

CHINCHILLA CARE SHEET

Chinchillas are small, personable, inquisitive, acrobatic mammals! Chinchillas are fascinating animals, and for the right caregiver, can make wonderful companions. They are relatively delicate, and do require more space than many other exotic mammals, so it is important to do some planning prior to bringing your new friend home. With the correct diet, housing, enrichment, and veterinary care they can make an excellent addition to your family.

BIOLOGY

Chinchillas once scattered the Mountains of North Central Chile in colonies of over 500 individuals, but today there are few colonies with more than 50 members.⁶ Chinchillas are nearly extinct in the wild as they have been extensively hunted for their silky-soft pelts, which decimated their numbers and has damaged their habitat.^{5,6} The Chilean Natural Reserve was created in 1983 in the Chilean Mountain Range, and it is believed the few remaining wild chinchillas can be found in or near the preserve.⁵ All domestic chinchillas in the United States are descendants of the original 13 chinchillas brought to California in 1927.⁶

Chinchillas are considered medium sized rodents, and are from the rocky slopes of the Andes Mountains. Chinchillas originated in South America, and at one time had a significantly larger home range. The species seen in the United States is *Chinchilla lanigera*, which is from central Chile, and is distinguished by its small body, large ears, and long tail.⁶ *Chinchilla brevicaudata*, is from the highlands of Peru, Bolivia, northern Chile, and Argentina, and is characterized by its large body, small ears, and short tail.⁶ They grow to weights of 400-800 grams, with females being larger than males. Wild chinchillas are described as living to 10 years, while in captivity there are reports of chinchillas living to be 20 yrs of age.⁶ The average lifespan of the chinchilla in captivity is 10-15 years.

- Lifespan: 10-15 years average
- Adult Weight: 400-800 grams (females being larger than males)
- Sexual Maturity:
Males: 8 months;
Females: 8 1/2 months
- Gestation: 105-118 days (average 111 days)
- Litter Size: 1-6 (2 average)
- Age at weaning: 6-8 weeks

Chinchillas become reproductively mature between 8-8 ½ months on average, with males usually developing earlier than females.⁶ Females are considered seasonally polyestrous (multiple heat cycles per season), and the breeding season in the Northern Hemisphere is between the months of November-May.⁶ The average gestation period is 111 days, and there are normally 2 young per litter.⁶ Kits are born fully furred at 30-50 grams, with teeth and open eyes, and are ambulatory within one hour.⁵ Kits are normally weaned by 6-8 weeks, and often do not survive if they suckle for less than 25 days.⁵ Kits usually start eating solid food by one week of age.⁵ Both males and females make kind and interactive parents, so males do not need to be removed from the enclosure while raising the young.

BEHAVIOR

Chinchillas are highly social, and at one time had been witnessed in colonies of over 500 individuals.⁵ Colony life reduces the likelihood of predation in the wild by foxes and owls (natural predators), but also provides a social component. Chinchillas are social animals, and should be housed with companions whenever possible.⁵ They appear to do well in same sex pairs, or in polygamous units composed of one male and two or more females.^{5,6} Females are both the larger, and the more aggressive of the sexes, although significant conflict in the wild is fairly uncommon. In captivity, it is important to ensure the enclosure is large enough to give each animal room to avoid others when desired, and at least as many perching and hiding areas as animals should be provided to limit conflict.⁵

Chinchillas are generally very friendly and docile, especially if handled frequently while young. It is rare for a pet chinchilla to seriously bite or scratch, which makes them excellent family pets. They do use their mouths to explore their environment, so it is not uncommon to get a mild nibble from your new friend, but often times offering some hay will work as a distraction.⁵ Chinchillas will often get used to gentle handling, and one should always lift the chinchilla with one hand under the abdomen, and the other hand holding the base of the tail. Never handle them roughly, or you may find you are left holding a handful of fur, as they are known to shed patches of fur when scared (fur slip).

Chinchillas are a nocturnal species (active primarily at dusk and night time), but can be active during the day in captivity.⁶ They are almost completely odorless, and are very clean. They are fast, active, and incredibly agile (they can leap almost 6 feet in the air), and their enclosures and

play areas must all be designed with this in mind. They are surprisingly vocal, and have specific sounds for attention seeking, interest, alarm or warning, physical distress, contentment, and aggression.⁵

- Chinchillas are social animals, and should be housed in same-sex pairs, or polygamous units of one male and two or more females when possible
- They must be given enough room to avoid others when desired, and at least as many perching and hiding areas should be provided as the number of animals
- Females are the larger and more aggressive of the sexes
- Chinchillas are generally very docile, and rarely bite or scratch
- Chinchillas must always be handled gently, as they are known to shed patches of fur when scared (fur slip)
- Chinchillas are nocturnal animals, and are usually active at dusk and nighttime, but in captivity can be more active during the day
- Chinchillas are very clean, and are almost completely odorless
- Chinchillas are fast, active, and incredibly agile
- Chinchillas have many different vocalizations for different situations

DIET

Feeding an appropriate diet to your chinchilla is one of the most important aspects of care, and plays a key role in overall health, disease prevention, and longevity. In the relatively barren areas of the Andes Mountains, chinchillas are considered folivorous, opportunistic feeders.^{3,6} They have a seasonally variable diet, which includes roots, leaves, bromeliads, fruit, berries, bark, alfalfa grasses, shrubs, cacti, and almost any available vegetation.^{3,5} This diet is coarse, dry, and low in nutritional quality, so requires extensive feeding to meet the nutritional requirements of the chinchilla.⁵ It is very unlikely that one can successfully reproduce the natural diet in captivity, but we can provide a reasonable alternative with some effort.

Chinchillas have open rooted teeth that grow constantly throughout the animal's lifetime. Captive chinchillas fed a diet lacking in adequate fiber and abrasive material are prone to dental problems,³ as the teeth will not be worn down properly. The exact diet of the wild chinchilla is still not completely known, but in captivity one that is composed primarily of grasses and hays is ideal.^{3,6} Feeding a diet primarily composed of pellets has been implicated in many digestive disorders, and only a small amount of pellets should be provided each day.⁵

Chinchillas should be provided a diet of unlimited coarse grass hays (orchard grass, timothy, blue grasses, and alfalfa for pregnant and growing animals), 1-2 tablespoons of a chinchilla specific pellet daily (Mazuri Chinchilla diet, Supreme Science Selective Chinchilla, and Oxbow Chinchilla Deluxe), occasional safe treats (mountain ash berries, fruit tree twigs, dried rose hips, marshmallow root, dried herbs, dried fruit), safe wood to chew (apple, pear, elderberry, bamboo, cotton-wood, crab apple, dogwood, rose, elm, hazelnut, kiwi, mulberry, willow, Manzanita, and grape vines), and clean water at all times.^{3,5,6} Any diet change must be performed gradually, or a significant decrease in food intake will occur. This diet can appear daunting, but it is easier than you may think, and will provide you with a healthy and happy chinchilla.

It is important to provide more than one type of hay. There is much more nutritional diversity in offering two different types of hay, than offering two different fruits or vegetables.² Alfalfa hay is important for juvenile, pregnant, and nursing females, but is generally not recommended to be fed otherwise due to the high levels of calcium and protein.²

- **Provide free access to coarse, grass hays** (orchard grass, timothy hay, bluegrass hay, etc).
- Growing, pregnant, and lactating chinchillas should be provided alfalfa hay for the added protein, and calcium
- **Provide 1-2 tablespoons per day of chinchilla specific pellets** (Mazuri Chinchilla Diet, Supreme Science Selective Chinchilla, and Oxbow Chinchilla Deluxe are some good options)
- **No more than 1 tablespoon per day of appropriate treats** (mountain ash berries, fruit tree twigs, dried rose hips, marshmallow root, dried herbs, dried fruit)
- **Safe wood to chew should be available at all times** (apple, pear, elderberry,

- bamboo, cotton-wood, crab apple, dogwood, rose, elm, hazelnut, kiwi, mulberry, willow, Manzanita, and grape vines)
- **Clean, fresh water should be available at all times**
- Offer more than one type of hay on a routine basis, as it provides greater nutritional diversity, and is also a great source of behavioral enrichment
- Diets lacking the appropriate levels of fiber and abrasive materials predispose chinchillas to dental and gastrointestinal problems
- Chinchillas do not appreciate diet changes, so any changes in diet must be done gradually
- Chinchillas are primarily nocturnal, and eat the majority of their food between dusk and dawn

HOUSING

Chinchillas are very active and agile, and require large multi-level cages, with plenty of room for climbing and jumping. The minimum cage size requirement for one chinchilla would be 6.6' x 6.6' x 3.3', with a wooden nest box at least 12" x 10" x 7".⁶ The cage design should be spacious, and designed with numerous ledges and levels equipped with hiding places. Cages should be made of 15mm x 15mm welded wire mesh to prevent damage from chewing.⁶ The floor can be narrow wire mesh or a solid bottom, with pregnant chinchillas close to giving birth benefiting from solid bottom cages.⁶ Cage substrate can be spread over both solid and perforated floors, and straw, hay, or kiln-dried wood shavings are preferred (no pine or cedar shavings, or cat litter please!).⁵

Chinchillas can be shy, and offering a place to hide is very important. In the wild they will conceal themselves in burrows and rock crevices, so a similar environment should be created in captivity with PVC piping, or clay pipe sections. PVC pipe (4"-5" diameter) sections make great hiding places that are easy to sanitize in the dishwasher.^{5,6} PVC pipe elbow, Y, and T sections are inexpensive, and easily found at your local home and garden store.

Chinchillas are considered a prey species, and are often frightened by changes in their environment and large open spaces without areas to hide. It is best to perform partial substrate changes when possible, and if a full change is necessary, one can add a small amount of old substrate as a source of scent to reduce stress.¹ Owls are a natural predator of the chinchilla, so it is best to have the cage as elevated as possible so they are not constantly being approached from above.⁵ Chinchillas can confuse ceiling fans for birds of prey, so they should not be located near your enclosure. It is also best to house your chinchilla in an area free of loud and unpredictable noises.

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- The minimum enclosure size for one chinchilla is 6.6' x 6.6' x 3.3'
- Cages should be 15mm x 15mm wire mesh, with solid or narrow mesh floors
- Cages should be multi-level with numerous ledges and levels
- At least one hiding place per chinchilla should be provided
- 4"-5" diameter PVC pipe elbows, Y's, and T's make great hiding spots, and are easy to sanitize in the dishwasher
- Straw, hay, and kiln dried wood are appropriate cage substrates (no pine, cedar shavings, or cat litter please!)
- Chinchillas should be kept in a location away from loud and unpredictable noises
- Cage temperatures should be maintained between 65-75F, and chinchillas can easily overheat in temperatures above 82-86F
- Humidity should be less than 50% in the area where chinchillas are kept
- Chinchillas are nocturnal, and should be provided a 12 hour day/night cycle
- Chinchillas should be provided access to unfiltered sunlight multiple times per week

HOUSING, continued

The natural habitat of the chinchilla is cool and dry, and the chinchilla's coat is perfectly designed for such an environment. The coat is so thick and soft because clusters of 50-75 hairs emerge from each follicle (humans have one hair per follicle).⁵ Chinchillas are extremely sensitive to heat, and thrive in temperatures between 65-75F, and are prone to heat stroke in temperatures above 82-86F.^{5,6} Chinchillas do best when the humidity is less than 50%, and do not tolerate dampness.⁶

Chinchillas are nocturnal animals, and a 12 hour day/night cycle should be provided. New studies show that chinchillas likely need exposure to UVB light to maintain adequate systemic levels of vitamin D.⁴ We do not yet know the exact levels of UVB necessary, but ensuring your chinchilla gets exposed to unfiltered sunlight multiple times per week is a good start.

DUST BATHS

Chinchillas need dust baths to keep their coat nice and clean. Dust adheres to the oil and dirt that has built up on the coat, and is then spun off, leaving the chinchilla looking like new. Blue Earth and Blue Sparkle are common chinchilla dust bathing products, but you can use volcanic ash, or even make your own with a 9:1 mixture of silver sand and Fuller's Earth if desired. If you are using the volcanic ash the dust bath time must be limited to 3-4 minutes to prevent eye and nasal issues, as this dust is extremely fine.⁶

When a chinchilla uses the dust bath it starts out by thrusting the front paws forward into the sand, and drawing the sand back towards its body. The chinchilla then rubs its cheek in the sand, which is followed by rotating its body around the horizontal axis in the direction of the

cheek rub.⁵ This pattern appears to always be followed, but the number of spins will increase in relation to the number of days the chinchilla has gone without a bath.⁵

A small glass aquarium, terra cotta planter, a metal pan, plastic dishpan, or cat litter pan are all appropriate dust bins. The bin should be large enough for the chinchilla to roll around in. It is best to take the bins out once the bath is completed to help keep the dust clean and free of fecal material. Dust should be about 1" deep, and wild chinchillas will spend up to an hour bathing, rolling, and fluffing their fur.⁶ Dust baths should be provided daily, but at least 4-5 times per week is necessary. If the fur appears greasy, damp, or sticky your chinchilla likely needs more frequent access to the dust bath,

- Chinchillas should be provided access to a dust bath daily
- Commercial chinchilla dust is available (Blue Earth and Blue Sparkle)
- Volcanic ash is now a popular product, but because it is an extremely fine product no more than 3-4 minutes of bathing should be allowed
- Small glass aquariums, terra cotta planters, metal pans, plastic dishpans, and cat litter pans can all make appropriate dust bins
- Dust should be about 1" deep, and the chinchilla provided at least 10-15 minutes of bath time
- Dust bins should be removed after each bath to keep the dust clean and free of fecal material
- If the fur appears greasy, damp, or sticky your chinchilla likely needs more access to dust baths
- If your chinchilla appears dry and flaky you may want to provide less access to dust baths

ENRICHMENT

Chinchillas, like all animals in captivity, have been witnessed exhibiting environmentally induced stress responses such as spinning and self-mutilation.⁵ It is likely that these behaviors can be limited or prevented by designing an environment with enrichment in mind.⁵ Enrichment does not need to be a daunting task, and some simple things can be done which will greatly improve your chinchilla's life at home.

Chinchillas are designed to chew, and their natural environment is rich with things to explore and chew. It is best to design an environment with multiple objects and toys designed for chewing. Appropriate chew items are: cholla cactus wood chews, mineral and pumice stones, cuttlebones, and wood branches (bamboo, apple, pear, poplar, willow, aspen, ash, birch, elm, sycamore, dogwood, and grape vines).⁵ Any area the chinchilla will interact outside of the cage must be "chinchilla proofed" to prevent the chinchilla from destroying your baseboards, furniture, and other items.

Chinchillas are social animals, and providing other chinchillas can be an important source of enrichment. Being social animals does not mean that all chinchillas are destined to be best friends, and some care must be taken with introductions. When introducing new chinchillas it is best to use new cages that have been thoroughly cleaned and treated with a scent reducing agent. The cages should be placed in close proximity so they can get a visual introduction, and the initial introductions should be in a neutral territory with extensive space and a dust bath. The animals should appear to get along prior to same cage introductions, and with opposite sex pairs the female should be introduced to the male's cage.⁵ It is also important to remember that we ourselves can be a source of enrichment, and many chinchillas do enjoy gentle human interaction.

Chinchillas will often enjoy some playtime outside of the enclosure, but they must be directly supervised. More than one chinchilla has been witnessed bounding between a wall and refrigerator to reach impressive heights, so it is important to supervise these acrobatic wonders at all times. Chinchillas do have surprisingly light and brittle bones, so it is best to keep them away from objects that would allow them to attain a dangerous height. Dogs and cats often times show a bit too much interest in chinchillas, so it is best to limit these interactions.

In the wild, rodents spend much of their time foraging for food. Foraging enrichment can help reduce boredom, frustration, and can stimulate natural behaviors.¹ It is easy to place hay in various areas of the enclosure, as well as tree branches and other chew toys. You can hide hay in toilet paper rolls, hide appropriate treats throughout the enclosure, or hide pellets in a cardboard egg carton to stimulate foraging behaviors. It is important to be creative, as it can be fun for you, and will help keep your chinchilla happy and healthy.

Chinchillas will often interact with toys. Paper bags, wicker toys, and grass-based toys are generally safe for chinchillas. Chinchillas also seem to enjoy bird-safe toys and balls.⁶ Many chinchillas will enjoy a solid running wheel placed in the enclosure as well. There are many available items to keep your chinchilla happy.

ENRICHMENT, continued

- Provide an environment with multiple objects and toys designed for chewing
- Many chinchillas will benefit from having other chinchillas as companions
- Chinchillas appreciate supervised play time outside of the enclosure
- Chinchillas chew everything, so furniture, baseboards, and other wood objects must be covered with cardboard or wire mesh, or expect their destruction
- Foraging enrichment can be an excellent way to keep your chinchilla stimulated and happy
- Provide paper bags, wicker toys, grass-based toys, bird-safe toys, and balls for enrichment
- Many chinchillas will appreciate a solid running wheel for exercise

RECOMMENDED VETERINARY CARE

With proper care your chinchilla will be a healthy, and long-lived member of the family. It is important to develop a good relationship with a veterinarian who is experienced with chinchilla care. Chinchillas are designed to hide signs of illness, so it is important to contact your veterinarian immediately if it is acting abnormal, or has not eaten in longer than 12 hours. These are the recommendations of Ohana Animal Hospital for the general care of your chinchilla.

- Complete physical examination every 6-12 months
- Make sure that you consult a veterinarian with experience treating chinchillas if you have any concerns about your chinchilla's health
- A fecal examination should be performed for any newly acquired chinchilla
- Discuss spaying or neutering with your veterinarian
- If your chinchilla has not eaten in over 12 hours call your veterinarian immediately!

REFERENCES

1. Brandao, J, and Mayer, J. 2011. Topics in Medicine and Surgery: Behavior or Rodents with an Emphasis on Enrichment. *J Exotic Pet Med* 20:256-269.
2. Clauss M. 2012. Clinical technique: feeding hay to rabbits and rodents. *J Exotic Pet Med* 21:80-86.
3. Grant K. Rodent Nutrition: Digestive Comparisons of Four Common Rodent Species. *Vet Clin North Am Exot Anim Pract.* 2014;17:471-483
4. Rivas, A, Mitchell, M, Flower, J, Welle, K, and Whittington, J. 2014. AEMV Forum: Effects of Ultraviolet Radiation on Serum 25-hydroxyvitamin D Concentrations in Captive Chinchillas (*Chinchilla laniger*). *J Exotic Pet Med* 23:270-276.
5. Sobie, J. Chinchillas. In: Tynes, V. eds. *Behavior of Exotic Pets*. Chinchester, West Sussex: Wiley-Blackwell; 2010: 138-147.
6. Quesenberry, K, Donnely TM, Mans C. Biology, Husbandry, and Clinical Techniques of Guinea Pigs and Chinchillas: basic anatomy, physiology, and husbandry. In: Quesenberry K, Carpenter J, eds. *Ferrets, Rabbits and Rodents: Clinical Medicine and Surgery*. 3rd ed. Philadelphia, PA: Elsevier; 2012: 279-294.

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