

# HERBIVORE EMERGENCY-AID

The majority of the reptiles currently available through the pet retail trade are imported from their country of origin. During transit, many of these animals become dehydrated and may not eat. Being introduced into an unfamiliar captive environment may increase the stress these animals experience. Although captive-born reptiles are generally more adaptive than wild-caught reptiles, these animals may also be susceptible to stress when introduced into new environments.

Fluker farms realizes the importance of reducing physiologic stress in pet reptiles and has formulated Herbivore Emergency Aid to assist with rehydration and provide critical nutritional support during stressful periods for your pet (e.g., such as a recent acquisition or after transport). Herbivore Emergency Aid may be used to treat a variety of herbivorous reptiles, including green iguanas, grassland tortoises and uromastyx.

**Assessing dehydrated and nutritional status:** Reptiles that are mildly dehydrated may have poor skin elasticity and develop thick, ropey mucous in their mouth. In severe cases of dehydration, the animal may stop eating and develop “sunken eyes,” which occurs as the fat pads behind the eyes lose moisture. A veterinarian should examine reptiles and amphibians with moderate to severe dehydration. Malnourished reptiles will have muscle wasting along the spine and extremities, and the pelvis and spine will be prominent.

## **Instructions:**

Weigh your pet to determine the amount of Emergency Aid it will require. *(If you do not have a scale, refer to the general weight reference to determine your animal's dosage. For mixing directions and appropriate dosing volumes, please refer to Table 1.)* Always mix Emergency Aid with warm water (80-85°F). Using cooler water could reduce the body temperature of the reptile, creating additional stress. Pull the correct amount of Emergency Aid into the syringe. You may have to dose (re-fill the syringe) an animal several times depending upon its body weight. Place the dose syringe to the mouth of the reptile or amphibian and gently infuse the emergency aid. If the animal does not lap the solution, then gently open the animal's mouth with the tip of the syringe. Do not pry the mouth open as you may break the animal's teeth or injure its mouth. Once the mouth is open, gently instill the solution. The glottis, or opening to the airway, is located on the floor of the oral cavity. Do not introduce liquid into the airway, as it can lead to aspiration pneumonia. Stainless steel feeding tubes or red rubber feeding tubes can be attached to the dosing syringe to deliver the Emergency Aid directly into the esophagus or stomach. The total number of calories may be split into 2-3 meals per day. Emergency Aid should be used until the reptile is eating and drinking on its own. If the animal does not show any improvement after 7-10 days, consult your veterinarian.

Use this chart if you do not have a scale to weigh your animal.

**General weight reference (grams):**

1-5g	juvenile leopard gecko, chameleon, bearded dragon, poison dart frogs
10-20g	juvenile corn snake, juvenile green iguana
40-60g	adult leopard geckos
60-80g	adult Jackson's chameleon
100-130g	adult panther chameleon
150-250g	adult ornate uromastix
250-500g	adult bearded dragons
400-700g	adult box tortoise
1000-2000g	adult ball python, green iguana, and savannah monitor lizard

**Table 1.** Dosing and mixing instructions: The following calculations were determined using a formula to calculate the standard metabolic rate ( $SMR=32(BW_{kg}^{0.77})$ ) of a reptile. The SMR is the number of calories needed by a reptile to meet its daily requirements. Animals that are severely malnourished should only be given 50% of their calories for the first 1-4 days. Once they are stabilized, they can be given 100% of their caloric needs. Animals that are only mildly malnourished/dehydrated may be given 100% of their caloric needs. Animals that are stable and require additional calories (e.g., severe chronic infection) may be given 2 times their SMR. Calculations are based on animals being maintained at 86°F and some variation based on temperature may be necessary.

	Weight of animal (grams)	Dosage 50% SMR (severe)	Dosage 100%	Dosage 2xSMR (additional)
Mixing Instructions: 1 spoonful per 1cc water	1g	0.1cc	0.2cc	0.3cc
	5g	0.2cc	0.6cc	1.1cc
	10g	0.6cc	1.0cc	2.0cc
	20g	0.9cc	1.8cc	3.6cc
	30g	0.6cc	1.2cc	2.4cc
Mixing Instructions: 6 spoonfuls per 3cc of water	40g	0.8cc	1.5cc	3.0cc
	50g	0.9cc	1.8cc	3.6cc
	60g	1.0cc	2.1cc	4.2cc
	70g	1.2cc	2.3cc	4.7cc
	80g	1.3cc	2.6cc	5.2cc
Mixing Instructions: 12 spoonfuls per 6cc of water	90g	1.4cc	2.8cc	5.7cc
	100g	1.5cc	3.0cc	6.0cc
	110g	1.7cc	3.3cc	6.7cc
	120g	1.8cc	3.6cc	7.1cc
	130g	1.9cc	3.8cc	7.5cc
	140g	2.0cc	4.0cc	8.0cc
	150g	2.2cc	4.2cc	8.4cc
	175g	2.4cc	4.8cc	9.5cc
	200g	2.6cc	5.3cc	10.6cc
	225g	2.9cc	5.8cc	11.6cc
Mixing Instructions: 15 spoonfuls per 6cc of water	250g	2.5cc	5.0cc	10.0cc
	275g	2.8cc	5.4cc	10.8cc
	300g	2.9cc	5.8cc	11.6cc
	350g	3.3cc	6.5cc	13.6cc
	400g	3.6cc	7.2cc	14.4cc
	450g	4.0cc	7.9cc	15.8cc
	500g	4.3cc	8.6cc	17.2cc
	550g	4.6cc	9.3cc	18.5cc
	600g	5.0cc	9.9cc	19.8cc
	650g	5.3cc	10.5cc	21.0cc
	700g	5.6cc	11.1cc	22.3cc
	750g	5.9cc	11.8cc	23.5cc
	800g	6.2cc	12.3cc	24.7cc
	850g	6.5cc	12.9cc	25.9cc
	900g	6.8cc	13.5cc	27.0cc
950g	7.0cc	14.1cc	28.2cc	
1000g	7.4cc	14.7cc	29.3cc	
2000g	12.5cc	25.0cc	50.0cc	