

## Companion Animal Hospital Exotic Animal Care



The guinea pig or cavy, *Cavia porcellus*, is an intelligent and often friendly companion animal. Despite their common name, they are not members of the pig family, nor are they from Guinea. Domestic guinea pigs are a hybridized descendent of other species of the genus *Cavia* from the Andes Mountains in South America. They are members of the rodent group called hystricomorphs. On average, guinea pigs may live 5-7 years, however with excellent care they may live up to 10 years. There are many different breeds with varying coat lengths and colours available in the pet trade today.

### 1. Feeding your pet guinea pig

Guinea pigs should always be eating and producing stools because of the structure of their digestive systems. As hindgut fermenters, their bowels are full of healthy bacteria that aid in digestion of plant material. If a guinea pig stops eating, these bacteria quickly die off and produce toxins. **This is a life-threatening situation for a guinea pig, and is an emergency.** If your pet has stopped eating and/or has stopped producing stools, please contact us or the Metro Animal Emergency Clinic ((902) 468-0674) as soon as possible. **Always provide fresh food to your guinea pig to help avoid this condition.**

Guinea pig diets should consist of three parts: Pellets, hay, and fresh fruits and vegetables. As guinea pig are **browsers** by nature, they will selectively eat the most nutrient-rich food since this is a less common but more “valuable” meal in the wild. This means that for our pets it is important to limit their access to rich foods like pellets, as they will easily overindulge which will contribute to obesity and dental problems.

- **Vitamin C:** Guinea pigs require a dietary source of vitamin C, as (like humans and other primates) they cannot make this molecule on their own. There are many balanced, modern pelleted diets that offer a stabilized vitamin C that does not degrade under normal storage conditions, and offering vitamin C through these diets in addition to feeding fresh fruits and vegetables is our preferred way to make sure your guinea pig gets enough of this vitamin.

Older resources recommend using a vitamin C additive in the water bottle. We do not recommend this. Vitamin C that is not stabilized degrades quickly in light, heat, and moisture, and within hours the vitamin C that you have added to the bottle is no longer active. These additives may also deter guinea pigs from drinking their water, as not all guinea pigs like the taste of the water supplement.

Some guinea pigs have special dietary requirements and may need a vitamin C supplement in tablet form. Our staff can recommend a safe product for your guinea pig if this is the case.

- **Pellets:** This is a balanced diet that ensures that your guinea pig is receiving appropriate nutrition. Guinea pig pellets have adequate levels of protein, vitamins, and minerals. A rule of thumb is 1/8 cup daily, but it is a good idea to check with the manufacturer's recommendations. Pellets should ideally have stabilized vitamin C to meet the guinea pig's special needs for vitamin C, please speak to our staff regarding pellet brand options.
- **Hay:** Timothy and/or orchard hay should be provided *ad libitum*. Hay provides fibre that keeps the digestive tract healthy, and guinea pigs can use the nutrition in hay because of their gut bacteria. Not only does hay provide nutrition, it also helps maintain their teeth and they may also use it as bedding. Store hay in a cool, dry place and regularly inspect it for moisture, discolouration, and/or mould. Hay should have a fresh, "grassy" scent.

Young guinea pigs (up to 6-7 months) or pregnant and nursing females may be fed alfalfa hay in addition to other hays. It is very rich in protein and calcium, which is good for a growing guinea pig. After the age of 6 months we discourage feeding alfalfa hay as it promotes urolith (bladder stone) formation and can contribute to obesity.

- **Vegetables and fruits:** Providing a mix of healthy and appropriate fruits and vegetables will help to round out your guinea pig's nutrition and can provide enrichment. The bulk of the vegetables should be leafy greens, about 1 packed cup of greens per guinea pig. Offer at least three kinds of vegetables daily, and rotate food items regularly. When offering a new fruit or vegetable, do so one at a time so that you may monitor how your guinea pig likes it. If any new food item causes soft stools or diarrhea, eliminate it from the diet.

Some fruits and vegetables naturally contain antinutrients. These are plant chemicals that reduce the body's ability to use certain nutrients. Oxalates or oxalic acid, a calcium antinutrient, is the biggest concern in pet guinea pigs.

*Leafy greens I (low in oxalates):* 60-75% of what is offered daily. Items with an asterisk (\*) are high in calcium and should be offered in combination with other, low-calcium greens.

- |                       |                       |                      |
|-----------------------|-----------------------|----------------------|
| • Arugula             | • Dandelion greens*   | • Mint (any variety) |
| • Basil (any variety) | • Dill leaves         | • Radicchio          |
| • Bok choy            | • Endive or escarole* | • Raspberry leaves   |
| • Borage leaves       | • Fennel              | • Watercress*        |
| • Boston lettuce      | • Frisée lettuce      | • Wheatgrass         |

- Chicory
- Cilantro
- Collard greens\*
- Cucumber leaves
- Mâche or nut lettuce
- Romaine lettuce
- Spring greens/mix
- Turnip greens\*
- Yu choy

*Leafy greens II (high in oxalates):* 15-20% of what is offered daily. Do not offer more than one of this category daily.

- Beet greens
- Carrot tops
- Kale
- Mustard greens
- Parsley
- Radish tops
- Spinach
- Swiss chard
- Sprouts, various (1-6 days old for better nutrition)

*Other vegetables:* About 15% of what is offered daily.

- Bell peppers
- Brussels sprouts
- Carrots
- Celery (leaves, stems)
- Flowers (ensure that they are pesticide-free): Hibiscus, nasturtium, pansy, rose
- Snow peas
- Summer squash (scallop squash, yellow crookneck squash, zucchini)

*Fruits:* Less than 10% of what is offered daily. Offer at most about 1 teaspoon per guinea pig daily, and you do not need to offer these foods every day. Unless otherwise stated, leaving the skin, rind, or peel on the fruit is preferred as long as the food is washed and rinsed thoroughly with warm soap and water. Feeding too much fruit can cause digestive upset.

- Apple, remove stem and seeds
- Apricot, remove pit
- Banana, remove peel
- Blackberries
- Blueberries
- Canary melon
- Cantaloupe
- Cherry, remove pits
- Currants
- Honeydew
- Kiwi
- Mango
- Nectarine
- Papaya
- Peach, remove pit
- Pear
- Pineapple, remove skin and leaves
- Plums, remove pit
- Star fruit
- Strawberries
- Watermelon

It is a good habit to find a food that your guinea pig enjoys to use as a treat. This can be offered in small amounts to gauge your pet's appetite, meaning that if he does not eat his favourite treat there may be an issue with his appetite. This treat food can also be used as positive reinforcement to reward good behaviours.

Some foods will upset the gut of guinea pigs, or are toxic. Avoid feeding these foods and plants (this list is not exhaustive):

- Apple seeds
- Apricot plant (all parts except fruit)
- Avocado
- Beans (any kind)
- Bread
- Broccoli
- Cabbage
- Cereals
- Chocolate
- Corn
- Nuts
- Oats
- Onion
- Peas
- Refined sugar
- Rice
- Seeds
- Tomato plant (leaves, stem, vines)
- Wheat

For a complete list of toxic garden and houseplants, please see this list on Medirabbit.com: [http://www.medirabbit.com/EN/GI\\_diseases/Food/Toxic\\_plants\\_en.pdf](http://www.medirabbit.com/EN/GI_diseases/Food/Toxic_plants_en.pdf)

Guinea pigs should always have access to fresh and clean water, provided in a water bottle. The water bottle and any other food dish should be washed regularly to maintain good hygiene.

## 2. Behaviour, socialization, and handling

Guinea pigs have evolved as prey animals so they are naturally shy and reserved. With time and patience, many guinea pigs learn to enjoy socializing with people, and even gentle handling. It is important to socialize your pet slowly, as being too forceful will cause undue stress.

Guinea pigs prefer to have their feet on the ground. They often become interested in a person who sits on the floor with them. Allowing the guinea pig to come to you to investigate is a great way to start with socialization. Try tapping or patting the floor gently- they often come to investigate the vibrations. Having a tasty food item ready as a reward can help your pet learn that you are a source of good things!

When picking up a guinea pig, always support their rear end cupped in one hand and their front end cupped in the other. A two-armed hold, like carrying a football, is a safe way to carry your guinea pig. These animals are very stocky and need to feel secure when being held.

Guinea pigs need their nails trimmed regularly. Socializing your pet at an early age can help make this procedure less stressful. Our staff can demonstrate how to do this at home if your guinea pig is well-socialized. If you are not comfortable with handling or trimming, our staff can perform regular nail trims for you.

## 3. Housing and exercise

Although guinea pigs are small animals, they need a relatively large amount of space for exercise, and bigger is always better! It is recommended that for a single guinea pig, a floor space of at least 76 x 91 cm (0.7 m<sup>2</sup>) is the minimum. For each additional guinea pig, we

recommend adding an additional 0.3 m<sup>2</sup>. Most small cages available in pet stores are not suitable as permanent caging for guinea pigs.

Cage flooring must be solid, like plastic, and not grid or mesh caging. Cage floors made of grid, mesh, or other similar material results in damage to the delicate feet that can become infected (often termed “bumblefoot” but properly called pododermatitis).

Bedding or substrate in the cage needs to be carefully selected. Bedding such as hay, fleece blankets, and towels are all safe for guinea pigs. Corrugated cardboard boxes that have been flattened may also be used, and guinea pigs often enjoy chewing on this for enrichment. Wood shavings of a non-aromatic wood, like aspen, are safe. Aromatic wood shavings such as cedar and pine are not safe: The fumes (aromatic hydrocarbons) are irritating to the respiratory tract and are hepatotoxic (harm the liver) in large concentrations or after long term exposure.

Compressed newspaper pellets make a great litter, and many guinea pigs can learn to use a litter box.

We do not recommend keeping your pet guinea pig outdoors during warm weather. Pets outdoors are exposed to parasites such as fleas and bot flies, predators, and weather extremes.

#### 4. Health

Guinea pigs are prey animals so they hide any signs of illness very well. This is a behavioural defense to avoid being eaten in the wild. If you notice any subtle changes in behavior, this can be the first hint that something may be wrong. Do not hesitate to contact us if you feel that your pet’s behaviour has changed.

Your guinea pig’s fur should be clean and dry, and his or her eyes, nose, and mouth should be free of discharge. If you notice anything like runny eyes or nose, wet fur around the mouth, anus, or genital region, these can be linked to various health problems and your guinea pig needs to see the veterinarian.

Monitoring your guinea pig’s waste production is important. Generally, they produce two forms of waste:

- **Feces or stools** are produced as waste from the digestive tract, and like in other animals contains what is left over from digestion. Normal, healthy guinea pig stools are small, oblong, and dry to slightly moist. Sometimes stools will be more moist if the guinea pig has eaten some unusual foods, but continued moist stool can be a sign of serious digestive upset. True diarrhea where the stool is mostly water and has no solid shape is rare in guinea pigs, but indicates a life-threatening health problem and requires immediate treatment.

- **Urine** can vary in colour and consistency in healthy guinea pigs, depending on what the animal is eating. Generally, urine is clear and pale yellow like in other mammals, but in very young guinea pigs it may vary from orange to brown. If a guinea pig's diet is high in calcium, the urine will appear cloudy, but it should never be "gritty" (this indicates a serious problem and your pet should be examined by the veterinarian). Blood in the urine (hematuria) may appear red or pink and requires veterinary attention. If your guinea pig is trying to urinate but is only producing small drops or no urine at all, this is a true emergency and requires immediate medical attention. Conversely, if your guinea pig is incontinent and its belly and perineal region are always moist with urine, this is abnormal and indicates a health problem.
- **"Boar glue"** is a whitish, rubbery substance produced by male guinea pigs, and is actually ejaculated material. Finding this substance in the cage is normal, however if it appears to be "stuck" on the prepuce this requires immediate veterinary attention.

## 5. Further reading

There are many excellent sources of guinea pig care and health information on the Internet. We recommend the following websites as a start.

- Guinea Lynx  
<<http://www.guinealynx.info/>>
- Veterinary Partner  
<[www.veterinarypartner.com](http://www.veterinarypartner.com)>
- Guinea Pig Cages.com  
<[www.guineapigcages.com](http://www.guineapigcages.com)>