Feeding rabbits and guinea pigs

Rabbits and guinea pigs are herbivores, meaning they derive their nutrients from plant material. Correct feeding and watering strategies are needed to ensure that they are kept in optimum health at all times.

Providing a balanced diet is necessary to meet all their dietary requirements. Knowledge of the nutritional value of a variety of feeds and the energy requirements of individual animals will assist you to feed for optimum health.

Rabbits and guinea pigs can be fed and housed together.

Basic nutrition

Rabbits and guinea pigs need six basic nutrients to meet their metabolic requirements:

- carbohydrates
- protein
- fats
- minerals
- vitamins
- water.
Carbohydrates

These are necessary as a source of energy. If not enough carbohydrates are available, rabbits and guinea pigs may suffer from cold and heat as they won't be able to cope with temperature extremes.

Sources of carbohydrates include:

- oats
- corn
- wheat
- barley
- lucerne
- grass.

Visit your local feed produce store to purchase good quality feed. Custom feeds are available specifically for rabbits and guinea pigs.

Protein

Protein is essential for building muscle, growth and repair. Deficiency of this nutrient will result in poor growth potential, lethargy and anorexia.

Sources of protein include:

- soybean
- milk powder
- sunflower seed
- grass
- lucerne.

Fats

Fats are a source of energy, as well as assisting in transporting vitamins, giving a shiny coat and lubricating the digestive system. Too much fat will cause obesity.

Adding a small quantity of vegetable oil to the diet is of value. It will improve digestion and give a shiny coat.

Note: too much oil will lead to obesity.

Sources of fat include the following but you rarely, if ever, need to add these:
Vitamins and minerals

These are essential to the functioning of vital organs, homeostasis and growth. Deficiencies will create disease and deformity.

Sources of vitamins and minerals include:

- grains
- roughage
- grasses
- fresh fruit and vegetables.

Water

Water is essential for sustaining life. Good quality water, moderate temperatures and accessibility are all important considerations. Several feeds are high in water and can decrease the quantity of extra water that is needed. Weather and lactation can also dictate the volume of water needed per individual animal.

Animals should have access to fresh clean water at all times. This can be provided via a sipper bottle or an automatic system, although these can block easily so should be checked regularly. Water can also be provided in heavy ceramic dishes that the animals cannot tip over.

The type of waterer you choose for your animal house depends on the following factors:

- supply a continuous fresh supply if the system is automatic
- be reliable and efficient
- not freeze in cold weather, or overheat in hot weather
- be tamper-proof and spill-proof
- be easy to clean and replace
- have hidden float valves if it is an automatic system to avoid breakage, flooding or failure of supply
- be the appropriate size for the number of animals to be supplied.

Automatic waterers are an excellent way to ensure that animals have a constant flow of fresh water. However, they still need to be checked daily to ensure that they are working properly.
A sipper bottle is an ideal way to water small numbers of rabbits and guinea pigs. Be aware that some individuals are adept at removing the rubber stoppers. It is also important to change the water every day.

What to feed rabbits and guinea pigs

Guinea pigs are like humans in that they cannot make vitamin C, so need to be provided with fruit and vegetables that are high in this vitamin, such as tomatoes, capsicums, broccoli, cauliflower and oranges.

Alternatively, ascorbic acid can be added to the drinking water. One gram per litre of water is needed. Remember to change the water daily as vitamin C deteriorates rapidly.

The most common form of feed is pellets but care must be taken to ensure that they are of good quality.

Roughage is essential to help retard tooth growth and assist with digestion. Include lucerne hay, straw and root vegetables.

Always wash fruit and vegetables before feeding them to the animals to prevent ingestion of toxins.

Throw out old fruit and vegetables daily to reduce pests, eg flies and ants.

Include grains for variety.

Often, rabbits and guinea pigs eat their first faecal pellets of the morning as this assists the growth of micro-flora in the gut and aids digestion—this is known as coprophagy.

Do not feed large quantities of cabbage or lettuce to these animals as it can be toxic and actually kill the rabbit or guinea pig.

Grass is a good basic diet for rabbits and guinea pigs as long as it is fresh and has not been treated with chemicals. A mobile cage on the back lawn is a good option for pet rabbits or guinea pigs. When grass is in short supply, good quality lucerne hay or chaff is a good substitute.

Feeding and storage

Guinea pigs are very messy animals and tend to soil their food by walking, urinating and defecating in their feed bowl.

To avoid this, have the bowl raised slightly off the ground.
Rabbits need a heavy bowl or hopper as they quickly learn the game of picking up the bowl and emptying the contents on the floor of the enclosure, thus exposing feed to contamination.

Dry feed supplies need to be stored in tightly closed containers that prevent access by vermin and moisture.

Fresh fruits and vegetables should be stored in a refrigerator.

The quantities of feed to be kept on hand will depend on the numbers of animals being catered for.

In research institutions, it is common practice for foodstuffs to be autoclaved.

### Quality of feed

Whenever purchasing food for your animals, it is important to buy good quality feed to ensure that it is eaten and that it doesn't cause digestive upsets, respiratory distress or illness. Always purchase fresh fruit and vegetables and check grain, pellets and roughage for spoilage or dust.

<table>
<thead>
<tr>
<th>Feed</th>
<th>Good quality food</th>
<th>Bad quality food</th>
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</thead>
<tbody>
<tr>
<td>Lucerne hay and chaff</td>
<td>Green colour, evenly cured, cool to touch, with a sweet smell, no dust, mould or weeds present. Bales should be reasonably heavy and tightly packed</td>
<td>Brown, grey, white patches or black, very uneven colour, brittle, dusty, light weight, musty, warm or hot to touch, presence of moulds and weeds</td>
</tr>
<tr>
<td>Cereal hay and chaff</td>
<td>Bright colour, green tinge with wheaten, more of a gold colour with oat, cool to touch, low dust, good grain content, reasonable weight, sweet grain smell</td>
<td>Grey, yellow colour, mouldy, musty or sour smell, dusty, light weight, weeds present</td>
</tr>
<tr>
<td>Grains</td>
<td>When you buy whole grain, it should be whole—not cracked, broken or dry—plump heavy grain, little dust, bright colour appropriate for the grain type, and every type has its own distinct fresh smell. Even processed grain should be free flowing, no moulds, etc</td>
<td>black hollow spots, broken or shrivelled, dry and dusty or oily and the presence of moulds or fungus. Weevils create a lot of dust, and give all grains a distinct sour smell</td>
</tr>
<tr>
<td>Pellets</td>
<td>Regardless of what shape it is meant to be, it should be whole, unbroken, free</td>
<td>Crushed, crumbled, powder, high dust, uneven colours, and no consistency from bag</td>
</tr>
<tr>
<td>Grain mixes</td>
<td>You should be able to identify the grains and some of the other ingredients in the mix, which should be dense, dust free, free flowing with good sweet, appetising smells</td>
<td>A powdery type mix full of crushed, unidentifiable dusts and powders that have unpleasant odours. Weight is usually very heavy or very light</td>
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**Note**

When buying feed for any animal, always go for quality not cheap quantity. There are no real bargains in the stock feeding industry, without some sort of catch. If you cannot see a sample of a particular feed before you buy it, then you should warn the person selling it to you that if you are not completely satisfied when you open the bag, you will be returning it.