

Feeding Rabbits

Rabbits are an interesting animal in terms of their appetite and feeding requirements. Studies have shown that they have a sweet tooth and unfortunately this will lead them to preferentially eat foods that are not healthy for them over ones that are. In one study when presented with the choice of hay or a bowl of sugar wild rabbits chose the sugar. As pet rabbit owners therefore we are responsible for providing them with the foods they require in the quantities they require them.

The vast majority of a rabbit's diet needs to be roughage. This can be grazing on fresh grass or as is more often practical providing them with hay. Grass or pasture hay is recommended and lucerne hay should be avoided. Types of grass hay that are acceptable include timothy hay, pasture hay, wheaten hay or oaten hay. This hay should be supplemented with fresh leafy greens and herbs to make up the other 20% of the diet. A good rule of thumb is 1-2 packed cups of leafy greens per day per kilogram of bodyweight and 4 times as much of hay. Acceptable leafy greens include spinach, kale, broccoli, bok choy, cabbage, celery, endive, beetroot or carrot tops and dark leaved lettuce varieties. Herbs that can be used include parsley, coriander, dill,



Pasture Hay bale

basil and mint. Apple and carrot should be used only as treats in very small amounts (1 tablespoon a day). One to two teaspoons of premium grade pellets (eg. Oxbow brand) can be given also, but a full pellet diet is not healthy (not enough fibre). Many commercial rabbit feeds are unfortunately not properly nutritious for rabbits.

Given our regional location obtaining pasture hay bales from a farmer or stock feed store will be much more economical than buying "rabbit hay" in small amounts from the pet shop.

Feeding Rabbits	1
Liver fluke	2
Newsletter Subscription	
Milk Fever after Whelping	3
Lice	4

Rabbits also like to chew on wood blocks that help to maintain their dental health so a piece or two of untreated pine in their environment is helpful too.

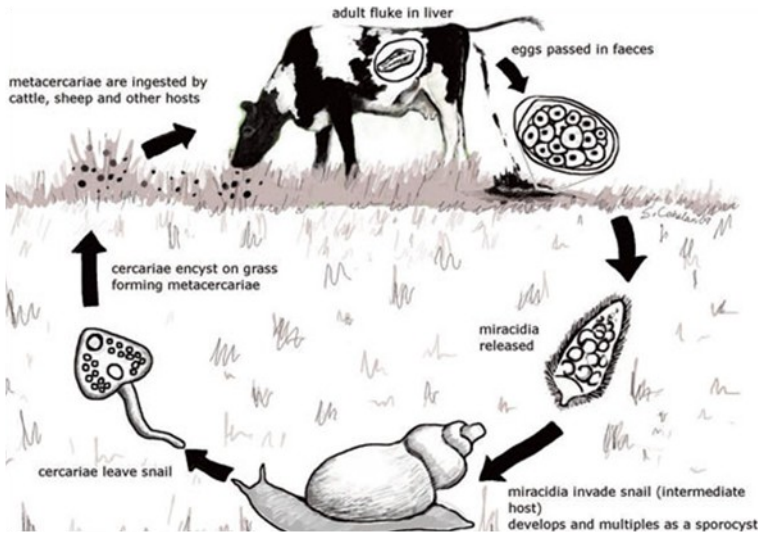
Things that need to be avoided include cereals, grains, nuts, corn, beans, peas, bread, sweets, sugar, breakfast cereal and chocolate.

A properly balanced diet made up of 80% hay or grass is essential to maintain the digestive health of the pet rabbit. Many problems that vets see rabbits for can be traced back to inappropriate feeding.

Tim Craig BVSc
Warby St Vet Hospital

Liver Fluke

Liver fluke infection in cattle is caused by a leaf shaped parasite or 'flake' which can be contracted by ingestion of the parasite whilst the cow is grazing. The infective stage of the parasite is an encysted larval form of the fluke called *metacercariae*. The completion of the liver fluke lifecycle also requires the presence of snails which act as an intermediate host to the parasite. The diagram below depicts the lifecycle of the liver fluke.



Fluke most commonly occurs in paddocks which have swampy and wet conditions. Calves and yearlings are most commonly affected and will undergo gradual but steady weight loss. If the infection is severe enough anaemia, weakness and death will follow. Reduced milk production and fluid accumulation at the lower point of the jaw can also occur (often referred to as 'bottle jaw'- this can be associated with several clinical conditions- NOT just fluke).

Treatment can be successful if the disease is caught early and involves drenching with products such as Fasinex® and Tremacide®

which contain the ingredient 'Triclabendazole.' In general if fluke is a problem on a particular property an autumn treatment and a spring treatment of these drenches can be useful to prevent egg contamination of pasture. Dr Kirri Solly-Slade DVM

NEWSLETTER MAILING LIST

We produce a 4 page newsletter every season to keep our clients informed about the goings on at Warby St Veterinary Hospital and the Wangaratta Equine Hospital. We send the newsletter out with our statements each time it is printed, but also deliver it electronically by email. If you would like to receive the newsletter in your email inbox you can either email me your address at tim@warbyvet.com.au or fill out the slip below and return it to Warby St Vet Hospital or Wangaratta Equine Hospital in person or by snail mail.

YES! I'D LIKE TO RECEIVE THE QUARTERLY WARBY ST VET HOSPITAL NEWSLETTER BY EMAIL!

NAME:

EMAIL ADDRESS:

“KING VALLEY RUN”

A service for routine work provided most **TUESDAYS** charging travel fees from:

Glenrowan, Greta, Moyhu or Milawa.

“BEECHWORTH AND MYRTLEFORD RUN”

For routine work most **THURSDAYS** travel fees from:

Markwood, Everton, Beechworth, Myrtleford

Milk Fever Following Whelping

After the birth of their pups dogs begin the process of feeding them to help them grow rapidly in the first few weeks of life. As we all know milk is high in calcium and therefore the demand for calcium is at its highest in a lactating mother. Added to this, calcium is important in muscle contraction and there has been plenty used up during the labour and birth of the pups. The result is a perfect opportunity for low blood calcium which can be very serious for the dog. The beginnings of this low calcium are muscle tremors and weakness, which commonly occur within the first few days after the pups are born. The tremors generate heat (hence the name milk



fever) and can deteriorate into an inability to stand and sometimes even seizures. We obviously wish to avoid this situation so ensuring a good supply of calcium to the mother in late pregnancy and early lactation is very important.

Feeding your dog a good quality commercial diet throughout the pregnancy is recommended. The volume of food can be increased in the last 3 weeks as the pups do most of their growth during this time inside their mother. It is also important to remember that although the mother needs more food they are often only capable of eating a small meal due to their expanding belly, so feeding 3 or 4 times a day in smaller amounts is often a good idea.

Fresh meat is a poor source of calcium and should not be used as the main part of the mother's diet either in pregnancy or lactation. After the mother delivers the pups we recommend feeding a good quality commercial puppy food to the mother as these are higher in calcium and energy than regular adult dog food.

You can discuss using a calcium supplement with your veterinarian after the pups are born and this would be recommended in a dog that has previously had milk fever. Calcium supplementation **during pregnancy** is not usually recommended as it reduces the dog's ability to rapidly mobilise calcium from its bones when the need arrives. Supplementing calcium in later pregnancy dampens down the hormones that draw calcium out of the bones and help improve its absorption from the diet. When the milk production begins it takes time for the dog to increase the production of these hormones again and often milk fever occurs before the dog can adequately respond to the increased demand.



Calcium powder for supplementing a lactating mother

Tim Craig BVSc
Warby St Veterinary Hospital

Lice

Lice populations significantly increase in winter. They prefer cooler skin temperatures and the denser winter coats. Generally lice are species specific and do not survive or breed on other animals or humans. For instance cattle lice will not affect sheep and vice versa. Lice are also relatively large and can be seen with the naked eye, whereas mites are microscopic. We will discuss the effects of lice on cattle, horses and sheep including survival preferences, symptoms, and management.

Sheep

Sheep are affected by different types of lice including body lice, face lice and foot lice. The body louse however is the one most commonly seen. It appears to be more responsible for causing a serious problem compared to other types of sheep lice. Unlike lice on other species, lice affecting sheep survive at temperatures of 37°C and prefer a high humidity. Body lice do not like extreme changes in these conditions and in order to maintain survival will move up and down the wool fibres. Hence, they cannot survive for long on fence posts or yards off of the sheep.

Lice on sheep are unique in the sense that they do not suck blood but rather feed on dead skin, as well as skin secretions and bacteria. This can result in a thickening of the skin.

Sheep that are recently infested with lice are more sensitive than those that have had them for long periods. Hence they will show more symptoms. Symptoms of lice infestation can take time to show depending on the size of the lice population along with sheep sensitivity. There are a variety of chemical treatment options available including pour-ons, dips and sprays which effectively treat lice on sheep.

Horses

There are 2 types of lice on horses, ones that bite and ones that suck. Biting lice on horses are usually observed around the back of the head and body whereas sucking lice are mostly found at the base of the mane, at the top of the tails and even around the fetlocks. Horses with longer winter coats are more at risk of lice infestations. An example of sucking lice is shown to the right:

In severe cases lice can cause weight loss and anaemia.

Treatments are often sprays, washes, powder insecticides or pour ons. If a horse is rugged or is consistently in work all rugs and gear should also be sprayed and left unused for 14 days. Even objects coming into contact with the horses such as brushes or blankets can spread the lice to other horses if not treated. Lice can live for a few hours off the horse on fences or in stables where the horse has rubbed.



Sucking lice on a horse

Cattle

There are 6 species of cattle lice in Australia. These are very similar to those found on sheep and horses.

An image of cattle lice and eggs is displayed at the right:

Cattle lice have a life cycle of 3-6 weeks. The eggs can be seen glued to the hairs. In general insecticides registered for use on cattle do not provide adequate control against louse eggs, meaning that even after treatment is applied the eggs can still hatch and restart the cycle. When and how often to treat cattle depends on individual circumstances. There are 4 types of treatment available including sprays, pour-ons, insecticidal ear tags and certain worm drenches.

General Symptoms of lice include:

- damage to fences, yards and trees
- hair loss
- rubbing, biting and scratching
- poor, rough coat
- skin wounds and raw areas
- ***Lice infestations are more likely to impact animals which are:***
- diseased
- nutritionally stressed
- Aged
- In poor condition



Cattle Lice