

**NEW REPTILE
GUIDELINES!**

LAFEBER'S®

Emeraid

CRITICAL CARE SYSTEM



The First Elemental Diet System Designed for a Wide Variety of Critically Ill Exotic Carnivores, Herbivores and Omnivores

Will the next severely debilitated animal be an amazon, a ferret or an iguana? Exotic animal veterinarians are presented with difficult emergencies every day. The Emeraid® Critical Care System is designed to quickly provide life-saving elemental nutrition for a wide variety of species during the critical first week of rehabilitation.

Emeraid products are divided into three categories: Omnivore, Herbivore, and Carnivore. By using these products singly or in combination, most acutely ill exotic animals can benefit nutritionally from Emeraid enteral or hand feedings. See the attached table for feeding guidelines of various exotic animals.

Benefits of the Emeraid® Critical Care System

- Meets the acute dietary care needs of most exotic animals
- Elemental diet made with purified amino acids
- Glucose syrup solids essential for acute carbohydrate needs associated with debilitation
- Highly digestible blend of fats and simple and complex carbohydrates for energy
- Dietary nucleotides to provide DNA and RNA precursors
- Balanced omega-3 and 6 polyunsaturated fatty acids
- All essential amino acids included
- Emeraid products have been used and recommended by clinicians for more than 20 years and were the first commercially available exotic animal enteral care diets.

Recommended Use

The Emeraid Critical Care System is designed to meet the metabolic needs of critically ill animals and is made to be fed as a sole or partial source of nutrition. When mixed as directed on the label, these products can be passed through both an 18 gauge feeding needle and a 5 French feeding tube.

Dosing Guidelines:

- 1) Mix with warm water as directed on label or feeding chart.
- 2) In general, most healthy adult animals can safely be tube or gavage fed 3% of their body weight per feeding. For example, a healthy 100 gram cockatiel can be fed 3.0 cc while a normal 1,000 gm rabbit can be fed 30 cc at one time.
- 3) Reduce dose to 1-2 % of body weight, or less, as needed for severely debilitated animals.
- 4) Feed most healthy reptiles and amphibians 0.5-1% BW. Adjust the volume fed to very small or large herps (such as dart frogs and sea turtles) by calculating maintenance energy requirements (MER). $MER = 32(BW^{0.75})$ where MER is expressed in kcal/day and is based on values at 86°F (30°C).

Emeraid Omnivore

Protein	20%
Fat	9.5%
Fiber	2.5%
Energy	2.39 Kcal/ml
dry weight	4.06 Kcal/gm

Emeraid Carnivore

Protein	37.8%
Fat	34%
Fiber	4.5%
Energy	1.67 Kcal/ml
dry weight	5.14 Kcal/gm

Emeraid Herbivore

Protein	19%
Fat	9.5%
Fiber	32%
Energy	1.32 Kcal/ml
dry weight	2.95 Kcal/gm

For additional information, visit our website online at www.LafeberVet.com or call 1-800-842-6445 (ext.888).

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Two Generations of Veterinarians Caring and Working for the Health of Animals™

Lafeber's Emerald® Critical Care System Formulations for Various Animals

*Use either the large end of the scoop with 60 cc of warm water (103-110°F) or the small end of the scoop with 20 cc of warm water. The number of scoops of Emerald to use is listed in the chart below. See page 1 for dosing guidelines.

Taxa	Natural foods of adults	*Scoops of Emerald Mixed					
		Adults			Juveniles		
		Omnivore	Carnivore	Herbivore	Omnivore	Carnivore	Herbivore
Companion Birds							
Budgerigar	Seeds	6	0	0	6	0	0
Canary	Seeds	6	0	0	6	0	0
Chicken	Seeds, insects, fruits, veggies	6	0	0	4.5	0.5	0
Cockatiel	Seeds	6	0	0	6	0	0
Cockatoo	Seeds, fruits, insects	6	0	0	6	0	0
Conure	Seeds, fruits, insects	6	0	0	6	0	0
Dove	Seeds, fruits	6	0	0	6	0	0
Domestic Duck	Seeds, aquatic vegetation, insects	6	0	0	4.5	0.5	0
Finch	Seeds	6	0	0	6	0	0
Lorikeet	Nectars, fruits, insects	6	0	0	6	0	0
Lovebird	Seeds	6	0	0	6	0	0
Macaw	Nuts, fruits, seeds, buds, insects	6	0	0	5	0.5	0
Myna Bird	Seeds, fruits, insects	6	0	0	6	0	0
Parrot	Fruits, seeds, buds, insects	6	0	0	5	0.5	0
Parakeet	Seeds, fruits, nectars	6	0	0	6	0	0
Peafowl	Seeds, buds, insects	6	0	0	5	0.5	0
Quail	Seeds, insects	6	0	0	4.5	0.5	0
Companion Mammals**							
Chinchilla	Grass, herbs, seeds	0	0	4	3	0.5	1
Ferret	Animal prey	0	2	0	0	2	0
Gerbil	Seeds, vegetation, insects	4.5	0	1	4.5	0.5	0
Guinea Pig	Grass, herbs	0	0	4	1.5	0.5	2
Hamster	Seeds, vegetation, fruits	3	0	2	3	0.5	1
Hedgehog	Insects, worms, fruits	3	1	0	2.5	1	0
Mouse	Seeds, vegetation, invertebrates	6	0	0	5	0.5	0
Rabbit	Vegetation	0	0	4	1.5	0.5	2
Rat	Seeds, vegetation, invertebrates	4.5	0	1	5	0.5	0
Sugar Glider	Insects, nectar, sap	6	0	0	6	0	0



For larger volumes, use the large end of the red scoop with 60 cc of warm water



For smaller volumes, use the small end of the red scoop with 20 cc of warm water

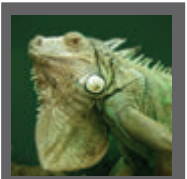


**Nursing animals should be provided milk or a milk replacer and not Emerald. Values are for weaned juveniles.

Formulations for Various Animals (Continued)

*Use either the large end of the scoop with 60 cc of warm water (103-110°F) or the small end of the scoop with 20 cc of warm water. The number of scoops of Emerald to use is listed in the chart below. See page 1 for dosing guidelines.

Taxa	Natural foods of adults	*Scoops of Emerald Mixed					
		Adults			Juveniles		
		Omnivore	Carnivore	Herbivore	Omnivore	Carnivore	Herbivore
Bearded Dragons, Blue-tongue Skinks, Ground Iguanas	Invertebrates, greens, fruits, small vertebrates, carrion	1.5	1.5	0	0	2	0
Chameleons—Old World	Insects, other invertebrates	0	2	0	0	2	0
Frogs, Toads—Aquatic, Horned, Pacman	Invertebrates, vertebrates (adults); algae (tadpoles)	0	2	0	0	2	0
Frogs—Tree, Dart, Mantella	Invertebrates (adults); algae (tadpoles)	0	2	0	0	2	0
Geckos—Leopard, Fat-tail, Tokay and others	Insects, other invertebrates	0	2	0	0	2	0
Geckos—Day, Crested and other Rhacodactylus spp.	Insects, other invertebrates, nectar, fruit	0	2	0	0	2	0
Green Iguanas, Uromastix, Chuckwallas	Leaves, blossoms, buds, greens, fruits, (Uromastix also eat seeds)	0	0	4	0	0	4
Lizards (small)—Anoles, Collared and others	Insects, other invertebrates	0	2	0	0	2	0
Monitors, Tegus	Invertebrates, vertebrates, eggs, (Tegus also eat fruit)	0	2	0	0	2	0
Salamanders, Newts, Caecilians	Invertebrates	0	2	0	0	2	0
Snakes (medium to large)—Boas, Pythons, Corn, King, Rat	Vertebrates	0	2	0	0	2	0
Snakes (small)—Garter, Green	Vertebrates, invertebrates	0	2	0	0	2	0
Tortoises—Desert, Gopher, Sulcata, Red-foot, Russian	Grasses, leaves, vegetables, (fruit)	0	0	4	0	0	4
Turtles—Box, Wood	Invertebrates, carrion, fruit, berries, vegetables, greens	1.5	1.5	0	0	2	0
Turtles—Sliders, Painted, Map, Cooter, Pond	Invertebrates, vegetation	1.5	1.5	0	1.5	1.5	0
Turtles—Snapping, Mud, Musk	Invertebrates, vegetation	0	2	0	0	2	0



Large Adults
4 large scoops of Herbivore + 60 cc of warm water

For larger volumes, use the large end of the red scoop with 60 cc of warm water



For smaller volumes, use the small end of the red scoop with 20 cc of warm water

Recommendation by Susan Donoghue, MS, VMD, Reptile Nutritionist/Researcher:

Reptiles and amphibians are a diverse group of ectotherms dependent on specific ranges of environmental temperature for adequate food digestion, and for calorie and nutrient assimilation and utilization. **Successful responses to Emerald diets require attention to optimal temperatures for the species being treated.**

- Feed Emerald Carnivore to those reptile and amphibian species feeding in the wild on vertebrate prey such as rodents, birds, and lizards, and those feeding on invertebrate prey such as insects, slugs, earthworms, and snails. This also includes geckos that supplement their diet with nectar and fruits.
- Omnivorous reptiles are often started on Emerald Carnivore because these species are geared toward diets containing relatively lower fiber and higher protein and fat. Transition those patients requiring long-term nutritional support to a mixture of Emerald Omnivore and Emerald Carnivore.

Once the patient is on the road to recovery, begin to offer foods that match the nutritional heritage for that species. For example, a crested gecko (*Rhacodactylus* spp.) may be offered peach baby food while being maintained on Emerald Carnivore, a box turtle (*Terrapene* spp.) may be offered earthworms and berries while fed Emerald Carnivore, and a green iguana (*Iguana iguana*) may be offered hibiscus blossoms while being fed Emerald Herbivore.

Formulations for Various North American Wild Animals

*Use either the large end of the scoop with 60 cc of warm water (103-110°F) or the small end of the scoop with 20 cc of warm water. The number of scoops of Emerald to use is listed in the chart below.

*Scoops of Emerald Mixed

Taxa	Natural foods of adults	Adults			Juveniles		
		Omnivore	Carnivore	Herbivore	Omnivore	Carnivore	Herbivore
Aves							
Blackbirds, Grackles, Cowbirds	Seeds, insects	6	0	0	3	1	0
Bluebirds	Insects, fruits	0	2	0	0	2	0
Chickadees, Titmouse	Insects, seeds	1.5	1.5	0	0	2	0
Crows, Ravens	Seeds, insects, live prey	4.5	0.5	0	3	1	0
Doves, Pigeons	Seeds	6	0	0	4.5	0.5	0
Ducks–Mallard, Canvasback, Coots, Gadwall, Shoveler, Teal, Wood	Vegetation, seeds, insects, molluscs	6	0	0	6	0	0
Ducks–Goldeneye, Bufflehead, Scoter	Insects, crustacea molluscs	0	2	0	0	2	0
Ducks–Scaup, Ruddy	Aquatic vegetation, insects, crustacea	4.5	0.5	0	3	1	0
Finches, Siskins, Crossbills	Seeds	6	0	0	6	0	0
Flycatchers, Phoebes	Insects	0	2	0	0	2	0
Gamebirds–Grouse, Quail, Pheasant, Turkey, Woodcock	Seeds, some insects	6	0	0	4.5	0.5	0
Grebes, Loons	Fish, crustacea, molluscs	0	2	0	0	2	0
Geese	Vegetation	3	0	2	4.5	0	1
Gulls	Fish, crustacea, molluscs	0	2	0	0	2	0
Jays, Magpies	Seeds, insects	6	0	0	3	1	0
Larks	Seeds, insects	6	0	0	3	1	0
Mockingbirds, Catbirds, Thrashers	Insects, fruits, seeds	1.5	1.5	0	0	2	0
Nuthatches	Insects, seeds	1.5	1.5	0	0	2	0
Orioles	Insects	0	2	0	0	2	0
Piscivorous–Cormorants, Egrets, Herons, Pelicans	Fish and other aquatic vertebrate	0	2	0	0	2	0
Raptors–Eagle, Falcon, Hawk, Kites Owl, Vulture	Vertebrate prey, insects	0	2	0	0	2	0
Shorebirds–Wader, Sandpiper	Fish, crustacea, molluscs	0	2	0	0	2	0
Sparrows, Cardinals, Grosbeaks, Juncos, Towhees	Seeds, insects	4.5	0.5	0	1.5	1.5	0
Starlings	Insects, fruits	3	1	0	0	2	0
Swallows	Insects	0	2	0	0	2	0
Tanagers	Insects	0	2	0	0	2	0
Thrushes, Robins	Insects, fruits	3	1	0	0	2	0
Vireos	Insects	0	2	0	0	2	0
Warblers	Insects	0	2	0	0	2	0
Waxwings	Fruits, insects	6	0	0	3	1	0
Woodpeckers, Sapsuckers	Insects, acorns, sap, gums	3	1	0	1.5	1.5	0
Mammals**							
Armadillos	Insects, fruits	0	2	0	0	2	0
Chipmunks	Seeds, insects	6	0	0	4.5	0.5	0
Foxes, Coyotes	Vertebrate prey, insects	0	2	0	0	2	0
Gophers	Vegetation, roots	0	0	4	3	0.5	1
Kangaroo Rats	Seeds	6	0	0	4.5	0.5	0
Marmots	Vegetation	0	0	4	3	0.5	1
Moles	Worms, insects	0	2	0	0	2	0
Muskrats	Vegetation	0	0	4	6	0	0
Opossums	Invertebrates, small vertebrates, fruits	0	2	0	0	2	0
Porcupines	Vegetation	0	0	4	3	0.5	1
Rabbits	Vegetation	0	0	4	3	0.5	1
Raccoons	Invertebrates, small vertebrates, fruits	1.5	1.5	0	1	1.5	0
Shrews	Insects, worms	0	2	0	0	2	0
Skunks	Invertebrates, small vertebrates, fruits	1.5	1.5	0	0	2	0
Squirrels	Seeds, fruits, insects	6	0	0	4.5	0.5	0
Voles	Grasses, rhizomes, seeds	1.5	0	3	3	0.5	1
Woodchucks	Vegetation	0	0	4	3	0.5	1

**Nursing animals should be provided milk or a milk replacer and not Emerald. Values are for weaned juveniles.