



HOUSING A RAT

The Habitat

Rats are very active, inquisitive, and agile so they need a large secured living space for playing, nesting and burrowing. They are also great climbers and will benefit from multilevel environments that create multiple layers of enrichment within the cage to keep their mind and body active. Rats should be housed in a wire cage with narrow bar spacing (no larger than 1/4 inch) to prevent escape but to allow for appropriate air ventilation. The bottom of the cage should always be solid. The size of the enclosure should expand appropriately if more than one rat is kept.



Bedding/litter

Rats 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. Rats can also be litter box trained with a bit of time by a dedicated pet parent. Litter boxes should be low profile with a safe, absorbent litter placed in the location in which your rat prefers to urinate/defecate. Rats 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 rat 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

Rats are naturally very intelligent and curious, so supporting mental health is just as essential as supporting physical health. 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 (rats are prey animals!)
- Safe, appropriate chews to support dental health (incisor teeth grow continuously)
- Climbing ropes/ladders/toys or rat 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
- Puzzles, mazes or logic games with a treat reward are a great way to really exercise a rat's nimble brain. They also do very well at learning tricks with the proper incentive (i.e. treat).

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

Handling

Rats are docile in nature and when appropriately socialized, generally do well with being handled. As always, the handler should carefully observe the rat for any signs of fear or anxiety and cease handling if needed. Rats can be picked up by placing one hand under or around the chest area and lifting and supporting the hind legs with the other hand. Young children can interact with rats by sitting quietly on the floor in a rat-proofed space and letting the rats approach them for interaction.

Playtime

Rats are very social and active and love playing. They should have supervised time outside of the cage in a rat safe environment. Rats that are used to being handled, may climb up on an offered open palm and love to sit on shoulders. Rats will also play fight and wrestle with each other. Rats are commonly referred to as "mini-dogs" as they can learn several tricks and even come when their name is called. They are naturally nocturnal animals but have been known to adjust to the activity of the household/classroom. When happy and content, rats commonly grind their teeth (known as "bruxing").

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 rats, and the habitat should be kept out of direct sunlight and drafts.

Rat-proofing space for interaction outside of the cage is important to ensure your rat doesn't escape into an unsafe area or interact with something he/she shouldn't. Below are some tips for making a safe play area for your rat:

- Block any small gaps/vents/under doors to ensure they can't squeeze into these spaces.
- Remove any appliances and remove/cover wires to prevent chewing
- Put any toxic household plants or other unsafe items out of reach
- Ensure the floor is clean and dust free
- Block off access to couches or chairs so they don't burrow in these small spaces.

Roommates

Rats thrive with same-species companionship; a same-sex pair or small group that grow up together is best in captivity. If getting a second rat is not feasible, rats can generally do well on their own if pet parents commit to spend time interacting with their rats within and outside their enclosure each day. Social interaction and mental stimulation are important factors to providing a happy and healthy environment.

DIET

Like hamsters and gerbils, rats are omnivores and enjoy a large variety of foodstuffs in the wild including veggies and greens, grains, fruits, proteins, and fats. Rats are selective eaters and, like humans, have a propensity to eat more when they are bored, so providing a balanced and controlled amount of nutrition is important along with providing appropriate enrichment to entice physical activity.

Pellets

The majority (75%) of a rat's diet should consist of high-quality, uniform, species specific food pellet/block. This uniform presentation ensures that rats receive a balanced intake of both macronutrients (protein, fat, fiber) and micronutrients (vitamins and minerals) while preventing selective eating of high fat and high calorie items which rats naturally gravitate towards.

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 rats. 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 the rat's digestive tract (i.e. low in sugar, no artificial colors/dyes, etc.) and should not exceed 5% of total food intake.

Water

Fresh water from multiple sources (Water bottle and tip proof crock/dish) should be made available within the habitat – multiple sources are especially important with housing rats in pairs.

HEALTH AND PREVENTATIVE MEDICINE

Finding A Rat-Savvy Veterinarian

It is important to locate a veterinary office before welcoming a rat (or multiple rats!) to the household comfortable seeing rats, 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. Rats are prone to certain conditions, like tumors, obesity, and respiratory issues, and regular check ups are essential for early detection and treatment.

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

Rats 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.

Spaying and Neutering

Spaying and neutering rats can have multiple health and behavioral benefits in addition to prevention of pregnancy. Ideally, rats are spayed or neutered between 4-6 months of age and should be done by a veterinarian familiar with the species.

Nail Trims/Grooming

A rat's nails should be monitored and can be trimmed if they are overgrown or prone to scratching the handler. However, healthy active rats 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. Rats are also fastidious groomers and do a good job of keeping themselves groomed and clean. Should they develop an unkempt appearance your rat's veterinary office should be consulted as lack of grooming can sometimes be the first sign of an ill rat.



CLASSROOM CONSIDERATIONS:

- Rats can live up to 2-3 years with appropriate care!
- Domesticated rats are clean, docile pets that are intelligent, curious and social by nature. They are often misunderstood and provide an excellent opportunity to clarify fact vs fiction.
- Rats do **best in pairs** but can do well alone with plentiful daily interaction from their owner!
- Rats need DAILY care and interaction – it is not appropriate to leave the unattended in a classroom environment over the weekend.
- Rats should be well socialized and can be handled by adults and older children that practice safe handling practices. Young children should interact with them on the floor
- Rats are naturally nocturnal and are generally fairly quiet and docile during the day.
- Rats 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>

Benefits of Same-Species Companionship

<https://www.oxbowanimalhealth.com/blog/does-my-rat-need-a-friend>

Rat Diet Considerations

<https://www.oxbowanimalhealth.com/blog/what-should-i-feed-my-pet-rat>

Dental Disease in Small Mammals

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