

# Rabbit Health

2002

Rabbit Health

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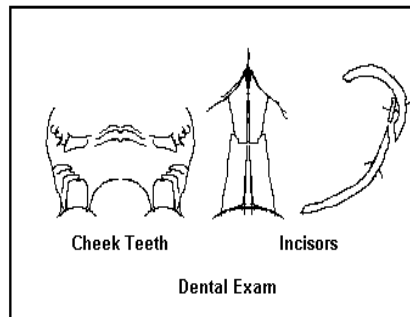
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## Rabbit Dentistry

Rabbits are hipsodontic (all of the teeth are open rooted and grow continuously throughout the life of the rabbit). Rabbits have this type of arrangement because they are designed to eat tough fibrous foods that would wear down the type of teeth humans, cats, or dogs have. If the teeth are not lined up properly (known as malocclusion) or if the diet does not provide sufficient opportunities for chewing, then they do not get worn down which results in overgrowth. Either or both the front teeth (incisors) and the back teeth (premolars and molars) can develop a variety of problems.

When the incisors are maloccluded, the upper incisors curve backwards into the roof of the mouth and the lower incisors will grow upwards like tusks. Molar malocclu-

sion leads to spurs/points that can penetrate the soft tissues of the mouth, such as the roof, cheek, or tongue, causing painful lacerations. In addition, tooth roots can overgrow and penetrate the jawbone. Your veterinarian may recommend head x-rays in order to fully evaluate the extent of the dental disease.



All of these conditions can cause extreme pain and can lead to swelling of the face or jaw, abscesses, nasal and/or eye discharge, drooling, and

inability to eat.

If the incisors are overgrown, they will need to be trimmed by your veterinarian on a regular basis (usually every 6-8 weeks). Your veterinarian may recommend extracting the incisors under general anesthesia. This procedure cures the problem and rabbits are able to eat normally afterwards. If the molars are involved, general anesthesia will be required to file the molars that are causing the problem. This procedure may also need to be done on a regular basis.

## Reproductive Health

If you do not intend to breed your rabbit, then we strongly recommend spaying and/or neutering between the ages of 4-6 months old. The spay procedure involves removing the uterus and ovaries. Unspayed females have a high risk of adenocarcinomas (cancer of the uterus). Adenocarcinoma is a malignant disease, which means it can spread to other areas of the body. Spaying also prevents

breast cancer, pyometra (infected uterus), uterine aneurysm (life threatening bleeding into the uterus), and false pregnancy. In addition, spaying a rabbit will decrease aggressive behavior due to the rabbit constantly being in heat.

Male rabbits tend to become extremely aggressive when they reach maturity. They may spray urine outside the

litter box. The urine usually has a very strong odor due to the presence of male hormones. Some male rabbits may not groom themselves well, developing stained and messy tail areas. Castration, surgical removal of the testicles, helps prevent these behavioral problems as well as preventing orchitis (inflammation of the testicles) and testicular neoplasia.

## Loss of Appetite

A rabbit will lose its appetite for a variety of reasons. The most common cause is pain. While dental disease (discussed separately) and gastrointestinal (GI) disease are the most common causes of pain, pain anywhere in the body can be associated with loss of appetite (anorexia). Other conditions that can lead to anorexia include bladder and kidney infections, uterine infections, abscesses, respiratory infections, inner and middle ear infections, strokes, parasitic diseases, and toxin exposure.

Hairballs are commonly cited as the reason for rabbits to stop eating. If the rabbit is on a high fiber diet and has access to plenty of water (in the form of fresh food and water bottle) this condition rarely exists. While

gastric impactions with hairballs, carpet fibers, food or foreign material are common, the problem is primarily a GI motility disorder with accumulation of hair or other material occurring secondarily. A high fiber diet is essential to the health of the GI tract. A low fiber diet, small particle diet (pellets as an exclusive diet), reduced water intake, lack of exercise, or any medical condition that causes it to eat or drink less may result in reduced motility of the GI tract. When this happens, the stomach contents start to dehydrate and compact. The less the rabbit eats or drinks, the more compacted the contents become until the rabbit stops eating entirely. When the rabbit stops eating, the intestinal tract stops moving and the problem escalates. Since rabbits cannot vomit, affected rabbits will

exhibit anorexia, weight loss, reduction in stool volume and numbers, and abdominal pain. A rabbit with these signs should be seen by your veterinarian immediately. A rabbit will deteriorate rapidly when they go without food for extended periods of time. Early diagnosis and treatment is essential to saving your pet's life.

Your veterinarian may require radiographs and blood work to efficiently evaluate the rabbit's condition. Medical therapy may include fluid therapy, forced feedings, medications to stimulate GI motility, and pain relief. Depending on the severity of the disease, your rabbit may need to stay in the hospital for treatments until its condition is stabilized.

*"Rabbits with anorexia or reduced numbers and volume of stools need to be seen by a veterinarian immediately."*

## Diarrhea?

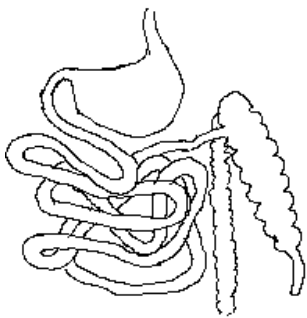
True diarrhea (all stool being passed in liquid form) is not common in the rabbit. This is a very serious condition and should be seen by your veterinarian immediately. Some diseases that can result in true diarrhea include parasites such as coccidia and bacterial infections such as salmonella, clostridium, and E. coli.

What most people refer to as "diarrhea" is an intermittent passing of soft or liquid type stools. Rabbits produce two types of feces. The first type of feces is the dry, round pellet that most people are familiar with. The other type of feces is the cecotrope, which is a soft

gelatinous package of feces that is rich in nutrients. They come directly from the cecum, which is a large blind sac located between the small and large intestine. The cecum is populated with bacteria responsible for breaking down the food into fatty acids, amino acids (protein), vitamins, and minerals. Some of these nutrients are absorbed through the wall of the cecum, but most of these nutrients are inside the bacteria excreted within the cecotrope. The rabbit eats the cecotrope directly from the anus and, through the digestion process, is able to utilize all these important nutrients. Normally, owners never see these cecotropes.

Occasionally, rabbits will pass these cecotropes along with the

normal hard stools instead of eating them. This occurs for a variety of reasons, but the most common cause is a diet that lacks sufficient fiber and has excessive amounts of protein and energy. If this only occurs once and awhile, then it is usually not a problem. However, some rabbits defecate excessive amounts because they are unable to reach the anal area. Obesity, flaps of skin over the anal area, spinal disease, painful abdomen, or pain in general are some other conditions that can lead to this problem. We recommend an examination by your veterinarian if your rabbit is leaving excessive amounts of abnormal cecotropes in the cage.



## Pasteurella

*Pasteurella multocida* is a bacteria that lives in the respiratory tract of most rabbits. Rabbits with a healthy immune system usually do not have a problem. However, rabbits under stressful conditions such as new home, poor environmental conditions (overcrowding, high temperature, poor air circulation, etc), and poor diet, can develop upper respiratory infections. Rabbits present with ocular or nasal discharge and sneezing (sometimes referred to as snuffles). Occasionally, pneu-

monia can develop. Rabbits with constant ocular discharge may also have a blockage of their nasolacrimal duct. Normal tears exit the eye through the nasolacrimal duct into the nasal cavity. Blockage of this duct, due to impacted tooth roots, inflammation of the duct, or anatomical abnormalities, causes the tears to drain down the side of the face. This discharge can be excessive causing a



dermatitis (skin infection) around the eyes. Your veterinarian may recommend flushing the nasolacrimal ducts as well as oral or ophthalmic antibiotics. Multiple treatments may be necessary and owners need to keep the skin around the eyes clean.

## Rabbit Abscesses

In addition to upper respiratory infections, pasteurella can cause infections in the skin, known as an abscess. Abscesses can occur anywhere in the body. Dental disease can lead to abscesses associated with the jawbone or tooth roots. Bite wounds from other animals can also lead to abscesses. For example, pasteurella is a part of the normal flora in

the mouth of cats, which is why we do not recommend owners allow their rabbits to play with their cats. Abscesses are very difficult to cure. Reoccurrence is common. Treatment involves surgical removal and debridement of the abscess and long-term antibiotics. Therefore, multiple visits to your veterinarian, with or without surgery and hospi-

talization, and intensive wound therapy are required for success.

**Rabbit abscesses are very difficult to cure and reoccurrence is common.**

## Ear infections

Rabbits with middle or inner ear infections present with head tilt, loss of balance (ataxia), circling, or rolling. A variety of bacterial agents (including pasteurella), parasites, and trauma can cause ear infections. Treatment is usually long-term (weeks to months) and involves antibiotics, steroids, and supportive care. If the rabbit is

alert, active, and is able to eat on its own, the prognosis is guarded to good. If, however, the rabbit is weak, lethargic, unable to walk on its own, the prognosis is guarded to poor because it is likely that the disease is



affecting deeper areas of the brain. The rabbit's condition will usually get worse before it gets better. Some rabbits will recover completely, while others may always have a head tilt. This disease can reoccur at any time during the rabbit's lifetime. Your veterinarian will discuss all treatments options available.

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## ***Our Mission***

***All Creatures Animal Hospital is dedicated to providing progressive medicine in a caring environment for pets of all species. Through preventative medicine, client education, professional development of our staff, and advanced medical and surgical techniques, we hope to foster a strong and lasting bond with clients and their pets.***



**Quality medicine in a caring environment.**

## **Urinary Tract Infections**

The color of a rabbit's urine can vary from clear, yellow to reddish-orange or cloudy to almost white. These changes in color are due to pigments in the urine, called porphyrin, and calcium precipitate. The amount of calcium in the urine directly relates to the amount of calcium in the diet. Diets such as pellets, alfalfa hay, and certain types of greens have a high amount of calcium. Rabbits eating diets high in calcium will tend to have cloudier urine.

Occasionally, rabbits present with signs of urinary tract disease, including cystitis (infection of the bladder), calciuria (too much calcium in the urine), and urolithiasis (bladder

stone). Rabbits on diets high in calcium and less than adequate water intake may develop calciuria. Calciuria can lead to stones or doughy urine. When the bladder is unable to empty completely or there is a stone present, a bacterial infection in the bladder can develop. This can be a fairly painful condition for the rabbit. Rabbits usually present with signs of weight loss, decreased appetite

(leading to decreased number and volume of stools), frequent or painful urination, or blood in the urine. (Note: Be aware that these signs could also indicate a reproductive disorder.)

We recommend rabbits with any of these signs be seen by your veterinarian immediately. Your veterinarian may require a urinalysis, radiographs, and/or blood work. Surgery may be necessary if a bladder stone is present. Otherwise, fluid therapy, antibiotics, and a change in diet are the treatments of choice.

