



Supplementing Reptiles

Overview

Maintaining an adequately balanced diet can be difficult when providing multiple food items together, such as a mix of pellets, produce, and prey. It's important to know that not all greens provide the same vitamins and minerals as one another (the same can be said for vegetables, fruits, and invertebrates). Therefore, when providing a mixed diet, it's often necessary to provide a vitamin and mineral supplement in order to balance out the diet.

The most common micronutrients to be out-of-balance in a mixed diet are calcium, phosphorous, and vitamin D3. Calcium and phosphorous are extremely important to balance against one another, creating a calcium:phosphorous ratio. This ratio should ideally be 2:1 in favor of calcium, and never lower than 1:1. If an inverse occurs, there is a risk of the animal developing metabolic bone disease, which can be debilitating. Vitamin D3 is the biologically active form of vitamin D that is necessary for the body to absorb calcium from the diet. It is found in small amounts in some animal material, but is lacking from plant material.

Recommendations

When feeding produce and/or prey items, it is recommended to use a reptile vitamin mix (such as Zoo Med's Reptivite) and a calcium supplement (such as Zoo Med's Repti Calcium). Remember that proper UVB lighting should always be provided, as it will not only activate vitamin D in the body, but can also be beneficial for natural behaviors. When feeding reptiles 3 times per week, follow these guidelines:

1. Use calcium once per week and vitamins once per week (separate feedings)
2. Provide one feeding per week free of supplements to help correct for any possible over-supplementation

The more food items you provide to animals, the more likely multiple nutrients are going to be out of balance. Therefore, when providing multiple food items, using a vitamin supplement will help balance out many micronutrients. When you only provide one supplemental food item, you are much less likely to have an unbalanced diet, so supplementing with calcium only will be sufficient.

For supplements that do not have a specific recommendation, sprinkle the powder supplement on produce in a similar way as you would sprinkle powdered sugar on food. When supplementing invertebrates, start with a small amount (1/8 tsp), and shake invertebrates to coat them thoroughly. If they are not coated completely, add another 1/8 tsp and shake again. Continue this pattern, as it is better to add more as needed than to start off with too much.

What's Up With D3?

Every reptile owner should be aware of how to properly use vitamin D3 in supplements, as it is possible to over-supplement, just as it is to under-supplement. Vitamin D3 is a fat-soluble vitamin, which means that it requires fats to be utilized by the body. Since fats are a necessary nutrient, they are always in supply in a healthy animal's

body. There are common reptiles that require supplemented vitamin D3, and some that typically do not. This is based on dietary habits.

Common reptiles that require supplemented vitamin D3 (diurnal, crepuscular, herbivorous, and omnivorous animals):

- Tortoises
- Bearded Dragons
- Water Dragons
- Some Lacertas (i.e. jeweled lacertas)
- Tegus
- Some Skinks (i.e. blue-tongue skinks)

Common reptiles that typically do not require supplemented vitamin D3 (nocturnal and strictly carnivorous animals):

- Snakes
- Some Skinks (i.e. water skinks, tree skinks)
- Leopard Geckos
- Crested Geckos
- Reptiles housed exclusively outdoors

If you are using supplements with an animal housed indoors, choose one with vitamin D3, and one without. If using supplements with an animal housed exclusively outdoors, you can use both supplements without vitamin D3 (if you will have more than one week of little to no sun exposure, consider using one supplement with D3 over that time or bringing the animal inside temporarily to provide artificial UVB). UVB is important to all reptiles (whether inside using UVB bulbs or outside using the sun) as it's part of an appropriate photoperiod which will help regulate behaviors and appetite, among other things.

ReptiVite:

- Complete vitamin, mineral, and amino acid complex designed specifically for reptiles
- Appropriate 2:1 ratio of calcium:phosphorous
- Available with and without D3

Repti Calcium:

- Source of concentrated calcium
- Available with and without D3
- Great additional calcium source for growing and reproducing animals

Banquet Blocks:

- Aids in reducing unnecessary beak growth, provides enrichment, another good source of calcium
- Can be left in a terrarium with the animal for long amounts of time as a constant supplement