

# Raw Feeding for IBD Cats

*Healing Can Happen!*



## How to make chunks of meat a balanced meal

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Please note: Raw Food diets using eggshell instead of bone (unless adjusted to account for the trace amounts of phosphorus in the food) are not appropriate for kittens. Please refer to the [Bone Alternatives](#) article for how to use freeze dried bone (calcium hydroxyapatite) in making food for kittens.

Technically, feeding chunks of meat, organs and bone-in meals (because bone is not fed separately from the meat!) is called Prey Model Raw (PMR). Most prey model raw feeders balance the meals by feeding the correct proportions of each component as per the model, and additionally provide an egg (or egg yolk) and a small oily fish once or twice a week to cover the nutrients (notably vitamin D, healthy omega 3s, and choline) that are “missing” from the model by not feeding whole animal. Unfortunately, these amounts fall short in meeting nutritional needs as defined by AAFCO. Using a healthy rotation of proteins, both dark meats and light meats; differing animal liver, and a rotation of second secreting organ supposedly helps to ensure your kitty gets all the nutrition they need. It doesn't, as you can see in this [analysis of the prey model](#) (where nutrient deficiencies are downplayed).

**Taurine.** Taurine is concentrated in electrically active muscles and organs. Dark meats (especially heart, thigh, and shoulder) have higher taurine concentrations than light meats (though both are important to include in rotation). Liver is extremely high in taurine, and thus feeding a properly balanced diet with a healthy protein rotation helps ensure your cats get sufficient taurine from their diet if feeding chunks, though taurine is water soluble, and any water/juice that results when thawing meat must be fed to the cat, or the diet will not contain the taurine you think it does. If you want to include taurine-rich items in your cats' diet, tongue, lungs, and hearts (all considered muscles, not organs, in prey model raw feeding) are very electrically active muscles and contain high concentrations of taurine. Of course, if you are not confident your diet provides the proper amount of intact taurine, it is safe to supplement. You can supplement taurine by adding 250mg per day, just sprinkled on the meat. This will ensure your kitty is not deficient in this critical nutrient, which can be damaged by freezing.

**Calcium & Bones.** What do we do if our cat will not eat bone-in meals? We *\*must\** provide a bone alternative, as calcium is an absolutely critical component of any diet. Calcium is one of the most important minerals for a mammal's body. Many of us are familiar with calcium as a key nutrient in fighting the onset of osteoporosis and indeed it does have a key role in building bones and teeth. But calcium is also crucial for various physiological

processes in body cells, including helping to clot blood, send and receive nerve signals, make your muscles work properly, and perhaps most importantly, keep a normal heartbeat. Calcium works together with numerous nutrients, notably phosphorus, magnesium, and vitamin D. When it comes to calcium, dietary considerations take into account not only the actual amount of calcium in the diet, but also the critical balance between calcium and phosphorus, known as the “calcium-to-phosphorus ratio” (Ca:P). In cats, the Ca:P ratio must be between 1.0:1 and 1.5:1. When feeding prey model raw, using the proper proportion of bone-in meals assures this need is met. When we move away from the model, we have to do the math.

The all-too-common practice of feeding meat without bones (or an alternate source of calcium) is nutritionally disastrous. If the diet does not provide enough calcium, or the Ca:P ratio is not right, the cat will leech calcium from their own bones, resulting in a condition that can become fatal and irreversible. A cat that is not receiving enough calcium will not have this show up in blood work until the harm has already been done. So do not try to guess your way around adding calcium to your cat's homemade raw diet, whether feeding ground or not. Either follow the PMR model (recognizing that cats typically need 7% - 8% bone, as [their typical prey](#) ranges from 5% bone (mouse and rat) to 10-15% bone (adult rabbits)) or provide a bone alternative that provides the correct amount of calcium to balance the phosphorus in the meat and organs.

Bone alternatives are discussed in this article, [Whole Bone Alternatives: When and How to Use Them in a Raw Fed Cat's Diet](#).

**How to get the bone alternative in the cat?** To use any form of whole, fresh bone alternative, because it is in powder format, you can simply sprinkle it onto the meat (or meat and organ) at meal time, whatever size chunks you use. We've yet to see any of the options (we prefer MCHA or eggshell to bone meal) be unpalatable to a cat. Eggshell requires the least amount of powder to be added. You *will* need to weigh your meat and organ no matter which alternative you choose, as the amount of powdered bone alternative to use is dependent on the weight of the food.



The easiest way to balance just plain, boneless meat, is with the supplement created by the founders of this group: EZComplete for Cats. It is based on the prey model but meets AAFCO for All Life Stages. It requires just boneless meat, raw or cooked, the supplement and water. You can learn about it on the [Food Fur Life website](#).

If your cat will eat meat and liver, using the [Alnutrin with eggshell powder](#) as a supplement is also very easy way to provide a balanced meal. It also meets AAFCO when used as directed, **but is balanced and complete for only adult cats, not kittens**. It takes 1/8 teaspoon of Alnutrin with eggshell powder per ounce of food, so you will need to weigh the meals – and having mini-measuring spoons will help. Many online sources sell mini-measuring spoon sets that measure 1/4 (usually marked as a “tad”), 1/8 (“dash”), 1/16 (“pinch”), 1/32 (“smidgen”), and 1/64<sup>th</sup> (“drop”) teaspoon. If you need help with the fractions given the amount of food per meal you need to feed your cat, just [ask in the group](#).

If you choose to use home-made eggshell powder to balance the meals for calcium, the mini-measuring spoons are incredibly helpful, as most cats only need a combination of the smidgen and the drop per meal. The measures are for VERY finely ground eggshell, so make sure your grind is fine powder.

As weight measures are always more accurate than volume measures, to determine if your eggshell is properly ground to use with these volume measures, one teaspoon should weigh 6.1 grams.

One **pound (450g)** of food (meat and organ) requires 1/2 teaspoon of finely ground eggshell powder.

One **ounce (28g)** of food (meat and organ) requires 1/32<sup>nd</sup> teaspoon of finely ground eggshell powder

**Making eggshell powder.** Rinse shells, leave the membrane. Pat dry. Bake at 350F (175C) for 10 minutes or leave in the sun to dry. The point of drying is to make them very brittle and easy to crush/grind into a very fine powder. Use a CLEAN coffee or spice grinder (or mortar and pestle – or a spoon in a bowl until you can get something easier) to grind the shells into a fine powder, the consistency of baking soda. If the eggshells are not finely ground, the measurements will be off. The less fine the grind, the more you need – but we can't be sure how much. Best idea is to weigh it. One teaspoon should weigh 6.1 grams. If you use an electric grinder, let it sit for 15 minutes or so before opening it, or you'll have an eggshell dust cloud. The shells can be stored in a glass jar, they do not need to be refrigerated.

If you are in the U.S. you can purchase eggshell powder. It is the last item in the e-shop at [http://www.knowwhatyoufeed.com/shop\\_online.html](http://www.knowwhatyoufeed.com/shop_online.html) (The same company that sells Alnutrin, Alnutrin with calcium, and Alnutrin with eggshell).

**Organs.** In the prey model, liver accounts for 5% of the diet. If you are going to use two secreting organs (most use liver and kidney, but for definitions, please see [A Raw Feeding Terminology Discussion](#) at CatCentric.org), then use each at 5% of the total diet. Meat (including hearts and gizzards) will then account for 90%. (In the prey model, meat would account for approximately 80% - 83%, but we are not feeding the 7% - 10% bone when using a whole bone alternative). If your kitty is not yet eating a second secreting organ, but eats liver, the diet should be 90% muscle meat and 10% liver. (Though do keep working on introducing that 2<sup>nd</sup> secreting organ!) Do not feed a meal of organs only. Most cats will vomit. You can either provide small amounts of organ with one meal daily, or see the [prey model raw sample menu](#) at CatCentric.org for an idea of how to include organs weekly.

Example:

Your cat eats 3 meals a day, 1.5 ounces (42.5g) each. The weekly total is 31.5 ounces (893g).

If eating 2 secreting organs, on a weekly basis, kitty should eat  
28.5 ounces (804g) of meat (including heart or gizzard)  
1.6 ounces (45g) of liver  
1.6 ounces (45g) of kidney or other secreting organ

If eating just liver, on a weekly basis, kitty should eat  
28.5 ounces (804g) of meat (including heart or gizzard)  
3.2 ounces (90g) of liver

**Using freeze-dried liver in place of fresh.** If your cat cannot keep down fresh liver, you can use freeze-dried liver in place of fresh. The Raw Feeding for IBD Cats FB Group has a file explaining (and you can always ask questions in the group). [How to Use Freeze Dried Liver in Place of Fresh](#).

**My cat won't eat ANY liver! What do I do?** If your cat is not eating at least liver, and you cannot access freeze-dried liver, you must provide vitamin A. You can safely give your adult cat cod liver oil, 1,250iu daily. Some come in gel capsule format so you can pill it if your cat does not like it on the food. The ones with the right amount are small enough to administer via pilling. All cod liver oil will also have some naturally-occurring vitamin D – this amount will vary by brand. Focus on the amount of vitamin A, there won't be “too little” or “too much” vitamin D (if you are using a natural cod liver oil product, not something “enhanced.”).

**Anything else? YES.**

**Choline.** You typically need to provide two egg yolks per week (one per each pound of food, thus how much to feed will depend on how much food your cat eats daily). This is to balance the diet. If you need to include [additional yolk for hairball management](#), bear in mind that one egg yolk provides the equivalent phosphorus to about one ounce of meat, and adjust eggshell accordingly if you're giving more than an extra half yolk per day.

**Omega 3s (and vitamin D!).** Some form of small oily fish (pilchard/sardine) fed as a treat at least once a week is typical PMR guidance. But this doesn't provide enough omega 3s for most diets – and most importantly, it doesn't provide enough vitamin D. Adding 500mg of salmon oil a day will ensure plenty of healthy omega 3s and, importantly, vitamin D. (No need for salmon oil if using cod liver oil as a liver replacement. Do not use cod liver oil if feeding liver (whether fresh or freeze dried)). If using krill or green lipped mussel, they contain highly bioavailable forms of omega 3, but almost no vitamin D. Dry vitamin D should be added to the supplement as noted, below if using krill or GLM.

**Gelatin.** This is optional if not feeding bone. It functions to replace an important component of cartilage: collagen. Collagen is 10% - 11% [L-glutamine, an amino acid that helps heal leaky gut](#) (L-glutamine helps regulate the tight junctions in the intestines. “Tight junctions” are the technical name for those places of intestinal permeability where nutrients pass into the bloodstream for nutrient utilization by the body). If you're using eggshell, consider also using gelatin. In feeding eggshell, we're providing magnesium in the correct proportion, and similar trace minerals as fresh whole bone – but we are not providing collagen. Use a natural or “organic” gelatin. Use the same measure as the eggshell (1/2 teaspoon per pound (450g); 1/32<sup>nd</sup> teaspoon per ounce (28g)). Some recipes recommend 2x as much gelatin/collagen as eggshell. You can safely double the amount of gelatin vs the amount of eggshell. You can also provide [bone broth](#) daily instead of supplementing with gelatin / collagen.

**Everything Else.** If you are not using a supplement premix, if you worry about all the stuff your kitty isn't getting that she would if eating the whole animal, you can ensure she gets the proper amount of iodine, vitamin E and manganese (as defined by the AAFCO and FEDIAF) by using the homemade supplement, instructions on the following page.

### HOMEMADE SPRINKLE-ON SUPPLEMENT

**Instructions:** put all capsules and tablets into a clean spice or coffee grinder (you can include the capsules). Pulse grind until very finely ground and well-mixed. Let sit for 15 to 20 minutes to allow the supplement to settle before transferring to a glass jar.

#### Instructions for Use:

**For Batches:** 1/4 (one-quarter) teaspoon per pound (450g) of meat and organ

**If Adding at Meal Time:** 1/64<sup>th</sup> teaspoon (the “drop” on mini-measuring spoon sets) per ounce (28g) of meat and organ.

You need not purchase these brands, but the dose of the vitamin must be equivalent.

#### Contents:

- 50 NOW 1,000mg Taurine capsules
- 20 NOW 150mcg standardized kelp tablets
- 10 Twinlabs 10mg manganese capsules
- 5 NOW 400iu dry vitamin E capsules
- 2 Natural Factors Hi-Potency 50mg B-complex capsules

#### \*\*\*\*VITAMIN D

\*\*\*\*\*If you are using 500mg of salmon, anchovy, or sardine oil daily, you do **not** need to include D. If you are using krill oil or green lipped mussel as the source of omega 3s, it is best to include vitamin D in the supplement: 20 NOW 1,000iu dry vitamin D capsules. Increase the amount of supplement used to a slightly rounded 1/64<sup>th</sup> teaspoon per ounce. Yes, organs are a healthy source of vitamin D in the diet. And yes, it is true that cats are not known to have a “high” requirement of vitamin D. But in humans, the importance of vitamin D and the understanding of its many functions is changing, and it is clear a “vitamin D deficiency” cannot necessarily be measured directly. Importantly, in cats, [low levels of vitamin D are associated with IBD and intestinal lymphoma](#). Further, a study conducted in the UK found that cats admitted to the ER for ANY reason were more likely to return home alive if they had [higher levels of circulating vitamin D](#). This is why we think ensuring vitamin D is VERY important, and one sardine a week is not enough.