

Cold Raw Facts

These frozen diets, comprised mainly of raw meat, offer truly premium nutrition for your dog.

BY NANCY KERNS

The more I've learned about the meat used in pet food, the more I've come to admire commercially produced frozen raw diets for dogs.

The meat and poultry used in most of these diets are far fresher and more wholesome – far more like what most of us would think of as “meat” – than most animal protein ingredients in dry (or even canned) pet foods. The products tend to produce terrific results in the dogs who consume them. Whether this is due to the ingredient quality or the fact that this type of diet is more biologically appropriate for canines than dry foods is anyone's guess. My guess is that both factors contribute to the success of the products.

A brief history of frozen raw diets for dogs

Before there were frozen raw diets, there were home-prepared raw diets. For decades, certain populations of dog owners fed their dogs diets that were largely

comprised of raw meats or fish – namely racing Greyhound owners (in the case of the former) and sled dog owners (latter). But few average dog owners in this country had even heard of raw diets until the 1993 publication of *Give Your Dog a Bone*, a call to arms written by Australian veterinarian Ian Billinghurst.

The longer he practiced veterinary medicine, Dr. Billinghurst recounts in the book, the more he became aware that the dogs (and cats) he saw in his practice were less fit and healthy than the pets he grew up with. How could that be, given all the wonders of modern veterinary care and “complete and balanced” pet food at owners' disposal?

Long story short, Dr. Billinghurst came to believe that it was all about diet. Australians embraced commercial pet food more slowly than Americans did, so when he was a kid, most people fed their pets the way humans have for hundreds of years: on scraps from the family's kitchen,



Raw frozen diets are available in a variety of presentations. They may be formed into patties or nuggets, or packed into plastic tubs, tubes (as seen above, also known as “chubs” or “sausages”), or vacuum-sealed “flat-pack” bags.

What you can do . . .

- Contact raw diet companies to determine the availability of their products in your area. In some spots in the country, there may be only one or two available to you at a reasonable price.
- When calculating the total cost of these diets, be sure to check the caloric content and feeding instructions, to determine how much your dog will probably eat per month. Don't forget to factor in any shipping charges.
- Check the “best by” date of any frozen product. Fresher frozen foods are better.
- If your vet is opposed to raw diets, make sure you find another, more supportive vet – preferably one who is familiar with raw diets – *before* you start feeding raw. Uneducated veterinarians have been known to blame a raw diet for any illness in a raw-fed dog.



including (most importantly) raw meaty bones. The dogs and cats of his youth were fit, not fat; they had nice clean teeth and fresh breath; and their poop was small and inoffensive.

During the period that Billinghurst spent in college, vet school, and his early years in practice, however, Australian pet owners (including Dr. Billinghurst himself!) embraced the convenience of commercial kibble. It took the veterinarian

some time in practice to develop the perspective to see what was right in front of him: that the overall condition of the pets he saw was declining. They had far more skin and coat problems than the pets of his youth, digestive issues were rife, and the state of their teeth! Ack!

After experimenting with the diets of his own pets (and eventually his clients' pets, too), Billinghurst concluded that dogs (and cats) do best when fed a biologically appropriate diet. For dogs, he determined that ideal diet to be comprised mostly of raw, meaty bones, which provide most of the protein, fat, and minerals needed by the dog, with supplemental amounts of other foods (organ meat, grains, vegetables, fruit, dairy, eggs) providing the balance of nutrients needed.

Billinghurst's book offered only rough guidelines – but tons of encouragement – for switching a dog to a home-prepared raw diet. He implored dog owners to give the diet a try and see for themselves whether their dogs' health improved. Billinghurst's concepts made sense to many dog owners, and many began their own experiments with "BARF" (bones and raw food or biologically appropriate raw food) diets.

As raw feeding became more popular, various approaches developed. Some people, uncomfortable with feeding whole bones to their dogs, grind raw meaty bones into a pulp before feeding them, while others use alternate sources of dietary calcium. Some people use grains or other carbohydrate sources; others spurn the use of carbs altogether. Then there are the "prey model" people, who try to reconstruct, as closely as possible, the type of diet they imagine that wild dogs would consume. They often eschew the inclusion of grains, fruit, and vegetables (and indeed, many supplements), except as occasional treats, relying almost solely on raw meaty bones and organ meat to feed their dogs.

Commercial sources evolve

As the population of raw feeders grows, commercial enterprises have emerged to serve them with a variety of prepared raw diets. Freezing the products is necessary, so the foods can be safely shipped direct to owners or to retail outlets.

Today, there are products available for every type of raw feeder: "complete and balanced" diets and ones meant for supplemental or intermittent feeding only; products that include bone and ones that use another calcium source. Frozen raw

diets are available at a wide range of price points; just as with more conventional pet foods, the price tends to (but might not, depending on the company's size and marketing budget) correlate with the quality and provenance of the ingredients.

Some companies produce foods for a very local market – retail stores in a few counties or a single state. Others have been able to grow their production and distribution to the national level; often these companies have piggybacked their raw frozen diets on the success of their other types of pet foods or treats.

The distribution of frozen foods, particularly in a small market, is challenging. Obviously, trucks equipped with freezers are needed to move product around the country. Most companies that use retail outlets have had to help retailers purchase special glass-front freezers that safely store and attractively display their products.

Companies that ship their products directly to consumers have to consider all the uncertainties that go along with using package delivery services, such as delays that are out of their control due to weather. Most ship only on Mondays or Tuesdays, so there is no chance that frozen products thaw on some truck over a weekend somewhere. To do this, they coordinate their ingredient procurement, production, and shipping schedules, so they have enough product to ship early in the week; even a half-day's delay can mean that some shipments can't go out for another week.

Ingredient quality and other considerations

As a rule (there are always exceptions) raw frozen diets usually contain extraordinarily fine, fresh ingredients. Maybe it's because frozen raw products are the least-processed of all the types of commercially produced foods you can buy for your dog, and you can see the ingredients with your own eyes (and smell the freshness or lack thereof); they haven't been altered into anonymity by processing. Or maybe it's because this entire segment of the pet food industry is aimed at owners who are seeking out the healthiest diet possible for their dogs – owners who are independent enough that they have not been frightened away by tales of deadly bacteria.

Really, it's only in this niche that you see so many pet food companies using only grass-fed animals who were humanely slaughtered, and locally sourced organic produce. That's amazing!

The thing is, it's not absolutely necessary. Even the products that use fresh or fresh-frozen meat from conventional sources are way ahead of the curve, quality wise, than manufacturers of conventional dry or canned pet foods. You simply can't make a safe, good-looking, fresh-smelling raw frozen product out of oxidized old meat scraps and compete in this niche. (Through the magic of rendering and extrusion or canning, you can, however, use pretty funky protein sources to make safe and appealing kibble or canned food: it's done all the time!)

High quality ingredients; raw, biologically appropriate nutrition; and the convenience of a commercially prepared, complete and balanced diet are the factors that bring some dog owners to this type of food. There are, however, a couple of things that may drive others away.

One is the potential for a fat content that is much too high for some dogs. Diets that contain only meat, organ meat, and ground bone obviously contain no carbohydrates, so their protein and fat totals will be high. It's possible that these diets will be too calorically dense for some dogs, especially inactive or older dogs. In this case, owners should seek out products that contain one or more carbohydrate sources and a lower fat content.

It's the fear of pathogenic bacteria, however, that scares the most people away from considering a raw diet.

The bacteria issue

For years, bacterial contamination of meat – and especially poultry – was the most potent tool that veterinarians who were opposed to raw feeding could use to try to dissuade dog owners from trying these "radical" diets. It's not enough, they warned, that you might make your dog sick; you could also sicken your entire family – and even kill a vulnerable family member – by having a bacteria-infested raw meat product in the house.

Today, most of us are aware that even the poultry purchased from your upscale supermarket for your own consumption is more than likely contaminated with *Salmonella*; the bacteria is *that* prevalent in conventional chicken-raising and -slaughtering operations. According to an article published in the September 2010 issue of the *Journal of Food Protection*, researchers from USDA and the University of Maryland mapped the distribution of *Salmonella* on young chicken carcasses.

They found *Salmonella* on 57 percent of the carcasses (which they obtained in various retail locations over a three-year period). Of the contaminated carcasses, almost 83 percent had more than one strain of *Salmonella* present.

Other bacterial pathogens commonly found on meat include *Escherichia coli* (*E. coli*) and *Clostridium difficile* (often called *C. difficile* or “C. diff”).

Good, basic kitchen sanitation and food-handling practices – and *cooking* – is what saves us humans (most of the time) from becoming sick from bacteria that’s on the meat and poultry we consume at home. People with immune-system disorders should avoid handling, or take extraordinary precautions when handling raw meat, whether the meat is for themselves or their dogs.

Very few raw-fed dogs contract infections from these common bacteria; the overwhelming majority of healthy dogs are able to combat the pathogenic challenge presented by these common bacteria.

However, raw diets are *not* recommended for dogs who are immune-compromised or receive immune-suppressant medications. Other poor candidates for a raw diet include dogs who are weak or debilitated with chronic illness, dogs with inflammatory bowel disease, or dogs who have suffered from pancreatitis.

What about the risks to humans from the pathogenic bacteria shed in the feces and saliva of raw-fed dogs? As author

CJ Puotinen explains in “Are Raw-Fed Dogs a Risk?” (WDJ July 2010), though it is *possible* for people to become infected with and get sick from pathogenic bacteria shed by their dogs, *it doesn’t appear to happen any more frequently to owners who feed their dogs raw diets than to owners who feed dry dog food*. In any case, zoonotic infections of all kinds can be prevented with basic infection control practices such as frequent hand-washing, especially after handling pet food, pet dishes, and pet feces. (See “Employ Common Sense and Basic Sanitation Practices,” below.)

Treated products

All of the companies that make their living by selling raw frozen diets take steps to buy wholesome ingredients, process them in a safe and sanitary manner, following a formal Hazard Analysis and Critical Control Points (HACCP, pronounced “hassip”) plan, protect them during freezer storage and shipment, and educate their consumers about the risks and benefits of feeding raw. But a few companies have taken additional steps to reduce or eliminate the risk to consumers caused by pathogens in their products: they treat their raw ingredients to kill any pathogens present. There are a few methods available for this purpose.

Most common among the producers of raw meat diets for dogs is a process that’s alternately called **hydrostatic high pressure (HHP)**, **high pressure process-**

ing (HPP), or **Pascalization** (after Blaise Pascal, a 17th century French scientist who experimented with the effects of pressure and vacuum). This process destroys or inactivates any organisms present in the food, without the use of heat.

According to a fact sheet published by the Ohio State University Extension, high pressure processing causes minimal changes in the fresh characteristics of foods: “Compared to thermal processing, HPP results in foods with fresher taste, and better appearance, texture and nutrition. High pressure processing can be conducted at ambient or refrigerated temperatures.”

In these high pressure processes, packaged food products are immersed in water and subjected to extremely high pressure; the water bath ensures that the pressure is equal on all sides, so the food product is not crushed as a result. (Imagine that you’ve dropped a grape into a full bottle of water; screw the top back on the bottle, and tightly squeeze the bottle. The grape can be subjected to tremendous pressure without deforming, because the pressure is equal on every aspect of the grape.)

Although relatively new, HPP is already commonly used to sterilize a variety of human foods, including fish, shellfish, fruit juices, jellies and jams.

A niche divided

Of all the methods available to treat raw meats to inactivate pathogens, including irradiation and ozone, high pressure

Employ Common Sense and Basic Sanitation Practices

In our opinion, the so-called “public health risk” of raw diets is overblown. Millions of people bring home raw meat and poultry every day. Despite the presence of bacteria in a certain amount of that meat, most are able to cook it and eat it without infection. If people employ scrupulous meat-handling and sanitation practices, and leave the consumption of raw meat to their healthy dogs, they should be able to keep their families safe.

Faithfully practice the following food safety guidelines:

- People with immune system disorders should avoid handling raw meat.

- Keep food frozen until you are ready to feed it. Then, thaw small amounts (only what your dog will eat within a day or two) in the refrigerator. *Never, ever* allow food to sit for long at room temperature.

If you need to thaw food in a hurry, seal it in a Ziploc bag and place it in warm water for not more than a few minutes.

- Wash your hands with hot water and soap immediately after handling the dog’s food.

- Promptly wash everything that comes in contact with the food with hot, soapy water: bowls, knives, grinders, countertops, and cutting boards. Periodically, use a disinfectant, such as a mild bleach solution.

- Discard any food your dog leaves in his bowl after eating. Don’t allow him to “leave it for later.”

- Immediately pick up your dog’s bowl after he eats, and wash it in hot, soapy water (or disinfect in a dishwasher). Never allow small children to handle the dog’s raw food or the bowl he ate from.

- Wash the dog’s *water* bowl in hot, soapy water daily, too. Many dogs drink right after eating, and could conceivably contaminate their water with bacteria in their mouths.

processing seems the least likely to cause controversy. However, its use has sharply divided the raw diet producers. Some we spoke with embraced the technology as safe and natural (since nothing is added to the food); others voiced concerns that the pressure alters the molecular structure of proteins, and affects the food's enzymes, vitamins, and essential fatty acids.

Every meat-based business is concerned about pathogens. But the defensive postures held by individual companies vary. Some put their trust in mainstream human food industry mechanisms and processes; if it's good enough for human food, they reason, it's good enough for dogs.

Other players have focused on alternatives to conventional agriculture and its practices – the naturally fed, humanely slaughtered, “slow food” approach. This is appealing to consumers who favor a natural, holistic approach to health, but these operations are necessarily small-scale, so their products tend to be very expensive.

Still others have embraced a science-based set of solutions, relying on lab tests of ingredients and of every batch of product; in this sort of “test and hold” model, a company releases no product until it's tested negative for any pathogens. This approach is admirable in an age where pathogens are prevalent in the mainstream (human) food supply; it's also expensive.

In the end, it's up to you. Raw food products that have been treated to inactivate pathogenic bacteria are a useful option for some owners. Treated products may be especially appreciated by owners who are concerned about pathogens for the protection of a vulnerable family member or simply to win the support of a veterinarian who is opposed to raw diets. In contrast, natural food purists will probably shy away from diets that are pasteurized by any means whether or not there is credible evidence that the treatment method could be harmful. Consumers have to find their place on the continuum.

Selection criteria

On our list of top-quality products on the next pages, **we've included only the companies that offer complete and balanced diets** and are able to support either national distribution or, at least, distribution to a large segment of the country. Next month, we'll present a list of additional companies that sell frozen raw diets that are meant for supplemental or intermittent feeding.

If we've missed your favorite maker of

a complete and balanced raw frozen diet, just check to see if its products meet our selection criteria; if they do, rest assured that the diets are just as good as the products on our list. Here is our list of selection criteria for raw, frozen diets:

■ **A named, whole animal protein (such as chicken, beef, pork, etc.) at the top of the ingredients list. No “generic” proteins (such as “meat” or “poultry”). No by-products.**

■ **A good source of calcium.** If raw, meaty bones are not used as the calcium source, another source will be needed to make the diet “complete and balanced.”

■ **Every other food ingredient (such as fruits or vegetables) should be whole and fresh; any grains present may be cooked but should be whole.** No low-quality grain by-products (such as “cereal food fines”).

■ **More information about the food than the minimum required by law.** The guaranteed analysis (GA) that is required on every pet food label need only contain the amount of protein, fat, moisture, and fiber found in the food. We feel most comfortable with products from companies who are able to share the complete nutrient analysis for their products. How can we feel confident that our dog is receiving “complete and balanced” nutrition if the maker can't tell us how much calcium or phosphorus is in its food?

■ **No added preservatives.** These aren't needed in a frozen food.

■ **No artificial colors.** These shouldn't be present in *any* pet food!

Selecting a product

With so many good frozen raw diets on the market, how should you select the right one for your dog?

■ **Price and local availability** will undoubtedly limit your options. Some of these products are pretty costly. It's no wonder; they are made out of very expensive ingredients! Products that can be purchased in local retail stores are generally (but not always) less expensive than direct-shipped products. Direct-shipped products might be the only option for those of us who live far from stores that carry raw

frozen diets. Only you know how much you can afford.

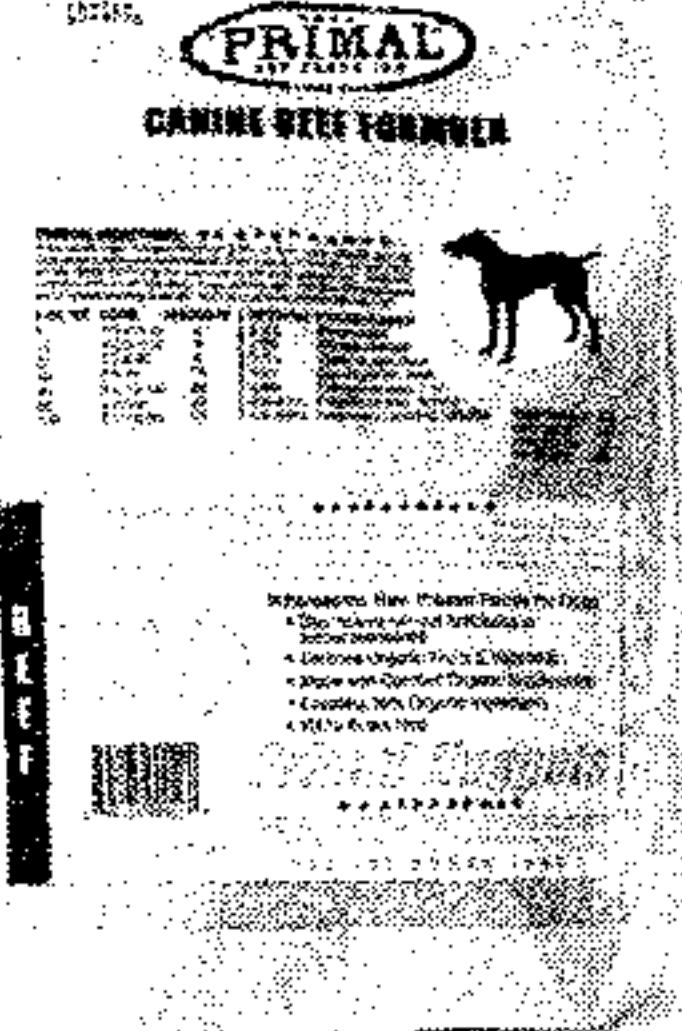
■ **Check to see make sure that it's fresh!** All frozen foods are more nutritious and appealing if they are thawed and consumed sooner rather than later. Look for a “best by” date; if the date/code lacks a date of manufacture, contact the company to learn the actual date of manufacture. Some companies suggest their products have a frozen shelf life of up to a year. Others aim to have their products consumed within three or four months of manufacture. If your preferred retailer doesn't sell enough product to keep their stock fresh, ask if they can better manage their inventory. Otherwise, you may have to find another source – perhaps a company that ships product directly to you.

■ **Look for ingredients that suit your dog.** Of course you've checked the ingredient list for quality; now examine it for any foods that don't agree with your dog. If he's allergic to or intolerant of certain proteins or grains, you need to make sure they are not in there.

■ **Check the fat content.** These foods can be extremely high in fat. That might be fine if your dog is an active athlete, but potentially dangerous for a dog prone to pancreatitis, as one example.

■ **Decide whether you feel most comfortable with a pasteurized product or an untreated one.** We've not seen studies that would lead us to avoid foods treated with a high pressure pasteurization process. But we also feel comfortable with feeding our dogs raw products from companies that use top-quality, naturally raised meats. You have to go with your own gut on this one.

■ **Switch it up.** We don't like to see any animal being limited to a static diet, comprised of nothing but the same protein for months or years . . . That's a great way to help your dog develop a vicious allergy to that protein, by the way. Instead, rotate among a variety of foods that contain different proteins. (That said, don't go out of your way to buy, in turn, diets that contain every protein available to pet food makers. Avoid a number of novel proteins so you can use them if you ever need to put your dog on an elimination diet to help diagnose a food allergy.)

COMPANY INFO	DESCRIPTION OF PRODUCTS; NUTRIENT INFO	HISTORY / FORMULATED BY	AVAILABILITY
<p>Nature's Menu Lake Geneva, WI (866) 333-3729 naturesmenu.com</p>	<p>Complete and balanced diets come in five varieties: beef, lamb, turkey, chicken, and organic chicken. Each contains about 80% muscle meat and 20% organ meat and has a vitamin/mineral supplement added. Diets do not include bone, but utilize high-quality calcium carbonate and "pure milk calcium" as sources of calcium. Products are available in 1/4-lb. patties, packed into 3-lb. bags.</p> <p>Crude fiber is included in the guaranteed analysis.</p>	<p>Company founder Rose Estes developed the formulas with assistance from board-certified veterinary nutritionists Dr. Gary Pusillo and Dr. George Fahey. Contract Comestibles used to manufacture the product for the Estes family; then the company bought Nature's Menu.</p>	<p>Sold at select vet clinics, pet stores, and health food stores in WI, IL, IN, LA, NE, and OR. Direct shipping available to anywhere in the continental U.S.</p>
<p>Nature's Variety Lincoln, NE (888) 519-7387 naturesvariety.com</p> <p><i>AM Pet Emporium SELLS THIS</i></p>	<p>Available in seven varieties: organic chicken, chicken, beef, bison, lamb, venison, and rabbit. Only the organic chicken, beef, and lamb varieties contain proteins from a single species. Chicken variety contains chicken <i>and</i> turkey, turkey liver, and turkey heart. Bison formula also includes beef kidney. Venison variety also includes lamb heart, lamb liver, and lamb bone. Rabbit formula includes pork fat, pork liver, and pork heart. All varieties include fruit, vegetables, and other food supplements; none contain a vitamin/mineral supplement. Product is available in "medallion" or "patty" form. Company is the only manufacturer whose raw diets have been substantiated as complete and balanced for all life stages of canines using AAFCO feeding trials.</p> <p>Full nutritional analyses are available on company website. Analyses are based on actual wet chemical testing of the finished product, not from computer models.</p>	<p>Products are formulated to mimic an animal's ancestral diet. Diets formulated by a team, including a pet food consultant with a PhD in nutrition, professional formulators, meat industry experts, and our Director of Research and Development (who has a PhD in Biology with continuing education in Nutrition). Diets have been on the market for nearly 10 years.</p>	<p>Products are available in the U.S. and Canada, from online and independent pet retailers and some veterinary clinics.</p>
<p>Pepperdogz Bellevue, WA (866) 866-3649 pepperdogz.com</p>	<p>Four complete and balanced varieties are available: bison, chicken, turkey, and beef. Each type is about 70% muscle and organ meat and 30% whole fruits, vegetables, and food supplements. Ground eggshell is used as calcium source; no vitamin/mineral supplements are included. Product is made into 1/2 lb. patties and sold in 5 lb. bags.</p> <p>Guaranteed analysis includes calcium and phosphorus. "We are in the process of obtaining a complete nutritional analysis of all our foods. This information should be available on our website by the end of this month."</p>	<p>Company founded by Sean and Karen Youssefi in 2002. Diets are formulated in consultation with Jacqueline Obando, DVM, a holistic veterinarian who champions the cause of raw dog food.</p>	<p>Available in retail outlets in Washington, Oregon, California, and Colorado.</p>
<p>Primal Pet Foods San Mateo, CA (866) 566-4652 primalpetfoods.com</p>	<p>Primal offers nine complete and balanced, raw frozen formulas, eight of which contain a single-species protein source: beef, chicken, duck, lamb, pheasant, quail, rabbit, and venison (the ninth is turkey and sardines). Each contains meat, ground bone, organ meat, and organic fruits, vegetables, and other food supplements (such as kelp, alfalfa, and salmon oil). All formulas are grain-free and gluten-free. Each product is available in 1 oz. nuggets, 8 oz. patties, and 5 lb. chub rolls. Food sources are used to supply specific vitamins or minerals; a vitamin/mineral premix is not used.</p> <p>A full nutrient analysis for each diet is available.</p>	<p>Primal was established in 2001. "Primal Formulas, our complete diet line, was originally developed and formulated as a collaboration between the company's founder and a local holistic veterinarian."</p> 	<p>Sold nationally through independent pet food retail outlets. Primal will direct-ship to consumers who don't have a retailer nearby.</p>

INGREDIENT CLAIMS

MANUFACTURING INFO

FOOD SAFETY PROGRAM

"We strive to make our diets economical enough for the average person to afford. We source all the ingredients. We buy boxed frozen beef that has been USDA downgraded as 'not for humans.' Turkey is end-of-day overruns from a large turkey grinding operation. Chicken is from regular mainstream chicken production.... We also carry lamb and organic chicken; both are USDA-inspected and passed for human food, and in accordance with all regulations for humane handling.... These diets are more expensive due to the cost of the raw materials."

Products are manufactured at Contract Comestibles. "We make, store, and ship the products ourselves.... Contract Comestibles is a small food manufacturer with about a half-dozen workers. We specialize in contract manufacturing primarily of human food. The process for making Nature's Menu diets is intentionally low-tech and as natural as possible."

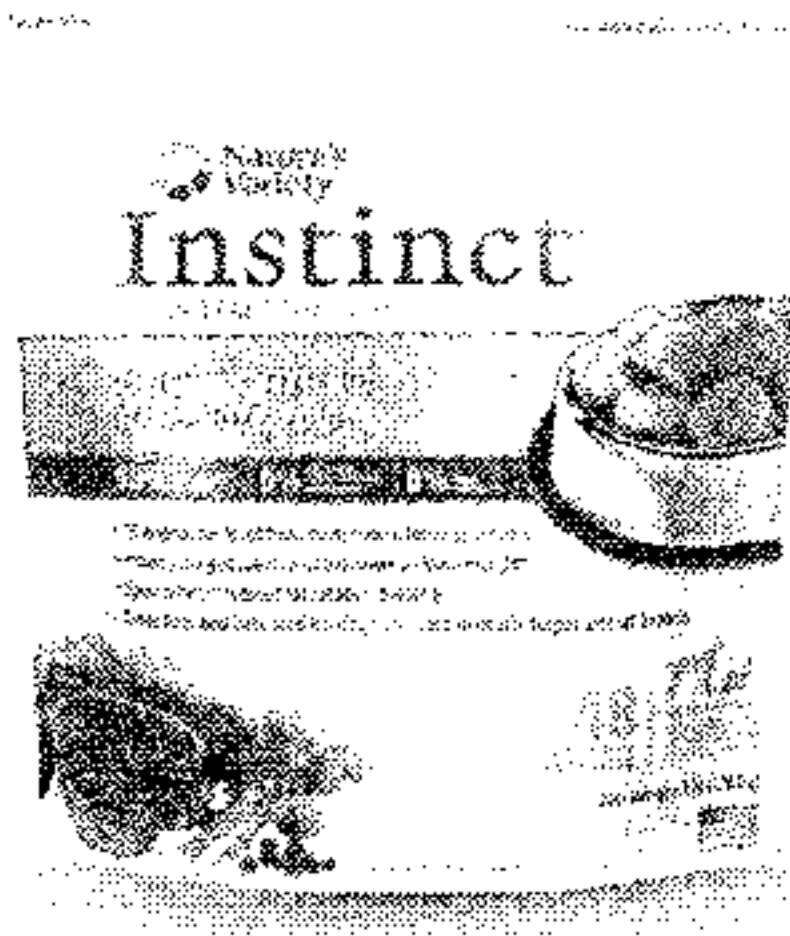
"No chemical, radiation, or high-pressure techniques are used on Nature's Menu diets. We recommend that people handle our meat diets as they would any other raw meat product in their home. After an initial adjustment to a raw diet, healthy animals, as well as many unhealthy ones on their way to better health, do not suffer from the bacteria that may be present in the diet."

"We source all of our ingredients for our raw products based on quality, nutritional profile, availability, and vendor reputation.... We source ingredients domestically and internationally; we have done our homework and know these are the best suppliers. In addition, we require our vendors to go through a certification and approval process.... All of our meat sources are raised and slaughtered humanely."

"We own and operate our state-of-the-art raw manufacturing facility, cold storage, and dry warehouse. At present we do use a co-manufacturer for the HPP process.... This co-packer undergoes audits and certification on a regular basis."

HACCP system in place. "We have written and implemented a comprehensive quality and vendor manual, employing six individuals to oversee daily production, vendor compliance, and overall plant sanitation. Part of our QA program requires our raw diets to be sent for HPP processing, followed by a pathogen test and hold procedure on every lot of finished goods.... Routine microbiological and chemical testing is performed on all products. We have an internal microbiology lab that does all non-pathogen raw material, finished product, and environmental testing. We use a third-party lab for wet chemicals, which assures regular and routine verification of guaranteed analysis and other chemical parameters on a routine basis."

NATURE'S
VARIETY



SOLD AT
ALL PET EMPORIUM

Pepperdogz sources local, USDA-inspected bison and all nutritional supplements. Co-manufacturer sources all other ingredients. All poultry is USDA-inspected, local, cage-free, hormone- and antibiotic-free. Beef is USDA-inspected, local, with no added growth hormones. Vegetables and fruit are local and whole. Supplements are all products of USA.

Co-manufactured at a state-inspected facility near Portland, OR, equipped with state-of-the-art equipment, where other premium-grade pet foods are made.

Manufacturer follows a HACCP program and is equipped with an advanced metal detection system. All ingredients are stored in stainless steel containers and maintained at -25° during manufacturing, before product is formed and sent to the blast freezer, where they are flash frozen at -10 degrees. Product is maintained at 0 degrees while in storage and during transportation to the warehouse facility....We are currently investigating the advantages and disadvantages of HPP, which eliminates food born pathogens (but) can also destroy some beneficial bacteria.... We do not use irradiation."

Primal sources all of its ingredients. "All Primal products incorporate 100% USDA human-grade meats, poultry, and game from the U.S. and New Zealand. The meats and poultry are raised antibiotic-free with no additional hormones. All fruits and vegetables used in our products are domestically sourced and we primarily use certified organic produce. Primal sources all proteins from farms and ranches that utilize sustainable farming practices as well as humane animal care practices."

"Primal operates its own manufacturing facility in San Mateo, CA. In addition, Primal utilizes the services of co-manufacturer in Portland, OR."

"Primal production facilities follow strict HACCP programs to ensure food quality, freshness, and safety. HACCP programs are in place to track product time and temperature from the arrival of raw materials to the completion of final product. Primal production facilities are inspected by the USDA and State Department of Agriculture. Detailed sanitation programs are in place at both Primal facilities and strict sanitation practices are implemented as part of our standard operating procedures. Primal implements random testing to ensure nutritional integrity and food safety of all products."

True Confessions

... of a raw feeder/breeder.

BY DENISE FLAIM

You know you've been feeding raw for a long time when it no longer seems like a radical, ground-breaking, or – ubiquitous adjective for beginners – *scary* way to feed.

When I started feeding raw – a dozen years and three generations of Rhodesian Ridgebacks ago – it was the Middle Ages of raw feeding. Ian Billinghurst's *Feed Your Dog a Bone* was the hard-to-find illuminated manuscript (the lax editing could have stood some sprucing up by Benedictine monks), and everyone used the unfortunate acronym BARF, which stood for "bones and raw food" (or, later, the loftier-sounding "biologically appropriate raw food"). No commercial raw diets were available, and new converts dutifully ordered their Maverick sausage grinders over the Internet. The instruction booklet said the table-top grinder couldn't be used on any bones harder than chicken necks or wings, but everyone ignored that. I can still remember the painful whirring of the motor, and then the crackles and pops as the thin ropes of ground meat and bone came out the cylinder.

Early days

Like many people, I started feeding raw reactively, not proactively. I had a new dog, my first show dog and first Ridgeback, who just wasn't thriving on kibble. I remember setting down Blitz's first raw meal with great fear and trepidation. And then – anticlimax – he didn't choke, die, or even look at me cross-eyed. He ate, he thrived, and off we went and never looked back. Three more adult Ridgebacks followed, and dozens of puppies, who in turn had puppies of their own. All got their start in life on raw-food diets.

Back then (and still today), the Holy Grail of raw feeders was a quality meat

source at affordable prices. Through local dog folk, I learned about Armellino's, a butcher in nearby Huntington Station, New York, who was a wholesaler of naturally reared poultry – chickens and turkeys raised without hormones or pesticides. Joe Armellino was your go-to guy for a free-range Thanksgiving dinner. And he had turkey necks – dare I hope? Did I hear that right? – for a bargain 79 cents a pound.



Just a few of Denise Flaim's healthy kids, canine and human. Having raw food and raw-fed dogs and puppies in the house has never harmed Flaim's triplets.

By my second or third trip there, as I gratefully accepted my 10-pound bag of turkey necks, Joe asked me quizzically, "Are you starting a soup business or something?"

"No," I replied with a chuckle. "I grind this stuff up for my dogs."

And as I explained my feeding regimen – the noise, the blood, the guts, the *time* – lights started going off for Joe. Maybe he could buy a commercial grinding attachment. Maybe he'd order that BARF book. This was a bit of back to the future: His father, who had owned the business before him, used to sell minced meat for dogs.

Today, 12 years later, my dogs still eat at Joe's. His business has gone to the dogs – literally – and his store walls are lined

with dog photos, from Danes to Dachshunds, who get their sustenance there. Joe doesn't do mail order, he doesn't do any fancy packaging or marketing. He just gets the meat directly from the source, grinds it, puts it in 2- or 5-pound sleeves, freezes it, and then sells it to the steady stream of doggie customers who are now a major part of his business.

Passing it on

My puppies are weaned on Joe's ground food mixed with evaporated milk at four weeks old. When the pups are around six weeks, I tell their new owners what I'm feeding, instruct them to order a good multivitamin and fish-oil source (for those nifty omega-3s), and have them stop by to visit Joe. (If they're not local, many will invest in a freezer and schlep back for a food run every few months.)

I also provide them with a list of "don't panic" points, including, "Don't freak out if you don't see your puppy drinking a lot. Her food is so well-hydrated, she won't be constantly lapping up water like her kibble-fed counterparts."

The three main problems with raw feeding for newbies are the time, the cost, and the learning curve. Joe solves the first two: His food is convenient (just thaw out overnight, dump in the bowl, and add supplements) and affordable (about the same price as a high-quality kibble).

As for the learning curve, I've fed this family of dogs for more than a decade. I know what to expect in terms of their growth needs. The biggest advantage to feeding raw is being able to control what you feed. (Which is the disadvantage to commercially prepared raw diets along with, frankly, price.) I am sure an Alaskan Malamute breeder instructs her puppy people to feed differently than I do, as would a Yorkie breeder. Our dogs, in their

genetic programming, process food differently. So when my Ridgeback puppies hit 4 months, and their ears start doing a Sally Field (hello, “Flying Nun”) because teething is taxing their little bodies, I know to increase the calcium and fat in their diets, and I can literally watch their crimped ears flatten and their flat feet knuckle up.

Such breed-specific nutritional knowledge doesn’t happen in a decade, or two. I am fortunate in my breed to have a long-time mentor, Alicia Hanna of Kimani Kennels. She’s taught me how to reverse rickets in Ridgebacks; that’s what the above description is, really. And she drove home for me the importance of the old British saying “Half the pedigree goes through the mouth” – you really are what you eat.

Getting vets to buy in

Veterinarians are often the biggest obstacle to owners who would like to feed raw. And I understand why: They are worried about owners who will take shortcuts and compromise their dog’s health in the process, far more than any fear of salmonella contamination. (Your garden-variety smoked pig’s ear carries a similar risk.)

Any skeptical vet I have ever encountered has been put at ease when I tell him or her these two things: First, I know the source of my dog’s meat, which is raised as holistically as anything I can buy in the supermarket for my own consumption; and second, I understand the importance of having a calcium source. This meat has a more-than-adequate bone content, and it’s finely ground to the consistency of hamburger meat to mitigate any issues of perforation or compaction. (Supposedly, grinding the bones negates any teeth-cleaning benefit, but life is nothing if not a series of compromises. And that’s one I can live with.)

“Well,” the vet invariably says. “You’ve done your homework. But the average pet owner isn’t as conscientious.” Maybe so, but it’s my job as the breeder to instruct my puppy people on how to feed correctly. And there’s a huge piece of me that thinks the lowest common denominator is a terrible place at which to set the bar.

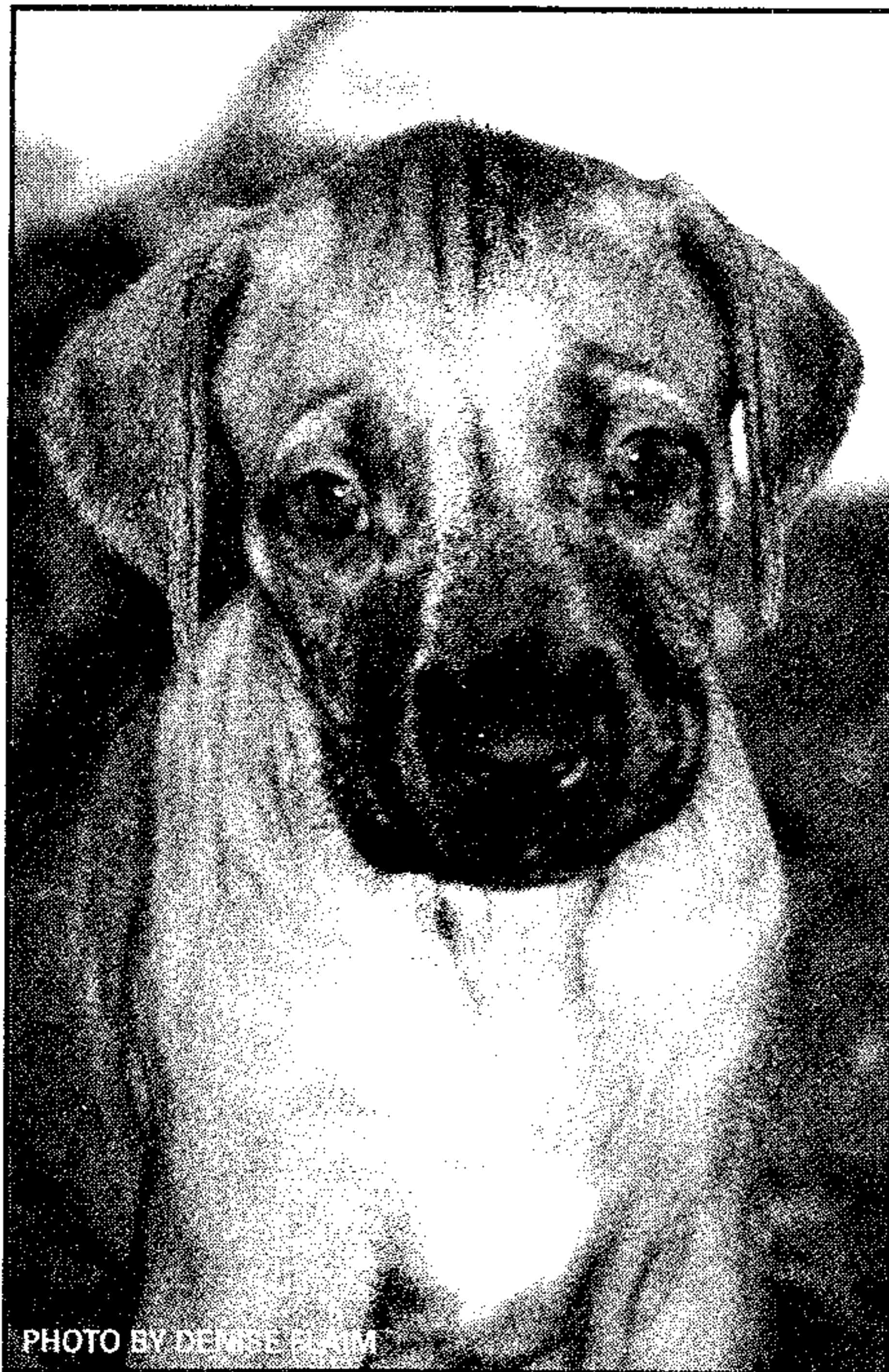
All this is not to say that raw-feeding doesn’t have its drawbacks. Last year, I almost lost a litter of puppies when they contracted enteritis, an intestinal bacterial infection, presumably from the constant licking of their very fastidious raw-fed dam. Desperately watching as my puppies

faded, and unsure what to do, I put them on a liquid antibiotic, and they all rebounded. Now, all my expectant mothers go to a cooked diet with added carbohydrates for increased milk production about halfway through their pregnancy until the puppies are weaned at eight weeks.

It works, it works, it works

After that close call, why do I continue to feed raw, you might ask. Because in all the years I have been feeding this way, I haven’t had any major health issues with my dogs. They stay vibrantly healthy and look like a million bucks. The longer I am in dogs, and the more I talk with old-time breeders who themselves are becoming an extinct breed, the more I take this simple truth to heart: Health shows from the inside out. No matter how fantastic a pedigree, it can be ruined by bad nutrition and bad rearing. Common sense prevails: Dogs need sunshine, exercise, and good, whole, hydrated food.

Dog people – especially serious dog people – like to get all self-righteous about how they feed. It’s our way or the highway. I want my puppies to be raw-fed and I strongly encourage that way of feeding (just as I do minimal vaccination and pesticide-free landscaping), but in the end I realize I don’t have control. And I also realize that changes in lifestyle and economics



A dog’s or puppy’s health shows from the inside out. No matter how fantastic a pedigree, it can be ruined by bad nutrition and bad rearing.

also impact how we care for our dogs. In an ideal world, they shouldn’t, but who lives in an ideal world all their life?

My Ridgebacks aren’t the only litters I have around the house: My human kids consist of 6½-year-old triplets. When they were toddling, I was concerned about bacterial cross-contamination. And the cost of diapers and formula (I’m holistic, but breast-feeding triplets? – I’m not *that* holistic!) was beginning to make a real dent in our budget. So I began cooking the Armellino food, boiling it up in a pot with a grain source such as barley, to stretch it a little further. I did that for about two years, until the kids were bigger and could be trusted not to, say, lick the dogs’ food bowls or stuff fistfuls of raw turkey in their mouths.

But it wasn’t until I looked back over that time that I noticed some subtle changes in my dogs. They were still generally healthy on the cooked, carb-loaded diet, but I noticed an increased frequency of acute problems: the occasional ear infection or impacted anal sac, for instance. A homeopathic vet suggested I start a journal to note these little changes, and if I had followed that advice during that period, I’m sure I would have noticed additional “nickel and dime” changes that the cooked food brought – and not for the better. If ever I needed proof of the price we pay when we destroy the enzymes and nutrients in our dogs’ food by cooking it, there it was.

So, in my heart of hearts, do I think raw is better than home-cooked is better than canned is better than kibble is better than plasterboard? To be honest, yes. But do I think I loved my dogs any less by making the lifestyle and economic concessions that I needed to, when I needed to? To be honest, no.

In the end, what raw feeding taught me were the same life lessons we all take to heart: Never act out of a place of fear. Embrace common sense. (If whole foods are good for us, why should our dogs be any different?) Keep things simple. Act locally. (Thank you, Joe.) And master the use of the prepositional phrase “In my experience” at the beginning of any sentence involving a controversial subject like raw feeding. Because your experience is your experience, whether others agree or not. 🐾

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