

## Tube Feeding Diets for Dogs and Cats

| <b>Table 1. Moist homogenized commercial diets used for tube feeding dog and cats: esophagostomy, or gastrostomy tubes</b>      |                    |                       |                    |                   |                      |  |                  |
|---|--------------------|-----------------------|--------------------|-------------------|----------------------|--|------------------|
| <b>Product</b>  | <b>Kcal per ml</b> | <b>% kcal protein</b> | <b>% kcal carb</b> | <b>% kcal fat</b> | <b>n-6:n-3 ratio</b> | <b>suitable for</b>                            | <b>Tube size</b> |
| <b>Prescription Diet A/D (Hill's)</b><br>Isosmolar<br>Lactose free<br>Fiber 1.3% DMB<br>Adequate taurine                        | 1.2                | 35                    | 12                 | 53                | 2:1                  | feline pancreatitis<br>not canine pancreatitis | 18F +            |
| <b>1 can Prescription Diet A/D (Hill's) + 25 ml water</b><br>Isosmolar<br>Lactose free<br>Fiber 1.3% DMB<br>Adequate taurine    | 1.0                | 35                    | 12                 | 53                | 2:1                  | feline pancreatitis<br>not canine pancreatitis | 12F +            |
| <b>Prescription Diet A/D mixed 1:1 with water</b><br>Isosmolar<br>Lactose free<br>Fiber 1.3% DMB<br>Adequate taurine            | 0.6                | 35                    | 12                 | 53                | 2:1                  | feline pancreatitis<br>not canine pancreatitis | 8F +             |
| <b>2 cans Prescription Diet A/D + 1 can Feline Clinicare</b><br>Isosmolar<br>Lactose free<br>Fiber 0.9% DMB<br>Adequate taurine | 1.1                | 33                    | 17                 | 50                | n.a.                 | feline pancreatitis<br>not canine pancreatitis | 12F +            |
| <b>Maximum Calorie (Iams/Eukanuba)</b>  | 2.1                | 31                    | 15                 | 54                | 5:1                  | feline pancreatitis<br>not canine pancreatitis | 18F +            |
| <b>Recovery Formula (Iams/Eukanuba)</b><br>Isosmolar<br>Lactose free<br>Fiber 1.6% DMB<br>Adequate taurine                      | 2.1                | 29                    | 66                 | 5                 | n.a.                 | feline pancreatitis<br>canine pancreatitis     | 18F +            |

**Table 2. Liquid polymeric commercial diets used for tube feeding dog and cats: nasoesophageal, esophagostomy, or gastrostomy tubes**

| <b>Product</b>  | <b>Kcal per ml</b> | <b>% kcal protein</b> | <b>% kcal carb</b> | <b>% kcal fat</b> | <b>n-6:n-3 ratio</b> | <b>suitable for</b>                              | <b>Tube size</b> |
|---|--------------------|-----------------------|--------------------|-------------------|----------------------|--|------------------|
| <b>CliniCare Canine (Abbott)</b><br>Isosmolar<br>Lactose free<br>Fiber free<br>Taurine 88 mg/ml   | 1                  | 20                    | 25                 | 55                | 6:1                  | not canine pancreatitis                          | 5F +             |
| <b>CliniCare Feline (Abbott)</b><br>Isosmolar<br>Lactose free<br>Fiber free<br>Adequate taurine   | 1                  | 30                    | 25                 | 45                | 6:1                  | feline pancreatitis                              | 5F +             |
| <b>CliniCare RF Feline (Abbott)</b><br>Isosmolar<br>Lactose free<br>Fiber free<br>Adequate taurine  | 1                  | 22                    | 21                 | 57                | 6:1                  | feline pancreatitis                              | 5F +             |
| <b>Concentration Instant Diet Canine (Waltham/Pedigree)</b>   | 1.5                | 30                    | 25                 | 37                | n.a.                 | not canine pancreatitis                          | 5F +             |
| <b>Concentration Instant Diet Feline (Waltham/Pedigree)</b>   | 1.3                | 37                    | 15                 | 48                | n.a.                 | feline pancreatitis                              | 5F +             |
| <b>Ensure HN (Ross)</b>   | 1.1                | 22                    | 53                 | 25                | n.a.                 | feline pancreatitis<br>not canine pancreatitis   | 5F +             |
| <b>Immun-Aid (McGaw)</b><br>Protein source: lactalbumin,<br>L-arginine, BCAA, nucleic<br>Acid<br>Hyperosmolar (460 mosmol/kg)<br>Lactose free<br>Fiber free<br>Taurine 200 mg/L (low) | 1.0                | 32                    | 48                 | 20                | n.a.                 | feline pancreatitis<br>not canine pancreatitis   | ???              |
| <b>Impact (Sandoz)*</b><br>Protein source: L-arginine,<br>Na and Ca caseinates<br>Isotonic<br>Lactose free<br>Fiber free<br>Taurine free  | 1                  | 22                    | 53                 | 25                | n.a.                 | feline pancreatitis<br>not canine pancreatitis   | 8F +             |
| <b>Jevity (Ross)*</b><br>Protein source:<br>Na and Ca caseinates<br>Isotonic<br>lactose free<br>fiber 14.4 g/L<br>taurine 114 mg/L (low)  | 1.1                | 17                    | 54                 | 29                | n.a.                 | feline pancreatitis**<br>not canine pancreatitis | 8F +             |

**Table 2 (cont'd). Liquid polymeric commercial diets used for tube feeding dog and cats: nasoesophageal, esophagostomy, or gastrostomy tubes**

| Product   | Kcal per ml | % kcal protein | % kcal carb | % kcal fat | n-6:n-3 ratio | suitable for                                     | Tube size |
|---|-------------|----------------|-------------|------------|---------------|--|-----------|
| <b>OsmoliteHN (Ross)*</b><br>Protein source: soy protein, Na and Ca caseinates<br>Isotonic<br>Lactose free<br>Fiber free<br>Taurine 114 mg/L (low)      | 1.1         | 17             | 54          | 29         | n.a.          | feline pancreatitis**<br>not canine pancreatitis | 5F +      |
| <b>Pulmocare (Ross)</b>   | 1.5         | 17             | 28          | 55         | n.a.          | feline pancreatitis**<br>not canine pancreatitis | 8F +      |
| <b>Sustacal (Mead Johnson)</b>  | 1           | 24             | 55          | 21         | n.a.          | feline pancreatitis<br>not canine pancreatitis   | 8F +      |
| <b>Traumacal (Mead Johnson)*</b><br>Protein source:<br>Na and Ca caseinates<br>Hyperosmolar (490 mosm/kg)<br>Lactose free<br>Fiber free<br>Taurine free | 1.5         | 22             | 38          | 40         | n.a.          | feline pancreatitis<br>not canine pancreatitis   | ???       |
| <b>Vitaneed (Sherwood)*</b><br>Protein source: pureed beef, Na and Ca caseinates<br>Isotonic<br>Fiber 8 g/L<br>Taurine free                             | 1.0         | 16             | 48          | 36         | n.a.          | feline pancreatitis<br>not canine pancreatitis   | ???       |

n.a. = not available

\*Human formulas are low and taurine, and if used for cats, 250 mg taurine per 8 ounces should be added

\*\* not suitable for cats long term (low protein); can add protein (see Table 4)

**Table 3. Liquid monomeric commercial diets used for tube feeding dog and cats: naso-esophageal, esophagostomy, gastrostomy or jejunostomy tubes**

| Product  | Kcal per ml | % kcal protein | % kcal carb | % kcal fat | n-6:n-3 ratio | suitable for                                     | tube size |
|--|-------------|----------------|-------------|------------|---------------|--|-----------|
| <b>Peptamen (CliniTec)</b><br>Protein source: hydrolyzed whey protein<br>isosmolar<br>lactose free<br>fiber free<br>taurine 130 mg/ml  | 1           | 16             | 51          | 33         | n.a.          | feline pancreatitis**<br>not canine pancreatitis | 5F +      |
| <b>Perative (Ross)*</b><br>Protein source: partially Hydrolyzed Na caseinate, Lactalbumin hydrolysate<br>Hyperosmolar (425 mosmol/kg)<br>Lactose free<br>Fiber free<br>Taurine 130 mg/ml | 1.3         | 20             | 55          | 25         | n.a.          | feline pancreatitis**<br>not canine pancreatitis | 5F +      |
| <b>Travasorb HN (Clintec)*</b><br>Protein source: hydrolyzed lactalbumin<br>Hyperosmolar (560 mosmol/kg)<br>Lactose free<br>Fiber free<br>Taurine free                                   | 1.0         | 18             | 70          | 12         | n.a.          | feline pancreatitis**<br>canine pancreatitis     | ???       |
| <b>Vital HN (Ross)*</b><br>Protein source: partially hydrolyzed whey, meat, soy, L-amino acids<br>Hyperosmolar (500 mosm/kg)<br>Lactose free<br>Fiber free<br>Taurine free               | 1           | 17             | 74          | 9          | n.a.          | feline pancreatitis**<br>canine pancreatitis     | 5F +      |
| <b>Vivonex TEN (Sandoz, Norwich Eaton)*</b><br>Protein source: crystalline amino acids<br>hyperosmolar (630 mosmol/kg)<br>lactose free<br>fiber free<br>taurine free                     | 1           | 15             | 83          | 2          | n.a.          | feline pancreatitis**<br>canine pancreatitis     | 5F +      |

n.a. = not available

\* Human formulas are low and taurine, and if used for cats, 250 mg taurine per 8 ounces should be added

\*\* not suitable for cats long term (low protein); can add protein (see Table 4)

**Table 4. Protein modules to increase protein content of liquid diets**

| <b>Product</b>                            | <b>tube size</b> |
|---|------------------|
| Promod (Ross)                             | 5F +             |
| Pro-Magic (Animal Nutrition Laboratories) | 5F +             |

Add 15-30 g casein or whey powder to 8 ounces of liquid diet.  
Human formulas are low in taurine, and if used for cats, 250 mg taurine per 8 ounces should be added

**Table 5. Recipe for liquid diet for jejunostomy tube or trickle feeding into E-tube or G-tube in cats with pancreatitis**

One package Vital low-fat elemental diet (Ross)  
355 ml water  
2 tablespoons Promod (protein product - Ross)  
500 mg arginine  
500 mg taurine  
350 mg choline if hepatic lipidosis  
1-2 ml liquid vitamin B supplement

Final solution is 0.87 kcal/ml  
Solution is hyperosmolar, and can sometimes cause diarrhea

**Dr. Kathy Michel, U Penn VH**

**Table 6. Custom feline/canine tube feeding diet, using any canned commercial food**

1 can (11-13 oz.) of commercial canned cat or dog food  
 $\frac{3}{4}$  cup tap water  
Any other nutrients indicated for the individual

1. Put all of the ingredients in a blender and run at the fastest cycle
2. Pour the food through a kitchen strainer to prevent plugging of the 12 Fr + tube

**Tom Smith, ACVIM**

**Table 7. Custom feline tube feeding diet, using any canned commercial food**

3 cans (5.5 oz each) of commercial canned cat food  
8 oz tap water  
2 oz vegetable oil  
16 mEq potassium gluconate.  
Any other nutrients indicated for the individual

1. Put all of the ingredients in a blender and run at the fastest cycle
2. Pour the food through a kitchen strainer to prevent plugging of the 12 Fr + tube
3. Feed each cat 45-50 ml/kg daily.

**Gary Norsworthy, ABVP**