Feeding the Chinchilla

By: Peter G. Fisher, DVM • Pet Care Veterinary Hospital

In captivity it has been shown that chinchillas ingest most of their food at night and are selective feeders: when given the choice, they will select the most tender, succulent plant parts first. If not controlled, this high energy, lower fiber intake will lead to obesity.

Based on our dietary knowledge of the wild chinchilla, together with studies measuring the nutritional intake of the pet chinchilla, it has been determined that the pet chinchilla does best on a diet composed of free-choice (available all the time) hay and a small daily ration of pellets. This diet meets the chinchilla’s fiber and energy needs without causing obesity.

In addition to meeting nutritional requirements, the high-roughage diet of the chinchilla is critical in helping to prevent two of the most common health disorders seen in these animals: dental disease and gastrointestinal disease. We can mimic the chinchilla’s natural high-roughage diet by feeding hay as the primary food source.

Fiber also stimulates gastrointestinal motility, which allows ingested food to move along properly for normal digestion. Without fiber, the gastrointestinal tract slows down, resulting in changes in cecal pH, fermentation capabilities and microorganism populations. Over time, these disruptive changes can result in various forms of chinchilla indigestion: gastrointestinal stasis, constipation or diarrhea. The chinchilla with gastrointestinal stasis will be anorexic or have a reduced appetite and will produce very small stools or none at all. The chinchilla with constipation will strain to defecate, and the few fecal pellets passed are thin, short and occasionally blood-stained. The chinchilla with diarrhea may or may not have a reduced appetite and will pass soft stools that frequently mat the fur around the anus. Again, these forms of chinchilla gastrointestinal upset are commonly associated with inappropriate diets - that is, diets that contain excess amounts of grains, seeds and/or fresh greens without sufficient roughage or fiber.

Dental problems, such as malocclusion, molar root overgrowth and molar spurs, are also common in chinchillas. As in the rabbit and guinea pig, all of the chinchilla’s teeth grow continuously. Improper wearing of teeth, secondary to a diet low in fiber, and the lack of suitable chewing materials can result in sharp points on the upper and/or lower molars, which leads to painful ulcers on the cheek and/or tongue. Providing plenty of free-choice hay ensures a normal chewing pattern, thus encouraging normal dental wear.
When it comes to feeding a concentrated ration, alfalfa-based pellets that contain more than 18% crude fiber and a minimum of 10% protein are recommended. Oxbow Pet Products' Chinchilla Deluxe provides a good balance of fiber, protein, carbohydrates, vitamins and minerals and is the pellet diet of choice for your pet chinchilla. As a general rule, feed 2 tablespoons (30 grams) of Chinchilla Deluxe to each adult chinchilla on a daily basis.

Treats such as fresh vegetables or herbs can be offered but should be fed in limited quantities. A diet containing too many vegetables can result in diarrhea and gastrointestinal upset. Feed the same foods consistently in order to prevent digestive upset, and avoid gas-forming vegetables such as broccoli and cauliflower.

It is obvious that nutrition plays a key role in keeping your pet chinchilla healthy. Fiber is of utmost importance in preventing gastrointestinal upset and dental problems, two of the most common health issues plaguing the pet chinchilla. Be consistent with the amount of Chinchilla Deluxe fed and the type and quantity of treats offered. Your chinchilla’s digestive tract thrives on consistency, and your reward will be a pet that is active, bright, alert and healthy.

References:


Guinea pigs are becoming a more valued, loved and cared for pet in the eyes of their owners and as a result, veterinary care for guinea pigs has increased. Veterinarians seeing guinea pigs are noticing several health problems attributed to nutrition: Vitamin C deficiency, gastrointestinal ileus, obesity, enteritis and urolithiasis.

Signs of Vitamin C deficiency (scurvy) include: hind leg weakness, gum inflammation, rough fur coat and sometimes bleeding in the joints or under the skin. Like humans, guinea pigs are unable to produce their own Vitamin C and require a dietary source. Daily requirements of Vitamin C range from 20-50 mg per kg of body weight. In order to prevent Vitamin C deficiency and subsequent scurvy, Oxbow recommends feeding your adult guinea pig Cavy Cuisine, a pelleted diet containing stabilized Vitamin C. Offering one of Oxbow's 50 mg GTN-50C vitamin tablets on a daily basis will also ensure your guinea pig is receiving all the Vitamin C it needs.

Gastrointestinal ileus (malfunction of the digestive tract due to gut slowdown problems) is commonly seen in guinea pigs on low fiber diets. Many times pet owners do not notice the signs associated with gastrointestinal slowdown until it is too late. Decreased appetite, a bloated or tense abdomen, along with lethargy and a decrease in the volume and size of feces passed are all signs of gastrointestinal ileus. Diets that incorporate high levels of non-digestible fiber, in the form of free-choice grass hay, promote increased gut motility and thereby prevent this gut slowdown.

Obesity in guinea pigs can lead to respiratory, heart and liver disease. Obesity not only leads to the previously mentioned health problems, but can also prevent coprophagy, which is necessary for the maintenance of normal gastrointestinal health. Cavy Cuisine was designed to prevent obesity by adding sufficient fiber to aid in overall digestion and eliminate those grains that raise fat content.

Enteritis (intestinal inflammation associated with toxin production) is a problem commonly associated with diets that contain high levels of energy (starch and glucose). A low-fiber, high-starch diet promotes gut hypomotility and changes the intestinal pH and microbial population which allows pathogens (bad bacteria) to produce toxins that can be fatal. The guinea pig with enteritis may have soft stools and be hunched and inactive due to increased GI gas production and the resulting abdominal pain. High-fiber, low-starch Cavy Cuisine is formulated to prevent enteritis.

Urolithiasis (bladder stones) is being seen in more and more guinea pigs. Although many are secondary to urinary tract infections, a certain percentage of stones are caused by an imbalance of calcium and phosphorus in the diet. Forage feed, the natural diet for a wild guinea pig, has a higher calcium to-phosphorus ratio. Grains have the inverse relationship and contain more phosphorus than calcium. Research has proven that diets containing an inverse ratio of calcium and phosphorus can cause stones and soft tissue calcifications.
Dietary levels of Vitamin D and magnesium may also influence the development of bladder stones.

Guinea pigs are strict herbivores, and like rabbits, are hind gut fermentors that practice coprophagy (ingestion of one’s own feces). As hind gut fermentors, guinea pigs digest much of their food in the cecum and colon (large intestine) which are at the end of the digestive tract. The cecum, a large, thin-walled sac located at the junction of the small and large intestine, contains up to 65% of gastrointestinal (GI) contents. Within the cecum, bacteria and protozoa aid digestion of foods taken in by the guinea pig.

Fiber is needed for these bacteria and protozoa to stay in balance and function properly. Fiber also aids in maintaining normal GI motility. Without fiber, the gastrointestinal tract slows down, resulting in subsequent changes in the cecum pH, fermentation and bacterial population. With time, these changes in the intestinal tract environment can lead to indigestion.

You can provide this essential fiber by feeding your guinea pig free-choice grass hay. Hay also helps prevent boredom by satisfying the guinea pig’s innate desire to chew, which is an important means of dental health maintenance.

Oxbow Pet Products agrees with nutritionists and veterinarians that less nutrient-dense diets are needed to prolong the lives of small mammals, especially guinea pigs and rabbits. Through the science of nutrition, Oxbow Pet Products wants to provide adult guinea pigs with the opportunity to live longer and healthier lives.

References:


Feeding the Rabbit

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The two primary keys to rabbit nutrition are providing plenty of fiber, primarily in the form of hay, and being consistent in what you feed.

Rabbits are hind gut fermentors, meaning they digest much of their food in the cecum and colon (large intestine) which are at the end of the digestive tract. The cecum is about ten times as large as the stomach and makes up approximately 40% of the digestive tract. Without fiber, the gastrointestinal tract slows down, resulting in subsequent changes in the cecum pH, fermentation and bacterial population. With time, these changes result in rabbit indigestion or gastrointestinal (GI) stasis. The rabbit with GI stasis will be anorexic or have a reduced appetite. An affected rabbit produces very small stools or none at all and may be hunched or in pain due to increased gastrointestinal gas formation. Diarrhea may or may not be present.

Since hay is the primary source of fiber in a rabbit’s diet, it should be fed free-choice, which means you always have plenty of fresh, good quality hay available for your bunny. Hay is a dried, cured, preserved plant product fed to animals. The primary types of hay include grass hay (timothy, oat, brome and orchard) and legume hay (alfalfa, clover, pea and peanut).

As a general rule, grass hay is recommended over legume hay (timothy vs. alfalfa) for the average adult house rabbit. The primary reason is that timothy hay is lower in protein and calcium and higher in fiber than alfalfa hay. High dietary calcium has been associated with urine crystal or bladder stone formation. Therefore, feeding timothy hay over alfalfa hay can potentially prevent this problem. The higher fiber helps keep the rabbit’s digestive system in balance and along with lower protein, encourages the ingestion of nutrient-rich cecotrophs or night feces.

Rabbit pellets should be high in fiber and contain over 20% fiber and contain less than 16% protein. As a general rule we recommend \( \frac{1}{4} \) cup pellets per 5 pounds of body weight per
day. Of course this can vary. Obese rabbits and rabbits with gastrointestinal motility problems need limited amounts of pellets, regardless of how much fiber the pellets contain.

Another vital key to maintaining a nutritionally healthy rabbit is consistency in what you feed. A consistent, healthy diet will assure that the bacterial population within the rabbit also stays healthy and consistent. So, if your bunny's hay and pellets are supplemented with greens, vegetables and fruits, it needs to be consistent; and the same types of these foods should be offered every day. The reason for this goes back to the all-important microbial (bacterial) population within the rabbit’s intestinal tract. These microbes thrive on consistency and stay in balance when offered the same foods to digest day in and day out. When carrots are fed, let’s say for three days, the bacteria that digests carrots is stimulated to grow and reproduce. If the carrot are stopped for several days, those bacteria, who have a short life span die due to lack of carrot to digest. When microbes die in large numbers they sometimes give off gas which can be painful and uncomfortable. The rabbit can stop eating for awhile, and without new fiber intake, intestinal gut motility slows down. This is the start of bunny indigestion which can lead to gastrointestinal stasis or "hairball" syndrome if this pattern repeats itself.

So, the bottom line is- be consistent and intelligent in the types and quantity of vegetables you feed. It is important to introduce vegetables one at a time to make sure each agrees with your rabbit’s digestive tract. Approximately one cup of leafy vegetables per 4 pounds of body weight daily is appropriate for rabbits. Some suggestions include romaine, butter crunch, or red leaf lettuce or other vegetables including cilantro, parsley, carrot tops, collards, dandelion greens, and kale. Avoid gas-forming vegetables such as broccoli and cauliflower.

I see so many rabbit health problems in my practice which are related to nutrition and improper diets. Hopefully this information will help keep many a rabbit’s gastrointestinal tracts moving smoothly and their overall health top notch.

References:
