



HOUSING A MOUSE

The Habitat

Mice should be housed in a wire cage with narrow bar spacing (no larger than 1/4 inch) to prevent escape and allow for appropriate air ventilation. A glass enclosure can also be appropriate **only** if it allows for proper air flow. The bottom of the cage should always be solid. Although mice do not require as much “floor” space as rats, they are active and curious so they need a large living space for playing, nesting and burrowing. Size of the enclosure should expand appropriately depending on the number of mice in one enclosure. Mice are great climbers and enjoy multilevel environments as well as a secure mesh lid to prevent escape.



Bedding/litter

Mice love to burrow and nest, so a safe, low dust, soft natural color paper-based bedding is best to support these activities while minimizing any irritation to their eyes and face. Mice are also natural nesters, so nesting materials such as paper towels, facial tissue, old mittens/socks can be provided to engage that behavior. Aromatic woods, such as cedar and pine, should never be used for bedding as they pose a risk of respiratory issues.

Cleaning The Habitat

In addition to removing waste, old fresh supplemental foods and soiled/wet bedding daily, more thorough cleaning of the habitat and its fixtures (water bottles/bowls, food dishes, etc) should be performed daily to every few days, depending on the size of the enclosure. During the “deep cleans” a mouse should be moved to a separate location, and the cage components washed with hot soapy water or dilute bleach (approximately 1:30 bleach to water ratio) and then rinsed and dried. Regular cleaning will reduce contact with waste and associated aerosolized debris which can cause skin and respiratory tract irritation.

Enrichment

Mice are social and curious and need to have enrichment items present in their habitat to allow for exhibition of natural behaviors. Natural behaviors including playing, climbing, exploring, chewing/gnawing, hoarding, nesting, hiding, and burrowing. The following should be supplied in their habitats to support total health:



- Hiding spaces or tunnels (mice are prey animals!)
- Safe, appropriate chews to support dental health (incisor teeth grow continuously)
- Climbing ropes/ladders/toys or mice safe wheels can provide great opportunities to exercise
- Grass hay and bedding for burrowing and nesting
 - o They especially enjoy hay varieties with seed heads, such as oat hay, which promote foraging behaviors
 - o Providing a dig box and hiding treats is a fun way to stimulate foraging instincts

**Multiple enrichment items should be presented and rotated at least monthly to maintain proper stimulation

Handling

Mice are generally a bit more reactionary and nervous than rats, so care must be taken to carefully socialize and hand-tame mice at an early age. Additionally, they are also delicate due to size and should only be handled by an experienced handler (techniques for handling similar to gerbils). As always, the handler should carefully observe the mouse for any signs of fear or anxiety and cease handling if needed.

Playtime

Although mice can be trained to be handled, their playtime should always occur within the cage. As a result, enrichment items in the cage are a must. Mice are naturally nocturnal and will be most active during the nighttime hours.

Safety

If any new animals are brought into an established environment, they should always be quarantined initially as a safety measure to prevent any infectious agents from being introduced. Cage items should be inspected for chewing and wear and replaced as appropriate. Temperature control is important for all species, including mice, and the habitat should be kept out of direct sunlight and drafts.

Roommates

Mice are social animals and do best in same sex, same species pairs or groups when raised together. New groups should be closely monitored for any aggressive behavior. Occasionally, male mice will exhibit extreme aggression toward other males and are best kept alone.



DIET

Like hamsters, gerbils and rats, mice are omnivores and enjoy a large variety of foodstuffs in the wild including vegetables and greens, grains, fruits, proteins, and fats. Mice are selective eaters with a fast metabolism so providing balanced, quality nutrition is important along with providing appropriate enrichment to entice physical activity.

Pellets

The majority (75%) of a mouse's diet should consist of high-quality, uniform, species specific food pellet/block. This uniform presentation ensures that mice receive a balanced intake of both macronutrients (protein, fat, fiber) and micronutrients (vitamins and minerals) and eliminates selective eating.

Supplementary foods

In addition to pellets, supplementary foods such as vegetables and greens, grains, fruits, proteins and fats are important to provide in appropriate amounts to best mimic the natural diet of mice. These foods should make up the remaining 20-25% of the diet. The table below outlines appropriate offerings and amounts in each category. Feeding a variety of the below not only provides quality nutrition, but also provides nutritional enrichment by keeping mealtime interesting.

VEGETABLES & GREENS	GRAINS	FRUITS	Proteins	Fats
1-2 tsp daily	0.5-1 tsp daily	<1 tsp 2-3x/week	<1 tsp 2-3x/week	0.5 tsp 2-3x/week
Diversity of Lettuces	Cooked brown rice and whole wheat pasta	Apple (no seeds)	Hard boiled eggs	Pumpkin seeds (unsalted)
Squash	Whole grain cereal (unsweetened)	Melons	Mealworms	Sunflower seeds (no shell, unsalted)
Green Pepper	Whole-grain crackers	Banana	Cooked beans	Pistachios (no shell, unsalted)
Cucumber	Oats	Berries	Cooked chicken	Pecans (unsalted)
Zucchini	Barley	Kiwi	Cottage Cheese	

Treats should be physiologically appropriate for a mouse's digestive tract (i.e. low in sugar, no artificial colors/dyes/preservatives, etc.) and should not exceed 5% of total food intake.



Water

Fresh water from multiple sources (Water bottle and non-tip crock/bowl) should be made available within the habitat – multiple sources are especially important with housing multiple mice.

HEALTH AND PREVENTATIVE MEDICINE

Finding A Mouse-Savvy Veterinarian

It is important to locate a veterinary office before welcoming a mouse (or multiple mice!) to the household comfortable seeing mice, which can be challenging.

- Boarded-specialists specializing in exotic companion mammals can be found by visiting the American Board of Veterinary Practitioners' webpage (<https://abvp.com/animal-owners/find-an-abvp-specialist/>)
- Veterinarians who have a particular interest in small exotic mammals can be found by visiting the Association of Exotic Mammal Veterinarians' webpage (www.aemv.org).

Examinations

Regular (at least annual) well checks are important for preventative health and monitoring.

Changes in appetite or urination/defecation

Any change in appetite, activity level, or urination/defecation should be reported to your veterinarian. As prey species, they tend to hide outward signs of pain or illness so often the monitoring of appetite, activity level, and urination/defecation is the first sign of a concern. It is a best practice to regularly monitor/document these three areas daily to identify normal behavior patterns for your particular animal(s).

Dental Health

Mice have yellowish, open rooted incisors, which continuously grow, so it is important to promote regular wear through a variety of fresh supplementary food offerings as well as species appropriate chews such as dried untreated sticks and cardboard. Any dietary inefficiency or trauma that results in misalignment of teeth or weak/broken teeth can lead to uneven wear and malocclusion. It is important to regularly monitor dental health and communicate with a veterinarian if anything seems abnormal. Other possible dental issues that require immediate medical attention include abscesses and localized infections that result in pain and inflammation. Common signs of dental issues include lack of appetite, drooling, eye/nasal discharge, swelling and pain, lumps, and weight loss.



Nail Trims/Grooming

A mouse's nails should be monitored and can be trimmed if they are overgrown. However, healthy active mice usually do a good job of wearing their nails down on their own, especially if their habitat has surfaces that encourage natural friction and wearing. Mice are also fastidious groomers and do a good job of keeping themselves groomed and clean – they also frequently will groom other cage mates as well. Should they develop an unkempt appearance your mouse's veterinary office should be consulted as lack of grooming can sometimes be the first sign of an ill mouse.

CLASSROOM CONSIDERATIONS:

- Mice typically live anywhere from 1-3 years with appropriate care!
- Domesticated mice are clean pets that are active, curious and social by nature. They are usually very entertaining to observe as they keep very busy in their enclosures and frequently interact with their cage mates.
- Mice do best in pairs/small groups.
- Mice need less cage space than some of their other rodent counterparts, but the cage should be equipped with appropriate enrichment to support natural behaviors.
- Mice need DAILY care and interaction – it is not appropriate to leave the unattended in a classroom environment over the weekend.
- Mice should only be handled by an experienced individual after being appropriately socialized. It is not recommended for children in the classroom to handle mice and most mice do well in an appropriately outfitted enclosure with their cage mates.
- Mice are naturally nocturnal and are most active in the evening hours.
- Mice that are appropriately socialized and have a caretaker dedicated to proper physical and mental care can make excellent classroom additions.

HELPFUL LINKS:

All About Enrichment

<https://www.oxbowanimalhealth.com/blog/all-about-enrichment-handout>

<https://www.oxbowanimalhealth.com/blog/the-importance-of-physical-enrichment>

<https://www.oxbowanimalhealth.com/blog/games-with-pets-new-enrichment-handout>

Dental Disease in Small Mammals

<https://www.oxbowanimalhealth.com/blog/dental-disease-in-small-mammals/>