

SAMPLE LESSON PLAN - UNMOUNTED - NUTRITION #4

TOPIC: Which Feeds Provide the Six Classes of Nutrients?

Level: C2 or C3

Time: 30 minutes Class Size: 5

Age: 12 - 14

EQUIPMENT: 1 box with enclosed feeds and nutrients
2 bags M&M
5 clear plastic cups labeled with students' names

PERSONNEL: Instructor

REFERENCES: NZ2, 198-207; Top Form, 87-102; Nutrition, 6-14

I. OBJECTIVES: To understand which feeds contain which nutrients.

II. ACTIVITY

Each student is asked to name a class of nutrients. When complete, post enclosed sheet where it can be seen. In turn, each student pulls a nutrient or feed name from the box. She is asked to identify its "nutrigory" from the six classes. Each correct answer is worth one M&M (to be collected in the clear cup). If the item falls into more than one nutrigory, the student gets an M&M for each correct answer. (See instructor guide sheet.) If the item contains protein, and the student can identify the percentage of usable protein, the correct answer (within 3%) wins three M&M's.

III. Discussion

- A. How did horsemen living 100 years ago decide what to feed their horses
- B. How do most horsemen you know decide what to feed?
- C. Do you think that feeding is a science or an art?

IV. Further Inquiry

- A. What might happen if a horse is fed more vitamins and minerals than he needs?
- B. What might happen to a brood mare fed double the recommended protein during the last four months she is in foal? Could protein-overfeeding affect the foal after it is born?

SCORING NUTRIGORY GAME

Classify Vitamins and minerals correctly: 1

Classify feeds, each nutrigory correct: 1

Identify percentage of usable protein within 3% of average: 3

Classes of Nutrients

Water
Minerals
Carbohydrates
Proteins
Fatty Acids
Vitamins

Nutrient/Feed List

Manganese	Niacin	Zinc
Oats	Panthenic Acid	Selenium
Corn	Choline	Cottonseed Meal
Barley	Folacin	Safflower Oil
Sweet Feed	Biotin	Grass Pasture
Pellets	Paba	Molasses
Water	Myo-inostol	Sunflower Oil
Orchardgrass	Calcium	Salt
Timothy	Phosphorus	Linseed Oil
Alfalfa	Sodium	Source
Mixed hay	Chlorine	Wheat Germ Oil
Clover	Magnesium	Calf Manna
Soybean Meal	Potassium	Bran
Corn Oil	Sulphur	Carrots
A D E K	Iron	Milo
Thiamine	Copper	
Riboflavin	Iodine	
B6 B12	Cobalt	

Instructor's Guide Sheet

Feeds/Vitamins, Minerals

Name	Protein	Carbo	Vitamins	Minerals	Fats	Water
Alfalfa	12.8%	X	X	X	O	O
Barley	10.0%	X	X	X	TR	O
Bran	13.3%	X	X	X	O	O
Calf Manna	VAR	X	X	X	X	O
Carrots	Trace	TR	X	O	O	O
Clover	9.2%	X	X	X	TR	O
Corn	6.7%	X	X	X	TR	O
Corn Oil	35.0%	O	O	O	X	O
Cottonseed Meal	34.0%	O	O	O	X	O
Grass Pasture	VAR	X	X	X	O	O
Linseed Oil Meal	31.0%	O	O	O	X	O
Milo	11.0%	X	X	X	TR	O
Mixed hay	7.2%	X	X	X	O	O
Molasses	0.0%	O	O	O	O	O
Oats	9.4%	X	X	X	TR	O
Orchardgrass	3.7%	X	X	X	O	O
Pellets	VAR	X	X	X	TR	O
Safflower Oil	30.0%	O	O	O	X	O
Salt	0.0%	O	O	X	O	O
Source	0.0%	O	X	X	O	O
Soybean Meal	42.0%	O	O	O	X	O
Sunflower Oil	30.0%	O	O	O	X	O
Sweet Feed	VAR	X	X	X	TR	O
Timothy	6.1%	X	X	X	O	O
Water	0.0%	O	O	O	O	X
Wheat Germ Oil	35%	O	O	O	X	O

Vitamins

A D E K
 B12 B6
 Biotin
 Choline
 Folacin
 Myo-Inostol
 Niacin
 PABA
 Panthenic Acid
 Riboflavin
 Thiamin

Minerals

Calcium
 Chlorine
 Cobalt
 Copper
 Iodine
 Iron
 Magnesium
 Manganese
 Phosphorus
 Potassium
 Selenium
 Sodium
 Sulphur
 Zinc