

Rabbit Nutrition and Diseases

PRESENTATION BY: EBONY LUCAS

NUTRIENTS

- WATER
- PROTEIN
- CARBOHYDRATES
- FATS
- MINERALS
- VITAMINS



WATER

- NEEDED FOR ABSORPTION OF NUTRIENTS
- MAKES THE SYSTEMS FUNCTION PROPERLY
- MOST IMPORTANT NUTRIENT
- RABBITS SHOULD HAVE UNLIMITED CLEAN FRESH WATER DAILY

PROTEIN

- BUILDING BLOCKS OF PROTEIN ARE CALLED AMINO ACIDS
- RABBITS CAN NOT PRODUCE THESE THEY MUST BE PART OF THEIR DIET
- PROTEIN IS A MAJOR COMPONENT OF ANIMAL TISSUE
- WHAT BRAND AND WHAT PERCENT PROTEIN IS IN YOUR FEED?

CARBOHYDRATES

- THESE ARE WHAT GIVES YOUR RABBIT ENERGY
- STARCH AND CELLULOSE ARE THE TWO MOST IMPORTANT CARBOHYDRATES
- TOO MANY CAN RESULT IN ENTERITIS

FATS

- ALSO A SOURCE OF ENERGY
- MAKES FOOD TASTIER TO YOUR BUNNY
- HELPS FOOD PASS THROUGH THE DIGESTIVE SYSTEM EASIER
- PROMOTES SHINY RABBIT FUR

MINERALS

- SALT
- CALCIUM
- PHOSPHORUS
- MAGNESIUM
- POTASSIUM
- COBALT
- COPPER
- IODINE
- MANGANESE
- ZINC

VITAMINS

- ORGANIC COMPOUNDS ESSETIAL FOR GROWTH, TISSUE MAINTENANCE AND METABOLISM
- RABBITS CAN NOT PRODUCE THESE THEY MUST BE IN YOUR FEED
- EXCESS VITAMINS CAN BE TOXIC TO YOUR RABBIT



	WEIGHT	Oz. OF FEED
NORMAL GROWTH (DOES OR BUCKS)	4-9	5-6
MAINTENANCE (DOES OR BUCKS)	5 10 15	3 4-6 7
PREGNANT DOES	5 10 15	4 4-6 9
LACTATING DOE	5-15	FULL FEED

FEED TAG

- **Professional 16 % 80034AAA**
- **Professional Rabbit 16 is a complete feed for growing and breeding rabbits.**

A **16% protein**, alfalfa-based rabbit feed specially fortified and intended for use by the commercial breeder, show competitor or those who just enjoy rabbits.

Features & Benefits

- Contains Sarsaponin (Yucca) to aid in reducing ammonia levels
- Contains direct fed microbial to aid in digestibility and nutrient availability
- Amino acid-balanced for improved growth and fur quality. Alfalfa-based formula for consistent palatability and high quality fiber
- Feed includes salt to eliminate need for salt spoons which may corrode cages.

Guaranteed Analysis

Crude Protein.....	Min. 16.0%
Crude Fat.....	Min. 3.0%
Crude Fiber.....	Min. 17.5%..... Max. 21.0%
Calcium (Ca).....	Min. 0.7%Max. 1.2%
Phosphorus (P).....	Min. 0.4%
Salt (NaCl).....	Min. 0.6%..... Max. 1.1%
Vitamin A.....	Min. 2,200 IU per Pound

- **Ingredients**
Dehydrated Alfalfa Meal, Dehulled Soybean Meal, Wheat Middlings, Soybean Hulls, Cane Molasses, Vegetable Oil, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Fermentation Product Dehydrated, Yucca Schidigera Extract, DL Methionine, Calcium Carbonate, Salt, Zinc Oxide, Vitamin E Supplement, Zinc Polysaccharide Complex, Copper Sulfate, Manganous Oxide, Ferrous Sulfate, Manganese Polysaccharide Complex, Copper Polysaccharide Complex, Sodium Selenite, Iron Polysaccharide Complex, Vitamin A Supplement, Niacin Supplement, Vitamin B12 Supplement, Menadione Sodium Bisulfite Complex, Vitamin D3 Supplement, Biotin, Calcium Pantothenate, Riboflavin Supplement, Magnesium Polysaccharide Complex, Calcium Iodate, Thiamine Mononitrate, Pyridoxine Hydrochloride, Cobalt Carbonate, Folic Acid, Choline Chloride.

- Pen Pals Feed

Pen Pals 18%

- **Professional Rabbit 18 is a complete feed for growing and breeding rabbits.**

An 18% protein, alfalfa-based rabbit feed specially fortified for rabbits requiring higher nutritional levels in the feed. Types of high nutritional needs include does producing 6 or more litters annually, show rabbits, fryers grown for maximum rates of gain and feed efficiency, Angora and other fiber-producing breeds, and rabbits in stressful environments.

Features & Benefits

- Contains Sarsaponin (Yucca) to aid in reducing ammonia levels
- Contains direct fed microbial to aid in digestibility and nutrient availability
- Amino acid-balanced for improved growth and fur quality. Alfalfa-based formula for consistent palatability and high quality fiber
- Feed includes salt to eliminate need for salt spoons which may corrode cages.

Guaranteed Analysis

Crude Protein.....	Min. 18.0%
Crude Fat.....	Min. 3.0%
Crude Fiber.....	Min. 16.5%Max. 19.8%
Calcium (Ca).....	Min. 0.7%Max. 1.2%
Phosphorus (P).....	Min. 0.5%
Salt (NaCl).....	Min. 0.6%Max. 1.1%
Vitamin A.....	Min. 2,500 IU per Pound

Ingredients

Dehydrated Alfalfa Meal, Dehulled Soybean Meal, Wheat Middlings, Soybean Hulls, Cane Molasses, Vegetable Oil, Lactobacillus acidophilus Fermentation Product Dehydrated, Lactobacillus casei Fermentation Product Dehydrated, Bifidobacterium thermophilum Fermentation Product Dehydrated, Enterococcus faecium Fermentation Product Dehydrated, Yucca Schidigera Extract, L-Lysine, DL Methionine, Calcium Carbonate, Calcium Phosphate, Salt, Zinc Oxide, Vitamin E Supplement, Zinc Polysaccharide Complex, Copper Sulfate, Manganous Oxide, Ferrous Sulfate, Manganese Polysaccharide Complex, Copper Polysaccharide Complex, Sodium Selenite, Iron Polysaccharide Complex, Vitamin A Supplement, Niacin Supplement, Vitamin B12 Supplement, Menadione Sodium Bisulfite Complex, Vitamin D3 Supplement, Biotin, Calcium Pantothenate, Riboflavin Supplement, Magnesium Polysaccharide Complex, Calcium Iodate, Thiamine Mononitrate, Pyridoxine Hydrochloride, Cobalt Carbonate, Folic Acid, Choline Chloride

Acceptable Treats

Timothy Hay – Fiber and Protein can help with digestion

Black Oil Sunflower Seeds- Help with digestion and give coats a glossy sheen

Oats - High in carbohydrates and dietary fiber which (may cause weight gain)

Flax Seeds- Full of nutrients, vitamins, minerals, dietary fiber and high in omega-3 fatty acids. They are great for the coat.

Basil- Contains Iron, Calcium, and Vitamin A

Mint- contains Vitamin A, and Magnesium

Parsley-Contains Vitamin A and C

Cilantro- Contains Vitamins A and C

Beware of feeding

Large amounts of Fruits

Apples, Banana Chips, and Papaya should be fed in moderation

Apple Seeds may cause diarrhea

Kale is rich in vitamins A and C but also contains oxalates which can be toxic

Broccoli- Contains Vitamin A and D but can create gas and diarrhea

DISEASES:

- KNOW HOW TO ID DISEASE BY SIGHT, DESCRIBE SYMPTOMS, CAUSE AND TREATMENT. (4 PTS)

Malocclusion/Buck or Wolf Teeth



- Condition where the rabbit has overgrown incisors
- Genetic condition which can be passed to offspring

Teeth need clipped regularly by an adult or Vet so the rabbit can eat.



BROKEN TEETH/TOENAILS

- ARBA DISQUALIFICATION
- MOST CASES TEMPORARY
- TEETH GROW APPROX 2mm PER WEEK
 - RABBITS HAVE 28 TEETH
 - CHECK FOR TOOTH ROOT
- CHECK THE DISTAL PHALANX

SLOBBERS

- EXCESSIVE SALIVATION
- CAN BE CAUSED BY MALOCLUSION
- RABBITS WITH MALOCLUSION ARE A DISQUALIFICATION
- TEMPORARY CASES IN EXTREME HEAT

DEAD TAILS

- ARBA DISQUALIFICATION
- TAIL IS AN EXTENSION OF THE SPINE
- WILL STILL HAVE HAIR
- TAIL WAS USUALLY FRACTURED OR DISLOCATED.
- LACK OF A TAIL IS A DQ

SNUFFLES

- SYMPTOMS INCLUDE DISCHARGE FROM NOSE AND SNEEZING
- INCLUDES MATTING ON PAWS FROM RUBBING NOSE
- EXTREMELY CONTAGIOUS
- PERMANENT CONDITION
- BACTERIAL INFECTION
- QUARANTINE IMMEDIATELY
- SYMPTOMS MAY GO AWAY AND REAPPEAR WHEN THE ANIMAL IS STRESSED



AUTOMATIC
DISQUALIFICATION
AUTOMATIC
REJECTION FROM FAIR

Wry Neck



- Head Tilts to one side severely
- Usually the result of an infection of the middle ear
- Treatment requires long term antibiotic treatment
- Antibiotics are not always successful
- Disrupts balance and rabbit will begin to roll over.

WEEPY EYE

- BACTERIAL INFECTION OF THE EYE
- DISCHARGE THAT PROGRESSIVELY WORSENS
- TREATABLE WITH OPHTHALMIC ANTIBIOTIC OINMENTS



VENT DISEASE/RABBIT SYPHILIS

- COMMON REPRODUCTIVE DISEASE OF RABBITS
- EXTERNAL GENITALIS SORES OR SCABS
- INFLAMED AND REDDENED VENT
- A FOUL ODOR USUALLY ACCOMPANIES THE INFECTION.
- MAY ALSO SPREAD INTO SCABBING ON THE NOSTRILS, AROUND EYES AND EVEN THE DEWLAP
- LITTLE OR NO BREEDING ACTIVITY
- DECLINE IN PREGNANCIES
- CAN BE TREATED WITH VET ANTIBIOTICS

MANGE

- FUR MITES – EXTERNAL PARASITE
- REFERRED TO AS WALKING DANDRUFF
- PATCHES OF FUR LOSS
- SCRATCHING
- TREATABLE WITH CAT FLEA POWDER...



EAR MITES/EAR CANKER

- CAUSED BY A PARASITE
- SPREADABLE FROM ONE ANIMAL TO ANOTHER
- TREATABLE WITH MITE DROPS OR MINERAL OIL



MASTITIS

- INFECTION OF THE MAMMARY GLAND IN A LACTATING DOE
- DOE WILL STOP EATING
- SWOLLEN MAMMARY GLAND
- ELAVATED TEMPERATURE
- TREATABLE WITH ANTIBIOTICS
- DECREASED WITH GOOD SANITATION

MASTITIS



Abscess

- Abscesses can begin with a cut or abrasion which is the entrance for bacteria
- A puss filled sac or lump will grow under the rabbits skin
- Quarantine so that the infection does not spread
- Abscess will need to be lanced and drained.
- Antibiotic cream applied.
- Vet can be consulted for antibiotic therapy.



Sore Hocks

- Sores on the bottoms of a rabbits feet/hocks.
- Secondary Infections are an issue
- Prevent by using resting boards in cages with wire floors and keeping cages clean.
- Treat with topical Antibiotic creams



Fleas, Ticks and Ringworm



Fleas, Ticks, and Ringworm

- Ringworm is a fungal infection that can be passed between animals and humans
- Protect yourself when treating infected animals.
- Iodine is effective for individual rabbits.

PINWORMS

- INTERNAL PARASITE
- SMALL WHITE WORMS FOUND IN RABBIT POOP
- TRANSMITTED WHEN DRY EGGS BECOME AIRBORN AND RABBITS EAT CONTAMINATED FOOD OR WATER



WORMS

- ROUNDWORMS
- TAPEWORMS
- FLUKES

COCCIDIOSIS

- **INTESTINAL DISORDER RESULTING IN DIARRHEA**
- **GOOD SANITATION IS THE KEY TO PREVENTION**
- **RABBITS CAN BECOME INFECTED THROUGH CONTACT WITH THEIR OWN MANURE**
- **CAUSED BY A PROTOZOAN PARASITE**
- **TREATABLE WITH ANTIBIOTICS**