

COMMON HEALTH ISSUES IN RABBITS

PARASITES

Fleas, ticks and ear mites are the most common parasites in rabbits, cats and dogs. Fleas and ticks are easy to see with the naked eye, while ear mites can only be seen with an endoscope. Scratching, head shaking and dark brown almost black-looking residue in ears are all indicators of ear mites. Get it treated, as ear mites can cause ear infections, which can result in headtilt. Ticks are easily removed by hand, if one knows how to do it. Make sure no body parts are left behind upon removing the tick. Fleas are also easily treated but not with any powder as it may cause health issues, like long term damage to the nervous system.

RED URINE

Red urine is no cause for alarm. Red urine is very common in rabbits and if you are not sure if there is blood, a dipstick test can easily determine if there is actual blood in the urine. So next time you see red, don't let it get to your head. Stay calm and make sure it's the norm.

BLADDER SLUDGE

Too much calcium and protein rich foods can cause bladder sludge. White, cloudy urine is a definite give away for bladder sludge. In severe cases the urine can become toothpaste like and kidney and bladder stones can develop.

MALOCCLUSION

Rabbit's teeth grow continuously through a rabbit's life. If teeth are not properly aligned and wear unevenly they become overgrown. Sometimes molar spurs occur, which are not visible from the outside, unless you get your bunny to say "Aaaah." Molar spurs are painful and can cause abscess in the mouth, making it very painful if not impossible for bunny to eat. A skilled veterinarian can trim the teeth.

OBESITY

Obesity is a real serious and too often of a problem in pet rabbits. The biggest factor is the wrong diet, too rich in carbohydrates and protein, and no exercise. Do not put your bunny on a strict abrupt diet. Gradual changes are best to help your bun lose weight. Obesity is the reason for fatty liver disease and heart problems. A FAT RABBIT IS A DEAD RABBIT. Make sure your rabbit gets enough exercise, a lot of fiber, and a diet low in carbohydrates.

HAIRBALLS AND GI STASIS

It is no longer thought that hairballs are the primary condition, but rather occur secondary to gut stasis. If a rabbit is on a poor low-fiber diet then it can cause the hair to get stuck in the stomach and can cause slow down of food passing through. A well-balanced high fiber diet (with lots of hay and good, fresh veggies) would prevent hair from getting lodged in the rabbit's stomach.

Exercise is also a very important factor for keeping the rabbits “plumbing” in good working order. Exercise is not only good for the rabbit from an emotional standpoint but also for the health.

HEAT STROKE

Rabbits can cope with the cold better than the hot climate. This is a very important factor when planning their environment. They should be in the shade, not exposed to direct sunlight. Even an indoor rabbit must be placed in a suitable area; in front of a window is not a good place. Signs of a heat stroke are panting, weakness, depression, in-coordination and convulsions. Apply first aid by putting a cold wet towel around your bunnies’ ears, while you are bringing him/her to the vet.

FRACTURES

Rabbits easily fracture their legs. Their habit of stamping can cause broken or fractured bones in feet or legs. If not handled properly a struggling rabbit is so strong that he/she can break his/her own back. Teach children and yourself on how to properly pick up and hold a rabbit.

MYXOMATOSIS

Myxomatosis is a viral infection and was introduced deliberately to Australia around the 1950s. The disease gradually spread across Europe over to Great Britain where it is now endemic in the wild rabbit population. It is deadly, but not very common in the US.

There are so many more diseases and health issues in rabbits that we cannot even scratch the surface of it all. It is strongly advised to read books and be alert and aware of your rabbit’s normal and not so normal habits. Rabbits are Academy Award winning actors. That is due to them being prey animals in the wild, where a sick rabbit would easily be spotted and hunted. In order not to get eaten, they act as if nothing is wrong, which can make it much more difficult to spot if “Thumper” is not feeling well. Be in tune to your rabbit and watch for the tiniest signs. If your bun has never spent much time in his/her litter box, other then using the bathroom and all of a sudden is hanging out there from morning until night, watch out. This could be a sudden hint.



401 Headquarters Dr. Suite 206
Millersville, MD 21108
Ph 410.987.8300 Fax 410.729.1434

MICHAEL E. ROMMEL, VMD
TIMOTHY S. TRIGILIO, DVM
KATHERINE M. LANING, DVM

RABBIT CARE

DIET

Rabbits living in the wild have adapted to eating grasses and roughage that most other animals can't digest. This must be taken into account when feeding your pet rabbit. The commonly available rabbit pellets have been developed to provide nutrition to fast-growing, young bunnies for use in laboratories or for meat. For the adult pet bunny, the most important food to feed is hay. I prefer owners feed loose, long strands of hay, as opposed to hay cubes or chopped hay. The fiber in hay is important: to promote normal digestion, to prevent diarrhea, for proper teeth growth, and to prevent hairballs. Young rabbits (up to 8 months of age) should have access to fresh water and pellets free choice. Older rabbits (older than 8 months) should have water and hay available at all times but should have limited amounts of pellets according to the following chart:

2-5 pounds	1/8 cup daily	8-11 pounds	1/2 cup daily
5-8 pounds	1/4 cup daily	11-15 pounds	3/4 cup daily

In addition, fresh foods can be offered such as: carrots, beet tops, dandelion greens, escarole, romaine lettuce (not iceberg lettuce), parsley, clover, cabbage, broccoli (florets, stems and leaves), green peppers, brussel sprouts, basil, bok choy and spinach. It is important to start out gradually when trying these foods. Only add one new food per week and monitor for diarrhea. The total amount of these foods shouldn't exceed one measuring cup per 5 pounds body weight per day.

Treat foods can be given but not exceeding 1 level tablespoon per 5 pounds of body weight per day. These would include: strawberries, papaya, pineapple, apple, pear, melon, raspberries, peach, pear, or dried whole grain bread.

One important and unusual component to rabbit nutrition is called "night droppings". During certain times of the day, usually in the evening, you may observe your pet licking the anal area and actually eating some of his droppings. These cecal pellets are an important part of rabbits' diet and are softer, greener, and have a stronger odor than the normal hard, dry, round waste droppings.

HOUSING

Metal cages may be used with wire flooring of 14 gauge wire (1" x 1/2" square openings) but a solid floored area should be provided to prevent sore hocks and allow an area for resting. Solid floored cages can be covered with towels (as long as your bunny doesn't eat towels), carpeting, wood, or synthetic fleece (found in fabric stores). This synthetic fleece is convenient because it can be machine washed and won't disintegrate into long strands if it is chewed. Do not use aquaria or other solid-walled cages because proper air circulation is important to prevent respiratory diseases.

Rabbits can be housed indoors or outdoors but care must be taken when housing rabbits outdoors. Bunnies are very sensitive to high humidity and heat. Outdoor rabbits should have some sort of cooling if temperatures rise above the mid 80's. A gallon jug frozen solid with ice can provide cooling for a rabbit that cannot be brought into air-conditioning.

Indoor rabbits should be kept monitored initially to make sure they don't chew on electrical cords or carpeting. Rabbits can be litter box trained relatively easily. Initially you need to keep your pet in a small area, either in a cage or a blocked off section of the room and place a litter box in the corner (try to pick a corner your pet has already used). It is helpful to put some of the droppings in the box. You can reward your bunny with one of the treat foods listed whenever the box is used successfully. Don't worry if your bunny sits for extended periods in the box unless he is soiling himself. It is best to use pelleted paper or other organic products in the litter pan. These are non-toxic and digestible if eaten, they're easier to clean up than wood shavings or clay litter, they control odor better and are compostable. Examples include: Care Fresh, Yesterday's News, Critter Litter, Mountain Cat Kitty Litter and Harvest Litter.

COMMON MEDICAL PROBLEMS

Females: The leading cause of death in the female rabbit is a cancer of the uterus called adenocarcinoma. This is a malignant disease that often spreads to other parts of the body before it is diagnosed. This cancer is preventable by spaying your bunny prior to 2 years of age. This surgery involves removing the ovaries and uterus and helps prevent the occurrence of breast cancer later in life.

Males: Some male bunnies (especially the dwarf varieties) can become extremely aggressive when they reach sexual maturity. They may bite their owners and other rabbit cagemates excessively, and start to spray urine outside their regular litter box area. The urine may develop a strong and unpleasant odor due to the male hormones. The best solution to these behavioral problems is neutering any time after 5 months of age.

Overgrown Teeth: Rabbits' teeth grow constantly throughout their lives. If the incisors (front teeth) or molars (cheek teeth) don't line up properly overgrowth can occur. The overgrown "spikes" can cut into the tongue or cheek and cause pain, infections, loss of appetite, excessive drooling, etc. The incisors can be easily trimmed by our veterinarian during an office visit but overgrown molars require anesthesia and a few hours in the hospital to correct. One reason hay is an important part of a rabbit's diet is that it forces them to chew the roughage and allow their teeth to be worn down properly. Unfortunately some rabbits are born with poorly aligned teeth and will require dental work every few weeks throughout their lives (unless a veterinary orthodontist comes along willing to put braces on rabbits' teeth!)

Diarrhea: This is one of the most common conditions seen in pet rabbits, especially those that are not receiving enough fiber in their diet. Other causes of soft or pasty stool include hairballs, various types of bacteria, viruses and other intestinal parasites. Checking a stool sample is one of the first tests we will request for rabbits with diarrhea.

Respiratory Diseases: Many types of infections can cause respiratory disease in rabbits but one bacterium in particular is more dangerous than others-Pasteurella multocida. A large percentage of rabbits carry this bacterium in their bodies without any health problems until the rabbit undergoes some sort of stress. This could be as simple as moving their cage to a different location, changing food, or could be due to another health problem. During these stressful situations Pasteurella can reproduce rapidly and cause a variety of symptoms. The most common symptoms are of runny noses, watery eyes, sniffling and sneezing. It can also cause skin bumps (abscesses), middle ear infections (causing problems with balance, a head tilt and ear pain), or other symptoms such as lethargy, loss of appetite, fever and difficulty breathing. Treatment involves antibiotics but may not completely eliminate the infection.

SELECTIVE FEEDING

Rabbit mix only provides a balanced diet if the rabbit eats it all. Serious health problems can develop in rabbits who are selective eaters. This can occur in two ways:

- The rabbit develops a food fad, picks out favourite ingredients, and rejects the rest of the mix.
- Two or more rabbits live together and each one eats different components of the rabbit mix.

If selective eating is a problem, switch to a pelleted or extruded food, or try another brand of rabbit mix. If you persevere with mix, reduce the quantity provided so that the rabbit eats everything in the bowl before its next meal.

RABBITS, CALCIUM, AND VITAMIN D

Like all mammals, rabbits obtain calcium from their diet. Rabbits absorb calcium in proportion to what is present in their food and excrete any excess calcium via the kidneys which is why rabbit urine is often chalky. Too much or too little calcium can cause problems. Calcium deficiency is linked to dental disease, but excess calcium causes urinary stones and bladder problems.

Rabbits also need vitamin D to enable dietary calcium to be absorbed from the gut. Outdoor rabbits with access to a lawn run can synthesise vitamin D from sunlight, but rabbits living indoors or in hutches will become deficient unless they have enough vitamin D in their diet or spend time sunbathing outdoors. Vitamin D is added to commercial rabbit foods and also present in hay. A normal healthy rabbit eating plenty of hay and limited quantities of a good quality commercial rabbit food does not need a vitamin or mineral supplement. Rabbits with existing dental disease or those that are fussy eaters may benefit from receiving one. Ask your vet for advice.

WARNING

NEVER change your rabbit's diet suddenly: abrupt changes of diet can trigger fatal digestive upsets, especially in baby rabbits or those that are stressed (e.g. changing homes). Take at least 1-2 weeks to change over and feed lots of hay during this period.

COPROPHAGY

As well as the food you provide, rabbits eat some of their own droppings! The hard, dry "rabbit raisins" are waste products, but rabbits also produce dark, shiny, smelly "night" pellets called caecotrophs. These are normally eaten directly from the anus ("coprophagy"), and you won't see them very often. If your rabbit starts producing lots of caecotrophs, look for a reason. Possible causes include obesity, reduced mobility, and dental disease, but dietary problems are by far the most common. If your rabbit is affected, increase the proportion of hay, reduce the amount of rabbit mix/pellets, and have him/her checked by the vet.

FURTHER READING

Rabbit Nutrition by Virginia Richardson & Fiona Webb (Coney Publications, 1999). The Winter 1999 issue of "Rabbiting On" concentrated on healthy eating for rabbits. Back copies are available for £2.50 (while stocks last) from the RWA, details below.

This leaflet is brought to you by the Rabbit Welfare Fund - the charitable wing of the Rabbit Welfare Association (RWA).

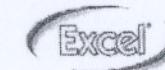
If you love rabbits, please consider supporting the Rabbit Welfare Fund. You can make a donation, or you may like to join the RWA. As well as fund-raising activities, most RWA members kindly make a small donation to the RWF in addition to their annual £17.50 RWA membership fee. RWA members receive a fabulous quarterly magazine packed with health, behaviour and care advice to help you to build a wonderful relationship with your bunny - whether she/he lives indoors or out.

To contact the RWA/Rabbit Welfare Fund:
Ring the RWA National Helpline on 0870 046 5249

Write to us at PO Box 603, Horsham,
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The RWF Guide to Feeding your Pet Rabbit



Many common health problems in pet rabbits are caused by incorrect feeding. A healthy diet for a pet bunny should mimic the diet of his wild cousins. This leaflet explains what your rabbit should be eating and why.





RABBITS EAT GRASS

Rabbits are designed to eat grass. The most natural life for a pet rabbit would be to run loose in the garden, grazing on the lawn, sampling a wide variety of plants and vegetables and stripping bark from trees.

This lifestyle may suit the rabbit, but it's not a very practical option for most owners!

Daily access to a large run on the lawn ensures survival of both rabbit and garden whilst still retaining the benefits of a grass-based diet. But with more rabbits living permanently indoors, it's vital that rabbit owners understand how to feed their pet properly.

So, what makes grass such a perfect rabbit food and how can your alternative match up?

GRASS HAS:

- High fibre - at least 20%
- Moderate protein - 12 to 15%
- Low fat, starch and sugar
- Abrasive action on teeth

"HAY IS MAGIC"

Unlimited, good quality hay is the foundation of a healthy diet for pet rabbits. As well as meeting their basic nutritional requirements it has many other benefits. It's so important, it should even be fed to rabbits eating "complete" rabbit foods.

Nibbling hay keeps bunnies busy, reducing boredom and helping to prevent behavioural problems. Chewing hay strengthens teeth and jaws. Hay also provides lots of long-strand fibre to maintain healthy gut movement.

Good quality hay - sweet smelling with minimal dust - can be difficult to find in pet shops. Try riding stables or farms instead. Kiln-dried grass products can be used alongside or instead of hay, and are particularly useful if you can't get good hay.

THE "HAY & VEGGIE" DIET VS. COMMERCIAL FOOD

If hay is the bulk of the diet, how much green food and/or rabbit mix should the rabbit have?

THE "HAY & VEGGIE DIET" CONSISTS OF:

- lots of hay
- a large selection of leafy greens and vegetables
- very small amount of mix or pellets

This is a natural way to feed your bunny and worth trying if your rabbit has an easily-upset tummy. But it can be expensive and time consuming to prepare. Also, a totally hay/veggie diet may be deficient in some important nutrients, so we don't suggest cutting out commercial foods altogether.

Most rabbit owners prefer to use commercial rabbit foods, which make feeding pet rabbits quicker and simpler. Used sensibly (in limited quantities plus lots of hay!) they can form an integral part of a healthy diet for most rabbits. You can always feed greens, veggies or kiln-dried grass alongside commercial foods - it's perfectly acceptable to end up half way to the "hay & veggie" diet!

HEALTHY TREATS

We all love crisps and cakes - and so do many rabbits! If we over-indulge on such foods we tend to get fat and suffer from tooth decay. So do rabbits, but they can also develop more serious problems: excess sugars and starchy treats can wreak havoc with the sensitive population of bacteria in the gut, leading to fatal digestive upsets. Stick to healthy treats - chunks of carrot or broccoli; swede / turnip peelings; cauliflower stalks. Many of the treats marketed for rabbits (e.g. milk-based yoghurt drops; sticks of sweetened cereals) should be fed in strict moderation or not at all.

If you cannot resist allowing your rabbit eat your food, limit him to one pea sized piece of cake; a one inch chunk of banana; or a peanut. That's all. Anything more and you risk both his waistline and his health.



HOW MUCH TO FEED?

The target is a bunny who isn't too fat or too thin and whose droppings resemble raisins. Young rabbits can have as much as they can eat from weaning until growth slows down at 4-6 months. After that, adjust food intake to suit the rabbit. Obesity is a serious health hazard to rabbits and it can be tricky to tell whether your pet is the correct weight. Ask your vet for advice when you take your bunny for his vaccinations.

If your rabbit stops eating for more than 24 hours, or changes his favourite foods, take him to the vet, even if he appears otherwise okay. There could be a serious health problem developing.

DON'T FORGET THE WATER!

Rabbits must have access to fresh water at all times. Rabbits eating lots of greens may not drink very much; those on extruded foods tend to drink more. Bottles are easier to keep clean for hutch rabbits, but indoor rabbits usually prefer a water bowl.

UNDERSTANDING RABBIT FOOD LABELS. MIX, PELLETS OR EXTRUDED?

• Rabbit mixes look like muesli and are popular with owners. Always choose a properly formulated, reputable brand. The main drawback is selective feeding by the rabbit - explained later in this leaflet.

• Rabbit pellets are bite-sized nuggets. Every pellet has the same composition which helps ensure that the rabbit eats a balanced diet. They're not as popular as rabbit mixes, largely because they look less appetising to the human eye.

• In extruded foods, the ingredients are mixed, cooked and "extruded". They have all the important advantages of pellets but are much more palatable. You can even get a "lite" version in some brands; better for bunnies' waistlines!

COMPLEMENTARY OR COMPLETE?

Complete foods provide the rabbit with all the nutrients it requires, but you still need to feed hay to relieve boredom and strengthen the teeth.

Complementary foods are designed to be fed as one part of the diet. Hay and sometimes greenfood must be added to provide a balanced diet.