## Chinchillas

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### **Natural History**

Chinchillas (*Chinchilla lanigera*) are a species of medium sized rodent native to the Andes of South America. Domestic chinchillas are descendents of the long tailed chinchilla, which is distinct from the short tailed chinchilla (*Chinchilla chinchilla*). Short tailed chinchillas have been hunted nearly to extinction for their fur, which is dense and extremely soft. However, long tailed chinchillas are also considered endangered due to overhunting. Long tailed chinchillas have longer tails, larger ears, and thinner bodies. Chinchillas have the densest fur of any land mammal, which helps them survive at cool temperatures at high altitudes. Wild chinchillas live in groups on mountain slopes where they consume vegetation and occasionally seeds and insects, primarily at night. All domestic chinchillas are descended from a small group of 11 chinchillas that were imported into the US in the 1920s. These animals have been kept for fur, companionship, and as research animals.

### Characteristics and Behavior

Chinchillas tend to be fairly docile, gentle, and playful. They can bite when threatened, but generally do not. Chinchillas are social and have minimal odor. Their fur is extremely soft and comes in a variety of colors that make them appealing in the pet trade. A medium, blue-grey color is the wild type and most common, but various shades of black, white, dark grey, and even brown are available. Chinchillas are generally quite curious and active, but may be shy or nervous if not handled frequently from a young age. They may also be suspicious of new people or objects in their environment. Like other small mammals, chinchillas need regular enrichment and exercise to stay physically and mentally fit. They are social animals that do best when housed with other chinchillas.

# Lifespan

10-12 years, up to 20 has been reported.

### Adult Size

400-700 grams with females usually larger than males.

# Housing

Chinchillas are very active and playful and require a large amount of space. Cages should be as large as possible with multiple levels to encourage activity. The multi-level Critter Nation cage, which is around 60", is a great choice for chinchillas. Large cages meant for ferrets are generally suitable for chinchillas as well. All shelving and bottoms in the cage should be solid, as wire can injure feet. Paper based bedding is ideal for chinchillas, but aspen or fleece bedding is also appropriate. Cedar and pine can cause respiratory irritation and should be avoided.

Since chinchillas are nocturnal, they will appreciate numerous hiding places such as plastic, cardboard, or wooden hide boxes. Each chinchilla should be able to have their own hiding spot if desired. Additional toys and cage furniture should be provided as well to help keep your chinchilla entertained. Chinchillas should also have access to a plastic, solid-bottomed exercise wheel. Wire wheels can trap toes and cause injury. Chinchillas are adapted to cool climates and can experience heat stress if the room temperature exceeds 80F, but 60-70F is ideal. Chinchillas also need a dust bath to keep their fur healthy. Since their fur is so dense they cannot bathe in water, so in the wild they will roll in volcanic ash to remove excess oil. Female chinchillas can be quite aggressive toward males, so same-sex groups often get along better.

### Feeding

Like rabbits and Guinea pigs, a chinchilla's teeth grow continuously throughout their lifetime. They use high fiber roughage to keep their teeth worn down and healthy. An improper diet will lead to dental disease, and it will also feed the "bad" bacteria in their gut. Chinchillas rely on a population of microorganisms in their intestines to help break down plant matter. If this population becomes unhealthy, the chinchilla's health will also decline. In order to maximize nutrient absorption, chinchillas consume the initial products of digestion called "cecotropes". Cecotropes increase the efficiency of digestion and allow the chinchilla to absorb nutrients that would otherwise be lost. Cecotropes are shinier and softer than normal fecal material.

The majority of a chinchilla's diet should be free choice grass hay (timothy, orchard, botanical, oat, etc). Alfalfa is a legume hay that should be reserved for young (<6mo) or lactating animals. Hay should always be available to promote dental and GI health. Uniform, fortified pellets should be fed over pellets with additives. Chinchillas will pick and choose the less healthy seeds or fruits in a mixed diet and potentially cause nutrient deficiencies, weight gain, or GI disease. Oxbow's chinchilla pellets are high quality and recommended. Pellets should be limited to 1-2tbsp per day for an adult chinchilla to prevent over consumption. Young or lactating chinchillas can be offered ½ cup of pellets per day. Pellets do not wear down a chinchilla's teeth like hay does and overfeeding can

also contribute to dental disease. The final portion of a chinchilla's diet is leafy greens and vegetables. Approximately 1 cup of leafy greens with a small amount of vegetables and occasional fruits (no more than 1tsp) should be offered daily.

Recommended leafy greens: Mustard greens, radish greens, turnip greens, carrot tops, dandelion greens, kale, bok choy, arugula, endive, escarole, romaine, bibb lettuce, basil, cilantro, parsley, wheat grass. Spinach and chard should only be offered in moderation as they are high in oxalates, which can increase the risk of urinary stones. Iceberg lettuce is very low in nutrients and not recommended.

Recommended vegetables: Sweet potatoes, squash, zucchini, peppers, cabbage, broccoli, brussel sprouts, parsnips, cucumbers. Carrots are high in sugar and should only be provided occasionally. Avoid leeks, onions, garlic, avocado, and rhubarb.

#### Water

Fresh water should always be available in either a ceramic bowl or a water bottle.

### Sexing

Chinchillas can be difficult to sex. Males have a greater distance between the anus and genitals than females. A male's penis can also be extruded to confirm sex but no scrotum will be apparent.

## Handling

Handle chinchillas gently with their entire body supported. A chinchilla can be safely picked up by scooping one hand under their chest and the other under their back end. Never try to grab a chinchilla's coat as one of their defenses is to drop their fur. If a predator bites a chinchilla, they will drop their fur and leave the attacker with a mouthful of hair. Chinchillas should be handled gently and consistently from a young age. Children should always be supervised when handling chinchillas as their bones can easily break if dropped or handled roughly.

# Grooming

Chinchillas will need their nails trimmed 1-2x per month. Their nails are very small so care should be taken when trimming. Chinchillas also need dust baths to stay healthy, but they should never be bathed with water. Their fur is so dense that water can get trapped against the skin and cause infection. Dust for baths should be high quality, chemical free, 100% volcanic ash. Particles should be fine and silky. Sand-based

products are not as effective at absorbing a chinchilla's natural oils. Ensure that dust bath containers are large enough for the chinchilla to roll around as they will move quite acrobatically while they dust bathe. Only an inch of dust is needed for chinchillas to efficiently bathe themselves. These baths should be provided 2-4 times per week for about 15-20 minutes at a time. Hot and humid weather will require more frequent dust baths. It is not recommended to have dust baths always available as eye and respiratory problems can occur with overuse. Chinchillas also frequently eliminate in their dust baths.

#### **Enrichment**

Out of cage time in a safe environment is important for both physical health and enrichment. Toys and other items should be provided to give chinchillas a safe outlet for chewing, playing, and climbing. Cardboard boxes, tunnels, paper towel rolls, wooden toys, hay toys, and hard plastic toys are all acceptable for chinchillas. Toys can be purchased or homemade. Chinchillas often enjoy chewing on wood, but ensure the wood has not been treated with anything. Chinchillas may also enjoy clicker training. Flying saucer type exercise wheels are a good option for chinchillas to exercise and tend to cause less abnormal back flexion as compared to traditional type wheels.

Rather than providing food in dishes, foraging is a natural outlet for activity. Homemade and store bought hay and food feeders can be provided. Paper bags or paper towel tubes can be stuffed with vegetables or pellets and tied with twine. Dust baths should also be considered an essential enrichment item. In addition to promoting health, dust baths also promote physical and mental activity.

### Zoonosis

Rodents may carry *Salmonella*, but chinchillas are not considered a major disease risk for humans.

### Health

Like other rodents, chinchillas are very good at hiding disease. As prey animals, they do not want to show that they are sick and may not show signs of illness until they cannot hide it anymore. Dental disease is common in chinchillas since their teeth grow continuously throughout their life. If their teeth are not properly worn down with roughage they can overgrow and lead to pain, difficulty eating, respiratory disease, and tooth root abscesses. Some chinchillas will need regular molar grinds under anesthesia to file their teeth down.

Another major concern for chinchillas is rodent gastrointestinal syndrome, more commonly known as GI stasis. GI stasis is not a disease, but a syndrome. Anything that causes a chinchilla to stop eating can cause GI stasis including pain, stress, infectious diseases, improper diet, and dental disease. GI stasis can become serious very quickly, leading to illness and even death in severe cases. A chinchilla that stops eating and/or pooping is an emergency and should be seen by a veterinarian immediately.

#### Sources and Further Reading:

- https://www.oxbowanimalhealth.com/uploads/files/Chinchilla-Care-Guide.pdf
- https://www.oxbowanimalhealth.com/blog/dust-til-dawn-chinchillas-and-their-dust-baths/
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