

GUT LOADING

Reptiles require a diet **high in calcium** and **low in phosphorous**. Unfortunately for insectivorous reptiles, the insects they are fed tend to be **low in calcium** and **high in phosphorous**. Feeder crickets, mealworms, and superworms can also be deficient in protein and moisture. Without supplementation, these reptiles will develop severe deficiencies, leading to bone weakness, weight loss, muscle tremors, seizures, and eventually death.

One way of supplementing a reptile's diet is by directly coating the insects with a powdered supplement. However, this method is not always effective since much of the supplement gets shaken off before consumption. Some reptiles will also refuse to eat dusted insects.

An alternative technique for supplementation is called '**gut loading**.' Gut loading is the term used to describe increasing the calcium, protein, and moisture content of feeder insects' stomachs prior to feeding them to reptiles.

Protein can be gut-loaded into insects by offering ferret food or trout chow as a main food source.

A number of sources of calcium can be used to add to the insects' food:

- Reptile calcium supplements such as ReptiCal™
- Crushed cuttlebones
- Crushed Tums™
- Crushed human calcium supplement tablets

Alternatively, the insects can be offered feed that is already fortified or high in calcium, such as calcium fortified chicken egg laying mash, Fluker's™ calcium-fortified cricket food, or turnip, collard, and dandelion greens. Feeder insects should not be offered water directly, as they can easily drown in even a shallow bowl of water. Instead, they can get moisture through pieces of cut raw potatoes and sweet potatoes or gelled water products available at pet stores.

Gut-loaded insects should be offered to the reptile every 2-3 days, depending on age and species.