key to success”

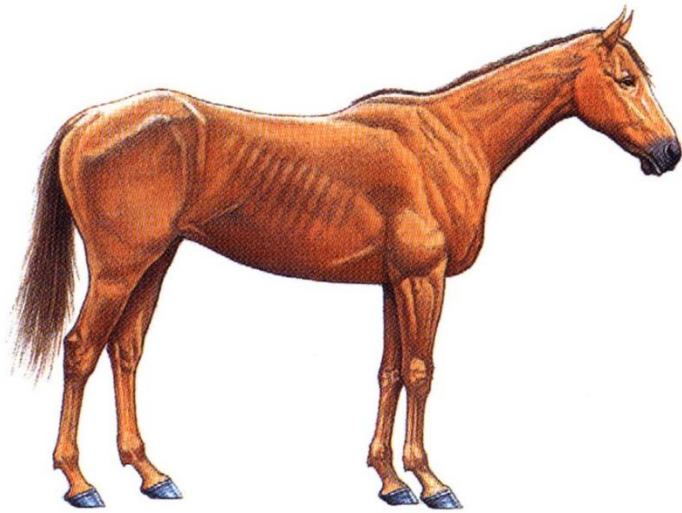
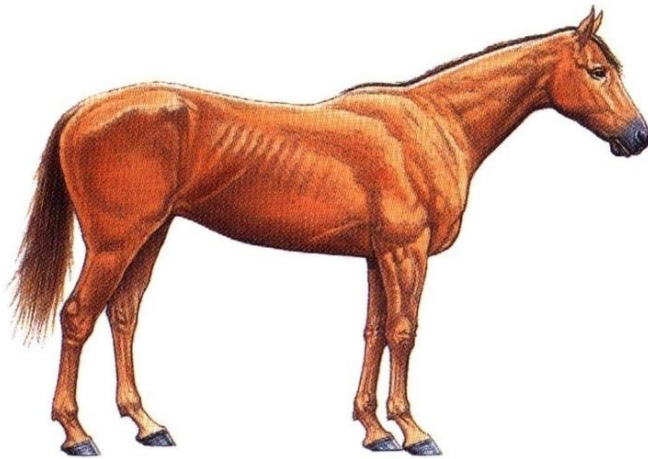


Image Credit: Dr. Don Henneke, Tarleton State University

BODY CONDITION SCORE “3”

“Nutrition is the key to success”

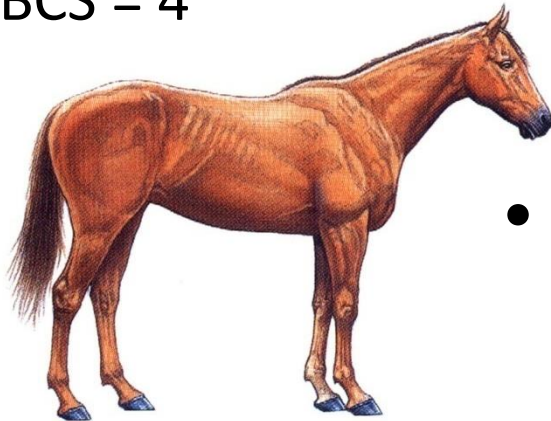
Horses in BCS of 3 or less = underweight



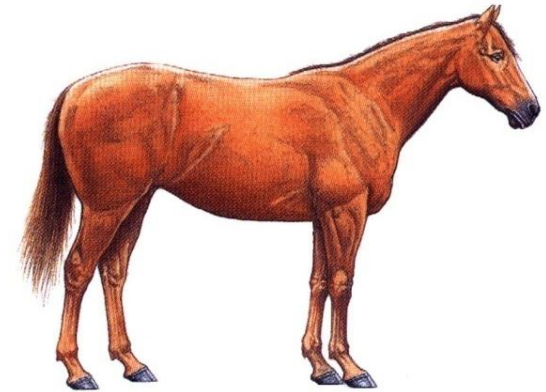
BODY CONDITION SCORE “4 & 6”

“Nutrition is the key to success”

BCS = 4



BCS = 6



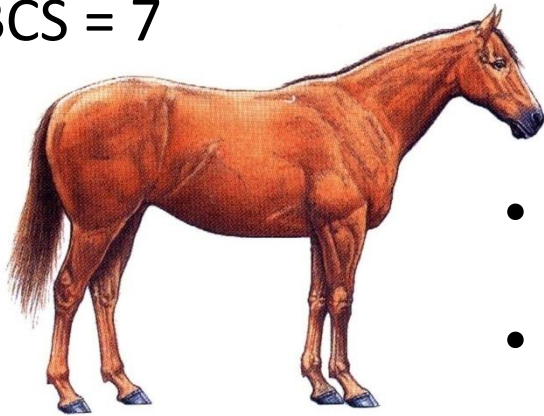
- BCS of 4 to 6 is considered ideal



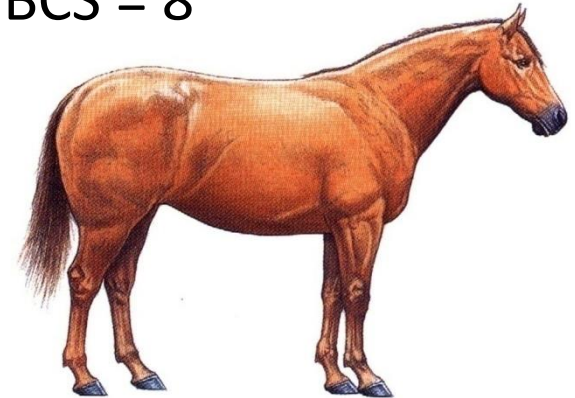
BODY CONDITION SCORE “7 & 8”

“Nutrition is the key to success”

BCS = 7



BCS = 8



- BCS of 7 to 8 is considered overweight
- Greater than 8 is considered “obese”



BODY CONDITION SCORE “9”

“Nutrition is the key to success”

“Obese”



Image Credit: bluecross.org.uk

FEEDING NEGLECTED HORSES

“COMMON QUESTIONS”



“Nutrition is the key to success”

- How should the horse be fed?
- How much feed should be offered?
- How often should feed be offered?
- What type of type of feed should be fed?

Poll Question

“Nutrition is the key to success”



Complications of Neglect



Standlee
PREMIUM WESTERN FORAGE®

COMPLICATIONS OF NEGLECT

“Nutrition is the key to success”



- Treat Disease
 - Won't gain until disease is treated
- Treat Parasites
- Educate Ignorance
 - Nutrition
 - Husbandry
- Take Care of Teeth
- Prevent Reoccurrence

Refeeding Syndrome



Standlee
PREMIUM WESTERN FORAGE®

REFEEDING SYNDROME

“Nutrition is the key to success”

- Depletion of serum electrolytes
- Starved horse does not have adequate electrolyte stores
- Depletion leads to heart, respiratory and kidney failure
- Death
- Refeeding syndrome can occur in any horse fasted 5-10 days



Go Slow, Kindness Kills

REFEEDING SYNDROME

“Nutrition is the key to success”



Image Credit: Dark Horse Ranch

- Occurs typically between days 3 and 5
- Sudden shift from fat to carbohydrate metabolism
- Increase insulin drives P into cells
- Movement of Mg + K into cells

REFEEDING SYNDROME

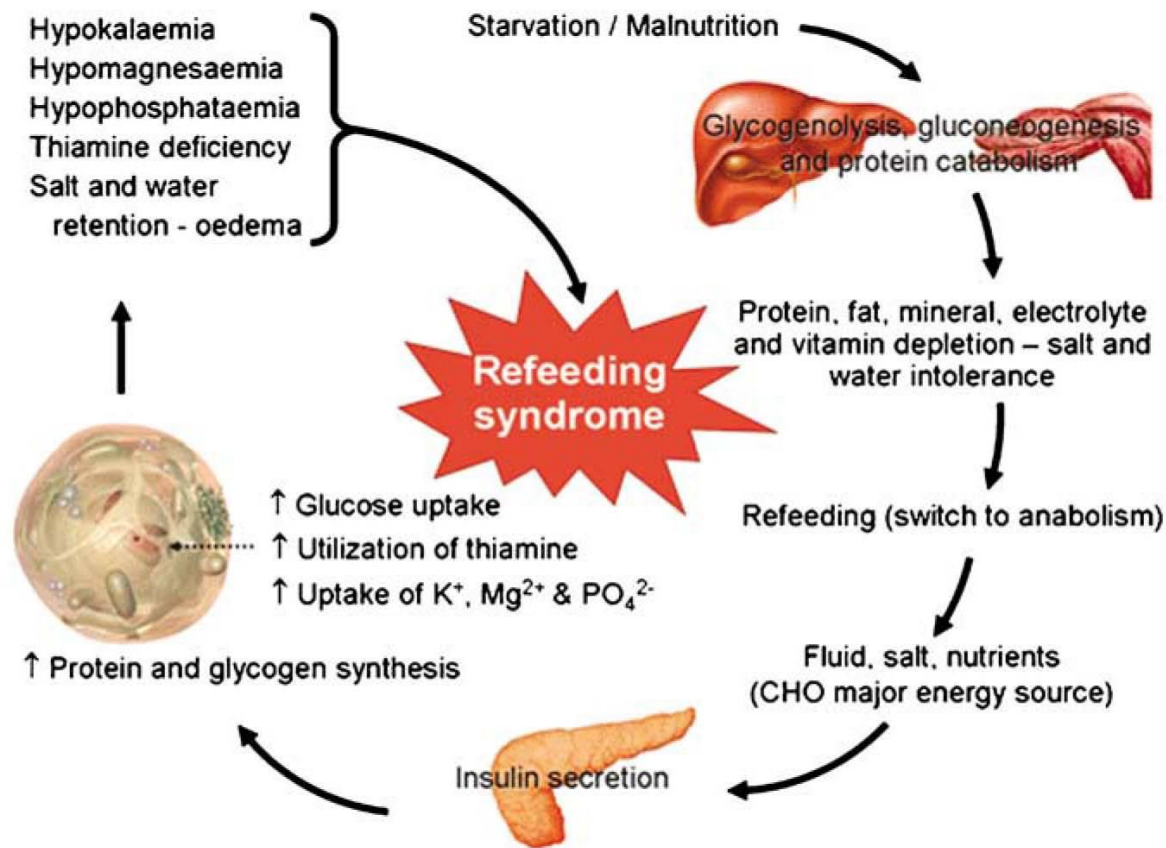


“Nutrition is the key to success”

- Fat and protein catabolism depletes intracellular electrolytes, *especially phosphate*
- Upon CHO re-introduction, ↑ insulin stimulates cellular uptake of phosphate, leading to hypophosphatemia
 - Usually occurs within 3 – 7 days
- Hypomagnesaemia and hypokalaemia may also occur

REFEEDING SYNDROME

“Nutrition is the key to success”



Pathogenesis and features of the refeeding syndrome.

Stanga et al., 2008 Journal of Clinical Nutrition

Nutritional Rehab Program



Standlee
PREMIUM WESTERN FORAGE®

REFEEDING PROGRAM - 4 PHASES

"Nutrition is the key to success"

- Phase 1
 - Days 1 - 3
- Phase 2
 - Days 4 – 10
- Phase 3
 - Days 11 – 14
- Phase 4
 - Day 15 and beyond



Poll Question

“Nutrition is the key to success”



PHASE 1 | DAYS 1-3

“Nutrition is the key to success”

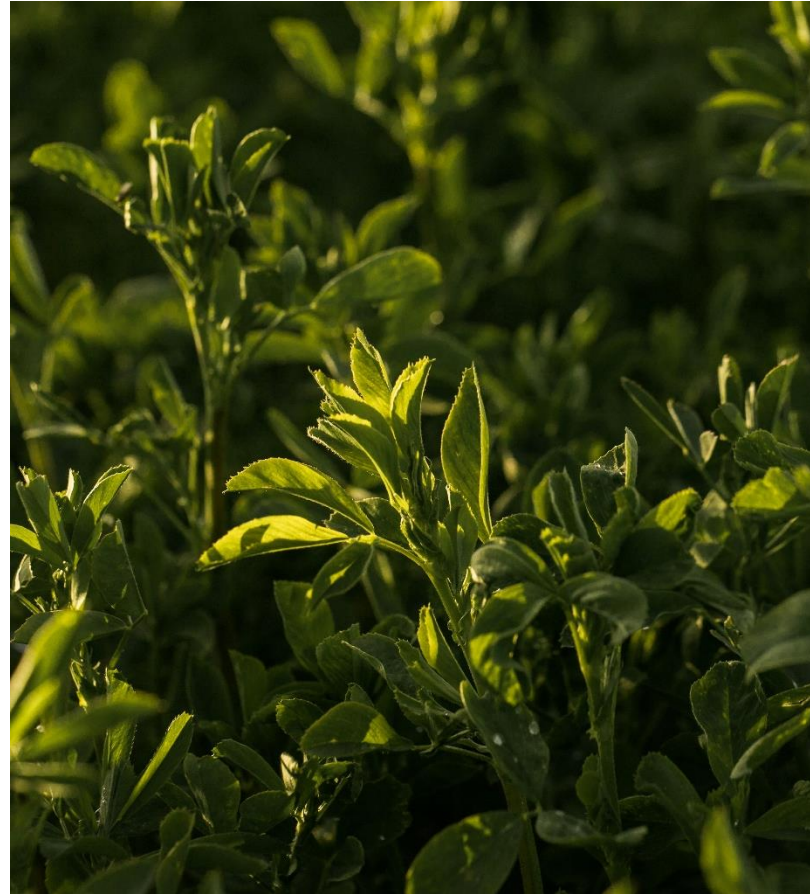


- Start with small, frequent meals
- High quality alfalfa forage
- Example horse
 - 1000 lb ideal body weight (BW)
- Feed 1 lb of alfalfa every 4 hrs
- 6 lbs total per day
- Free-choice water
- Feed soaked alfalfa pellets in dental problems

ALFALFA FORAGE

“Nutrition is the key to success”

- High Quality
- Abundant Protein
 - Muscle tissue
 - Organ tissue
- Quality Protein
 - High in lysine
- Low Sugar
 - Low insulin response
- Abundant Electrolytes
 - Ca, Mg



PHASE 1 | DAYS 1-3

“Nutrition is the key to success”

- Six pounds of alfalfa per day is far below horses’ energy requirements
- Trying not to shock them metabolically
- Avoid “Refeeding Syndrome”



PHASE 2 | DAYS 4-10

“Nutrition is the key to success”



Image Credit: Green Diamond

- If horse tolerated ‘Phase 1’ feeding without diarrhea, make slow diet changes
- Gradually adapt the horse to being fed 4 lbs of alfalfa every 8 hours
 - Larger meal
 - Less frequent

PHASE 2 | DAYS 4-10

“Nutrition is the key to success”

- Feeding a total of 12 lbs of high quality alfalfa per day
- Still below energy requirement
- No grain
- Free-choice water
- Short periods (10 minutes) of hand grazing twice daily



PHASE 3 | DAYS 11-14

“Nutrition is the key to success”



Image Credit: Eco Equine

- If horse tolerated ‘Phase 2’ feeding without diarrhea, make slow diet changes
- Gradually increase alfalfa to a total of 2% of current body weight
- Reduce number of feedings to two feedings per day

PHASE 3 | DAYS 11-14

“Nutrition is the key to success”

- This amount of alfalfa will satisfy energy requirements and facilitate weight gain
- Not quite free-choice forage
- Can continue with hand grazing
- Free-choice salt + water



PHASE 4 | DAY 15 AND BEYOND

“Nutrition is the key to success”



- Begin to offer forage on a free-choice basis
- Goal is for horse to gradually increase intake toward 2.5% of current body weight
- Can begin to gradually blend in other types of high quality grass forage or pasture

PHASE 4 | DAY 15 AND BEYOND

“Nutrition is the key to success”

- Gradual introduction of grain
- Grain should be fortified with vitamins + minerals
- Fortified with fat
 - Energy dense
 - Safe
- Pelleted or processed to enhance digestion



Image Credit: horses.extension.org

REFEEDING SYNDROME



“Nutrition is the key to success”

- The energy level of the horse will increase in about 2 weeks
- Careful monitoring - serum electrolyte levels should be checked at least every 24 hours for the first 5 – 7 days
- Starved animals have impaired immune systems - **separate** – (more on [gut health and immune function](#))
- High-fat and low carbohydrate
 - Vegetable Oil, Rice Bran
- 3-5 months is the expected time-frame to restore and rehabilitate the horse back to its normal weight

Stull 2003, UC Davis

FEEDING EXAMPLE

“Nutrition is the key to success”

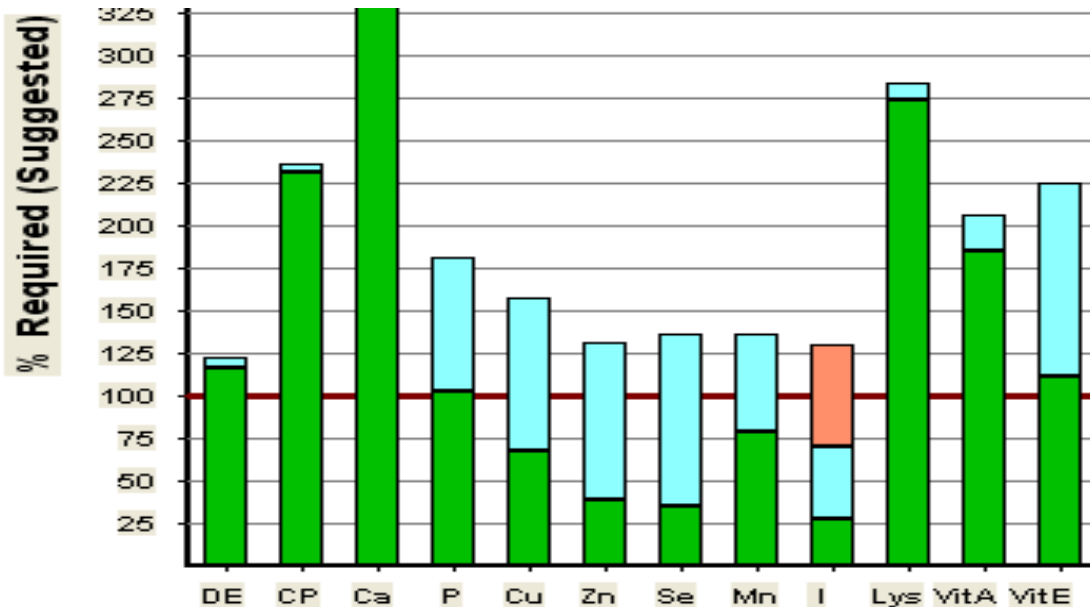
- Start grain feeding with low intake, pelleted protein/vitamin and mineral supplement
 - Provides essential nutrients
 - Intake of 0.1 lbs/100 lbs BW

Current Diet

- 2% of BW as Alfalfa (20 lbs)
- 0.1% of BW as Supplement (1 lb)
- Iodized Salt



Image Credit: horses.extension.org



CONCENTRATE FEEDING

“Nutrition is the key to success”



Image Credit: Horse Journals

- Gradually move horse from low intake supplement to regular grain
- Multiple small meals
 - 3x per day feed
- Start at 0.1% of BW, slowly increase to 0.5% of BW
- Increase by 1 lb/week

FEEDING EXAMPLE

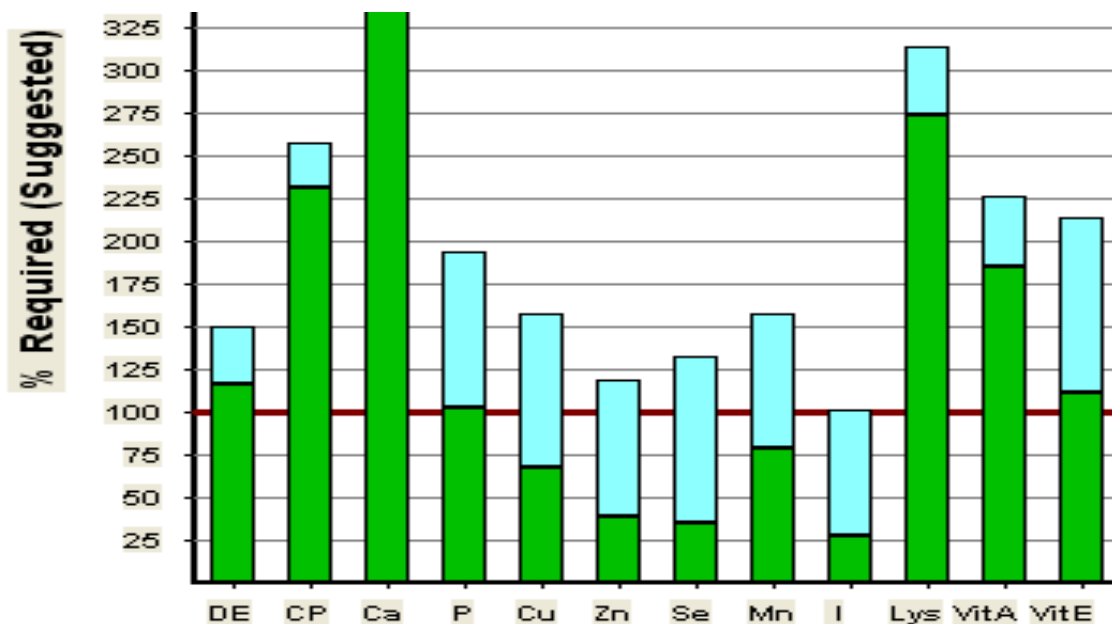
“Nutrition is the key to success”

Current Diet

- 2% of BW as Western alfalfa
- 0.5% of BW as pellet grain concentrate
- Fed 3x per day to avoid digestive upset



Image Credit: horses.extension.org



OTHER DIETARY ADDITIVES

“Nutrition is the key to success”

- Vegetable Oil
 - Energy dense
 - ¼ to 1 cup/day
- Probiotics
 - Yeast
 - Bacteria
- Prebiotics
 - Bind harmful bacteria + stimulate immune function



Image Credit: Practical Horseman Magazine

SUMMARY

“Nutrition is the key to success”

- Body Condition Score used to classify
 - BCS of 3 or less = underweight
 - BCS 4 to 6 = ideal
 - BCS 7 to 8 = overweight
 - BCS > 8 = obese
- Determine why horse is thin and prevent
- Four phases of refeeding
 - Alfalfa - primary forage

SUMMARY

“Nutrition is the key to success”

- Avoid Refeeding Syndrome
 - Electrolyte shifts due to refeeding
- Weight gain – allow 60 days per BCS
- Go slow – Kindness kills



Q & A Session



Standlee
PREMIUM WESTERN FORAGE®

Thank you for joining us!

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

1-800-398-0819

customerservice@standleeforage.com

For more past webinars, Nutritional White Papers, Standlee Forage Finder®, Standlee Feed Calculator™ or our Store Locator, visit:

standleeforage.com

Follow us on Facebook @Standlee.Forage and on Instagram @StandleeForage for more nutritional tips and some feel good animal posts!