Nutrition Consultation – Homemade/clinical

Adult Diet (2025)

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1. **Key Nutritional Factors and Goals for Large Breed Puppies**
   - Balanced diet for energy, vitamins and minerals.
   - Greater than 30% protein (dry matter basis) along with essential amino acid requirements exceeded, particularly sulfur amino acids (methionine/cysteine).

2. **Diet**
   - I use a mixture of meats in the formulation so you can use various ground meats that work into your shopping routine and that each dog tolerates. There is no need to change weights.
   - Produce options = This is up to you. You can use frozen vegetables or fresh. Digestibility will increase with mild cooking (such as steaming) or grinding prior to mixing with meat.
   - **This diet contains approximately 46 kcal/oz. The calorie breakdown is as follows:**
     1. % calories from protein = 30%
     2. % calories from fat = 56%
     3. % calories from carbs = 14%
   - Formulation is based on concentration of each nutrient in the diet balanced against the nutrient density of the diet.
   - There is 36% dry matter in this diet and 70% moisture.
   - If you want to make large batches and freeze. Do not add the Thorne Vitamin and freeze.
   - An estimate of daily caloric requirements for adult pet dogs using metabolic body weight:
     1. Convert dog's body weight to kilograms.
     2. Metabolic body weight (MBW) is the body weight in Kg raised to the 0.75 power ($Kg^{0.75}$).
     3. (MBW x 70) x 1.2 = estimate of calories per day
        - Use 2 rather than 1.2 for very active or intact dogs
        - Use 1 rather than 1.2 for overweight dogs
     4. Example: 45 pound dog = 20.25 kg.
        - MBW = $20.25^{0.75}$ = 9.55 kg.
        - (9.55 Kg x 70) x 1.2 = 802 Kcal per day.
        - This diet contains 46 Kcal/oz; therefore, 802 Kcal/46 Kcal = 17 oz of this diet daily.
     5. Always monitor body weight and condition and increase or decrease the overall diet fed. Do not change ingredient or supplement ratios.

Table 1. Recipe – This recipe makes approximately 1 Lb 12 oz of food (28 oz).

Ingredient	Amount	Notes
Meat	1 Lb	Any meat that is 80-90% lean.
Mixed vegetables	2 oz	Frozen mixed vegetable blends work very well.
Spinach	2 oz	You can use fresh or frozen.
Mixed Grains	2 oz	Cooked oatmeal, quinoa or barley. You can also substitute rice on occasion.
Mixed fruit	1 oz	Very good options are: banana, pear, apple, banana, berries.
Beef liver	½ oz	It is best to use beef, double if using chicken liver.
Egg	1 whole	**Include ½ of the shell. Another option is 1 teaspoon of calcium carbonate. Eggshells can also be saved, dried in the oven and ground in a coffee grinder – also used at 1 tsp per batch.**
Oysters	½ oz	Canned as it also helps meet sodium requirement.
Sardines	2 oz	Canned as it also helps meet sodium requirement.
Thorne Basic Prenatal	2 per batch size	Open capsule and mix well. Do not freeze this supplement in the diet mix. Ideally, it is dosed daily at time of feeding but is based on total batch size. 1 capsule for every pound of food. ***Do not use dose on the product label.***
Iodine	Various products including kelp can be used as long as ug of iodine are on the label.	Iodine should be monitored and dosed based on body weight in **micrograms (ug) per day based on dog weight:** **10 Lb = 10 ug** **20 Lb = 200 ug** **30 Lb = 250 ug** **40 Lb = 300 ug** **50 Lb = 350 ug** **60 Lb = 400 ug** **70 Lb = 450 ug** **80 – 100 Lb = 500 ug** **100 – 125 Lb = 600 ug** **125 – 150 Lb = 700 ug**

Table 2. Nutrients in the Table below are presented on a dry matter basis or all water removed.
Diet Dry matter =30%
Diet Moisture = 70%
Kcal/oz = 46 (as fed basis) – caloric breakdown: 8% carbohydrates 32% protein 60% fat

Nutrient	Diet Concentration	Recommendation (2006 NRC*)
Crude fat, %	35.00	7.51
Protein, %	44.00	13.60
Vitamins		
Folate (mg/kg)	5.59	0.37
Pantothenic acid (mg/kg)	66.66	20.40
Vitamin B12 (ug/g)	0.63	0.05
Vitamin D3 (IU/Kg)	3.58	0.74 – 4.35
Niacin (mg/kg)	187.09	23.12
Thiamin (mg/kg)	19.06	3.05
Riboflavin (mg/kg)	20.74	7.07
Vitamin A (IU/g)	57.20	6.87 – 290
Vitamin B6 (mg/kg)	41.18	2.04
Vitamin E (mg/kg)	97.30	40.80
Minerals		
Calcium (%)	0.90	0.54
Phosphorus (%)	0.50	0.41
Ca:P ratio	1.80	1-2
Magnesium (%)	0.10	0.08
Selenium (mg/kg)	0.63	0.48
Iron (mg/kg)	179.30	40.80
Potassium (%)	0.78	0.54
Sodium (%)	0.35	0.11
Copper (mg/kg)	12.85	8.16
Iodine (mg/kg)	1.38	1.20
Manganese (mg/kg)	17.57	6.53
Zinc (mg/kg)	180.38	81.60
Amino Acids		
Total SAA, %	1.50	0.89
Leucine, %	2.96	0.92
Total BCAA, %	6.72	2.11
Tryptophan, %	0.46	0.19

The recommendation column are recommendations according to the 2006 National Research Council Nutrient Requirements for dogs and adjusted to the caloric density of the diet. Total SAA are sulfur amino acids (SAA) and include methionine and cysteine. These are often limiting amino acids in dog diets and are critical for maintaining urine pH and taurine synthesis. Total branched chain amino acids (BCAA) include valine, leucine and isoleucine and are important for maintaining lean muscle mass and aid in neurotransmitter regulation, as does tryptophan. These are minimum guidelines for normal/healthy dogs. Freezing and storage will reduce the concentration of many of the vitamins that are indicated in the above table.