

WEEK ONE

RABBITS FEEDING AND NUTRITION

I. INTRODUCTION.

- A. Rabbits are monogastric (single stomach), herbivorous (eat plant material) animals.

- B. They need nutrients (such as proteins, carbohydrates, lipids or fats, minerals and vitamins) in specific amounts to grow and perform at their best.
 - 1. Feed is very important when raising rabbits, because it accounts for about 75 percent of your production costs.
 - 2. In the wild, rabbits eat a variety of grains, greens, roots, and roughages.
 - 3. Most domestic rabbits eat a pelleted feed made to meet their nutritional needs.
 - a. Rabbit pellets consist mostly of ingredients from plants (primarily alfalfa meal and wheat middlings).
 - b. Pelleted rabbit feeds are available from many companies and are easy to feed and store.

- C. Some rabbit raisers prefer to formulate (mix) their own rabbit diet.
 - 1. Rabbit feeds can be prepared from many readily available ingredients.
 - 2. The following feedstuffs are commonly used in diets for rabbits.
 - a. Green feeds -- growing plants such as grasses, weeds and leafy vegetables.
 - b. Root crops -- carrots, sweet potatoes, turnips and beets.
 - c. Cereal grains -- oats, wheat, barley,, grain sorghums, corn and rye.

- d. Milled feed -- bran, middlings and shorts.
- e. Hays -- alfalfa, clover, lespedeza and timothy.
- f. Protein supplements -- soybean meal, peanut meal and dried milk products.
- g. Salt.

II. FEEDING.

- A. Feeding has a strong influence on breeding, fertility, conception, kindling, nursing, growth, and resistance to disease.
 - 1. Young rabbits begin to consume feed when they are approximately three weeks of age.
 - 2. A well balance, palatable ration should be available to them at all times in amounts which will adequately supply their nutritional needs.
 - 3. Special "milk supplements" are not needed.
 - 4. The following table shows the amounts of feed which should be fed daily for young rabbits and other rabbits in various stages of the life cycle.

<u>Age or Condition</u>	<u>Amount to Feed Daily</u>
Growing rabbits (After weaning)	3 to 4 ounces
Resting Does	2 to 5 ounces
Does in Gestation	4 to 8 ounces
Nursing Does (until litter is 3 weeks of age)	6 to 8 ounces
Does with litter of 7 or 8 (3 to 8 weeks)	1 to 2 pounds

- B. Feed requirements for rabbits will vary with individual animals.
1. Proper amounts should be fed to keep the animal in good physical condition without allowing it to become overly fat.
 2. Fat rabbits should have feed reduced; thin rabbits should have feed increased.
 - a. The most important thing is to feed only fresh, high quality pellets.
 - (1) The way a pelleted feed is put together is important.
 - (2) The pellets should be firm and not broken into small particles (fines).
 - (3) Rabbits tend to only eat the solid pellets and will not consume the fines.
 - (4) Look at the end of the pellet.
 - (5) The firm pellets will have squarer ends.
 - (a) If the ends of the pellet are extremely ragged, this may indicate a softer pellet which will produce a greater amount of waste due to fines.
 - b. Feed every animal over 3 weeks of age one small handful of legume hay every day.
 - c. Pellets or hay should never be fed if moldy.
 3. **Some special feeding of nursing does is sometimes required.**
 - a. The doe's ration is normally reduced to one-half the usual amount on the day she kindles.
 - b. From the second to the seventh day, the amount of feed is gradually increased daily.
 - c. After the first week, feed should be kept before the nursing doe and her litter at all times.
 - d. When hay, greens, or root crops are fed, the amount of grain can be reduced.

- e. When feeding greens, introduce small amounts at a time to rabbits, increasing total amount fed gradually to prevent diarrhea.
- f. Salt can be provided either by mixing into the feed at one percent or in the form of commercial salt cakes.
- g. Vitamins.
 - (1) Vitamin A is available from root crops and hay.
 - (2) Vitamin B is found in greens and crude roughage.
 - (3) It is also synthesized in the rabbit's cecum and is obtained by the rabbit's re-ingesting its droppings.

III. COPROPHAGY (ka-prof-a-gee).

- A. Rabbits are unique in that they produce two types of fecal material, a hard, dry fecal pellet and a soft of "night" feces.
 - 1. The soft feces are produced in the cecum (a pouch located between the small and large intestines) and are consumed by the rabbit directly from its anus as they are excreted.
 - 2. This practice is called coprophagy or cecotrophy and usually takes place when the animal is alone.
- B. Some feces contain a mucus coating and are excreted in a cluster rather than as single pellets as with hard feces.
 - 1. Coprophagy is a natural process which provides the rabbit with B-vitamins which are synthesized (produced) by bacteria in the cecum and excreted in the soft feces.
 - 2. Night or soft feces are much higher in protein and water and lower in fiber than hard feces.

IV. KEEP THESE POINTS IN MIND WHEN FEEDING RABBITS

- A. Breeding does and bucks should be kept in good condition. Many breeding failures are caused by does being overweight. In general, it is best to have a doe a little lean rather than a little fat.
- B. Pregnant does and lactating does require more feed. Consult an experienced breeder and/or a rabbit feed salesperson to help determine the amount of increase needed.
- C. Reduce the amount of feed given to a doe 24 to 48 hours before she kindles to help prevent caked mammary glands. After kindling gradually increase to full feed in 7 days.
- D. Growing young rabbits should have as much feed as they can eat; however, DO NOT let stale or mouldy feed accumulate in the feeder.
- E. Provide only as much feed as your rabbits will eat between feedings; any excess left in the feeder is usually wasted.

V. TIPS TO REMEMBER WHEN FEEDING RABBITS

- A. Use a good quality, commercially prepared, pellet rabbit feed.
- B. Use a suitably sized container to measure you feed. (A 6-ounce tuna fish can holds about 5 ounces of pellets if shaken off level).
- C. To lower feed costs, feed a small amount of good, clean hay every day.
- D. DO NOT feed young rabbits cabbage, lettuce, or green grass.