



## MOUSE AND RAT CARE

### BEHAVIOR AND HANDLING

Rats (*Rattus norvegicus*) and mice (*Mus musculus*) can make excellent pets and will form bonds with owners, when handled gently and consistently. They are largely nocturnal. Given their highly social nature, rats should be kept in groups of the same sex or with neutered animals. Mice also do well in groups of female animals. Males housed together will show varying degrees of dominance toward one another and smell significantly more than females.

Rodents are very sound sleepers and can be expected to be grumpy if awoken suddenly and handled during the day. If you must wake your rat or mouse, do so gently, and be sure before you pick him up that your hands do not smell of "predators", such as cats, dogs or ferrets. Rats and mice have an excellent sense of smell, but poor eyesight (particularly the albino rat). This is why rats may weave their heads back and forth in order to focus. Rats in particular will come to recognize their owner's scent. As potential prey in the wild, any rodent can be expected to act defensively if frightened or startled. That said, well-handled rats and mice seldom bite unless extremely upset. Their small size and quick movements mean that mice are good pets for older children. The nocturnal habits of these animals should be remembered when choosing a spot for the cage. A child's bedroom is not always best; they can create a surprising amount of noise when running on their wheel or drinking from a water bottle.

Young children should be supervised when handling rats or mice, and should probably do so on the floor. They should be picked up with one or two hands, by scooping them around the chest and abdomen. Always provide lots of support. Rats and mice should never be held by the tail alone. It may be necessary to hold them by the base of the tail, next to the body for added stability. Because a rodent's eyes are on the side of his head, he has very little depth perception, and may quite easily wander off the edge of a table or flight of stairs. Exercise balls are not recommended. Whether the animal is left in the ball too long, or rolls down stairs, or is played with by another pet, exercise balls are all too often a source of injury. Wheels provide excellent exercise, but solid wheels are recommended as legs and tails can be trapped in the openings between wires or plastic slats. Plastic edges can be surprisingly sharp and should be checked and perhaps filed in the case of new or gnawed wheels.

### HOUSING

Rats and mice are renowned escape artists; be sure your cage is secure. Rodents do not have sweat glands and therefore are susceptible to heat stress. They do best housed out of direct sunlight at 20-24° Celsius, warm room temperature.

A wire cage with a plastic or metal solid bottom is recommended. Aquariums have poor ventilation, and so are not ideal. Multi-storied cages can be a cause of injury should the animal fall from an upper story, or get his tiny feet trapped between wires. Be sure that the wire spacing is not too wide, and consider covering the upper floors with heavy cardboard or plastic. Care should be taken with modular plastic caging, as it is difficult to clean, ventilation is poor and should tunnels split at the seams, legs can become trapped and seriously injured.



Newspaper, shredded paper or wood shavings, such as aspen, work well as bedding, and paper towel and tissue are excellent nesting material. All rodents are busy, intelligent creatures, and all will benefit from having a “project”. Provided with a roll of toilet paper, already having a small rip in it, rodents will have hours of good healthy chewing activity. At the same time, this is a “natural” behavior through which the animal builds his nest. At least roe hide box should also be provided for every animal in the enclosure.

We do not recommend pine or cedar shavings, as these release essential oils, which are believed to contribute to respiratory, skin and liver disease.

Being the clean creatures they are, rats and mice may choose one corner of the cage in which to urinate. This corner should be cleaned regularly, or more simply, a large jam jar can be placed strategically in the chosen corner. To begin with, place a small amount of soiled bedding in the jar. Particularly when habituated from a young age, rats and mice may urinate in the “pee-jar”, which can then be changed daily. Feces, urine soaked bedding and uneaten fresh food should be removed daily and the cage cleaned entirely every one to two weeks. Rats and mice recognize territory by scent; leaving some of the relatively clean bedding unchanged means that the cage will still feel like home. Too frequent changing of the bedding can lead to territorial disputes.

Rats and mice are inquisitive and highly intelligent. They will be far more interesting and satisfying pets when provided an enriched environment. In addition to daily handling (at least 30 minutes in the case of the rat) offer cardboard boxes and rolls, PVC tubes and non-toxic branches or toys to chew.

## DIET

Water should be available at all times and changed daily. Be careful of sipper tubes, which may block or bottles, which leak and flood the cage, or leave the animal without water. Bacteria may proliferate in water not changed regularly and bottles are occasionally left dry if not checked frequently. Be sure that your pet can reach the sipper tube.

Rats and mice are omnivorous and will do best on a diet of commercial rodent pellets. Seeds, grains and treats are not a balanced diet and feeding these will lead to malnutrition. The diet can be supplemented with small amounts of fresh fruits and vegetables. Avoid sugary treats. Scattering the food about the cage provides activity and mental stimulation for the rat, mimicking natural behavior to a degree. Rodents are suspicious of most new things and should become accustomed to a variety of foods at an early age. Do not feed rats and mice dairy products (no cheese!) or high fat foods. Rats and mice are prone to obesity. Scattering food throughout the cage encourages exercise and provides some mental stimulation. It also ensures that all cage mates have equal access to food. A small degree of soiling of the food by feces is nothing to worry about, as rodents are naturally coprophagic. That is, they consume some of their own feces, as a source of nutrients. Be careful, however, not to overfeed your pet, as excess food will be hoarded and may rot.



### HEALTH AND DISEASE

As potential prey animals, rodents have adapted to hiding signs of disease and pain. Close and regular observation of your rat may bring to light subtle changes in health or behavior, which should alert you to the possibility of a problem. Regularly check your pet's front teeth or incisors, weigh him, examine his feet and nails and check his body for lumps.

The following signs may be seen in sick rats and mice and warrant veterinary attention:

- Increased water consumption
- Weight loss
- Difficulty eating
- Eye or nose discharge
- Difficulty breathing
- Thin or unkempt fur
- Sores
- Swellings under the skin
- Lameness
- Blood in the urine or diarrhea

Mammary tumors are extremely common in rats and mice. While usually benign, these can become very large. Spaying a rat at an early age likely prevents tumor formation. Female rats should not be bred after eight months of age, as at this time the pelvic bones fuse.

### RAT AND MOUSE FACTS

	<b>RAT</b>	<b>MLCE</b>
<b>Expected Life Span:</b>	2-4 years	1-3 years
<b>Body Weight:</b> Adult Male	450-520g	20-40g
Adult Female	250-300g	20-60g
<b>Birth Weight:</b>	5-6g	1-1.5g
<b>Sexual Maturity:</b>	4-8 weeks	6 weeks
<b>Gestation:</b>	21-23 days	19-21 days
<b>Litter Size:</b>	6-13	7-11
<b>Weaning:</b>	3-5 weeks	18-21 days

Incisors (front teeth) grow throughout life; molars (back teeth) do not