

## Rabbit Care Sheet

Rabbits can make great additions to the family. They can have outgoing personalities. With proper care these furry friends can live 8+ years. Since these guys are social animals, they do well in pairs but do need to be monitored for any bullying activity. Spaying and neutering these guys are highly recommended especially when paired with other rabbits. It will avoid any unwanted litters and reduce the risks of fighting. It will also help prevent reproductive issues such as ovarian cysts, pyometra (infection in the uterus), and many different cancers they can get. Just like cats and dogs, there is a high population of rabbits in shelters all over the country, so adoption is highly encouraged.

Rabbits do require annual vet exams; they can develop health issues as they get older just like any other pet but can require more care depending on breed and genetics. Breeds like lops can be considered the pugs of the rabbit world, they may require more dental care and can be prone to ear issues. Breeds like lion heads and angoras need continuous grooming due to their long hair. Rabbits can also be vaccinated with the RHDV (rabbit hemorrhagic diarrhea vaccine). This is something that is being seen in wild rabbits around the area and can be tracked into the house if you walk through contaminated areas or if your rabbit spends time outdoors where wild rabbits may come in contact.

As discussed above, rabbits may require routine dental work. Most seen are molar issues. They can develop what we call steppes and points on the teeth that can grow into their tongue or cheeks. Signs of dental issues most often present as changes in appetite. Most owners notice that their rabbit will stop eating hay or pellets but will still eat soft veggies, or they will drop food (will take a bite of something but either will spit it out or will just fall out of their mouth when trying to chew).

Another common health issue we see is GI Stasis. GI stasis is where there is a lack of mobility in the rabbit's gastrointestinal tract. Rabbits are "hind-gut fermenters" which means that their diet is broken down at the end of their GI tract in an area called the cecum. The cecum is filled with microbes that will break down fibrous foods that these little guys are eating. Most of the time the food needs to be broken down even further to absorb most of the essential vitamins and minerals that were missed during the first part of digestion, so a product called cecotropes is produced. Cecotropes are softer stools that the rabbit eats to aid in the second half of digestion to absorb those missing vitamins and minerals. They are produced mostly at night so most of the time you may not see them or will wake up to a small portion of missed pieces in the cage. Back to GI stasis, it can be caused by many things but the most common are stress and discomfort. We have seen cases that the owner has a single rabbit that is bonded to them so owner leaves town and comes back to a rabbit that is not eating or defecating, or an older rabbit that is arthritic and is uncomfortable moving around so they slow down on eating as well. GI stasis is a life-threatening condition that needs to be addressed sooner than later. Common signs are anorexia (lack of appetite) for over 4 hours, lack of stools or diarrhea. Being fermenters, when the GI tract is slowed, they will get an excess amount of gas filling their cecum causing a lot of discomfort, so you will see their abdomen become distended and feel like a balloon when touched. Another cause of GI stasis is liver lobe torsion. This is when the liver flips over itself and causes extreme pain and blood back up that may need surgery. Most cases of GI statis can be diagnosed with the help of radiographs. Radiographs will help show the excess buildup of gas and the severity of it will help decide the route of treatment. If caught early enough, we can supplement feed with critical care and som

Diet plays a huge role in keeping a rabbit happy and healthy for as long as possible. As mentioned above, these guys are hind-end fermenters, so they require a high fiber diet. Hay should consist of 80% of their diet. The type of hay is important as well. As juveniles, rabbits should be eating alfalfa hay which is higher in protein and calcium to aid in proper growth. Around 7 months of age, we should be transitioning to a grass hay such as timothy or orchard hay. Most pet stores carry blended hay so in the 7 months to 1 year mark you can feed an alfalfa grass blend. At a year of age and older they should be eating grass hay, as stated above alfalfa is high in calcium. With elevated levels of calcium rabbits will excrete it through their urine but we can see issues with it such as sludgy urine. Sometimes the calcium builds up in their bladder and will cause stones to develop and the only way to get rid of them is through surgery. If you notice your rabbit urinating blood or is not producing as much urine, it is a good idea to get them seen.

Veggies are another crucial part of their diet. Rabbits should get about 1-2 cups of vegetables per 4 pounds of body weight. For juveniles younger than 7 months it is recommended to keep vegetables to a small amount. Their guts have not developed the proper bio load (beneficial bacteria) to properly digest larger amounts of vegetables, so it is good to only give sample size servings to help introduce vegetables into their diet. As they get older, over 7 months, you can slowly add more to their daily intake. When introducing new vegetables to any rabbit's diet, it is good to add them in small doses as well to reduce the risk of diarrhea. Once we reach a year of age, vegetables can make up 10% of their diet. We try keeping calcium rich vegetables to a minimum to help reduce the risk of stones, as well as sugar rich vegetables, which can cause an imbalance in gut bacteria. Calcium rich vegetables include things like kale and collard greens; sugar rich vegetables such as carrots and sweet potatoes. The best vegetables for our little friends should consist of leafy greens, herbs, and nutrient dense vegetables. Rabbits, unlike guinea pigs do produce their own vitamin c but can benefit with extra supplementation when ill or stressed to keep their immune system up. Below is a list of veggies that are safe for rabbits:

 Arugula, Basil, Beets tops, Bok choy, Carrot tops, Collard greens (in small portions), Coriander / cilantro, Cucumber leaves, Dandelion greens, Dill leaves, Endive, Escarole, Fennel leafy tops and base, Kale (in small portions), Butterhead lettuce, green leaf lettuce, red leaf lettuce, Romaine lettuce, Peppermint leaves, Spearmint, Mustard greens, parsley, purslane, raspberry leaves, radicchio, radish tops and sprouts, spinach (in small portions), spring greens, sprouts, Swiss chard, thistles (bull, milk, sow), turnip greens, watercress

Things to add/rotate through their diet in small portions due to high sugar content or can cause excess gas:

Artichoke leaves, Asparagus, Baby sweetcorn, Beets, Banana peppers, Bell peppers / Sweet peppers, Broccolii, Broccolini, Brussels sprouts, Carrots,
Cauliflower, Celery, Celeriac/celery root, Cucumber, Green beans, Okra, Green peas, Snow peas, Sugar snap peas, Parsnip, Pumpkin, Radish, Squash,
Turnip

Fruits should only be given as sparing treats since they are high in sugar, small pieces of apples, bananas or berries can be used for things like training or bonding.

A grass hay-based pellet is good for added nutrition and should make up about 5% of their diet. A 1/4cup per 5 pounds of body weight a day is recommended. A brand like oxbow is what we recommend.

Housing is a common issue in rabbit households, mostly because of the way pet stores advertise cages for these guys. Rabbits are very active pets and require space to run and jump. Most of the cages sold in pet stores are not large enough for most rabbits to stretch out comfortably and get the exercise needed. With the smaller cages sold by most stores, rabbits will need longer periods of "outside" time to get as much exercise. We recommend using X-pens to house rabbits, the larger the space the better. Some owners have rooms dedicated to their pets. We recommend adding cushioned spots throughout their living spaces to also give their feet a break from the hard floors or the rough texture of carpet, which both can cause bumblefoot especially in older arthritic pets. Adding a yoga mat with a fleece covering will help prevent further issues. You will also have to keep their areas chew proof. Since these guys have continuously growing teeth, they will chew on anything they can. Removing cords or any other things that can be chewed on that can cause harm, watching carpets to make sure they are not ingesting pieces, and lastly making sure there also are not things that your rabbit can get stuck in/under. Rabbits can be litterbox trained and will make clean up a lot easier. The House Rabbit Society (rabbit.org) has articles and videos on how to litter box train your rabbit. Daily spot cleaning and litter box changes should. Depending on how many rabbits you may have, the larger the area is better and having multiple hides and litter boxes will help prevent unwanted fighting over resources.

As stated in the beginning, rabbits generally do better in pairs or groups. A lot of rabbits from the shelter generally have a bonded buddy with them but if you are getting from a breeder or trying to get a friend for your already established rabbit, it can be a little complicated bonding them. Taking things slow is the best. Having 2 separate cages in one room is a good start so they can see and smell each other. Over time it will move on to having them running around in the same area during supervised play time. Eventually leading them to living in the same space. House rabbit society does have good bonding info as well. Unfortunately, there are some cases when bonding rabbits is too stressful or aggressive and the bonding just doesn't work out. Every rabbit is an individual and some just don't like being paired with another rabbit.

If there are any concerns with your rabbit and its care feel free to contact the clinic

Thank you,

ACE Staff