Digestive disorders in snakes

The digestive system converts food into energy. In snakes, left over waste is expelled through the vent which is the reptile equivalent of the mammal’s anus. The digestive tract of your snake consists of the mouth, stomach, intestines and vent.

All about the snake’s digestive system

Snakes have lots of peg like teeth; when they break they regrow. This is called pleurodont dentition. In our mouths the roof is called the hard palate; the snake does not have a hard palate, instead he has a hole called the choana. Snakes have six rows of teeth; two on each of the upper jaws and one on each lower jaw. Snakes have a forked tongue!

Leading from the mouth is a tube called the esophagus which then leads to the stomach.

After the stomach, the digestive tract continues as the small and large intestine. Some snakes are capable of not eating for long periods. The intestine ‘up-regulates’ going from a completely inactive state to active in a short period of time. This is common in ‘sit and wait’ snakes.

The vent is made up of three areas: the coprodeum, urodeum and proctodeum. The food waste from the large intestine is stored in the coprodeum. The urodeum is the area which stores urine, and sperm or eggs (depending on whether your snake is male or female). Both the coprodeum and urodeum empty into the proctodeum and from here all feces and urine are passed out of the vent.

The liver is the largest organ inside the body and has many functions. It plays an important part in the breakdown of proteins and fats from the food. It also helps the body to expel any toxins and other harmful substances.

The pancreas produces juices which help to breakdown food.
What is stomatitis?

Stomatitis is inflammation of the mouth and is commonly known as ‘mouth rot’. Stomatitis can be caused by either viral or bacterial infection. Damage to the mouth can also cause mouth rot.

Pay particular attention to the condition of the house; also check the furniture in your snake’s house to make sure that there are no sharp areas which could damage his mouth. Very active species such as Corn snakes may need the sides of the house to be covered to prevent them from charging at the glass or plastic. The use of a tape barrier nose height can also be useful in allowing the snake to see and minimize facial injuries. Low temperatures in the house can also lead to a weakening of the immune system. The correct temperature of the tank depends on the species of snake. Researching your particular species of snake is very important.

If you think your snake has stomatitis get him checked by your veterinarian.

What is fatty liver disease?

Fatty liver disease, also known as hepatic lipidosis, is when the liver cells become swamped with fat, preventing the liver from working properly. It is very difficult to detect fatty liver disease; there are no obvious symptoms, but a snake with this condition will stop eating. It is important to weigh your snake weekly to spot any severe weight loss.

To avoid this condition ensure you are feeding your particular species of snake a balanced diet. Avoid feeding food that is too big as this can put your snake off eating. If your snake doesn’t seem to want the size of food, you are offering then try a size down. Low temperature can also cause loss of appetite as mentioned above researching your species correct temperature is vital.

If your snake loses more than 10% of his bodyweight you should take him to the veterinarian.
Can snakes become impacted or constipated?

Yes!

Constipation is when a snake cannot pass feces. If your snake is constipated you may notice him straining to pass feces or that his feces look very dry.

The temperature in your snake’s house is vital. If it is too cold the intestines cannot digest food properly and this can lead to constipation. The temperature of your snake’s vivarium is species dependant.

Calcium is needed to make the intestines work properly. Ensure that the snake’s UV light is at the correct height, around 30-45 cm away from where the snake spends most of its time. The UV light needs to be changed every 9 months. Old lamps stop producing UV and this will then reduce the amount of calcium the snake absorbs through the intestine. Snakes are one of the few reptiles that are not as reliant on vitamin D3 and calcium production due to their diet; this is because whole skeletons are consumed with their own store of calcium and vitamin D3. Even though snakes do get vitamin D3 and calcium from the diet exposure to UV light is still necessary as part of the environment as snakes can see ultra violet light.

It is very important that your snake has water at all times and that the humidity in his house is at the correct level. Dehydration often leads to constipation. The humidity of the tank varies in species as some species will need higher humidity than others.

Make sure your snake is eating the right type of food and the correct amount. If he is greedy his intestine may become too full and therefore prone to impaction.

Constipation is often left until it is too late. If an impaction is very severe an operation may be necessary to remove the material blocking the intestine. To try and avoid this ensure you are familiar with the color, consistency and frequency of your snake’s feces. This will allow you to pick up on any changes and make your veterinarian aware if you are unsure. Your veterinarian may choose to test the feces either in house or send it away to an external laboratory.

What is a vent prolapse?
A vent prolapse happens when one of the organs that are plumbed into the vent (for example the large intestine) gets pushed out of the body. Egg binding and low calcium in the diet can cause a vent prolapse.

A prolapse is an emergency; if you suspect a prolapse you must take your snake to the veterinary practice as soon as possible.

**Can snakes become infected by cryptosporidium?**

Yes!

Cryptosporidium is an infection caused by a single celled organism called protozoa; it is a very infectious disease.

This disease can make digestion for snakes very difficult, infected snakes regurgitate their food and will lose weight. It is important to weigh your snake weekly to allow you to pick up on any weight loss.

This condition often causes the stomach lining to swell which is visible externally.

If your snake vomits or regurgitates he will need to see a veterinarian. This condition is very difficult to treat!