



# Blue House Bunnies

Your guide to having happy  
and healthy rabbits



# DIET

## Why is diet so important?

A rabbit depends on a good-quality, appropriate diet to keep it healthy. One of the main problems we see with rabbits is dental disease, which in rabbits is rarely curable. Rabbits suffering from dental disease often have lifelong eye discharge, require dental treatment under general anaesthetic on a regular basis and are at risk of developing abscesses, which can be fatal.

Dental disease in rabbits can be prevented by feeding an appropriate diet.

**Prevention is better than cure!**

## So, what should I feed my rabbits to keep them healthy?

**95-100% of a rabbit's diet should consist of hay or grass.** This is what wild rabbits survive on.

We recommend feeding high-quality Timothy hay ad lib; such as that produced by Oxbow. Your rabbit can eat as much good-quality hay and grass as they like - but not grass cuttings from the lawn-mower!

## But what about dry food / pellets?

It is very easy to overfeed dry food. This can lead to obesity. An average-sized rabbit needs no more than 1-2 tablespoons of pellets each day. The majority of the diet should be made up of fresh hay and/or grass, as above.



Pelleted foods are better than muesli-type foods as they do not allow selective feeding.

Coloured muesli-type foods encourage rabbits to pick out the bits they like and leave the rest. This can put them at risk of dietary imbalance and encourage weight gain.



## What about other fresh food?

Dark, leafy greens such as dandelion leaves, Savoy cabbage, carrot tops and curly kale are good in moderation. Do not feed lettuce as it can cause diarrhoea. Some rabbits will like herbs such as parsley and mint, and you can also try small quantities of other vegetables such as peas, green beans, celery, cauliflower, and broccoli.

**PLANTS TO AVOID:** Anything that grows from bulbs, yew, oak leaves, foxglove, rhubarb leaves, potato tops, poppies, ragwort, laburnum, privet and evergreens.

## Treats/extras

Small amounts of carrot or apple can be given as occasional treats, but NOT on a daily basis. These treats are high in sugar, which can contribute to obesity and upset the balance of the gut. We do not generally recommend chewy fruit or nut sticks for rabbits. Again, these are too sugary and do little or nothing for dental health.

## So, how do rabbits digest their food?

Rabbits have been known over the years for 'eating their own poo'. This is partially true! The rabbit digestive system is complex; they produce two different types of faeces as part of their normal digestive process.



While the indigestible fibre in the diet is passed straight through the digestive tract as the round, hard faecal pellets you see all over the hutch floor, the digestible fibre undergoes further digestion and is eventually expelled as special soft pellets called **caecotrophs**. These are eaten by the rabbit and passed through the digestive system a second time, recycling the food and extracting further nutrition from it.

Caecotrophs are larger and softer than normal faecal pellets. They are often produced at night, and are consumed straight from the bottom. Dropped caecotrophs go untouched, so it is normal to see the occasional one – don't mistake them for diarrhoea if they get squashed.



Normal pellets

However, seeing a large number of dropped caecotrophs, or finding them stuck on your rabbit's bottom, is NOT normal. This usually suggests an inability to remove them from their bottom, due to illness, obesity, back pain/arthritis or dental disease.



Caecotroph

## What are the consequences of an incorrect diet?

### Flystrike

Poor grooming and build-up of caecotrophs due to dental disease and/or obesity can attract flies, which lay their eggs in the soiled skin and hair. These hatch into maggots, which migrate through the tissues, causing extensive damage and even death.



A balanced diet can help prevent the build-up of faeces that can result in flystrike; however, daily checking and cleaning of your rabbit's bottom is essential, especially in the summer months. A fly repellent, **Rearguard**, can also be applied to the rabbit to minimise the risk of flystrike.

Check your rabbit's bottom DAILY. Remove all wet, soiled bedding DAILY. If you see maggots on your rabbit, contact us immediately as this is an emergency situation.



# Dental disease

As stated previously, it is important to feed a high-quality Timothy hay (see below). It is easy to pick up poor-quality, dusty hay, which is of far less nutritional value and not as palatable. This will result in overgrown teeth as the rabbits are less likely to chew on it sufficiently.



Good-quality Timothy hay is recommended



Low-quality, dusty hay is of no nutritional value

## What can go wrong?

Roughage is essential for wearing down the teeth, which never stop growing. Teeth that are not worn down adequately will become overgrown, misaligned and may develop sharp points, which can traumatise the mouth.



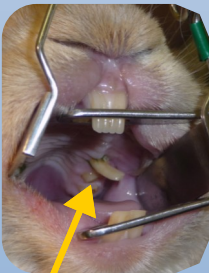
Normal healthy incisors.



Misaligned incisors – the upper teeth are sitting behind the lowers, rather than the other way around.



Badly overgrown incisors. These teeth never stop growing.



A badly overgrown molar is visible at the back of the mouth.



Ulceration caused by sharp points on overgrown molar teeth literally cutting into the tongue.



Sharp point on molar caused by uneven wear of teeth.



# HOUSING

**In the wild, rabbits cover an area equivalent to 30 football pitches, and run up to five miles per day!**

Hutches were originally designed by the Victorians as a short-term housing solution for rabbits destined for the pot. They are not suitable as a long-term home: a hutch or cage on its own is like a prison. These should be regarded as the 'burrow' in which the rabbit can hide, sleep and eat, but should not constitute their entire space.



- The hutch on the left is too small. The rabbit barely has room to turn around and cannot hop or stand up.
- The layout on the right is perfect.



- The run on the left is the minimum size advised. Make sure there is a hiding place provided (and put it on grass!).
- Housing does not have to be expensive: the run on the right is home-made and the connecting tunnels can be purchased cheaply.

## **Some people are surprised by just how much space their rabbits need!**

The Rabbit Welfare Association & Fund (RWAF) recommend a minimum hutch size of 6' x 2' x 2' for two rabbits. When inside the hutch, your rabbits should have space to stand up on their back legs, and to hop in a straight line three times (about six feet!).

A secure run of at least 8' x 4' should be attached to the hutch to allow free exercise. If you have a secure garden, rabbits will always benefit from exercise over a wider area whenever possible.

Provide toys, places to hide and safe digging opportunities for your rabbits. Uprturned flowerpots, empty cardboard boxes and tunnels make excellent places to hide or shelter. For toys, try shredded paper, balls or even old toilet roll tubes stuffed with hay! You don't want your rabbit burrowing out of the run, so try setting up a 'digging box': a deep cardboard or plastic box filled with shredded paper, soil or dried autumn leaves is ideal.

## **What about house rabbits?**

Rabbits can live happily in a house too! They still need plenty of space to run around outside, ideally on a grass surface, as carpet burns can be a problem. The RWAF website has a very good fact sheet explaining all about caring for a house rabbit on their website at [www.rabbitwelfare.co.uk](http://www.rabbitwelfare.co.uk). You need to be very careful to "rabbit proof" your house to prevent expensive and dangerous damage to wires and furniture.

## Bedding

The hutch should be lined with an absorbent material, e.g. good-quality wood shavings. Make sure that they have enough bedding to create a nesting or sleeping area: this is particularly important in colder weather to reduce draughts.



**STRAW IS NOT A FOODSTUFF!** It is strictly bedding material. While rabbits may nibble on straw occasionally, their diet should consist primarily of good-quality HAY.



Soiled or wet bedding should be removed and replaced daily. If left in the hutch, dirty bedding can have the following consequences:

- **Flystrike**; the soiled bedding will attract flies, which lay their eggs on the bedding and the rabbit.
- **Urine scalding**; this is most commonly seen on the underside of the back feet and around the hocks.
- In cold weather, wet bedding can freeze solid.
- **Breathing problems / lung infections**; ammonia from urine-soaked bedding can cause irritation to the eyes and airways, and predispose to secondary respiratory infections.



LEFT: severe urine scalding of the hindquarters with associated swelling and inflammation.



RIGHT: lesions on the back feet caused by inadequate bedding.

## Water bottles and bowls

Fresh water should always be available and replenished daily. A bottle or a bowl is suitable, but make sure it is sanitised at least weekly with a weak detergent, then rinsed thoroughly with clean water before returning it to the house.

## Winter care



When the weather is colder, ensure the water doesn't become frozen by checking at least twice daily and using an insulating "bottle snug", either bought or home-made with bubble wrap and an old sock!

Your rabbits' hutch will also need some extra protection from the weather such as the "hutch hugger" pictured. Home-made is fine, or consider moving the hutch inside a well-ventilated shed or garage (but be careful with car fumes). Ensure they have lots of clean and dry bedding and lots of fresh hay to eat.



# COMPANIONSHIP

## One rabbit or two?

Rabbits are by nature social creatures, and in the wild they naturally live in groups. Rabbits should be kept in pairs as a minimum or loneliness and boredom will follow.



- Obviously, keeping unneutered males and females together will quickly result in unwanted pregnancies, and members of the same sex may fight. **The best combination is a neutered male and neutered female.**
- If you already have a lone rabbit, it is never too late to find a companion for him or her, as long as they are both neutered to reduce the chance of fights. Always introduce them to one another gradually and on neutral ground (the Rabbit Welfare Association and Fund has a good guide).

The introduction process can take anything from a few hours to a few months, so don't give up too soon if the rabbits don't seem to be getting on! However, it is an occasional misfortune that some individuals just won't get on, in which case you must be prepared to keep them separate permanently.

## What about guinea pigs?

Keeping rabbits and guinea pigs together is **NOT RECOMMENDED**. Rabbits tend to bully guinea pigs, and their dietary requirements differ. If you already have a rabbit and guinea pig who are bonded together don't separate them now as this will cause more stress; however, please don't start off with this combination if you are new to rabbits. Rabbits are happier with a companion of their own kind.

# NEUTERING

Even on their own, male rabbits can be territorial, spraying urine and sometimes behaving aggressively. Unneutered females too can be extremely hormonal, even to the point of aggression in some cases. Studies have also shown that entire females are at risk of developing uterine cancer and life-threatening womb infections; spaying eliminates this risk.

Neutering helps your rabbit become more relaxed and easier to live with.

- **Male rabbits (bucks) can be castrated from 16 weeks of age.** The testicles are removed through one or two small incisions in a minor operation.
- **Female rabbits (does) can be spayed from 16 weeks of age, although if they are small it is often preferable to wait until they reach 5-6 months.** The uterus and ovaries are removed via an abdominal incision. Your rabbit will have stitches on their belly, but these are usually buried under the skin and dissolve by themselves so do not require removal.

# VACCINATIONS

## Should I vaccinate my rabbit?

We recommend that rabbits are vaccinated against:

### Myxomatosis

This contagious disease is spread by a virus, which is carried by insects such as flies, mosquitoes and fleas. Britain's wild rabbit population carries the disease. It causes swellings around the eyes, mouth and bottom. Affected rabbits become progressively weaker and eventually die. The prognosis is always very poor for unvaccinated rabbits once they have contracted myxomatosis.

Vaccination, while not 100% protective, dramatically reduces the chances of contracting myxomatosis. When vaccinated rabbits do occasionally catch the disease, it is usually milder and less likely to result in death than in unvaccinated rabbits.

### Viral Haemorrhagic Disease (VHD)

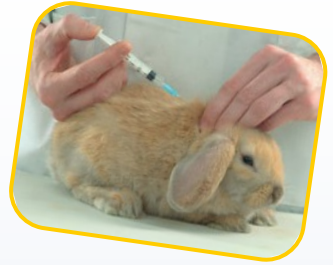
The virus responsible for VHD causes massive internal bleeding. Usually this happens quickly and goes undetected, resulting in sudden unexplained death. Bleeding from the bottom or nose may be seen at death. The virus is spread by contact with infected rabbits (or their droppings/urine). This could happen directly if your rabbit has contact with other pet or wild rabbits – however, the virus survives for months in the environment and also be spread on shoes, hands and equipment.

A single injection, given every 12 months, is available which protects against both of these nasty diseases. The vaccination appointment also allows the vet to conduct a full health check on your rabbit.

## What about insurance and microchipping for rabbits?

We recommend insuring your rabbit through a lifetime policy. Several major insurance companies will insure rabbits; ask us for more information.

Rabbits can be microchipped, just like cats and dogs. This allows your rabbit to be traced back to you if they get lost.



If you would like to make a free rabbit husbandry appointment with one of our nurses, please contact reception on **01782 522100**.

Whether you've had your rabbit for five minutes or five years, our nurses have appointments available to discuss diet, housing, vaccination and dental care.