

# Daily Diet, Treats And Supplements For Rabbits



Resident buns munch on a bit of tasty bok choy! Photo credit: Edgar's Mission

If you're reading this resource, there are likely some special rabbit residents in your life who you'd like to provide the best possible care for! The compassionate lifelong care of rabbits at [animal sanctuaries](#) starts with the food they're provided. While [rabbits are all individuals who have their own preferences and needs](#), there are some general principles to consider in their physiology and nutritional needs!

When it comes to feeding the rabbits in your care, you may be overwhelmed initially by the number of choices and amount of information out there. By first understanding what a rabbit's

essential needs are, you can make informed decisions about how to feed and supplement your resident rabbits, and have the knowledge to backup your choices.

## What Does A Rabbit Need?

Rabbits, like all other animals (human and non-human) require a combination of carbohydrates, fats and proteins, as well as minerals, vitamins, and water. Of course, the needs vary by species, age, health, and pregnancy-related changes. Below are a few important facts about the rabbit digestive process and nutritional needs:

- A rabbit's digestive tract is delicate, and a number of changes from a healthy diet can cause GI stasis. When this happens, a rabbit's digestion slows to a dangerous level and can cause serious health issues or even death.
- Rabbits require a lot of fiber in their diet to maintain a healthy digestive tract.
- [Hay](#) is also important for a rabbit's dental health, as the frequent chewing helps wear down their continuously growing teeth!
- Rabbits actually make some of their own nutrients.

## The Building Blocks Of A Healthy Diet

Let's take a quick look at the at the individual underlying nutritional requirements for a rabbit that will be contained in the food provided to residents:

**Protein:** Proteins are important as they provide essential and nonessential amino acids. Rabbits in particular require the essential amino acids lysine, leucine, valine, methionine, and isoleucine. How much of these amino acids that an individual rabbit needs depends largely on their age and whether they are

pregnant or lactating. A healthy neutered or spayed adult requires less protein (and corresponding amino acids) than growing or pregnant individuals. In fact, while protein is an important part of their diet, too much can overwork their kidneys, so it is important to ensure you are providing the right amount.

**Fat:** Rabbits don't require much fat in their diet, though a lactating rabbit may have slightly higher requirements. In general, 3 percent fat in proffered food is a good amount of fat to provide rabbit residents. Too much more can lead to unnecessary weight gain and potential cause health issues.

**Fiber:** This is an important one for rabbits! They require high amounts of fiber to ensure their digestive tract works properly. Too little fiber can result in diseases of the gastrointestinal tract and prevention of the production of important vitamins. Foods containing a minimum of 14% are recommended, though requirements may vary between age groups and pregnancy status.

**Vitamins:** Vitamins, particularly vitamins A, D, and E, need to be provided in a rabbit's diet. Rabbits are able to produce their own B and K vitamins. They don't require high amounts of these vitamins, though their diet should contain these three vitamins. Care must be taken to not cause vitamin A toxicity if feeding both a supplemented pellet and high amounts of alfalfa.

**Minerals:** There are many minerals that can be beneficial for a rabbit, but there are two that are of particular importance: calcium and phosphorus. The amount and ratio are important things to consider when developing a diet plan for a resident. Once again, age and reproductive status can affect the ratios required by an individual. During periods of growth and pregnancy, a ratio of 2:1 satisfies an individual's needs. A healthy spayed or neutered adult generally requires less.

Calcium can be acquired through alfalfa or alfalfa meal, as well as grass hay, though this has lower levels than alfalfa. Phosphorus is available in a grain by-product, like wheat bran. However, certain fruits and vegetables contain calcium and phosphorus as well. There *can* be too much of a good thing, and if a white substance is in a resident's urine, chances are there's too much calcium in their diet. This can cause kidney and urinary tract problems. If you are concerned about the level of calcium a resident is consuming, be sure to contact your veterinarian.

## **Meeting Dietary Needs**

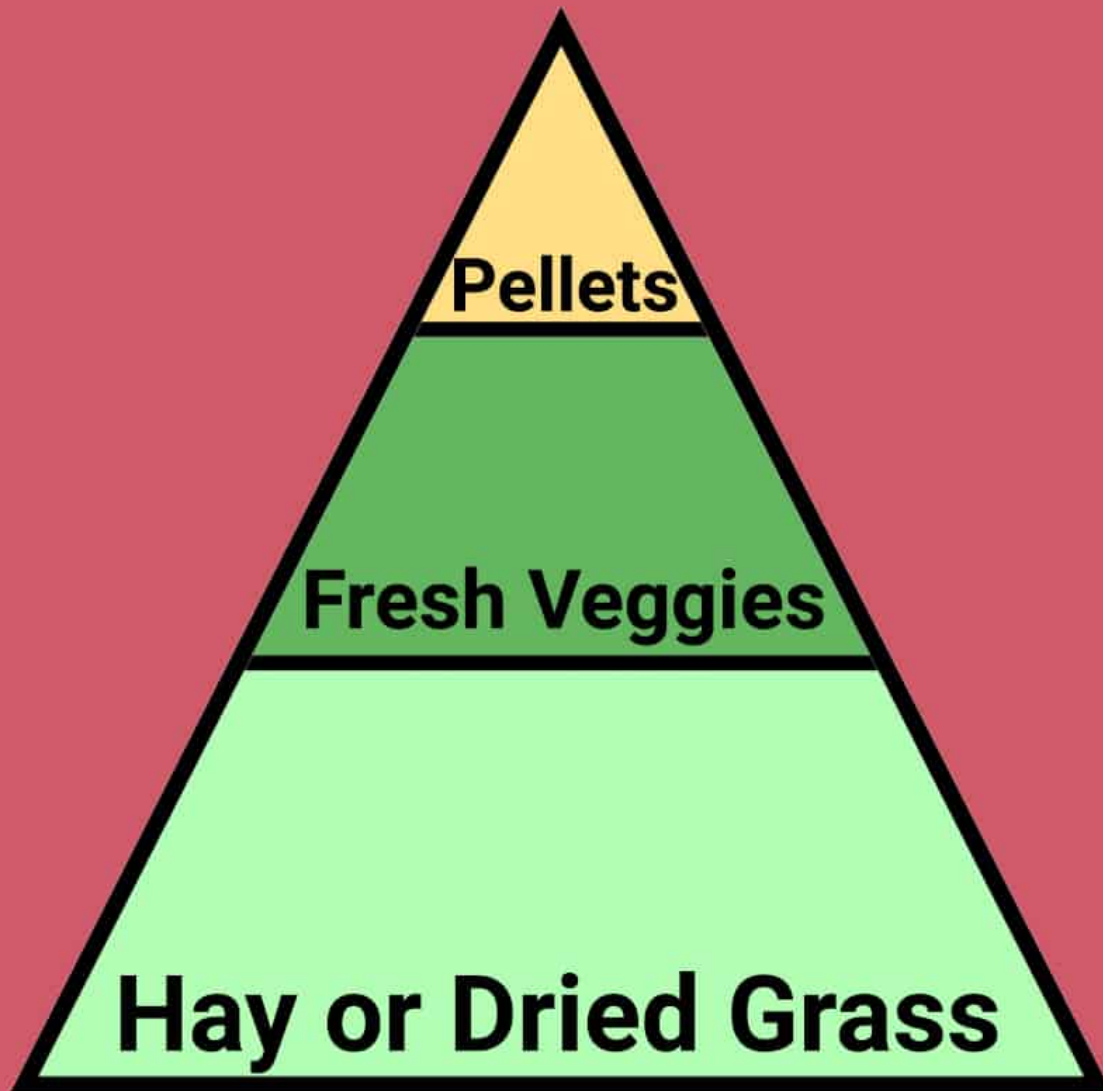
You might be surprised to learn that rabbits have a rather complicated digestive process. In fact, the digestive tract of a rabbit is physiologically more similar to that of a horse than to that of a rodent or other small mammals! In the wild, rabbits eat many different grasses, leafy plants, sprouts, and even some bark, twigs, and fruit or seeds from time to time. However, every individual rabbit is different, and a number of factors (including age, health concerns, weight, preference, and more) come into play when developing individual diets. You may find your veterinarian doesn't want a certain resident on any pellets, or that certain veggies are not a great choice for individuals with certain health conditions. It is important to work with a qualified veterinarian who has rabbit care experience to develop personalized diets for each rabbit resident in your care.

In general, resident rabbits should have a diet that consists primarily of hay or grass (around 80%), followed by appropriate vegetables (see below for good vegetable and fruit choices and for those to avoid), and a small, measured amount of pellets.





# The Rabbit Food Pyramid



OpenSanctuary.org

## Hay Or Grass For Rabbits

You can't really offer too much hay for rabbit residents. It is an absolute nutritional need for rabbits to have hay make up the

majority of their diet. Hay helps provide a good gut flora balance, prevents blockages from hair, and promotes good chewing, which prevents serious dental issues. Additionally, it helps meet a rabbit resident's behavioral need to forage, and can prevent boredom and harmful redirected behaviors.

For these reasons, rabbit residents should always have access to ample hay. If you have younger resident rabbits, they should be introduced to hay as soon as they are eating on their own. Generally, Timothy or mixed grass is better due to the lower protein and calcium levels it contains.

Grass hays like bluegrass, timothy, oat, ryegrass, brome, orchard, and fescue are preferred because they are lower in protein and calcium. It is ideal to offer multiple types of hay, as it encourages rabbit residents to be comfortable with little changes to the textures and smells. A variety of hays can also encourage rabbits to explore their food options and lessen potential neophobia (fear of new things) to new hays.

## **Alfalfa For Rabbits**

Alfalfa should only be given as a treat to adult rabbit residents, as it is technically a legume and much too rich for them to eat on a daily basis. However, younger rabbits can have some alfalfa on occasion, as their nutritional needs are a little different and their bodies can use the additional protein found in alfalfa. If providing younger rabbits with alfalfa, they should also receive grass hay. They should slowly be transitioned away from alfalfa completely, especially if they are being fed alfalfa pellets.

You can learn more about choosing the right combination of hay from the [House Rabbit Society](#).



## Vegetables For Rabbits

Generally, a healthy rabbit with no known medical issues can have around 1 cup of appropriate vegetables for every 4 pounds of body weight, up to 2 cups. Smaller breeds like dwarf rabbits should not receive more than 1 cup of vegetables.

Variety is the spice of life, and a good general rule is to offer 2 or 3 different vegetables each day. However, it may be best to start out with one vegetable and observe for signs of stomach upset, like diarrhea. Once you know that a vegetable has been readily accepted by a rabbit resident and their tummy, you can add more. Some vegetables are better for daily diets, while others you should use more sparingly, perhaps just once or twice a week.

Do **not** feed your rabbit any seeds or nuts, beans, corn, or potatoes, as they can cause potentially serious digestive issues. Remember, rabbits have highly sensitive digestive systems!

This list of acceptable vegetables is from the House Rabbit Society:

### Daily Vegetables That Rabbits Enjoy

- Bell peppers
- Bok choy
- Brussels sprouts
- Carrot tops
- Cucumber
- Endives
- Escarole
- Fennel
- Herbs: basil, cilantro, dill, mint, oregano, parsley, rosemary, sage, thyme

- Lettuces: romaine, green leaf, red leaf, Boston bibb, arugula, butter lettuce
- Okra leaves
- Radicchio
- Radish tops
- Sprouts: alfalfa ([but first see above](#)), radish, clover
- Watercress
- Wheat grass
- Zucchini

### **Weekly Surprise Vegetables For Rabbits (Only to be fed once or twice a week)**

- Broccoli (stems and leaves only)
- Carrots
- Chard
- Clover
- Collard greens
- Dandelion greens (pesticide-free)
- Flowers: calendula, chamomile, daylily, dianthus, English daisy, hibiscus, honeysuckle, marigold, nasturtium, pansy, rose
- Kale
- Spinach

### **Fruit For Rabbits**

While certain vegetables can be offered daily, fruit should be offered sparingly, once or twice a week, and in small doses. One or two tablespoons of fruit per 5 pounds of body weight is plenty. Remember, fruit is packed with sugar, and too much isn't great for residents.

Here is a continuation of the list provided by the House Rabbit Society:

## **Fruity Fundays For Rabbits (Only to be fed once or twice a week, in small doses)**

- Apple (no seeds)
- Banana
- Berries: blueberries, blackberries, strawberries, raspberries, cranberries
- Cherries (no seeds)
- Grapes
- Melon
- Nectarine
- Orange
- Papaya
- Peach
- Pear
- Pineapple
- Plum
- Watermelon

Now that you have an idea of what fruits and vegetables to offer, let's take a closer look at the next part of a rabbit resident's diet: pellets.

## **Pellets For Rabbits**

Remember, pellets should only make up a small portion of a resident rabbit's daily diet. When choosing a pelleted food, it can be tempting to go for the one with exciting-looking colors and "gourmet" treats. Unfortunately, this is more of a marketing strategy to attract humans than it is a healthy choice for rabbit residents. A lot of those mixes include dried fruits, in addition to fried bits of cereal and nuts and seeds. Instead, go for the green! Look for plain old green pellets, and be sure to check the formulation for:

- Fat content less than 2%

- At least 18% fiber, though 20-25% is great
- Protein percentages between 14-15%
- Calcium below 1%

Adults (residents over 1 year old) should ideally get a timothy-based pellet, while younger rabbits can have an alfalfa-based pellet, as they require more protein. However, if they are receiving alfalfa-based pellets, you will need to offer grass hay instead of alfalfa. Be sure to use an accurate measuring cup to ensure residents are getting the right amount each day.

Check out this [helpful chart](#) from House Rabbit Society that shows the composition of pellets from different brands.

### **Daily Pellet Recommendations For Rabbits**

Timothy-based pellets can be offered to adult residents. A 6-10 pound rabbit generally only needs  $\frac{1}{4}$  cup of pellets, while smaller residents (under 5 pounds) should just receive  $\frac{1}{8}$  cup.

As previously mentioned, rabbits who are old enough to eat on their own but are under 1 year old can be offered alfalfa pellets. Always check for fiber content and strive to obtain those with higher content. The above recommended amounts apply here as well.

Any nutritional section would be incomplete without a “foods to avoid” section. It is less fun, but so important to your resident’s health and well-being!

### **Cecotropes: Made By Rabbits, For Rabbits**

If you are new to caring for rabbit residents, you may be surprised to find that there are a special type of rabbit poop designed for rabbits to eat! In fact, it is a necessary part of their digestive process. These special poops are called cecotropes or “night droppings” or “cecal pellets”. They contain

vital nutrients and minerals for rabbits. While we human-animals get our nutrients through the passing of food through our digestive tract, rabbits do not get nutrients that way. They get them through ingesting cecotropes. We told you they had a complicated digestive process! Cecotropes are different from fecal droppings in that they are produced in a different part of the digestive system called the cecum. They look different than the little dry round balls of poop rabbits produce. Instead, they will have a mucousy, rubbery looking coating and they will be packed close together much like little segments of a mulberry.

## **Junk Foods To Avoid Feeding To Rabbits**

As with pellets, there are many food products marketed to rabbit caregivers as “nutritionally complete” or “gourmet”. However, much of this is actually junk food, high in sugar and starch that will have a deleterious effect on the health of rabbit residents. Offering accepted fruits and veggies is a much better choice. Fresh fruits and vegetables are best, and dried fruits should only be given in tiny amounts as a very special treat, as they are quite high in sugar.

## **Other Foods To Avoid Feeding To Rabbits**

As mentioned above, rabbits have highly sensitive digestive systems, and even a small amount of inappropriate foods can cause serious health issues in rabbits. The following should not be fed to rabbit residents:

- All human treats
- Beans
- Beet greens
- Cabbage
- Cauliflower

- Cereal
- Chocolate
- Corn or corn-cob treats
- Crackers
- Iceberg lettuce
- Legumes
- Mustard greens
- Nuts
- Pasta
- Peas
- Potatoes
- Rhubarb
- Seeds
- Sugar
- Turnip greens
- Yogurt

## Water For Rabbits

Water is an important part of keeping resident rabbits healthy. Rabbits should have access to clean water at all times. It is vital to their digestive health to drink lots of fluids, and serious complications can arise when their needs for water aren't met, even for what may seem like a small amount of time.

## Suggestions For Food Storage

In addition to feeding a high quality food, you must be sure to store the food properly to ensure your residents reap all the nutritional benefits. Food will keep best if kept in a cool, dry, dark place. All food, including unopened bags, should be stored in tightly sealed metal cans or thick plastic bins to prevent rodents from getting into food. You can contact the supplier to determine their food's recommended shelf life, but in general, properly stored bagged food will last about 3

months. Storing food too long or in undesirable conditions can not only lead to rancid or moldy food, but can also cause food to become depleted of vitamins and minerals. Be aware that you should **never** feed rancid or moldy food to rabbits as it can make them very sick.

There are many considerations when it comes to the daily needs and desires of a rabbit, but don't get too stressed out over it! Stick with the basics at first, and modify depending on what an [individual](#) rabbit is looking for. They'll let you know if changes have to be made!

## SOURCES

[What Should I Feed My Bunny? | Best Friends](#)

[The Importance Of Hay | House Rabbit Society](#)

[Hay In Your Bunny's Diet | House Rabbit Society](#)

[Rabbit Nutrition: What You Need To Know | University Of California](#) (Non-compassionate source)

[Nutrients Required By Rabbits | National Cooperative Extension](#) (Non-compassionate source)

### Non-Compassionate Source?

If a source includes the *(Non-Compassionate Source)* tag, it means that we do not endorse that particular source's views about animals, even if some of their insights are valuable from a care perspective. [See a more detailed explanation here.](#)