

Appendix 5: Tube Feeding Diets for Dogs and Cats

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

Table 2. 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
CliniCare Canine (Abbott) Isosmolar Lactose free Fiber free Taurine 88 mg/ml	1	20	25	55	6:1	not canine pancreatitis	5F +
CliniCare Feline (Abbott) Isosmolar Lactose free Fiber free Adequate taurine	1	30	25	45	6:1	feline pancreatitis	5F +
CliniCare RF Feline (Abbott) Isosmolar Lactose free Fiber free Adequate taurine	1	22	21	57	6:1	feline pancreatitis	5F +
Concentration Instant Diet Canine (Waltham/Pedigree)	1.5	30	25	37	n.a.	not canine pancreatitis	5F +
Concentration Instant Diet Feline (Waltham/Pedigree)	1.3	37	15	48	n.a.	feline pancreatitis	5F +
Ensure HN (Ross)	1.1	22	53	25	n.a.	feline pancreatitis not canine pancreatitis	5F +
Immun-Aid (McGaw) Protein source: lactalbumin, L-arginine, BCAA, nucleic Acid Hyperosmolar (460 mosmol/kg) Lactose free Fiber free Taurine 200 mg/L (low)	1.0	32	48	20	n.a.	feline pancreatitis not canine pancreatitis	???
Impact (Sandoz)* Protein source: L-arginine, Na and Ca caseinates Isotonic Lactose free Fiber free Taurine free	1	22	53	25	n.a.	feline pancreatitis not canine pancreatitis	8F +
Jevity (Ross)* Protein source: Na and Ca caseinates Isotonic lactose free fiber 14.4 g/L taurine 114 mg/L (low)	1.1	17	54	29	n.a.	feline pancreatitis** 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
OsmoliteHN (Ross)* Protein source: soy protein, Na and Ca caseinates Isotonic Lactose free Fiber free Taurine 114 mg/L (low)	1.1	17	54	29	n.a.	feline pancreatitis** not canine pancreatitis	5F +
Pulmocare (Ross)	1.5	17	28	55	n.a.	feline pancreatitis** not canine pancreatitis	8F +
Sustacal (Mead Johnson)	1	24	55	21	n.a.	feline pancreatitis not canine pancreatitis	8F +
Traumacal (Mead Johnson)* Protein source: Na and Ca caseinates Hyperosmolar (490 mosm/kg) Lactose free Fiber free Taurine free	1.5	22	38	40	n.a.	feline pancreatitis not canine pancreatitis	???
Vitaneed (Sherwood)* Protein source: pureed beef, Na and Ca caseinates Isotonic Fiber 8 g/L Taurine free	1.0	16	48	36	n.a.	feline pancreatitis 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
Peptamen (CliniTec) Protein source: hydrolyzed whey protein isosmolar lactose free fiber free taurine 130 mg/ml	1	16	51	33	n.a.	feline pancreatitis ** not canine pancreatitis	5F +
Perative (Ross)* Protein source: partially Hydrolyzed Na caseinate, Lactalbumin hydrolysate Hyperosmolar (425 mosmol/kg) Lactose free Fiber free Taurine 130 mg/ml	1.3	20	55	25	n.a.	feline pancreatitis ** not canine pancreatitis	5F +
Travasorb HN (Clintec)* Protein source: hydrolyzed lactalbumin Hyperosmolar (560 mosmol/kg) Lactose free Fiber free Taurine free	1.0	18	70	12	n.a.	feline pancreatitis** canine pancreatitis	???
Vital HN (Ross)* Protein source: partially hydrolyzed whey, meat, soy, L-amino acids Hyperosmolar (500 mosm/kg) Lactose free Fiber free Taurine free	1	17	74	9	n.a.	feline pancreatitis ** canine pancreatitis	5F +
Vivonex TEN (Sandoz, Norwich Eaton)* Protein source: crystalline amino acids hyperosmolar (630 mosmol/kg) lactose free fiber free taurine free	1	15	83	2	n.a.	feline pancreatitis ** 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

Product	tube size
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