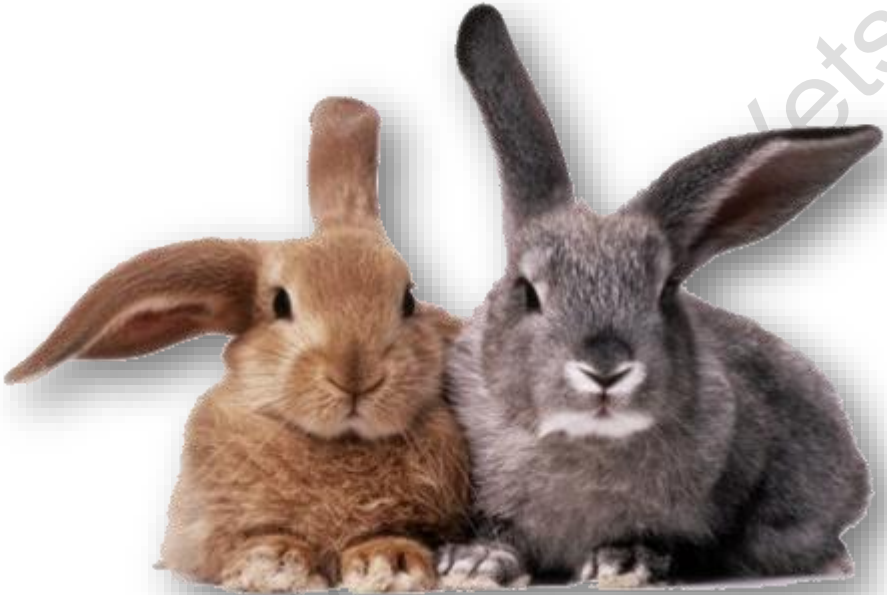




CLUTHA · V · E · T · S ·

Animal Health Centre



**The Clutha Vets
Rabbit Handbook**

Welcome to your new rabbit

Here at Clutha Vets we want to work together with you to keep your new bunny healthy and happy for many years to come. We have a team of dedicated companion animal vets and nurses who can advise you on all aspects of your bunny's well being.

Our aim is to give your bunny the best possible start and to help prevent health problems in the future. When you visit the clinic, our vets and nurses can give your bunny a tailor made healthcare programme to suit his or her lifestyle. This booklet contains some basic information on the main aspects of bunny care including:

- Housing
- Feeding
- Neutering
- Dental care
- Vaccination
- Worming
- Skin parasites
- Bunny behaviour
- Grooming
- Microchipping
- Common hazards
- Pet insurance



Clinic Contact and Hours

BALCLUTHA – 03 418 1280

Monday – Friday 8.00am – 5.30pm

Tuesday evening to 7.00pm

Saturday morning 9.30am – 12.30pm

MILTON – 03 417 8032

Monday – Friday 8.00am – 5.00pm

24hr / 7 day a week Emergency

Housing

In New Zealand, rabbits are commonly housed both indoors and out. Overseas, indoor housing is more common. So long as your bunny is kept warm, clean, and dry, and has enough space to exercise, either option is fine (though bringing your bunny inside during storms is definitely recommended!).

Regardless of whether your bunny is housed indoors or out, providing enough space for the size of your bunny is an important consideration. More is better!!! A bare minimum rough guide is 2 square meters for a pair of 2kg bunnies – a Flemish giant at 8kg would need more like 4 square meters for at least part of the day.

Remember that rabbits and guinea pigs should not be housed together, as rabbits harbour a type of bacteria which causes respiratory disease in guinea pigs. The size and behavioural differences between rabbits and guinea pigs can make life difficult for the guinea pigs too.

Bedding choice is important for rabbits. Commonly sold shaved wood, such as pine or cedar, releases scent molecules called phenols, which cause respiratory disease in rabbits. For this reason, hay is recommended as the best choice of bedding.

If your bunny is to be housed outdoors, it is essential to provide a warm, draught free nest box stuffed with lots of fresh hay. The base of this should be cleaned and replaced daily, and the clean hay on top replaced at least weekly. The hutch should be predator proof, and you may want it to have some 7cm chicken netting on the base to prevent digging. Close wire bottoms are not recommended, as they cause foot sores.

If your bunny is to be housed indoors, a cage is not essential, but may make life easier while your bunny is being house trained. Bunny-proofing a small room or setting up a play pen are other options. Potty training is very straightforward – rabbits usually toilet in one spot only, so keep an eye on your bunny, and pop the litter tray there! Because rabbits are inclined to eat their bedding, litter designed for rabbits should be used only.

Feeding

The vast majority (80-90%) of adult rabbits' diets should be good quality, fresh timothy or meadow hay.

Rabbits should drink their mother's milk until 7 weeks of age, along with free access to fresh, good quality pellets.

From 7 weeks until 6 months, rabbits should have free access to hay and fresh pellets. Fresh vegetables can be introduced gradually from 7 weeks, being careful to remove anything causing loose stools.



After 6 months, pellets should be restricted to $\frac{1}{4}$ cup per kg of body weight, down to $\frac{1}{8}$ cup per kg at 12 months. By 12 months, rabbits should be eating 1 packed cup of fresh chopped veggies per kilo of body weight each day.

Feeding dark, leafy greens such as spinach (no lettuce!) helps to build and maintain a strong and healthy skeleton and teeth because these veggies are full of calcium. Leafy greens should make up 75% of the fresh veggies fed. As a rule of thumb, any green that a horse and human can eat, a bunny can eat too. Rotating veggies each week is a good way to minimise toxicities or deficiencies associated with each green – a minimum of 3 types is recommended.

Root vegetables and flowers (e.g. broccoli, cauliflower) can be high in starches, so remember to keep these to no more than 25% of the veggies. Do not feed greens from the onion family, including leeks, chives, garlic, spring onions, shallots etc. as these can cause anaemia.

Fruit should be kept to no more than 1 tablespoon per kg daily to avoid tummy upsets and excessive weight gain.

See rabbit.org/faq-diet/ for a detailed list and discussion of feeding your bunny.

Neutering



Unless you have a pedigree bunny it is likely that you will plan to have your bunny neutered. There are many advantages to having your bunny neutered, including reduced aggression (meaning they make better playmates!), no unwanted litters, and 100% reduced risk of testicular, ovarian, or uterine cancers. They also become much less inclined to chew and dig inappropriately. We neuter most rabbits at 4-6 months of age.

Entire bucks are likely to spray urine in the house (if he's a house bunny), smell strongly, and show aggressive behaviours. They become calmer, friendlier, cleaner animals if they are castrated, and are easier to litter train.

Entire does have around a **90% risk of developing uterine cancer**. That's 9 in 10! It is therefore very strongly recommended to get your doe spayed. Also, does will produce an astounding number of bunnys in a very short period of time given the chance, adding to an already overlarge rabbit population. A doe can become pregnant again within days of giving birth.

Vaccination

The disease we protect rabbits against by vaccination in New Zealand:

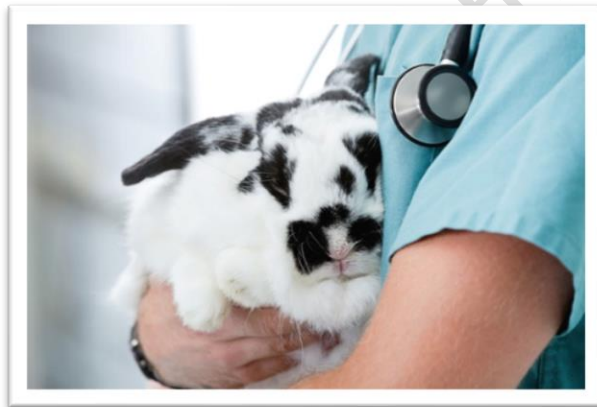
Calicivirus – This is a virus causing a disease called “rabbit haemorrhagic syndrome”, which is as bad as it sounds. An affected rabbit is usually found dead with blood at the nostrils. It is thought to have been introduced illegally to New Zealand by some farmers to aid in controlling the wild rabbit population. Unfortunately, this was not successful, and now means that all

pet rabbits must be vaccinated against the disease. The risk is greatest when your bunny has a chance of touching noses with a wild rabbit, like when they are in an outdoor hutch, but we still recommend vaccinating all bunnies because of the severity of the disease.

Myxomatosis is another severe disease in rabbits, for which a vaccine is available overseas. We do not have this disease in New Zealand – great news!

Age of Vaccination

Rabbits are usually vaccinated from 12 weeks of age with a single dose. Your bunny will need an annual booster.



Dental Care

Rabbits' teeth grow continuously, and require constant wear to keep them in order. If wear is inadequate, the teeth overgrow and can cut into the roof of the mouth, cheeks, and tongue. Ensure that your bunny has 24/7 access to fresh hay, and provide apple tree branches for bunny to nibble on.

Rabbits with overgrown teeth may drool, have smelly breath, be picky with their food, have a dirty bottom or loose poo, groom less, or lose weight. However, there may be few outward signs and it is not until the teeth have been trimmed that you notice how much happier your rabbit is. If you have concerns about your rabbit's teeth, please let us know.



Worming – internal parasites

Unlike dogs and cats, rabbits don't tend to suffer disease from the typical "worm" internal parasites, and they don't require a regular tablet.

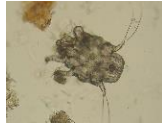
Bunnies are affected mainly by two groups of internal parasites:

Coccidia (pictured right) – These are tiny organisms which carry out their lifecycle inside the cells of the intestine. They are a normal part of the gut, and healthy bunnies have them at low levels. Sometimes, in young bunnies especially, the coccidia overgrow and cause diarrhoea and dehydration. This condition requires treatment, so it is important to bring your bunny to the vet if he or she develops diarrhoea.



Liver fluke – Just like cattle and sheep, if bunnies have access to marshy areas and ingest a snail infected with the juvenile fluke, they will develop liver fluke and become sick. Although this disease is virtually unheard of in rabbits in New Zealand, it can still occur, so it is wise to keep your bunny away from boggy areas if you are in a typical "flukey" area like the West Coast.

Skin Parasite Control



For all of these parasitic diseases, hygiene is the best prevention! Keep your bunny's hutch clean and dry, and give it an extra-thorough scrub should your bunny get any of these problems.

Fleas – Prevention is better than cure for fleas in rabbits. Keeping your cats and dogs up-to-date is an easy way to reduce your bunny's risk, along with flea-bombing the house before your rabbit's arrival at home. If your bunny does get fleas, they are easily controlled using a product called Advantage or Revolution for kittens. **DO NOT** use Frontline!

Mange mites, ear mites – These are picked up from the ground, so outdoor rabbits are particularly susceptible. Both are easily treated if they are picked up early, so take your bunny to the vet at the first sign of excessive itching of the body or ears.

Flies – Rabbits as well as sheep can suffer from fly strike, which can quickly become very serious. This is one of the reasons that grooming is recommended. If bunny has a matted bottom, urine and faeces can get stuck in the fur and start to smell, attracting flies. Prevention is better than cure, as rabbits don't tolerate the chemicals often used for sheep.

Lice – Fortunately, lice are almost 100% species specific, meaning that rabbits only get lice from other rabbits, and can't give them to humans! It also means you or your kids can't give lice to your bunny. These can be treated with the same products as for fleas.

The most common products used are for the treatment and prevention of fleas. Most other skin parasites are only treated when there is a clinical problem, for example ear mites and lice. Your bunny will be checked over for signs of skin parasites when they come for their annual health check and vaccination. We can discuss the type and frequency of treatments needed depending on your bunny's lifestyle. We usually advise spot-on treatments as they are more effective and safer than flea collars, powders or shampoos. They are also much easier to apply!

Grooming

If your bunny is long haired it is very important to get it used to being brushed. Long hair can become very matted and knotted, causing discomfort. It is not possible to brush these mats (bunny skin tears very easily) and using scissors to cut knots out often risks cutting the skin. Once they have become matted the rabbits need to have an anaesthetic and have the hair shaved off.



Prevent knots on your bunny by regular grooming. Start for a minute or two once a day using a suitable soft brush. It is important not to hurt or frighten your bunny and to get them used to being handled all over including their tummy. Short haired rabbits also benefit from being groomed and it is a good time to check your bunny for wounds, lumps or other skin problems.

Microchipping

Yes, rabbits can be microchipped as well as cats and dogs! Although not required by law, microchipping is a good way of permanently identifying your bunny and of helping get them back to you if they get lost, stray or are injured on the road. The New Zealand Companion Animal Register is a nationwide register for all animals.

You will probably be surprised at how little it costs to have your bunny microchipped and registered. It is a simple quick procedure similar to an injection and does not require anaesthesia. You may prefer not to let your bunny outside until after it has been neutered and so neutering may be the ideal time to have them microchipped as well.

Common Hazards

The biggest hazard in the home to rabbits is electrical wiring. Cables seem to be the most tempting thing of all to chew on. The amount of current in a home is easily enough to seriously injure or kill a rabbit, so please keep bunnies and wires separate! If your bunny is allowed to run free, tying up and housing cables is the simplest measure, or blocking off areas such as behind the TV or office desk.

Rabbits are not as prone to eating poisonous things as dogs are. However, rabbits do seem to have a liking for houseplants some of which are poisonous including Lilies and Cycad palms. Other plants that are toxic include daffodils and lily of the valley. Slug bait and rat bait are other common poisons that rabbits can be exposed to. Never give your rabbit any human drugs without checking with a vet first.

Rabbits can also find other things in the home which can cause serious problems. Eating wool, string, thread (with or without needles attached) elastic bands or tinsel can cause serious problems as it gets wrapped round and tangled in the digestive tract. Have a good look around your home for any small spaces or holes where your bunny could fall or become trapped. Remember to keep the toilet lid closed to prevent any curious bunnys going for an unwanted swim!



Bunny Behaviour

Rabbits are very different in their needs and motivations compared to cats and dogs. Cats and dogs are predators (like us), and so we understand their behaviour more instinctively compared with rabbits, which are a prey species.

In order to satisfy a bunny's behavioural needs, they need to be able to:

- Feel safe: e.g. nest box, tunnels, hidey holes, gentle handling
- Dig - supply an area and a time for bunny to dig, e.g. dirt/sand box, large litter tray
- Chew - e.g. supply apple branches and hay
- Run around and play - at least 4 hours in a large space daily, toys recommended (if you have a big run on your hutch, that's great!). Remember to bunny-proof and predator proof the area!



Insurance

Veterinary medicine is advancing rapidly and many more diseases and conditions are now treatable. Sometimes these treatments come at a significant cost, particularly if referral to a specialist is recommended. Pet insurance is becoming increasingly available to help meet these unexpected costs. As with any insurance there are many different policies to choose from. It is important to read the conditions of each policy carefully to check if a certain condition is only covered for a certain period or up to a certain amount of money. Usually any pre-existing conditions will be excluded. We all hope our pet will be healthy and accident free but if the worst does happen then having a good pet insurance policy will enable you to choose the best treatment available.

Website

Have a look at our website www.cluthavets.co.nz , we have a section on Animal Health which is regularly updated with articles from our Companion Animal Vets.

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