# Dental Care In-Depth: All Small Pets

*Drs. Foster & Smith Educational Staff*

## dental anatomy & proper care

### Tooth Tour: Getting to the root of your small pet's dental health

The dental health of your small pet is much more important than many people realize. In fact, your pet's tiny teeth are really the key to unlocking everything our large world has to offer. Everyone knows that teeth are used to break down food at the beginning of the digestive cycle. In that regard, teeth are the gateway to good health. But many people forget that small animals also use their mouths and teeth in other specialized ways, such as to explore their surroundings, carry food and nesting materials, and defend both themselves and their territories. As such, your small pet's teeth are closely tied to her health, happiness, and overall survival.

Since your small pet's teeth are used as digestive, explorative, and defensive tools, keeping your pet's teeth healthy is essential. At the most severe, a dental or oral problem could cause a variety of otherwise preventable complications, be it malnutrition, infection, or even a premature loss of your pet. But beyond that, pain in your small pet's mouth could also hinder instinctive tasks, such as nesting, breeding, and simple gnawing. In turn, the inability to satisfy these instincts could create behavioral problems. To add to the dilemma, your small pet cannot tell you when her teeth are causing pain, obstructing feeding, or growing abnormally. Instead, it is up to you to ensure your pet's teeth are healthy and cared for.

Treating a problem after it has taken root in your pet's mouth is often difficult. But by actively working to maintain your pet's dental health, you can easily deter any potential dental problems before they afflict your pet. As with most health issues, simple preventive measures are the best course of action.

### Similar Smiles, Different Bites: Defining your small pet's dental differences

The dental anatomy of all small pets is not identical, though some similarities do exist. In fact, the design of your small pet's teeth and mouth is tailored, in part, to maximize her specific, natural diet. For instance, plants need to be chewed differently than meat to obtain the maximum nutritional value. As such, the location, structure, function, and even quantity of teeth in a pet's mouth differ, depending on if he is a herbivore (plant eater), omnivore (plant and meat eater), or carnivore (meat eater). Therefore, by simply understanding and meeting your specific pet's natural diet, you are already on your way to promoting great small pet dental health.

Diet, however, can be further broken down to explain the dental anatomy of your specific small pet. Rabbits (which are lagomorphs) and truly herbivorous rodents



*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are subject to change without notice. These restrictions are necessary in order to protect not only our copyrighted intellectual property, but also the health of pets, since articles or images that are altered or edited after download could result in misinformation that may harm companion animals, aquatic life, or native species.*

(such as chinchillas and guinea pigs) feed on tough, fibrous vegetation in their natural environments. This vegetation tends to be low in energy content; thus, larger quantities of this vegetation need to be consumed to maintain your pet's nutrition and energy levels. This means these pets are constantly chewing to grind down and digest this type of vegetation. In turn, the large grinding teeth in the back of the mouth (known as cheek teeth) experience constant, rapid wear. To compensate for this wearing, cheek teeth have evolved to grow continuously throughout the animal's life.

However, the cheek teeth of other rodents, such as hamsters, gerbils, rats, and mice, do not grow continually. These animals feed mainly on grains, seeds, and tubers, which are the fleshy underground part of a plant, such as a potato. Because this diet tends to be very high in energy content, less quantities need to be consumed to maintain your pet's nutrition and energy levels. Since these animals are chewing less food, the cheek teeth wear less, which means the cheek teeth do not need to continually grow.

In both lagomorphs and all rodents, the incisors - which are the elongated front teeth designed to cut through foods - continually grow throughout life. The incisors do experience constant wear because of the cutting and tearing action needed to break plant and plant products away from the plant structure. These chewing actions cause the incisors to grind against each other during use as well. One noticeable difference between lagomorphs and rodents, however, is that rabbits have two pairs of upper incisors (the second pair, located immediately behind the larger incisors, are small and peg-shaped and often referred to as the "peg teeth"). Rodents, on the other hand, have only one pair of upper incisors.

In comparison, the teeth of other exotic small pets do not grow throughout their lifetime. Instead, these teeth are designed to both obtain and maximize the specific diet of these animals. Hedgehogs, for example, which eat predominantly insects and bugs, have teeth specialized to crunch through the tough exoskeletons (hard, outer shell) of their prey. Sugar gliders have teeth that allow them to strip away tree bark to consume the saps, nectars, pollens, and insects of their diets.

## Constant Care: Health and products your small pet can really sink her teeth into

Preventing dental and oral problems is the simplest way to care for your pet's teeth. It makes sense, then, that offering your pet a diet rich in her natural foods is the most important preventive measure. After all, if your small pet were living in the wild, it is her natural foods she would eat, which would naturally wear - or not wear - the necessary teeth to maintain good dental and oral health. However, there are other potential dental problems of which you should be aware to keep your pet healthy and happy.

Similar to humans, your small pet's upper and lower teeth need to properly align when the jaw is closed. When the alignment is off, it is referred to as "malocclusion." There are several causes for malocclusion, including genetics, trauma to the teeth, abnormal growth, reverse scissor bite, and, most commonly, inappropriate diet. Malocclusion can occur in both the cheek teeth and the incisors, which results in uneven teeth wear, which often permits the overgrowth of teeth.

Overgrown teeth can wreak havoc on your small pet's health. In some species, cheek tooth overgrowth can lead to root elongation. When this occurs, the root of the tooth continues to grow through the oral tissues, causing swelling. If root elongation occurs in the upper jaw, the root can grow to the point of affecting the eyes, resulting in watering, bulging, or inflammation. In hamsters, an overgrown tooth could cause food to become impacted (tightly wedged) in the cheek pouches, appearing as a large, persistent swelling of the cheek. In truly herbivorous lagomorphs and rodents, overgrown cheek teeth can cause severe oral pain, resulting in excessive salivation (often called "slobbers"), reluctance to chew, inability to close the mouth, and reduced food intake.

In each of these instances, the situation deteriorates as the teeth continue to grow, and, if it is not treated, will result in severe malnutrition. Fortunately, if overgrowth occurs and is caught in time, the teeth can be trimmed by a veterinarian to prevent further problems. An even better preventive solution to each of these problems is to offer your pet a diet rich in her natural type of foods (e.g. high fiber, such as timothy hay, for rabbits and truly herbivorous rodents). For small pets with continually growing teeth, complement the diet with a variety of chew toys and chew treats. Also, your pet's teeth should be examined routinely for abnormalities. If you see abnormal growth or if your pet drools, has difficulty chewing, is eating less, or shows pain when touched around the mouth



*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are subject to change without notice. These restrictions are necessary in order to protect not only our copyrighted intellectual property, but also the health of pets, since articles or images that are altered or edited after download could result in misinformation that may harm companion animals, aquatic life, or native species.*

or head, contact your veterinarian immediately. Though often referred to as "pocket pets," clearly, the dental and oral health of your furry friend is nothing to be tucked away and forgotten.

## WE RECOMMEND

Kaytee Munchables Chew Blox

Lasts longer than wood chews and won't splinter, keeping small pets' teeth in top condition.

Crispy Chews

Promotes clean and healthy teeth for your rat, rabbit, guinea pig, or chinchilla.

Peter's Chew Toy

Encourages healthy chewing behavior for dental health



*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are subject to change without notice. These restrictions are necessary in order to protect not only our copyrighted intellectual property, but also the health of pets, since articles or images that are altered or edited after download could result in misinformation that may harm companion animals, aquatic life, or native species.*