Nutrition Basics

What is Nutrition?

Anything a horse consumes to receive nourishment for growth

Nutrition is Broken up into these Categories:

Feedstuffs

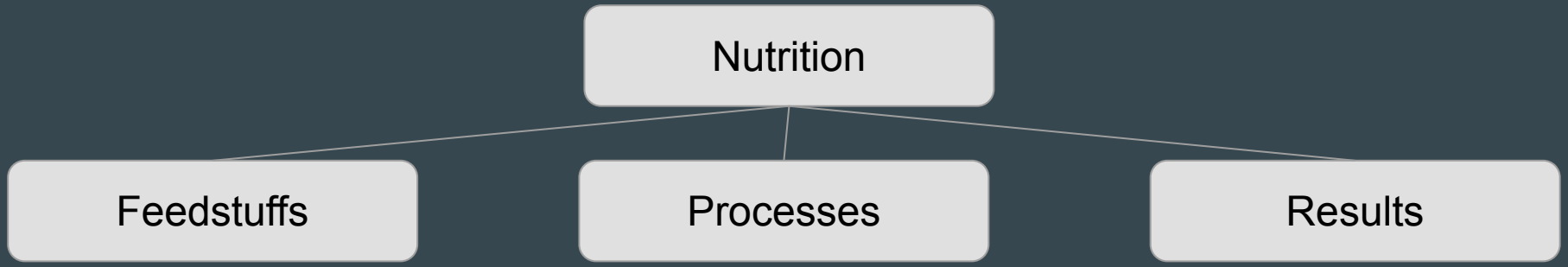
- Forage, Concentrates, Supplements, Poisonous

Process

- Systems Anatomy, System Diseases

Results

- Balancing, Meeting Needs, Deficiency/overload disorders, congenital/acquired dietary needs


Nutrition
Feedstuffs
Processes
Results

Feedstuffs

Feedstuffs are any item ingested

Feedstuffs are broken up into four areas

Forage
Concentrates
Supplements
Poisonous

Forage

Forage is any matter consumed in it's natural state such as hay and grass. It differs from Concentrates (Commonly called grain) because concentrates are altered mechanically or chemically to make them stronger per bite for horses (concentrated)

Feedstuffs

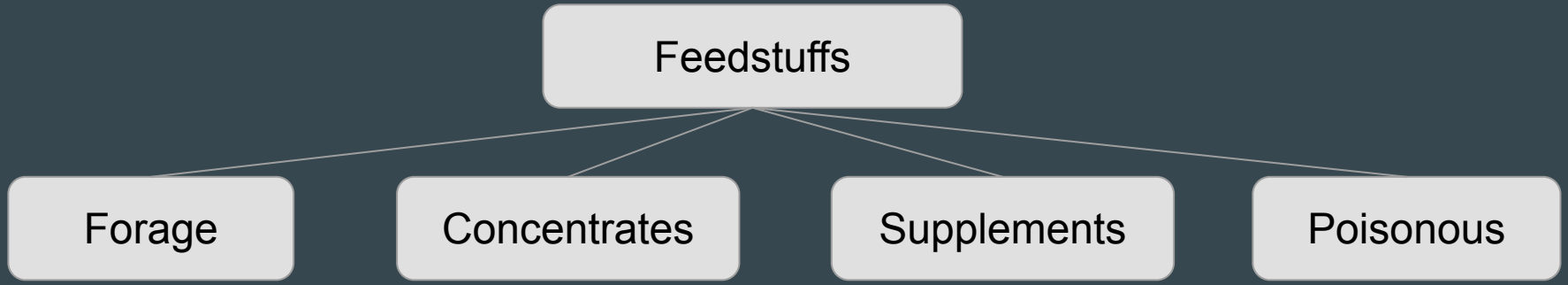
Concentrates are commonly referred to as “Grain”
Concentrates include the following

True Grain (Corn, Wheat, Barley etc) Manufactured or Processed

Concentrates (Sweet Feed, Pelleted or Extruded Feed, and Bagged feed)

Supplements are any feed additive used to balance or enhance a feeding program. These vary from plain salt to a prepared commercialized joint supplement and are designed to augment any feeding program which may have deficiencies

Poisonous Plants are ingested and therefore technically a feedstuff. They are often only ingested in the absence of quality feedstuffs.


Feedstuffs
Forage
Concentrates
Supplements
Poisonous

Forage Types

There are three types of forage
Legume and Grass

Legumes Have bacteria that live in their root nodules that make super strong hay. It creates higher protein, and calcium, and is best for harder keepers and pregnancy etc

Alfalfa, Clover

Grass forages are grasses

Bluegrass, Brome, Bermuda, Orchard, Timothy, Fescue

Cereal Grain Forage is classified as grass it comes from the stalky byproduct of other grains

Oat hay and Teff

Also byproducts such as Beetpulp are considered a source of fiber

Forage Feed Types

Forage comes in several types, fresh as grass, or in various dehydrated forms.

Round Bale

Square Bale

Hay Cubes

Hay Pellets

(Beetpulp shreds, pellets)

Horse Smarts

Brome Grass

Bluestem Grass

Bermuda Grass

Bahia Grass

Alsike Clover

Red Clover

White Clover

Alfalfa

Kentucky Bluegrass

Tall Fescue

Orchard Grass

Timothy

Forage Feed Types

Forage comes in several types, fresh as grass, or in various dehydrated forms.

Round Bale

Square Bale

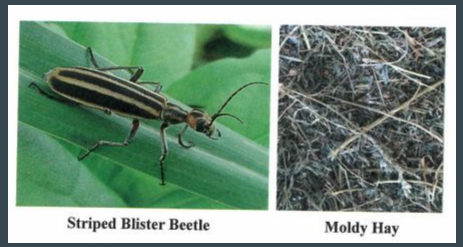
Hay Cubes

Hay Pellets

(Beetpulp shreds, pellets)

Forage Disease

Mold, Botulisim, Pests, Weeds



Mold: Hay is baled too wet, mold creates not only hay which cannot be digested by nonruminants but creates an exothermic process and becomes a barn hazard

Botulism:Botulism in horses is a devastating illness that occurs when they ingest toxins produced by the Clostridium botulinum bacteria. The resulting disruption of communication between nerves and muscles leads to debilitating and potentially deadly neuromuscular impairment. Without prompt treatment, botulism in horses is almost always fatal.

Pests: The Striped Blister Beetle when ingested poisons horses with cantharidin and can kill horses. Commonly seen in alfalfa

Feeding Forages

Ideal Hay:

Green, Free of dust or mold, fine stemmed, lots of leaves, no weeds or pests, not damp

Green - Vitamin A which can be sunbleached out

Fine stemmed - plant is harvested at early enough maturity before flowers form

Lefiness - Leaves contain more digestible carbohydrates and proteins than stems. Hay that is too dry will have the leaves fall off

Moisture - Hay should be baled at 17-20% moisture

Feeding Forages

Crude Protein - Level of amino acids and nitrogen in the forage

Dry Matter - amount of water in sample

Acid Detergent Fiber (ADF) - Non digestable fiber parts like stalks (You want a low number)

Relative Feeding Value - Quantifiable measure of the quality of hay and digestibility

Digestible Energy (DE) - Energy content of hay

Feeding Rates

All horses should receive 1.5-2% of their body weight in forage per day. Forage for this # can come from Hay, Grass, Commercially produced forages (cubes) ALSO complete feeds such as a senior feed have forage built in for horses who can't chew hay

Calculate the forage needed to feed these horses

Samuel : 250#

PC: 400#

Indy 650#

Annie 1000#

Claire 1300#

___

Concentrates

Concentrates are commonly referred to as “Grain”
Concentrates include the following

True Grain (Corn, Wheat, Barley etc) Manufactured or Processed

Concentrates (Sweet Feed, Pelleted or Extruded Feed, and Bagged feed)

Oats

Corn

Sorghum (Milo)

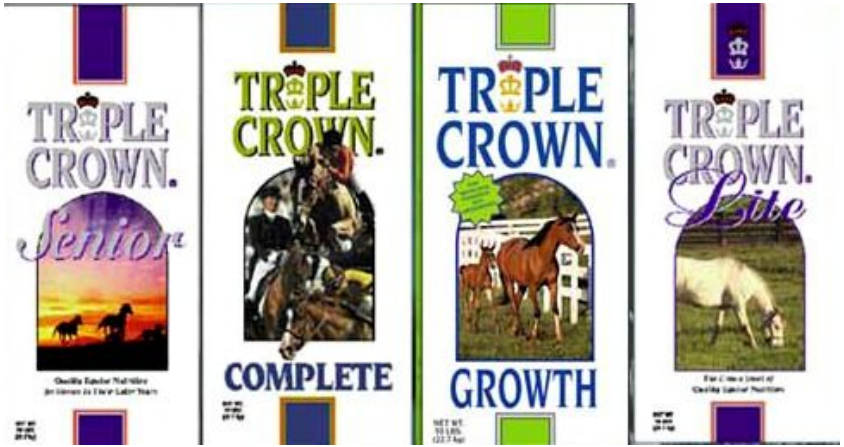
Soybean

Barley

Wheat

Commercially produced feeds

Reading Feed Labels



Commercial feed labels follow a format set by the Association of American Feed Control Officials, whose members are state and federal feed regulators. The label must include the following information:

the feed name
the purpose or use of the feed
a guaranteed analysis of the nutrients in the feed
a list of ingredients
directions for feeding and use
the name and address of the manufacturer
the net weight of the bag
a list of drugs if the feed is medicated
any precautions or warnings.

PURINA®
WELLSOLVE W/C

FOR HORSES

CAUTION: USE ONLY AS DIRECTED

GUARANTEED ANALYSIS

Crude Protein (MIN)	12.0000 %
Lysine (MIN)	0.7000 %
Crude Fat (MIN)	1.0000 %
Crude Fiber (MAX)	26.0000 %
Calcium (CA) (MIN)	0.8500 %
Calcium (CA) (MAX)	1.3000 %
Phosphorus (P) (MIN)	0.6000 %
Sodium (NA) (MIN)	0.1000 %
Sodium (NA) (MAX)	0.5000 %
Magnesium (MG) (MIN)	0.3000 %
Copper (CU) (MIN)	65.0000 PPM
Selenium (SE) (MIN)	0.6000 PPM
Selenium (SE) (MAX)	0.6100 PPM
Zinc (ZN) (MIN)	240.0000 PPM
Vitamin A (MIN)	5000.00 IU/LB
Vitamin E (MIN)	150.00 IU/LB

INGREDIENTS

Dehydrated Alfalfa Meal, Wheat Middlings, Ground Soybean Hulls, Dried Beet Pulp, Ground Oat Hulls, Dicalcium Phosphate, Calcium Carbonate, Biotin, DL-Methionine, Locust Bean Gum, Salt, L-Lysine, Magnesium Oxide, D-Alpha-Tocopheryl Acetate, L-ascorbyl-2-polyphosphate, Vitamin A Acetate, Thiamine Mononitrate, Cholecalciferol, Calcium Pantothenate, Nicotinic Acid, Vitamin B-12 Supplement, Zinc Oxide, Copper Sulfate, Calcium Iodate, L Threonine, Choline Chloride, Riboflavin, Natural Mixed Tocopherols (a Preservative), Citric Acid, Cobalt Carbonate, Ascorbic Acid, Rosemary Extract, Lecithin, Ferrous Carbonate, Manganous Oxide, Anise Flavor, Fenugreek Flavor, Sodium Selenite.

14% Ground Oat Hulls 16% Ground Soybean Hulls

RUMINANT MEAT AND BONE MEAL FREE

35TD-RHI-W 13

DIRECTIONS

Guideline of pounds of Wellsolve W/C to feed daily for weight loss along with hay*

	HORSE BODY WEIGHT								
Lifestyle	400	600	800	1000	1200	1400	1600	1800	2000	2200
Maintenance	2.0	3.0	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.0
Performance- Light Work**	3.0	4.0	5.0	6.0	6.5	7.5	7.5	7.5	8.0	8.0
Breeding	3.0	4.0	5.0	6.0	6.5	7.5	7.5	7.5	8.0	8.0

See Reverse Side For Directions for Use and Precautionary Statements

8 83576 00456 2

PURINA MILLS, LLC

PO BOX 66812, ST. LOUIS, MO 63166-6812

FEED QUESTIONS? PLEASE CALL 1-800-227-8941

Net Weight 40 lb (18.14 kg)

0066925

PURINA® WELLSOLVE W/C

35TD

DRAFT

Distribute Homework

Schedule next session

Triple Crown June Meeting:

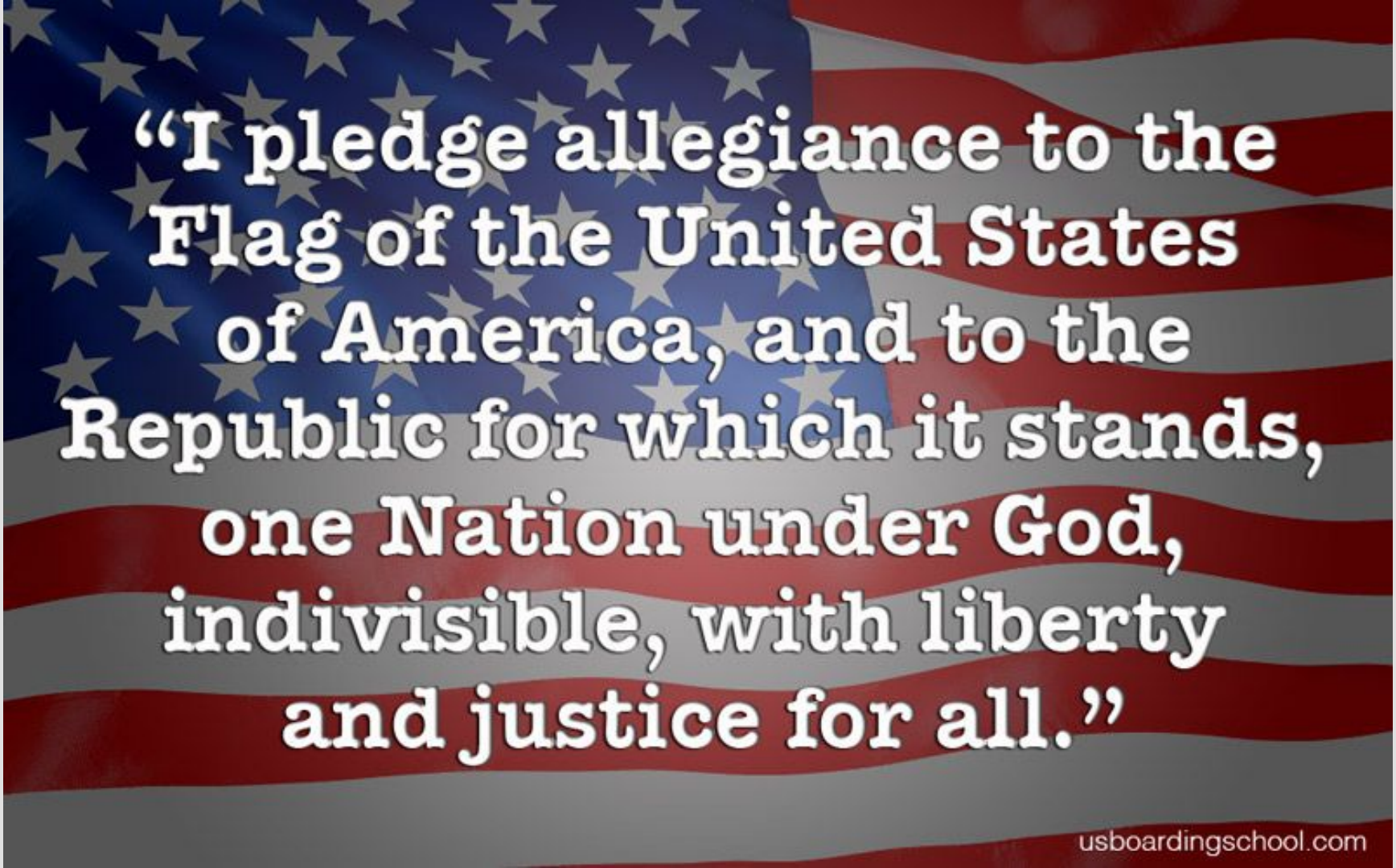
Call to order:

Led By Our President:
Nikki Novak

Changing of the Guard

Pledge Of Allegiance:

Led By:
CJ Roehl


“I pledge allegiance to the Flag of the United States of America, and to the Republic for which it stands, one Nation under God, indivisible, with liberty and justice for all.”
usboardingschool.com

4-H Pledge:

Led By:
Sophie Roehl

I pledge

my *head* to clearer thinking,
my *heart* to greater loyalty,
my *hands* to larger service,
my *health* to better living,
for my club, my community,
my county, and my world.

Roll Call:

Led By Our Secretary:
Kate Hudson

Reading Of The Minutes:

Led By Our Secretary:
Kate Hudson

#Old News

Congrats to our next batch of qualified riders/handlers/drivers!

Meghan Peterson and Summer and Missy

Nikki Novak and Annie

Peyton Freeman and Minimus

Kate Hudson and Samuel

David Hudson and Samuel

#Old News

COSTUMES!!

Mac

New Business:

Led By:
Lisa Beckwith

New Business:

Sponsorship Forms

Horse Show Hero (NOT TCC Sponsors)

4-H Horse Show Hero Support Levels:

1. $150 and less total in donations will allow the 4-Hers to be entered into prize drawings

2. $225 in donations will drop the entry fee to $75

3. $300 or more in donations will drop the entry fee to $0 for one horse

4. SENIORS ONLY: $500 or more in donations will drop the entry fee to $0 for two horses

Fundraising

Edgehill Concessions:

July 2

August 27

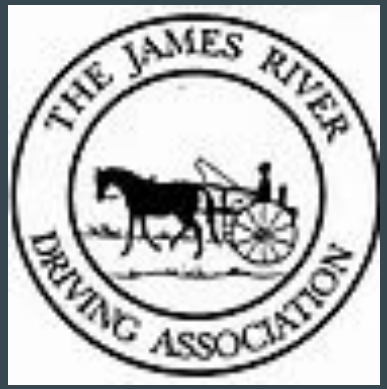
October 8

November 5

Aria Farm

June 3

Community Service



State Horse Show Entries!!

Entry forms are here tonight for your convenience

All Forms must be returned to the July club meeting (Or sooner if not available) If you have never attended state please ask for help with forms!

July club meeting is the mandatory rider orientation so we need every parent and 4-h kid attending. If you are not available we can discuss another date

This Month's Important Dates:

June

1- TCC Club Meeting

3- Aria Farm Concessions

19-23ish - Virginia 4-H State Congress

18-23 - Lisa and Katie Vacation

July ? - TCC Club Meeting (Scheduled for 6th but open to changes due to mandatory orientation/holiday week)

Call to adjourn:

Led By Our President:
Claire Edwards

Thanks For Attending!