### Table 1. Fluid Provision on Admission

<table>
<thead>
<tr>
<th>Species</th>
<th>Amount</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(chelonian)</td>
<td>balance s/c</td>
<td></td>
</tr>
<tr>
<td>Reptile</td>
<td>Rabbit</td>
<td>Ferret</td>
</tr>
<tr>
<td>Bird</td>
<td>20 ml/kg i/v</td>
<td>10 ml</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bid/kg s/c</td>
</tr>
</tbody>
</table>

### On-going fluid requirements

- 1-2 x daily for reptiles
- 3 x daily for birds (>500g)
- 4 x daily for all mammals and birds (<500g)
- See Emeraid.com for additional species.

### Step 5: Determine initial feeding

- First feed: 1% body weight for 1st feed. 5ml.
- Second feed: 2% bwt i.e. 10ml
- Third feed: 3% bwt i.e. 15ml
- Fourth feed 3% bwt i.e. 60ml

### Step 6: Mix enough Emeraid for feeding

- First feed: 15% body weight. 15ml i.e. 0.75% body weight.
- Second feed: 15% bwt i.e. 0.75% body weight.
- Third feed: 15% bwt i.e. 0.75% body weight.
- Fourth feed 3% bwt i.e. 60ml

### Step 7: Administer Emeraid by syringe or gavage

- Feedings are cautiously planned for every 2 hours before feeding.
- If feedings accepted, 10mls TID additional fluids may be necessary.
- If the patient does not take the prescribed volume, their fluid intake should be adjusted for patient response.

### Step 10: Withhold feed

- Day 1: Weight Patient first, before feeding or administration of any fluid or medications.

### Table 2. Ongoing fluid requirements

<table>
<thead>
<tr>
<th>Species</th>
<th>Amount</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please visit Emeraid.com.

### About Emeraid Calculator

Use Larke/Vet's Emeraid Calculator to make daily feeding calculations in small animals and marsupials for your Emeraid.com account for additional information on feeding requirements.

### Examples

#### Rabbit Example

A debilitated, anorectic, 5.0 kg African Grey Parrot. 500g body weight.

- Correct Hypovolaemia: Assume 10% dehydration, indicate fluid loss. For this critically ill bird, calculate 10% loss of body weight for dehydration.

#### Ferret Example

A debilitated and dehydrated ferret. 1.5 kg body weight.

- Correct Hypovolaemia: Assume 10% dehydration, indicate fluid loss. For this critically ill ferret, calculate 10% loss of body weight for dehydration.

#### Patient Example

A debilitated and dehydrated African Grey Parrot. 500g body weight.

- Correct Hypovolaemia: Assume 10% dehydration, indicate fluid loss. For this critically ill bird, calculate 10% loss of body weight for dehydration.

### Benefits of the Emeraid Critical Care System

- Designed to meet the metabolic needs of critically ill animals and animals recovering from surgery.
- By using these products singly or in combination, most acutely ill and debilitated exotic animals can benefit tremendously from Emeraid from emergent or hand feedings.

### Emeraid Calculator

Available: 300g Tub and 100g Bags

### Guarantees and Analyses

**Emerald Omnivore**

- Protein: 20%
- Fat: 5%
- Fiber: 2%
- Energy: 2.3 Kcal/ml
- Dry Weight: 1.0 Kcal/g

**Emerald Carnivore**

- Protein: 57.8%
- Fat: 40%
- Fiber: 6%
- Energy: 1.07 Kcal/ml
- Dry Weight: 5.14 Kcal/g

**Emerald Herbivore**

- Protein: 23%
- Fat: 5%
- Fiber: 32%
- Energy: 1.57 Kcal/ml
- Dry Weight: 2.9 Kcal/g

**Emerald Benefits**

- Semi-elemental diet made with purified amino acids and hydrolyzed proteins
- All essential amino acids
- Hydrolyzed carbohydrates essential for acute carbohydrate needs
- Highly digestible blend of fats plus simple and complex carbohydrates for energy
- High levels of nutrients that support the immune system including arginine and glutamine
- Dietary nucleotides to provide DNA and RNA processors
- Balanced omega 3 polyunsaturated fatty acids

### To Order Contact

Larke Internationals: +44 (0) 2 01 3 77 46 00 www.LarkeInternational.com

Larke/Vet's Emeraid Critical Care System was designed to provide life-saving semi-elemental nutrition for a wide variety of species during the critical first week of rehabilitation.
Step 1: Weigh patient

Step 2: Correct hypervolemia

Step 3: Address hypothermia

Step 4: Determine appropriate Emeraid or Emeraid combination

For a more extensive list of herbivores, omnivores, piscivores, Reptiles:
- Green Iguanas, Uromastyx, Chuckwallas 44
- Bearded dragon, Blue-tongue Skinks, Ground Iguanas 1.5 1.5 4
- Turtles–Snapping, Mud, Musk 1.5 1.5 4
- Turtles–Box, Wood, Aquatic–Sliders, Painted, Map, Cooter 1.5 1.5 4
- Tortoise–Desert, Gopher, Sulcata, Red-foot, Russian 44
- Snakes 24
- Gecko–Day, Crested, Radcodactylus 24
- Gecko-Leopard, Fat-tail, Tokay and others 24
- Frogs–Tree, Dart, Mantella 24
- Frogs, Toads–Aquatic, Horned, Pacman 24
- Chameleons–Old World 24
- Ferret 24
- Woodpecker 31 4
- Hedgehog 1.5 1.5 4
- Hamster 32 4
- Rat, Gerbil 4.5 14
- Sugar Glider 64
- Ruddy Duck, Sparrow 4.5 0.5 4
- Goose 3 24
- Chicken, Dove, Myna Bird Quail, 64
- Finch, Canary 64
- Pigeon, Opossum, Squirrel, Raccoon 2 4
- Sheep 2 4
- Wooden–Rabbits 1.5 1.5 4
- Raccoon 2 4
- Beaver 2 4
- Bearded dragon, Blue-tongue Skinks, Ground Iguanas 1.5 1.5 4
- Chameleons–Old World 24
- Frog–Tree, Dart, Mandella 2 4
- Garter-Striped, Eastern Tiger, and others 2 4
- Gecko–Day, Ground, Radiosaurus 2 4
- Green Iguana, Uruguay, Chelydridae 2 4
- Skink 2 4
- Tortoise–Desert, Gekko, Sulcata, Red-foot, Russian 6 6
- Turtoise–Wood, Wood–African, Tamarind, Map, Crest 1.5 1.5 4
- Turtle–Snapping, Mud, Wood 1.5 1.5 4

Table 2. On-going fluid requirements

<table>
<thead>
<tr>
<th>Species</th>
<th>Volume ml/kg/24hr</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td>8 ml kg 1st day</td>
<td>i/v</td>
</tr>
<tr>
<td></td>
<td>4 ml kg 2nd day</td>
<td>s/c</td>
</tr>
<tr>
<td></td>
<td>4 ml kg 3rd day</td>
<td>s/c</td>
</tr>
<tr>
<td>Bobcat</td>
<td>4 ml kg 1st day</td>
<td>i/v</td>
</tr>
<tr>
<td></td>
<td>2 ml kg 2nd day</td>
<td>s/c</td>
</tr>
<tr>
<td></td>
<td>2 ml kg 3rd day</td>
<td>s/c</td>
</tr>
<tr>
<td>Bobcat</td>
<td>4 ml kg 1st day</td>
<td>i/v</td>
</tr>
<tr>
<td></td>
<td>2 ml kg 2nd day</td>
<td>s/c</td>
</tr>
<tr>
<td></td>
<td>2 ml kg 3rd day</td>
<td>s/c</td>
</tr>
</tbody>
</table>

Table 1. Fluid provision on admission

<table>
<thead>
<tr>
<th>Species</th>
<th>Volume ml/kg</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabbit</td>
<td>50</td>
<td>i/v</td>
</tr>
<tr>
<td>Chinchilla</td>
<td>20</td>
<td>s/c, i/c</td>
</tr>
<tr>
<td>Guinea pig</td>
<td>20</td>
<td>i/v, s/c</td>
</tr>
<tr>
<td>Rodent</td>
<td>10</td>
<td>s/c</td>
</tr>
<tr>
<td>Fish</td>
<td>5</td>
<td>i/v</td>
</tr>
<tr>
<td>Bird</td>
<td>5</td>
<td>i/v</td>
</tr>
</tbody>
</table>

Step 5: Determine mls/feeding

When feeding CRITICALLY ILL ANIMALS, begin with a small feeding volume:
- Reptiles: 2nd feed 1% body weight, 2nd feed 1% body weight, 3rd feed 2% body weight.

Step 6: Mix enough Emeraid for feeding

a) Measure out Emeraid according to Step 4 (Table 3) “Parts” indicate the proportions needed. To mix Emeraid, you can use the scoop provided, a syrup cap, or any measuring implement of your choice as long as the proportions described above remain consistent.

Step 7: Determine frequency of feeding

The decision on how frequently to feed must rely on clinical judgment or FREQUENCY depends on the species, the individual and their ability to handle the stress of re-feeding, the patient’s clinical response, and the underlying clinical problems:
- Is the patient gaining or losing weight?
- Has the patient vomited or regurgitated?
- Has normal fecal production been observed?

Step 8: Administration of Emeraid by syringe or gavage

• Monitor patients closely.
• Administer all other treatments before gavage to prevent regurgitation.
• Immediately after gavage, please place patient gently back in cage or incubator.

Step 9: On-going fluid requirements

• Assuming 10% dehydrated and given advised feeding volumes and frequencies.

Step 10: Next day–weight patient first

• Important to weigh before first gavage feeding so weight accurately reflects patient weight.
• Gravitate possible increased weight due to slow stomach emptying.
• An accurate measurement to patient’s ENERGY REQUIREMENTS.

Step 11: Re-access patient

• If the patient is in very poor condition, or has lost weight, increase frequency or volume of feeding.
• For more detailed calculations refer to: LafeberVet.com/emergency-medicine/...