

Basic Care of Guinea Pigs

THE GUINEA PIG

The guinea pig (*Cavia porcellus*) is a rodent and is a domesticated version of the wild cavies of the Andes Mountain area of South America. They were first domesticated by the Andean Indians of Peru, who used them as a food source and as a sacrificial offering to Incan gods. During the 16th century, Dutch explorers introduced guinea pigs to Europe, where fanciers selectively bred them. The guinea pig entered the research laboratory in the 18th century, and has since made significant contributions to the scientific community.

There are five basic varieties of guinea pig. The most common is the English or shorthaired variety characterized by uniformly short hair coat. Abyssinian guinea pigs have rough looking coats, which are arranged in whorls. Peruvian guinea pigs have extremely long hair. The Silky guinea pig is a larger variety and is distinguished by its medium length silky hair coat. The Teddy Bear guinea pig is characterized by medium length hair of normal consistency. These last 2 varieties are encountered less commonly.

Guinea pigs are very social and gentle animals, making them very good pets. They rarely bite or escape from cages, are not difficult to care for, and may live 5 to 7 years. They are most active at dawn and dusk (crepuscular). Some guinea pigs engage in a behavior known as stampeding, which involves running wildly around the perimeter of the cage. Barriers used to inhibit this type of behavior may cause injury to young pigs. When overcrowded, guinea pigs may chew the hair of other guinea pigs (barbering). Guinea pigs will eat their own feces. This is a natural behavior essential to good health because it provides extra vitamins and nutrients.

VETERINARY CARE

In order to maintain the health of guinea pigs, it is important to determine the presence of any problems. Since they are adept at masking the signs of illness, regular examinations are a valuable addition to preventative care. An examination by a veterinarian is crucial to keeping your guinea pig healthy. Problems detected early can often be treated more easily and effectively.

New guinea pigs should be examined soon after they enter the home. At this time the veterinarian can establish the current health status of the guinea pig and give recommendations for husbandry. After this initial examination, annual examinations should be maintained until the age of 4 years old. At the age of 4 years old, guinea pigs are considered senior. Senior patients should have a thorough physical exam every 6 months.

HOUSING

Guinea pigs do not climb or jump well and therefore can be kept in plastic bottom tub cages with wire tops, open bins, or any other type of safe, easily cleaned container. If housed in open enclosures the sides should be at least 10 inches high. Also, be sure other family pets, such as dogs and cats, are not a threat. Enclosures made of wood should not be used due to difficulty in cleaning and susceptibility to destructive gnawing. Many plastics are also easily destroyed by

gnawing. Ideally, the enclosure should have one open side for adequate ventilation. In addition, the cage should be free of sharp edges and other potential hazards. At least four square feet of floor space should be available for each guinea pig.

Cage flooring can be either wire or solid. Solid flooring is recommended over wire flooring. Wire mesh flooring provides a cleaner environment and easier maintenance, but may result in injuries to the feet and hocks. Housing on wire over long periods of time can result in footpad and hock infections from abrasive rubbing on fecal soiled wire. Broken legs are common in guinea pigs that fall through the wire mesh. Although solid flooring requires more effort to keep sanitary, it is safer for the guinea pig.

Bedding materials must be clean, non-toxic, absorbent, relatively dust free and easy to replace. Acceptable beddings are recycled paper litter, pine wood shavings, shredded paper, and processed ground corncob. Make sure the ground corncob is properly processed to reduce fungal spore problems. Cedar shavings should NEVER be used since they have been associated with causing respiratory and liver disease. Sawdust should also be avoided since it tends to accumulate within the external genitalia of male guinea pigs causing an impaction. Remove soiled bedding and stale food daily. Replace old bedding with fresh clean bedding weekly. Cages should be thoroughly cleaned and sanitized at least once weekly. Bleach diluted 1:32 makes an excellent disinfectant if used after cleaning and rinsed off well.

Guinea pigs are more comfortable and relaxed when housed in a quiet spot away from noise, excitement and other such stresses. They need to be kept in a cool, dry environment with adequate ventilation. Temperatures should be kept between 60-75 degrees and 40-70% humidity.

Guinea pigs need a spot to hide and feel safe for sleeping and resting. A hide box can be a cardboard box, plastic igloo, or a hay tunnel/bungalow. Cardboard tubes, PVC piping and/or flower pots are fun additions to the cage for guinea pig play time and enrichment. Finally, provide something for your guinea pig to chew on. Small branches or twigs, untreated wood, or cardboard works well.

GROOMING

Most guinea pigs will do most of their own grooming. They keep their fur clean and maintain themselves well. There are a few things they may need help with, however. The first is trimming the toenails. Once every 4-8 weeks, it is a good idea to trim the tips of the nails. If the nail is clear, the quick can be seen as a pink area within the nail. Dark nails are more difficult. The quick should be avoided. Have one of our staff show you how to trim nails. If you do this at home, you should have some styptic powder or cream available to stop any bleeding. Nicking a quick is not life-threatening, but it can be messy and it does hurt the guinea pig. Often, a horny growth is present extending from the foot pads. Consult your veterinarian prior to trimming these. Brushing, bathing, or ear cleaning may be required under certain circumstances.

HANDLING

Generally, guinea pigs are docile, non-aggressive animals. They rarely bite or scratch when handled. They usually voice their protest simply by letting out a high-pitched squeal. They may, however, struggle when being picked up or restrained. Extreme care should be taken not to injure

them during handling. They should be approached with both hands. One hand is placed under the chest and abdomen, while the other hand supports the hindquarters.

Children should be closely supervised around guinea pigs. Aside from outright injury, guinea pigs can become stressed by the erratic movement of some animals and children. Interactions between different species (dogs, cats, rabbits, etc.) should be discouraged. Dogs and cats can cause bodily harm to the guinea pig. Other species can carry bacteria and disease that guinea pigs have no immune defense to leading to serious and sometimes fatal infections.

BREEDING

Breeding guinea pigs is relatively easy since they are social and males and females can be kept together. However, several factors must be kept in mind. In addition, homes must be found for the 2 to 4 babies.

Females (sows) should be bred between 4-6 months of age. After this time frame, the guinea pig may not be able to deliver babies normally. The reason for this is that the pelvis of the guinea pig fuses at this early age, narrowing the birth canal and preventing the babies from passing easily. Overweight sows often will develop pregnancy toxemia. Males (boars) should be at least 4 months of age before breeding.

The length of pregnancy is 59-72 days. The time of delivery is difficult to assess due to the relatively long gestation period and lack of nest building. An uncomplicated delivery usually takes about ½ hour with an average of 5 minutes between babies. Unfortunately, abortions and stillbirths are not uncommon. The young are born fully furred, with eyes open and able to eat solid food. It is recommended to allow them to nurse for 3 weeks before weaning. Nursing females should be separated from males to prevent mating. A female can be pregnant with one litter while nursing another.

If breeding is not desired, males can be neutered and females spayed to avoid unwanted litters and potential diseases associated with the reproductive tract.

DIET

Grass Hay

Guinea pigs are herbivores and in their natural environment grasses are the most important part of their diet. Grasses are abrasive to the teeth, which is why the guinea pig evolved teeth that grow throughout their life. The molars are particularly adapted to grinding up tough fibrous materials. Grasses also provide a variety of nutrients as well as indigestible fiber, which helps keep the intestinal tract moving at a normal speed, and digestible fiber that is used by the bacteria in the cecum to produce such things as vitamin B and amino acids.

The most important part of a guinea pig's diet is good quality grass hay. It should be available at all times. The guinea pig can eat as much as he/she wants. You can use any grass hay, including timothy, orchard grass, brome, and others. Avoid alfalfa, which is not a grass but rather a legume (like peas and beans) and is too high in calories and some nutrients such as calcium and protein. While the hay can be provided in a hay feeder or on the bottom of the cage, putting it in a basket or cardboard box can provide enrichment for the guinea pig.

Vitamin C

Unlike most mammals, guinea pigs cannot produce their own vitamin C so it must be supplemented daily in their diet. The amount of vitamin C required by adult guinea pigs is about 20-25mg daily and up to 30-40 mg daily for pregnant guinea pigs. Probably the best and healthiest way to provide vitamin C is by offering vegetables rich in vitamin C, such as bell peppers (red, yellow and orange are best), parsley, kale, dandelion greens, mustard greens, collard greens, and broccoli leaves. Carrots and lettuce are not good sources of vitamin C. Fresh produce with high Vitamin C content should be offered at 1 cup daily. Always thoroughly wash all fresh produce to avoid exposing your pet to pesticide residues or bacterial contamination.

Other sources for vitamin C supplementation include vitamin C tablets (Oxbow makes a tablet for guinea pigs) or flavored liquids for children (for example Childlife Essentials Vitamin C for Kids Natural Orange). Pelleted guinea pig diets are supplemented with vitamin C, however it is very unstable. Fresh pellets lose about ½ of the vitamin C content due to degradation within 6 weeks of manufacture. For this reason, it is recommended to provide supplemented vitamin C to the diet. Websites with good vitamin C information include <http://www.veterinarypartner.com> Small Animal Health Series; Vitamin C Supplements for Guinea Pigs and <http://www.guinealynx.info> which has a calculator for Vitamin C.

Pellets

There are complete pelleted diets formulated for guinea pigs. However, these diets were developed for guinea pigs that were used in research. The diets support maximum growth rates but probably are not ideal for longevity, gut function, and overall health. While a growing pig (less than 4 months old) may be fed unlimited pellets, it is advisable to limit the pellets of adults. Adults should be restricted to 1-2 tablespoons of pellets daily; otherwise, they may become obese. Use guinea pig pellets that are grass-hay based, not alfalfa based. Also, do not feed diets that have dried fruits, seeds, and other additives. As previously discussed, the guinea pig's intestinal tract is highly specialized for digesting fiber. When inadequate fiber is given, intestinal motility is reduced, the wrong types of bacterial flora proliferate, and toxins may be produced. Impactions, diarrhea, enterotoxemia, and other disorders may result from the excessive feeding of grains (i.e. pellets, seeds, cereals, and breads). Additionally, pellets have higher levels of protein and calcium than is necessary for adult guinea pigs. Do NOT feed rabbit pellets as a substitute for guinea pig pellets. Unlike rabbits, and most mammals for that matter, guinea pigs require a high level of folic acid and vitamin C. Guinea pig diets are uniquely formulated with these requirements in mind, whereas rabbit pellets are not.

Treats

Foods to be avoided are the high starchy foods such as peas, beans, corn, nuts/seeds, cakes, cookies, cereals, grains, breads, etc. Other foods that can be offered in very limited quantity are those that are high in sugar and carbohydrates, such as carrots and fruits. These foods create an imbalance in the normal bacteria in the intestinal tract and can lead to serious disease. You can offer *one* baby carrot or *small* piece of fruit daily at the most. However, 2-3 times weekly is probably a healthier frequency.

Food Bowls and Water

Food should be offered in a dish suspended an inch or two above the bedding. Food offered on the bottom of the cage may be soiled by droppings or urine. Heavy ceramic bowls are recommended because they resist tipping and chewing. Guinea pigs are very finicky and may refuse food if the type of food or the container is changed. Any change in the diet should be made gradually.

Finally, fresh, clean water should always be available in sipper bottle or a heavy crock that prevent spillage and should be changed daily. Do not add any medications to vitamins to the water as it will change the taste of the water and promote bacterial growth. If the taste of the water is disagreeable the guinea pig may not drink as much. Not drinking enough water can result in dehydration and disease, such as kidney disease and kidney or bladder stones. It is very important that all food and water containers be cleaned and disinfected daily. In addition, many vitamins are inactivated shortly after they are exposed to air, water, and light.

Foraging

Foraging for food is one of the most natural behaviors and provides a great enrichment for pets. Most mammals will spend a good portion of their day looking for food. Try hiding food around the cage, in the bedding or exercise area so the guinea pig has to forage for the food. Put the hay or fresh food in places such as hidden in little crumbled pieces of paper, empty toilet or paper towel rolls, or non-toxic baskets. Offer pellets in a small hollow plastic ball with holes larger than the pellet. As the guinea pig rolls it around, the food falls out and he/she gets to eat. It provides exercise and stimulation. You do have to take care that the guinea pig is eating and getting adequate nutrition. Be careful not to overfeed.

Our Mission

All Creatures Animal Hospital is dedicated to providing progressive medicine in a caring environment for pets of all species. Through preventative medicine, client education, professional development of our staff, and advanced medical and surgical techniques, we hope to foster a strong and lasting bond with clients and their pets.

All Creatures Animal Hospital
2001 N. Linview
Urbana, IL 61801
Quality medicine in a caring environment.
217-328-4143