## Care Cards

## **Reptile Anorexia**

Anorexia in reptiles may be defined as the lack of an appetite or the lack of a feeding response. Anorexia is a symptom, not a disease. It may be related to a variety of reptile disorders. Infection, metabolic disorders, abnormal husbandry conditions, and even behavioral problems may cause anorexia. Anorexia may develop as a newly acquired pet that has not eaten since its purchase. Anorexia also may occur when a reptile that has a good appetite history suddenly stops eating. Regardless of the cause, anorexia may lead to debilitation and possibly death if not corrected.

The most common cause of anorexia is improper husbandry. This can occur without the existence of any disease process. Some of the more common husbandry problems include unfamiliarity with the natural diet for the specific reptile; improper temperature, photoperiod, and/or humidity in the enclosure; and excessive handling of the animal.

Proper lighting and feeding cycles are critical to prevent anorexia in captive reptiles. Enclosure lighting should never remain on 24 hours per day. Anorexia may occur when the reptile's food is offered in an incorrect cage location. For example, an aquatic reptile should not have its food placed on land, likewise, a terrestrial reptile should not be fed in trees. Owners may offer their reptiles an inappropriate food source leading to anorexia. Some reptiles will not feed on dead prey, requiring movement to elicit a proper feeding response.

Anorexia can occur if the food being offered is too large for the reptile to consume. Obese rats have been shown to cause anorexia in snakes, likewise, high fat diets will cause anorexia in crocodiles. Improper use of nutritional supplements may lead to anorexia secondary to metabolic disturbance.

Anorexia may frequently result from improper environmental temperatures resulting in



improper body temperatures. The preferred body temperature of a reptile is defined as a relatively narrow temperature range at which a specific reptile is active and carries out normal functions such as feeding, reproduction, and digestion. A temperature gradient is necessary for normal thermoregulation in reptiles. A specific reptile's proper temperature requirements can be found by learning the animal's native habitat and geographic origin. Proper species identification can prevent anorexia by allowing the owners to find habitat information.

Improper feeding time may result in an ownerperceived anorexia. Nocturnal reptiles fed only in the daytime may exhibit anorexia, however, if food was provided during their normal feeding time, the anorexia would dissipate.

Anorexia may occur secondary to social or reproductive stimulus. Dominate individuals may cause anorexia in their cage mates by fighting or simply ingesting all the available food. Reproductively active male reptiles may undergo temporary anorexia during the breeding season. Additionally, full term, gravid, etc., females may exhibit anorexia due to the amount of space required in the abdominal cavity at this time. Anorexia is a common symptom with dystocia in reptiles.

Anorexia can occur secondary to gastrointestinal problems. Necrotic stomatitis, esophagitis, dental disease, abscess, and oral cancer can all lead to anorexia, related to the reptile's inability to grasp food. Parasitic diseases may also lead to anorexia. Viral infections have been shown to cause anorexia in reptiles, such as herpes virus in tortoises, or paramyxovirus in snakes. Anorexia may be associated with mycoplasmosis in tortoises. Gastrointestinal foreign bodies can lead to impactions and anorexia.

Respiratory disease such as pneumonia or sinusitis can lead to anorexia. In snakes, especially during feeding, the trachea is severely compressed by the food item. Upper respiratory infections will make feeding very stressful on the reptile.

Seasonal anorexia will occur in temperate climate reptiles. These species will physiologically prepare themselves for hibernation regardless of their captive housing conditions. This anorexia may become severe if hibernation is not initiated with the reptiles.

A good history is always necessary to help diagnose the cause of anorexia. Samples of the food items fed will help rule out improperly sized items. Fecal exams are required to rule in or out intestinal parasites. Occasionally blood chemistry or radiographs may be required for a complete diagnosis.

Often a change of diet will help induce a reptile to start eating again. For example; a reptile that had been eating rodents for some time, then for some reason refused to eat them, may return to normal feeding when offered a chick or a quail.

Reptile appetites may also be stimulated following exposure to natural, unfiltered sunlight. Care must be taken to protect the reptile from overheating. Never place a reptile outdoors in a glass or plastic enclosure. Always mist the reptile frequently with water and provide a shaded area for cooling off. If the reptile is not accustom to direct sun exposure, only leave them outside for 20 to 40 minutes at a time.

Many reptile veterinarians have noticed a large number of anorectic reptiles, without other clinical signs of disease, will begin feeding after receiving one dose of Metronidazole at a dose of 150mg/kg. The mechanism by which this effect is achieved is still unclear. Intramuscular injections of multi-B vitamins and vitamin C have often stimulated anorectic reptiles to eat.

Reptiles can survive for months without eating, but eventually their reserve tissue stores will

be exhausted and their physical condition will rapidly deteriorate. Gentle handling and a quiet environment are almost as essential as restoring proper nutrition.

The quickest, most effective method for immediately restoring a positive lipid, protein, and vitamin balance is by tube-feeding. A nutritional replacement produce that has a high calorie, low bulk formula, designed for convalescent reptiles should be fed. Tube-feeding is preferred by most veterinarians over force-feeding for several reasons. Tube-feeding formulas can be fed warm to help increase the digestion process. Force-feeding can sometimes lead to iatrogenic damage to the reptiles mouth or throat leading to an inflammatory cause for anorexia. If force-feeding must be initiated, follow these basic guidelines. Always have an extra handler present, this will enable you to concentrate solely on the feeding process. Offer items smaller than what the reptile would normally consume, this will decrease the chance of mouth or throat injury. Food items for snakes and carnivorous lizards should be coated with beaten whole egg. This will provide lubrication as well as nutrition for the reptile. Other lizards and chelonians may be hand-fed smaller sized pieces of their normal diet.

Because anorexia is a symptom, not a disease, its treatment will depend on identifying the underlying cause. Most often, husbandry changes are required. Proper parasitic therapy may additionally be required when treating anorexia. Debilitated reptiles may require stomach tube feeding to maintain normal body functions. Temperature-monitoring devices usually are also suggested. Regardless of the cause, anorexia needs to be observed, diagnosed, and treated as quickly as possible to help prevent a fatal outcome.

## References

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- Frye, Fredric: Reptile Care; An Atlas of Diseases and Treatments, Volume 1. T.F.H. Publications. New Jersey, 1991.
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