

A Complete Guide to Fancy Mouse Care

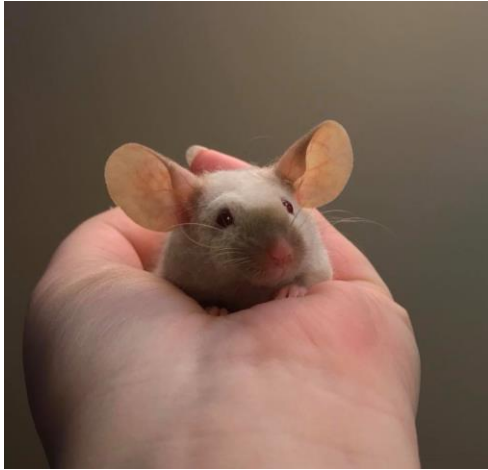


Photo submitted by Tonya Parker of Blip in Time Mousery

Fancy mice, also commonly known as feeder mice, are the domesticated form of the house mouse, usually bred as pets or food for a variety of reptiles and other carnivorous animals. The species is characterized as small, delicate rodents with thin, slightly hairy tails and big, beady eyes. The very first cross-path between mice and humans was long ago when hunters and gatherers turned to farming instead. Humans were learning how to grow and store grain, and mice quickly realized it was easier to feed off their supply than fend and forage for themselves in the wild. While the relationship between humans and mice at that time was one of necessity, it was inevitable that someone would eventually attempt to catch and keep a mouse. According to The American Fancy Mouse and Rat Association, this first "pet" mouse was most likely a normal wild colored Agouti. Over the last century there has been a significant increase of interest in fancy mice as show animals and pets, which can be largely associated with the popularity of reptile keeping, as many people buy rodents to feed their reptiles, and end up discovering what wonderful pets they can make. Fancy mice have worked their way into the hearts and homes of many families and animal-enthusiasts and with good reason – they are exquisite, adorable, inquisitive, and surprisingly intelligent creatures. Here is an overview of fancy mouse care brought to you by Nicole Dempsey (that's me!), RVT, mouse enthusiast, and owner/admin of The Cavy & Critter Community.

General Mouse Characteristics

On average, the lifespan of a fancy mouse is between 1 ½ - 2yrs, though it is possible for mice that are well cared for and come from good lines to live past 2yrs. Unfortunately, the short lifespan of these rodents is typically correlated to genetics from poor breeding programs. Fancy mice are most recognized for their generally small size, large ears, and slightly pointed faces, along with long, thin tails. The most common color variations include brown, black, tan, gray, and albino, with lighter and darker shades of these as well. Coats can be smooth, curly, longhaired or a combination. The average weight of an adult fancy mouse can range from 20 to

40 grams. Mice obtained from pet stores are typically on the smaller side, while mice bred from show lines tend to be larger, thus a little heavier than others. Like humans, mice come in different shapes and sizes, so while one may be small and dainty, another of the same age and gender could be much larger and rounder. Male mice are typically larger than females. Obesity in mice is almost always genetic, and can often be linked to certain color variations. Brindle colored or orange colored mice, for example, are more prone to obesity than others.

Fancy mice are generally considered nocturnal rodents, meaning they are asleep during the day and awake at night, though many will display more crepuscular characteristics; being most active at dusk and dawn. Like many animals, they appreciate routine. It's typical that your pet mouse might be found sleeping in his or her favorite spot while you're at work then wake when you arrive in anticipation for food or attention! They are most definitely "busy bodies" and like to be kept occupied, with lots of things to tunnel through, nest in, chew on, or climb. They are very entertaining and it's not uncommon for new owners (or even long-term owners like myself!) to spend a lot of time simply observing them in their cage while they do their own thing.

Behavior and Language

Mice display many behaviors in order to communicate with us and each other. It's important to be able to recognize these behaviors and learn what is normal for your rodent companions so that you can better



Photo submitted by Hannah Owen, mouse owner

identify their moods, and if something is bothering them. *Running/scurrying away* when you attempt to pick up your new mice is a normal action that is pretty much hard-wired into the rodent's brain. Mice are prey animals and have virtually no defense mechanism when it comes to predators. In the wild, a fast mouse is a safe mouse! Many mice can be curbed of their fleeing instincts if given patience and commitment during the bonding process, though it helps tremendously if the mouse was obtained as a pup and was bred for temperament. Not all mice enjoy being handled and some may never get accustomed to it, but that doesn't mean that you can't still build a bond with them or give them a good life. Like people, some are simply more introverted and would rather spend their time in the comfort of their own home. Mice in general, require a good amount of effort in order to gain their trust – frequent handling and positive reinforcement are key factors in making this effort worthwhile. *Teeth chattering* or repetitive

grinding of the incisors against each other is often a sign that your mouse is upset, displeased, or annoyed with something (hint hint: it could be you!) This behavior contains sharp, crackling sounds that are often loud. If this happens while you're handling your pet mice, it's best to set them back in the cage for a while. This behavior accompanied by *tail flicking or wagging* should be taken as a warning and often means your mouse has had enough. If you do not heed their warning, don't be surprised if you get a little chomp on your finger! Mice aren't known to be biters, but can resort to doing so if pushed too far. Both of these behaviors can also be seen occurring between mice to each other – in which case, one or both of the mice are not happy about something and an altercation may take place. Teeth chattering is not to be confused with *bruxing*, which consists of soft, repetitive grinding of the incisors against each other and serves to keep these open-rooted teeth filed. This behavior often reflects a relaxed, content mouse.

Photo by John Jenrette of Forbidden Mouse City



Grooming is a natural behavior that mice will perform to keep themselves clean. Grooming consists of rapid little nibbles which typically start in one spot and gradually move down to another. Mice will also lick their paws and use them to clean the area around their face and neck. *Mutual grooming* is the grooming of one mouse to another, which is a commonly seen in pairs or groups of females. The mouse being groomed will remain immobile and

may even be pushed into different positions by the groomer. Though this behavior is normal, *barbering*, or excessive grooming, is not and often results in subsequent bald patches on a mouse's body and shortened or missing whiskers. Mice will barber themselves out of boredom, illness (most commonly mites), or stress. Recent studies have shown some affected mice may even suffer from trichotillomania (aka compulsive hair pulling) as seen in humans; typically a self-directed behavior. Barbering can also be associated with exposure to an allergen or excess protein in their diet. Barbering of one mouse by another is often interpreted as an act of dominance, a subordinate mouse allowing her superior to do so.

Chasing is a behavior seen in pairs or groups of mice and can be interpreted in different ways dependent on the circumstances. Females may chase each other around the cage in a playful manner; one pursuing the other until she succeeds, then being chased herself. This is the mouse equivalent of "Tag! You're it!" One might also chase another in pursuit of something the other mouse has (food or a yummy treat for example), in which case she will head in the

opposite direction once she has what she wants. Chasing is also often seen when a new mouse is introduced into an already-established group (fun fact: a group of mice is called a mischief!) The new mouse may be tailed while the others figure out who she is and what she's doing in their territory. Prolonged chasing in addition to tail nipping, rear-end biting, batting or boxing, and loud squeaking coming from the pursued mouse can be associated with aggression and often causes a great deal of stress to the mice involved. *Popcorning*, though more common in rats, is a behavior associated with a happy or excited mouse. If you've ever seen a guinea pig suddenly jerk themselves in the air or "leap with joy," it's very similar. *Nesting* is a natural behavior demonstrated by many rodents. Mice will instinctively collect materials from around the cage (usually bedding) to make nests to sleep in. Nests are often built in corners of cages or inside houses or tunnels. New mothers will also build nests in preparation for their pups. *Digging and tunneling* are two other behaviors you're likely to observe.



Photo submitted by Hannah Owen, mouse owner

Like their behavior, mouse language can tell us a lot about their present mood. We've already deciphered the meaning of teeth chattering; now let's explore some other common mouse sounds! *Squeaking* can have many meanings. Males squeak while mating with a female, females might squeak when playing with each other, and others will squeak when frightened or in pain. A common

situation where mice will squeak is during improper handling (lifting by the tail for example). The motive behind the sound is heavily dependent on the situation, which is why reading body language is also important. A mouse with a dull and disheveled coat, wincing eyes, lethargic gait, and hunched posture exemplifies a mouse that is ill and these symptoms in addition to frequent soft squeaking or labored breathing could mean your mouse is in pain. In addition to audible squeaks, mice produce ultrasonic sounds – squeaks so high they can't be heard by the human ear. Males will "sing" to attract females in order to mate. Unfortunately for us, these songs are too high pitched for us to hear! Healthy mice may squeak from time to time, but not persistently. If these sounds are synchronized with breathing (in and out), it is often indicative of respiratory illness. *Chirping* is a way for mice to communicate with each other (maybe they're gossiping about you?) Many mouse owners have reported seeing their females chirp to each other while sitting contently in their cage. Some may even chirp in their sleep. Pups will chirp to their mothers in the nest. Though it's difficult to truly decipher the meaning behind this sound,

it's typically considered to be a positive one. As I mentioned with squeaking, if you hear one of your mice chirping persistently or in synchronization with breathing, she might be ill.

Socialization

Fancy mice are unique in the sense that the social needs of each gender are very different. While females of the species are very social and should be housed in trios or groups, **males are considered solitary and should never be housed with other males.** Not only are they territorial, but very hormonal. Even littermates can turn aggressive towards each other at the flick of a switch. *Housing male mice together often leads to injury or death.* Though it is possible for males to become lonely, most often they live happy and fulfilling lives if provided sufficient space and proper enrichment. In the case that a male does become lonely, it's plausible to house him with another species called an African Soft Fur Rat – but proper introduction and supervision is critical. Female fancy mice are social butterflies and require the companionship of other mice to thrive in captivity. Though pairs are fine in theory, it's recommended to have at least a trio of females so that in the event one passes away, the remaining mouse isn't left alone. Bullying in groups of mice may occur but can most times be avoided when space requirements are met for the number of mice being housed together, along with proper introductions and an adjustment period for new mice. New mouse owners may find it easier to obtain a group of littermates or those already familiar with each other to decrease the chance of bullying. Keep in mind, though, that these mice may still need to establish a pecking order.

Photo submitted by Phillip Krawszewski of Mystic Sapphire Mousery



Gender Considerations

New mouse owners may find it difficult to decide which gender is best for their family. If the social needs and respective cage size requirements (more mice = more space) of each gender is not enough for you to make a decision, then consider these other differences. The general belief is that male mice are more docile than females and easier to tame. While females tend to bond strongly with each other, males will often bond more quickly to their owners. My personal experience has told me this isn't always the case. I've held strong relationships with mice of

both genders, and concluded that gender isn't always a good indicator of how to shape true human-rodent companionship. I feel there are much bigger roles that play apart in building a strong relationship with your pet mouse, such as genes and personal dedication and understanding of the bonding process. I do, however, think that bonding with a male is often easier purely because you are able to put your focus on building a relationship with one mouse as opposed to several. There are also less factors at play and less distractions with a single mouse than with a group. A notable difference between males and females is odor. Male mice typically produce a stronger smell. This is due to their urine which is concentrated with hormones to mark their territory as their own and ward off other males. Females will scent their cage similar to males – this is especially common directly after a thorough cage cleaning or bedding change – but the odor is apparently more tolerable. If male mice are housed together or within close proximity of each other, they might “compete” with each other, thus scent marking different areas of the cage. Female mice may be more active and engage in more nesting behavior than males, demonstrating their natural and maternal instincts.

Housing Options

When deciding on a cage for your pet mice, there are important considerations. *Their small size does not reflect their cage space requirements.* It is true that they don't require as much open floor



space as hamsters, but ample space for running, tunneling, climbing, and other activities is a necessity to keep them active, healthy, and happy. Tanks, terrariums, and glass enclosures are one the most popular cage choices for fancy mice, and with good reason. Mice are known for being able to squeeze through the smallest spaces. This is because, unlike humans, they don't have collarbones. It's this feature (or lack thereof) that allows them to contort and maneuver their bodies through the smallest nooks and crannies. I like to tell people to think of mice as little ninjas – they are escape artists, and if there is a way out they are sure to find it. It's critical to make sure your mouse enclosure is secure to eliminate the possibility of escape, and also to keep them safe from predators like house cats or dogs.



Photo submitted by Linsey Moore, mouse owner

A good general rule of thumb for size is 10 gallons (20 X 10 inches) of space for the first mouse, and an additional 5 gallons (16 X 8 inches) per each additional mouse. The minimum recommended size for a single male is a 10 gallon tank, though a 20 gallon (long) is preferred. Respectively, you could house 3 female mice in a 20 gallon (long). Male mice grow larger than females, thus ideally should have a similar amount of cage space as a pair or trio. Ventilation becomes a concern when tanks are not kept clean or the height of the tank is significantly larger than its length. If a tank has poor ventilation, mice can become sick and develop severe respiratory issues. If you decide on a tank or glass enclosure for your mice, you will need to allow appropriate air flow throughout the tank to provide enough oxygen. You can do this by purchasing a mesh lid for the tank. Terrariums often come with a mesh lid already in place. Most pet stores will sell mesh lids separately as well so that you can find the right size for your tank. Sometimes larger or oddly shaped enclosures will be difficult to find a lid for, in which case one may need to be custom built (don't worry, there's tons of helpful videos on Youtube!)

Below is my current mouse enclosure made by repurposing an IKEA Detolf Shelf. This enclosure happily houses 10 females.

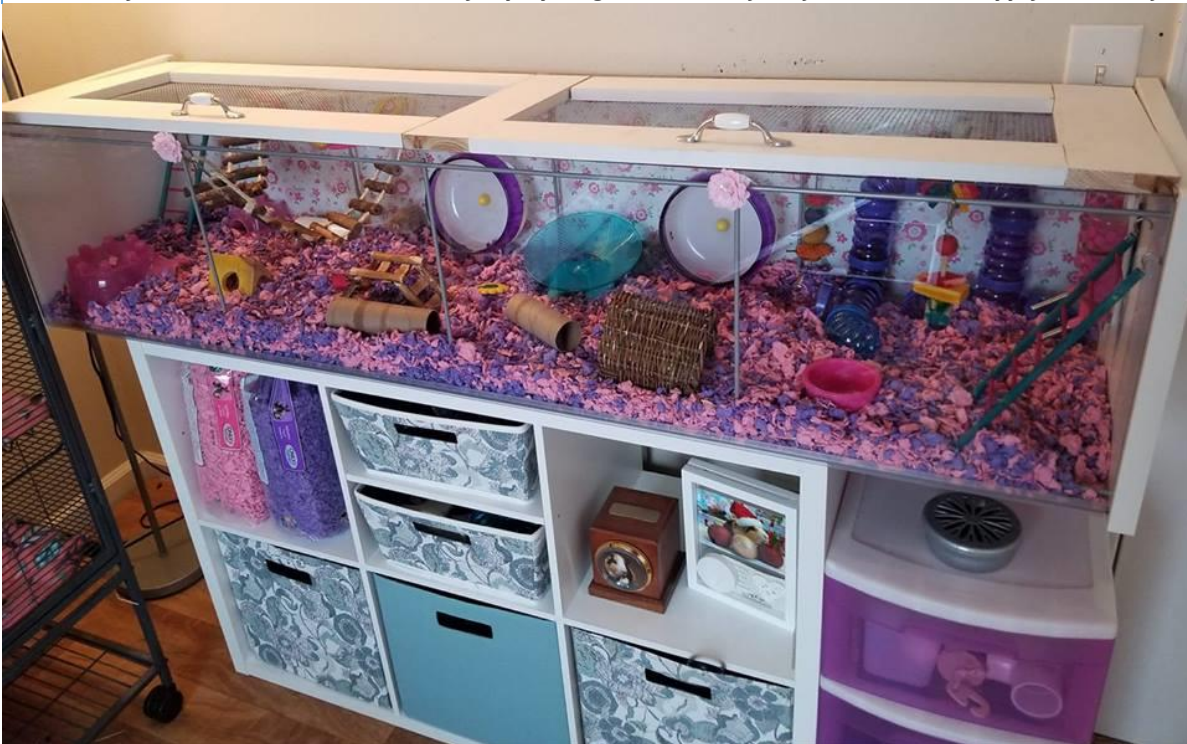


Photo by hammyhappenings.wordpress.com



Bin cages are another popular option for housing your mice and ideal for those who enjoy DIY projects. These cages are also quite popular in the hamster community. The benefits of selecting bin cages are endless – they are cheap, lightweight, easy to clean, provide ample space, can be stacked or connected to other bins and even tanks, and you get to put your own,

personalized touch on your mouse's home (fun-patterned tape, different colored bins)! Building your first bin cage can be a little time-consuming, especially if you're anything like me (not very handy, easily frustrated, needs to workout, a perfectionist...I can go on) but worth the trouble! Storage bins can be purchased from just about any big named store and come in all different sizes and colors. I tend to lean more towards clear or light colored bins so that I can see my mice better when I want to check on them briefly, and so they can get some natural light in the cage. Darker colored bins will work too, but you won't have the best view from outside of the cage. If you're interested in building a bin cage for your fancy mouse, check out the link below. I found this tutorial very helpful when I built my first bin cage!

VISIT → hammyhappenings.wordpress.com/diy-hamster-cage-bin-cage/



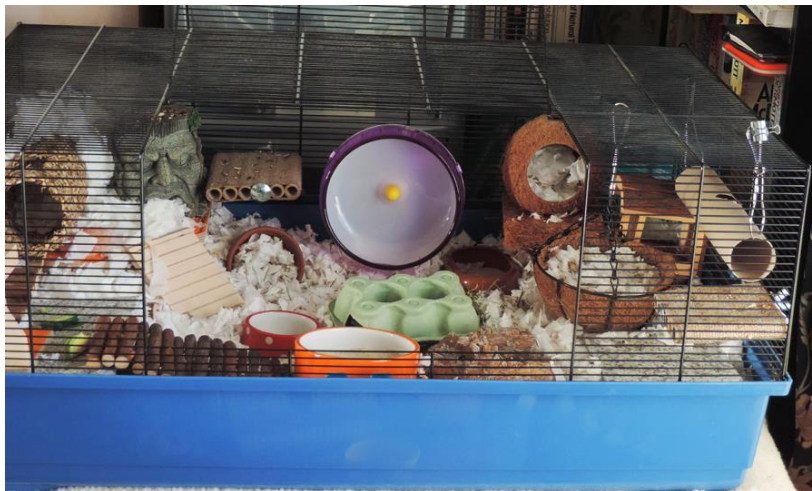
Photo by hammyhappenings.wordpress.com

Wired cages are less commonly used for fancy mice but are another plausible option. The most important factor in selecting the proper wired cage for your mouse is *bar spacing*. Since mice don't have collar bones as we previously discussed, they can often squeeze themselves through cage bars with little effort. Wired cages are not recommended for pups or growing mice, as their bodies can squeeze through a smallest crack in the cage. One of the benefits of using a wired cage is good ventilation. They are also usually light weight and easy to move for cleaning. A few disadvantages include less protection from predators, greater possibility of escape (if bar spacing is too wide), and less resilience than tanks or terrariums (wired cages with plastic lid/base are easier to knock over and break). Wired cages can also be a bit pricey since mice need specific bar spacing and a solid floor.



Photo by hamsterhideout.com

If you choose a wired cage, the recommended bar spacing is $\frac{1}{4}$ inch (7mm). Anything larger than that risks your mouse escaping, of course this depends on the size of your individual mouse, as some may or may not be able to squeeze through a little larger bar spacing. Adult males will typically be fine with $\frac{3}{8}$ inch bar spacing. Something to consider with wired cages is that sometimes the bar spacing near the lid or door is a little larger than the rest of the cage – make sure this bar spacing does not exceed $\frac{1}{4}$ inch. Many mouse owners might repurpose bird cages, as the bar spacing for smaller species like parakeets and finches is the same as for mice. Since mice love to climb, bird cages can be a fun and more unique housing option, however cages with solid bottoms are ideal in order to avoid your mice getting their feet stuck in the grates or becoming irritated from walking on them.



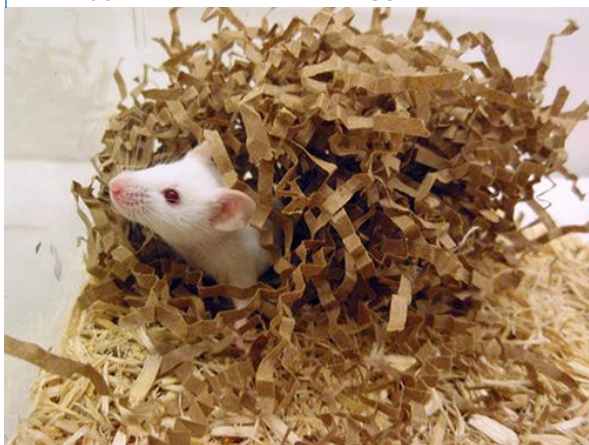
To the left is a Lixit Civic Mickey cage, XL. This cage measures 31 $\frac{1}{2}$ X 20 X 15 inches and is the size equivalent of a 35-40g tank. It is constructed mostly of metal, with a hard plastic base. This cage can comfortably house around 6 females.

To the right is a Lixit Savic Hamster Heaven Metro cage. It measures at 31 ½ X 20 X 20 inches and can comfortably house around 6 females.



Bedding Options

Photo by fibercorellc.com – Eco-Bedding pictured



There is an abundance of bedding options available on the market today, but not all of them are suitable for your rodent companion. Options such as cedar, saw dust, and large wood shavings are not ideal and should be avoided, as these types of bedding can be irritating to your mouse's sensitive respiratory tract, eyes, and harsh on their feet. A popular choice of bedding among mouse owners includes paper-based bedding such as Carefresh. Reportedly soft and absorbent, the primary drawbacks are price and some dustiness. There are cheaper paper-based bedding alternatives such as Critter Care (the generic version of Carefresh), Kaytee Clean N' Cozy, or Oxbow's Pure Comfort. If you decide to go with a paper-based bedding, it's best to avoid ones that contain baking soda. Some companies add baking soda as one of the ingredients to help with odor control, however the residues stick to the coats of rodents and consequently become ingested during grooming. Ingesting and breathing in baking soda can cause health complications such as an upset stomach or upper respiratory infection. Recycled newspaper, aspen, and fleece scraps are all acceptable options if you wanted to go a different route. Eco-Bedding is a well-known brand that is dust-free and made using recycled paper. I generally avoid pine, though many mouse owners find it works for their mice; it is often selected because it is cost efficient. The only safe kind of pine for mice is kiln-dried so be sure when selecting a bag that it is labeled as such.

Nutrition

Mice are opportunistic omnivores and will eat both plant and animal based food. In the wild, mice will eat a wide variety of seeds, grains, and other plant material as well as available fruits, small invertebrates, and even carrion - the decaying flesh of animals. Although house mice have adapted over the



Photo by John Jenrette of Forbidden Mouse City

years to almost any food source likely to be found in a home, a varied and balanced diet is ideal to keep your pet mouse healthy. Both veterinary professionals and rodent enthusiasts agree that a fortified rodent block or pellet should be used as the staple to a pet mouse's diet. Rodent blocks are compressed of animal and plant proteins, grain carbohydrates, and added vitamins and minerals that are beneficial to a mouse's digestive tract and overall health. Scientists have found that the nutritional needs of mice were met using a rodent block-based diet combined with different types of food mice may have foraged in the wild.

There are several store-bought brands available on the market; however, not all are created equally. There are a few brands I recommend over the others, as I feel these top contributors mimic a nutritionally complete diet specifically formulated to meet the nutritional requirements of mice throughout their life span. Which brand you have available to you will ultimately depend on your location. Some of the preferred rodent blocks are analyzed below.



MAZURI RAT & MOUSE DIET

Guaranteed Analysis

Crude protein not less than	23.0%
Crude fat not less than	6.5%
Crude fiber not more than	4.5%
Moisture not more than	12.0%
Ash not more than	8.0%
Vitamin E not less than.....	50 IU/kg



OXBOW ESSENTIALS MOUSE/YOUNG RAT FOOD

Guaranteed Analysis

Crude protein not less than	18.0%
Crude fat not less than	6.0%
Crude fiber not more than	2.0%
Moisture not more than	12.0%
Calcium not more than	0.80%
Phosphorus not more than.....	0.60%
Vitamin A not more than.....	8,000 IU/kg
Vitamin D not more than.....	1,000 IU/kg
Vitamin E not less than.....	125 IU/kg



OXBOW ESSENTIALS ADULT RAT FOOD

Guaranteed Analysis

Crude protein not less than	15.0%
Crude fat not less than	4.0%
Crude fiber not more than	2.0%
Moisture not more than	10.0%
Calcium not more than	1.00%
Phosphorus not more than.....	0.80%
Vitamin A not more than.....	8,000 IU/kg
Vitamin D not more than.....	1,000 IU/kg
Vitamin E not less than.....	125 IU/kg



A common issue found with pet store foods designed for mice is that the protein content is much higher than the suggested amount. Pet store mice are typically more prone to allergies and deficiencies due to poor genetics and not all will tolerate high levels of protein very well. Protein content in a balanced mouse diet should be around 14%, and you'll

notice even some of the "top notch" brands I mentioned above have well over that. While some mice will do just fine with higher protein in their diet, others may experience side effects such as itching and hot spots. If you obtain your mice from a pet store like most new owners do, or if you aren't sure which diet your mice were previously fed, it's best to go with a low protein/low fat diet such as *Oxbow Adult Rat* or *Science Selective*. Pregnant or nursing mice require additional protein in their diet, thus breeders will feed diets higher in protein.

SCIENCE SELECTIVE MOUSE FOOD

Guaranteed Analysis

Crude protein not less than	14.0%
Crude fat not less than	4.0%
Crude fiber not more than	4.0%
Calcium not more than	0.60%
Phosphorus not more than.....	0.40%
Vitamin A not more than.....	15,000 IU/kg
Vitamin D not more than.....	1,500 IU/kg

In addition to rodent blocks, which I leave available for my mice to feed on as they please, a good seed (aka muesli) mix is ideal to add some variety to your mouse's diet and reflect a more natural food source. I personally feed seed mix 2-3x per week and sprinkle it around the cage to encourage their natural, foraging behavior. Several seed mixes designed for mice and rats will contain sunflower or safflower seeds, both of which are high in fat. I choose to feed these less frequently, though my mice have other treats factored into their diet which we will discuss next. I don't suggest feeding your mice seed mix daily, and especially not exclusively. Although they often have rodent blocks or pellets added in the mixture, most mice will just pick through the food to find their favorites, thus not receive the nutrients they need to thrive. Here are a few options for seed mixes you can feed your mice; you'll notice a few of these are made for birds. Seed mixes designed for budgies are often better for them than the ones designed for mice!



Higgins Vita Garden
- Photo by Petco.com



Brown's Tropical Carnival,
Gourmet - Photo by Walmart.com



Vitakraft Vita Smart,
Parakeet - Photo by
Chewy.com



Brown's Encore Premium,
Parakeet - Photo by
Petsmart.com



*Kaytee Supreme,
Parakeet – Photo by
PetSMART.com*



*Higgins Vita Seed,
Parakeet – Photo by Petco.com*



*Tiny Friends Farm Reggie Rat
– Photo by Amazon.com
This mix is low in seeds*



*Sunseed Vita Prima mix
– Photo by Petco.com*

For a more in-depth analysis of each diet's nutritional values and ingredients, visit these links:

MAZURI RAT & MOUSE DIET (formula 5663): www.mazuri.com/product_pdfs/5663.pdf

OXBOW ESSENTIALS MOUSE/YOUNG RAT FOOD: www.oxbowanimalhealth.com/our-products/fortified-food/essentials-mouse-young-rat-food/

OXBOW ESSENTIALS ADULT RAT FOOD: www.oxbowanimalhealth.com/our-products/fortified-food/essentials-adult-rat-food

SCIENCE SELECTIVE MOUSE FOOD: www.supremepetfoods.com/products/science-selective-mouse/

HIGGINS VITA GARDEN RAT & MOUSE: www.higginspremium.com/vita-garden-rat-mouse/

BROWN'S TROPICAL CARNIVAL GOURMET RAT & MOUSE: www.fmbrown.com/tropical-carnival-gourmet-pet-mouse-rat-food.html

VITAKRAFT VITA SMART PARAKEET: www.vitakraftsunseed.com/vitakraft/products/vitakraft-vitasmart-parakeet-food

BROWN'S ENCORE PREMIUM PARAKEET: www.fmbrown.com/encorer-premium-parakeet-food.html

KAYTEE SUPREME PARAKEET: www.kaytee.com/all-products/pet-bird/supreme-parakeet

HIGGINS VITA SEED PARAKEET: www.higginspremium.com/vita-seed-parakeet/

TINY FRIENDS FARM REGGIE RAT/MINI MOUSE: www.supremepetfoods.com/products/reggie-rat-mimi-mouse-tasty-mix-2/

SUNSEED VITA PRIMA MOUSE, RAT & GERBIL: www.vitakraftsunseed.com/sunseed/products/sunseed-vita-prima-sunscription-rat-mouse-gerbil-formula

If you want to be an overachiever, you can also create your own seed or variety food mix at home. The biggest benefit of doing this is being able to measure out exactly how much of everything you want added into the mixture. Since sunflower seeds can make up a large portion of seed mixes sold in stores, and the ingredient lists seem never-ending, a homemade mix can be a healthier and simpler alternative! Examples of healthy ingredients include rolled oats or oat groats, budgie seed, puffed rice cereal, Cheerios, raw brown rice, whole barley, uncooked pasta noodles, and flaxseed. You can add some pre-packaged mixes to your homemade mix as well.

Now that we've covered the different food options available for your mice, let's talk **treats!** Every mouse has their favorite yummy snack. Like humans – they deserve to indulge every once in a while, and there's nothing wrong with giving the occasional treat. Below is a brief list i've created of treats your mouse can safely enjoy. You probably already have most of them in your home! I suggest feeding fruits and vegetables sparingly, as fruits contain a high



Photo by John Jenrette of Forbidden Mouse City

amount of natural sugars and too much vegetables (esp. dark leafy greens) can cause diarrhea. Also note that whenever feeding fresh foods (cooked or live) be sure to clean up after them once your mice have taken their share. Cooked foods and recently deceased foods (such as crickets that have died but not been eaten) should be removed from the enclosure no more than 2 hours after they are given. If they are left in there any longer they can grow harmful bacteria. All treats should be given to mice in close moderation. Whenever introducing something new to your mouse, you need to watch their stool. Some treats will cause runny stool.

SAFE MOUSE TREATS:

Baby carrots	Spray millet	Grapes
Apple	Cranberry	Cooked sweet potato
Banana	Strawberry	Animal crackers
Cucumber	Blackberry	Whole peanuts (no salt)
Cooked pasta noodles	Blueberry	Puffed rice
Uncooked pasta noodles	Garden peas	Cornflakes
Cauliflower	Frozen peas	Parsley
Celery	Cooked, unseasoned chick.	Baby food
Dandelion greens	Cooked, unseasoned turkey	Apple sauce
Cheerios	Mealworms	Baby cereal
Oats	Lintels	Granola
Barley	Broccoli	Toasted bread
Wheaties	Crickets	Pumpkin seeds
Hard-boiled/scrambled egg	Whimzees	Kale



Photo by heartgranola.com



Photo joblo.com



Photo by spud.com

There are several pre-packaged pet store treats available for mice and other rodents, but many have added sugars and preservatives that make them less ideal. If you do decide to feed them, do so in moderation. Sometimes the best treats aren't labeled for mice at all (but for dogs, birds, or people!) I've created a brief list of safe pre-packaged treats you can feed your mice, most of which you can find at your local pet store (the others at the grocery store). I will feed any of these no more than once a week, as I find simple, single-ingredient treats to be more beneficial.

SAFE STORE-BOUGHT TREATS:



Lafeber Nutri-Berries, with carrot, peas, & broccoli



Whimzees dog chews



Nutro's crunchy treats – assorted flavors include berry, apple, peanut butter, carrot, & pomegranate



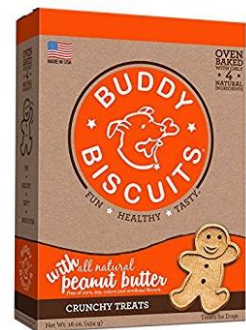
Tiny Friend's Farm Russel Rabbit Munchers



Gerber Graduates Yogurt Melts – assorted berry flavors



Gerber Graduates Puffs – assorted flavors include strawberry, blueberry, banana, apple, vanilla, peach, & sweet potato



Buddy Biscuits, peanut butter

DANGEROUS TREATS – DO NOT FEED:

Spicy food	Onion
Avocado	Garlic
Mango	Raw meat
Candy	Potato
Apple seeds	Rhubarb
Oranges (avoid all citrus fruits)	Raw sweet potato

Enrichment

Enrichment is a key factor in ensuring your pet mice are kept healthy and active. Mice are big chewers and have open-rooted incisors (they don't stop growing!) so providing plenty of natural wood chews will not only keep them busy, but help wear down these teeth and prevent tooth overgrowth.



Photo by John Jenrette of Forbidden Mouse City

Safe wood chews include apple orchard wood, willow, pear, and other *untreated* woods. You can also give them timothy twists, loofah chews, and a variety of twig or wooden houses or bridges. Cardboard tubes like paper towel rolls are not only safe to chew but fun for them to run through as well. Mice love to explore and run through things so things like critter trail tubes, small PVC piping, and cardboard or wooden tunnels make great cage accessories. Since they will naturally dig, tunnel, and burrow, placing a decent amount of bedding in their enclosure to allow them to do so is ideal. You can also give them a place to dig by filling a cardboard or wooden box with lots of bedding (odds are it will be all over the place the next morning, but making a mess is half the fun!) You're likely to find your mice stuffing their bedding inside their

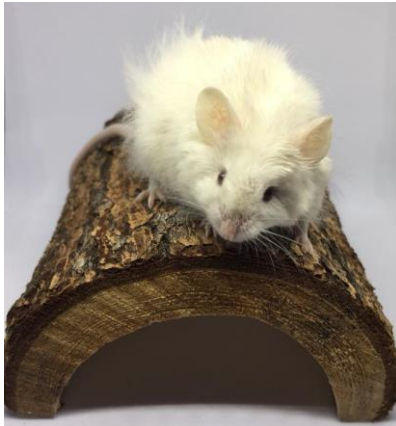


Photo submitted by Brittany Beard Farris of Mittney's Meeple Mousery

favorite house or in one corner of the cage to make a cozy nest. Hay makes good nesting material too.

Though mice are ground-dwelling rodents by nature, you'll find that they are big climbers when placed in captivity. Providing ladders, hanging bridges, and hanging chew toys will make any mouse cage that much more fun. You don't always have to spend money to keep your mice busy. A simple yet effective idea to provide enrichment for your mice is to fill a cardboard roll with paper towels and stuff a few treats in there for them to forage. They are likely to use the paper towel as nesting material so it's a win win! A

recommended cage accessory for every pet mouse is an exercise wheel. Since the amount of space offered in a cage is incomparable to that of the big, open world, they should be offered the opportunity to let out some of that energy in a safe, effective way. The size of your wheel will depend on the size of your mouse, but typically between 7-8 inches in diameter is appropriate.

Suitable wheels include but are not limited to Wodent Wheels, Silent Spinners, Comfort Wheels, and Flying Saucers (a medium saucer). If you notice your mice like to run together, which many will, consider getting a size larger for them to fit comfortably. For more information on the different wheels available and what to avoid when purchasing a wheel, take a look at our “*All About Wheels*” document in the group files.

Taming & Handling

Patience is key to taming fancy mice. The best thing you can do is start when they're young, but if this isn't an option for you, there are plenty of ways to tame older mice. After giving them a few days to adjust to their new environment, you can sit down and set your mice in a secure area (an empty bin or tank for example), set your hand inside the area, and simply leave it there for them to investigate. You can do the same in their normal enclosure too, but it's beneficial to do so in an empty enclosure so the mice has less distractions or places to scurry away to. If you're



Photo submitted by Jemma Cameron of Tartan Thistle Hamstery & Mousery

the only thing in their space, the main focus will be on you, which is what you want. If you have a very scared mouse, you might want to start off by placing your hand in the area for a while then try again another day for a longer amount of time. Though the idea is a simple one, the goal is that your mice will get curious enough to come to you. A mouse or two might work up the courage to run towards your hand, in which case you should remain very still: they're testing the waters. The mice might next start climbing over your hand (and maybe even up your arm). At this point you can try moving your hand very slowly, careful not to make any quick or sudden movements that will spook them. When the mice are crawling on your hand, you should be able to pick them up – again, slowly. After a while, you'll be able to gain their trust. This likely won't happen right away, and could take weeks – they are prey species, after all.

You can use treats to encourage your mice to come to you, but doing this is a good way for them to think of you as a treat dispenser and expect something yummy every time! I prefer to use treats as positive reinforcement, giving after the mice have come to me of their own free will. I'm not sure if it makes a huge difference, really, as my mice have me well trained, but I think it's better for them to get a reward rather than an incentive. Hand feeding can be a fun

experience for both you and your mice, but don't make it the only interaction they get or they will learn to expect food every time. Frequent handling is really the best way to get your mice used to you, so patience is crucial. Another tip I've found worked for my mice, though it seems a little odd, is stuffing a paper towel in your bra or shirt for a while then giving it to them to use as nesting material in their cage. This will help familiarize your mice to your scent.

Handling mice properly is important because they are quick and agile little critters. A fall from our height can really hurt them, so I always suggest handling new mice over their enclosure or close to the floor (sitting with them). Once your mice are more familiar with you and comfortable being held, you should be able to move around without fear of them leaping from your shoulder or hand. Some mice enjoy nuzzling in your shirt, hoodie pocket, or on your shoulder while you walk around the house, but not all will tolerate this well, so get to know each of your mouse's personalities individually. When picking up your mice, **never pull or lift them by their tails**, as this can de-glove the tail and cause severe pain. Instead, you can cup your hand and slide it beneath their tummies, or gently grab them from their bodies and set them in your hand. Some mice will come to you when they want to be handled, so you can just place your hand in the cage and see who climbs on. Do not squeeze or hold your mice too firmly because this can hurt or suffocate them. For the safety of your mice, use extreme caution when allowing small



Photo submitted by Tabitha Dorn of Fairly Rats Rattery & Mousery

children to handle them. I suggest allowing them to hold the mice above their enclosures if possible so that if one is to jump, they will land in their cage instead of on the floor. Most times a scared mouse will flee, so if they fall to the floor you might have one loose in your house. You can also have your child cup both of their hands close to their chest and place the mouse in their hands, closely watching and even cupping your hands beneath your child's for extra security.

Veterinary Care

No, you're not crazy for taking your mouse to the vet – in fact, they should have a special doctor familiar with treating the species so that in the event they do become ill, they are in the hands of a knowledgeable professional. Not all veterinarians will see mice, and sometimes even the ones

Photo by Tenplay.com

that do aren't as skilled with them. Ideally, you should find a veterinarian who specializes in exotic medicine and is comfortable handling and treating rodents. To determine whether a veterinarian is capable of treating mice, you might want to look at their professional affiliations – exotic specialists will typically be affiliated with one or multiple of the following organizations: AEMV (Association of



Exotic Mammal Veterinarians), AALAS (American Association for Laboratory Animal Science), or ASLAP (American Society for Laboratory Animal Practitioners). Ones that specialize in other exotic animals may also be associated with the ARAV (Association of Reptile & Amphibian Veterinarians), AAV (Association of Avian Veterinarians), and others. You can always call and ask the clinic directly, or visit their website – they will usually have a little bio section for each doctor with a list of their interests and expertise!

Since mice are prey species, they often don't show signs of illness until they are too sick to hide them anymore, so it's best to observe your mice daily and examine them on a regular basis in order to notice any changes in mood, behavior, or appearance. Weighing your mice weekly is a great way to keep track of their eating habits and make sure they're healthy. If their weight suddenly drops and there hasn't been any change in diet, it could be an indicator that something is wrong. Other symptoms associated with illness include decreased thirst or appetite, diarrhea, sunken eyes (dehydration), rough, greasy, or unkempt coat, hunched appearance, winced eyes, discharge from eyes, ears, or nose, lethargy, hair loss or excessive itching, or excessive porphyrin secretion. **Porphyrin** is a red-colored substance secreted from a mouse's Hadrian gland and is often referred to as "red tears" because it's most often seen coming from the eyes and looks like blood. It can also appear around the nose or ears. Porphyrin is normal in both rats and mice, though can be more prominent around times of stress or illness.

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