



Chapter 1

Nutrition: Is Your Dog Eating McFood?

The canine corollary to talking about religion and politics is discussing dog food. At first glance, it might seem silly to get emotional about what you feed your dog. You feed kibble, I feed canned, the guy down the street gives his dog leftovers—what’s the big deal?

But on a deeper level, food is about love and nurturing. For someone to suggest that we are not giving our dog the best possible nutrition is to suggest that we are not the best possible dog owner. And as the options for feeding our dogs increase, so does the defensiveness of many people about the decisions they ultimately make.

So before you go any further in this chapter, it’s important to know that there is no universally “best” way to feed a dog. There is only the best way to feed *your* dog. The decision you ultimately make about what and how you feed depends not only on the food itself, but other factors, including your own resources. You may not have enough time to commit to home cooking for your

2 The Holistic Dog Book

dog, or may not have the budget to afford free-range chicken for yourself, let alone your dog. If you have small children, you may not feel comfortable feeding raw meat (one of the options discussed here) because of concerns about salmonella. (Concerns for your children, that is, not your dog. Canine digestive tracts are well-equipped to handle most microbes that would level us bipeds.)

These are valid points, and you should not feel bad about yourself because they factor into your decision-making. Remember: A holistic approach is all about evaluating the entire situation, not getting fixated or stuck on one area. And life is a fluid, changing process. A year from now, your circumstances may change, and you may be ready to try a new approach.

Do your best to do what's best.

A RAW DIET

Raw food diets for dogs have become trendy these days. There are books, e-mail discussion groups, even bumper stickers devoted to what has come to be affectionately referred to as BARF—short

WHY DO THEY CALL IT BARF?

As acronyms go, BARF isn't the most elegant, but that hasn't mitigated its popularity. According to veterinarian Ian Billinghurst, the BARF nickname was coined by someone who disagreed with the diet and referred to those who fed it as Born Again Raw Feeders. "She then tried it herself, became convinced and changed it to mean Bones and Raw Food," says Billinghurst, who also interprets the acronyms to mean Biologically Appropriate Raw Food.

for "bones and raw food." While veterinarian Ian Billinghurst of Bathurst, Australia, ignited the most recent interest in raw feeding, other advocates include Richard Pitcairn, Wendy Volhard and Kymmythy Schultze.

Each offers slightly different methodologies. Some advocate including cooked grains, others recommend different supplements. But the basic theory behind all their diets is this: Domesticated dogs are not markedly different from their progenitor, the gray wolf. Indeed,

up until less than a century ago, before the advent of commercial dog foods, most dogs ate as wolves did—fresh, oftentimes raw meat, usually scavenged or tossed to them as a leftover. What raw feeders advocate is not a radical departure from the norm, but a return to how dogs were meant to eat in the first place.

Science bears out the dog's close relationship to the wolf. Studies of mitochondrial DNA—the DNA passed down directly from mother to offspring that changes only in the relatively rare occasion of a genetic mutation—show that the genetic difference between domesticated dogs and gray wolves is about 1 percent. (By comparison, the difference between wolves and their wild cousins, coyotes, is a whopping 7.5 percent.) This minute degree of separation from the wild is the cornerstone of the nutritional theory behind raw food: Dogs, like wolves, need raw meat to derive crucial enzymes and nutrients, which are destroyed during the cooking process.

Take a look inside a dog's mouth. Those big teeth are not there for show. They are there to rip and tear and crunch flesh and bones. And dogs have short digestive tracts with powerful enzymes for dealing with harmful bacteria, such as salmonella.

Billinghurst's book *Give Your Dog a Bone* helped drive the current renaissance of raw meat diets. In that raw food guide, he explains that dogs don't just need to eat *what* wolves eat, but *how* they eat as well. Consider Mr. Wolf on a given Monday. He and his pack have managed to bring down a deer, and he greedily eats the innards, including the stomach, which contains half-digested plant material. He returns on Tuesday to eat some choice muscle meat, then chomps on the remaining bones on Wednesday and Thursday. On Friday, he may come across a nest of quail eggs and have a raw omelet. On Saturday, dumpster-diving is on the menu, and he snarfs a half-eaten Big Mac. Sunday might bring slim pickings around town, so (appropriately, perhaps), he fasts.

Billinghurst points out that this dramatic variation in a wolf's diet—from day to day, week to week, month to month—is entirely natural, and depends upon what he calls "balance over time." This is antithetical to the way commercial dog food delivers its nutrition, which is basically the same percentage of nutrients, in the same form and of the same quantity, day in and day out. This is also the reason, Billinghurst suggests, behind the dramatic improvement many dogs show when their owners

4 The Holistic Dog Book

switch brands of dog food. It's not that the second brand is necessarily any better; it's just that the dog's system is responding to the change in ingredients and sudden variety of nutrition. But once the dog has been eating the second brand for a period of time, that effect will wear off and the dog will begin to show the same problems again.

The staple of the BARF diet is the raw meaty bone—ideally, one that has a 50-50 ratio of bone to meat. Chicken wings and backs fulfill this equation handily, as do turkey necks. These poultry bones are non-load bearing, meaning they do not carry the weight of the animal's body, and therefore are soft and can be easily chewed and swallowed raw. In addition to raw meaty bones, raw feeders give their dogs pulped vegetables, raw muscle meat, offal such as liver and gizzards, nutritional supplements, and other goodies such as raw eggs, yogurt and the occasional leftover lasagna.

The key is to make the raw meaty bones the majority of the diet so that the dog derives benefit from their enzyme and calcium content.

The Benefits of Feeding Raw

Feeling nervous yet? That's normal. Most people have such reflexive reactions to changing or rethinking their dog food—"He'll get sick if I switch." "How will I know if I'm feeding him correctly?"—that the dog food companies are to be commended for all but signing us up as customers for life.

Most everyone who has switched a dog from a commercial dog food to a raw food diet has had twinges of panic. It's understandable, and it's transitory. Once you actually see your dog eating and thriving on a raw diet, once weeks and months go by and nothing horrible happens, you will begin to relax. And soon, feeding this way will feel natural—which is exactly what it is, on a bunch of different levels.

Although it sounds far afield, there is a parallel between the pressure some vets put on dog owners to feed kibble instead of home-prepared meals and the insistence of obstetricians in the 1950s and '60s that women give their newborns formula instead of breast milk. This idea that somehow we are incapable of

providing appropriate sustenance without corporate intervention—that something artificial is better than something natural—should seem counterintuitive. Think about it: Are you so incapable of putting together a balanced diet for your dog that you need to feed him out of a bag every day? You don't feed your human children that way. And surely their nutritional needs are no less complicated, or important, than your dog's.

Raw feeding “has all the appearances of becoming mainstream within the next five to ten years,” says Billinghamurst, adding that the most common reason people switch is “the need to solve a health issue for their pet. However, large numbers of people who have taken an interest in their own health and have embraced natural therapies for themselves research and adopt the evolutionary diet for their pet as a logical extension of that way of thinking.”

Here are some of the changes you can generally expect after switching your dog to a raw diet.

Enhanced immune system and reduced allergic reactions. Commercial dog food is taxing on your dog's system, for a number of reasons. To keep kibble fresher longer, dog food companies must remove as much moisture as possible, baking it under extremely high temperatures. Not only is the food over-processed, with lots of additives to preserve shelf life and provide nutrients lost during the cooking process, but the quality of the ingredients varies widely.

In contrast, raw food is much more bioavailable—your dog's body doesn't have to work as hard to extract the much-needed nutrients. And since all the ingredients are controlled by *you*, you can eliminate the cheap grains, low-quality meats and chemical preservatives that may account for some of the food sensitivities you see.

Increased hydration. Raw meat contains plenty of water. Kibble, because of the manufacturing process, does not. People who switch their dogs to raw food will often notice a decrease in their dog's water intake. This isn't a cause for alarm; in fact, just the opposite. It's a sign that the dog is getting the moisture and hydration she needs from her food, and no longer needs to supplement it.

6 The Holistic Dog Book

Smaller volume of stool. Kibble contains fillers, which help bulk up the food—and contribute to the formation of copious amounts of stool. In contrast, the ingredients in a raw diet are fresh, more easily digested and more completely absorbed. Most of what goes in gets used.

As a result, dogs fed raw diets produce a smaller amount of stool—in many cases, about a third less than kibble-fed dogs. And their stools are often hard and round like marbles, turning white in a couple of days and disintegrating into a powder if you get lax with your poop-scooping. Contrast this to the potty products of kibble-fed dogs, which can endure for weeks and months.

Fewer anal-gland problems. The stools of raw-fed dogs aren't made soft and mushy by the preservatives and fillers in kibble. Instead, their bone content gives them a harder consistency. As a result, when stools are passed, they tend to stimulate and empty a dog's anal glands naturally.

Less of a doggy smell. Raw feeders swear that their dogs have less of an objectionable overall odor than kibble-fed dogs.

Cleaner teeth. If you choose to feed your dog whole raw bones, as some raw feeders advocate, you can expect a mouth full of shiny, tartar-free teeth. The reason should be obvious: All that bone crunching and gnawing is better than any brushing or flossing you could ever do. A side benefit—reduced doggy breath.

Fewer ear infections. The yeast and grain content of commercial dog foods can contribute to chronic ear problems in many breeds, especially those with pendulous or drop ears. Raw diets—especially those with no- or low-grain content—can clear up those frustrating infections for good.

Bloat management. Some owners and breeders of large dogs who are prone to bloat, or gastric torsion, believe a grain-free raw diet reduces the risk of a bloating episode. The theory is that a raw diet does not contain fillers that can expand in the stomach, thereby increasing the possibility of bloat.

The Risks of Feeding Raw

Most conventional vets are adamantly opposed to a raw food diet, and will be very persistent in trying to dissuade you from

feeding one to your dog. Billinghamurst sees this animosity as rooted in a lack of knowledge, and the myth that canine nutrition is somehow more complex than human nutrition.

“Vets have no training in this area,” he says. “In fact, they have very little training in nutrition outside the admonition to feed a complete and balanced scientifically produced grain-based processed pet food. They are very much afraid that raw food will pass on deadly bacteria to their patients. They assume—on the basis of nothing more than their own prejudicial belief—that raw foods will cause animals to be overwhelmed with *E. coli*, campylobacter and salmonella. They also think that such bacteria will be readily passed from the dog to its human companions.

“In practice, none of this has been known to happen. Dogs and cats have, until very recently, been eating this way and doing brilliantly for millions of years—certainly not requiring the army of vets they apparently need today to keep them healthy!” In addition, Billinghamurst says, vets often have a vested financial interest in promoting the kibble that is displayed in their waiting room.

Are there risks to feeding a raw diet? Of course, just as there are to feeding a steady diet of kibble. Nothing in life is risk-free. But if you take the proper precautions and educate yourself about this way of feeding, you can mitigate many of the following concerns.

Parasites and Bacteria

Raw meat contains salmonella and other nasty bacteria—that is just a fact of life. You can cook the meat, but, raw food advocates point out, along with those nasty microbes you’re also destroying important enzymes and nutrients.

Much of the current concern with bacteria, especially salmonella, in raw diets for dogs results from anthropomorphism. We worry (and rightly so) about ingesting salmonella, and so think we need to have the same concerns for our dogs. But canids do not have the same digestive system as humans. They can handle bacteria that would severely incapacitate, or even kill, a human. Even the United States Department of Agriculture has stated that salmonella is not a health risk for dogs. Instead, it’s we humans who should be worried about it. Indeed, if your household includes young infants, the elderly or anyone who is immunologically compromised, you must take precautions to

8 The Holistic Dog Book

keep your dog's feeding area scrupulously clean. (Also, always wash your hands after handling such popular doggy treats as pigs' ears, as they can and do carry salmonella.)

There is a wide spectrum of opinion among holistic vets about whether most dogs can handle a raw food diet. While Billingham says that in his experience, "only the most severely immune-compromised animal genuinely requires a cooked diet," some vets are reluctant to switch all but the youngest and healthiest dogs to raw. Still others advocate a long transition period, especially for elderly or ill animals, moving from kibble to home-cooked to, eventually, raw, if a dog's system can handle it.

And some vets, including Michael Fox, one of the first veterinarians to introduce American dog owners to holistic concepts, feel the widespread contamination of raw meat and unsanitary slaughtering practices are simply too risky. Fox also worries that raw-fed dogs may pass on intestinal food-borne diseases to human members of the family. *He recommends that raw feeders lightly sear all meat before serving.*

There are ways to minimize the amount of harmful bacteria in your dog's raw meat. One way is to soak the meat in grapefruit seed extract, which has antibacterial qualities. You can also use food-grade hydrogen peroxide. Another precaution is to store raw meat for at least a month in your freezer. Recent studies by British researchers found that freezing kills 20 to 25 percent of all micro-organisms.

Best of all, feed naturally raised raw meat. It may be more expensive, but it's likely to be less contaminated and safer than meat that, when it was alive, was injected with hormones, pumped with antibiotics and fed pesticide-sprayed grains.

Impaction and Perforation

The old injunction about not feeding chicken bones to dogs pertains to *cooked* bones, and its wisdom is unassailable. Cooked bones are brittle and prone to splintering, and they should never be fed to dogs. Raw bones, however, are soft, supple and easily dispatched with a rapid crunch-crunch-crunch-gulp.

Still, some people worry about their dog's ability to properly chew and swallow a whole bone. The overenthusiastic can also

THE MIDDLE GROUND

Increasingly, those who do not feed their dogs kibble diets find themselves confronted by food wars, in which evangelical-sounding proponents of one diet or another insist that it's their way or the highway.

That's precisely what Monica Segal of Toronto discovered while researching a diet for her Zoey, a Cavalier King Charles Spaniel puppy with digestive problems so dire she was literally wasting away. Segal, who is certified in animal care, decided she would look beyond the posturing and the diet gurus, and see where the facts took her.

In the end, Segal wound up with a healthy dog and a firm conviction: Dogs are highly individualistic, and their diets should be, too. One dog may thrive on raw food; another may need cooked. While one dog may not tolerate beef, his housemate may do exceedingly well on it.

Segal organized all her information into a self-published book, *K9 Kitchen, Your Dogs' Diet: The Truth Behind the Hype* (Doggie Diner, \$21.99, available from www.doggiedietician.com). In it, she explores the minutiae not just of which nutrients dogs need, but also how those components interact and the factors that affect their absorption. Also invaluable is her nutritional analysis of commonly fed raw meaty bones, the staple of the BARF diet. No matter what guru you follow, Segal's book is an important addition to your bookshelf.

swallow a poultry neck or wing whole, possibly leading to asphyxiation. An alternative is to grind the bones up. Tabletop sausage grinders such as the Maverick (sold, among other places, at www.pierceequipment.com) can process chicken necks and wings into a hamburger-like consistency. The bone content is still there—and so is your peace of mind.

If you want to feed whole bones, stay with bones that are non-load-bearing, such as turkey and chicken necks, and chicken wings and backs. Some people feed bigger bones—such as chicken thighs and lamb necks—without concern. But since there is always a risk of impaction and choking, it is best to supervise your dog while she is eating. And if your dog is a gobbler,

10 The Holistic Dog Book

you may have to teach her to eat slowly and safely by holding the bone and forcing her to take her time while chewing it.

Nutritional Imbalances

Buying a bag of kibble is a pretty commitment-free act. The label on the side of the package tells you that the company that manufactured it has made sure the contents are nutritionally balanced. But when you are feeding a home-made diet, whether raw or cooked, the burden is on you to make sure your dog is getting a complete and balanced diet.

If you want to start feeding a raw diet, you need to educate yourself. Entire books have been written on the subject, and at the very least, you should read one straight through, following the nutritional requirements it outlines. Most of the diets advocate feeding 60 to 75 percent raw meaty bones and the remainder muscle and organ meat, such as ground beef and gizzards. Feeding a raw diet that includes only meat and no bone (or no bone substitute) can lead to dangerous imbalances, because phosphorus levels will be too high and calcium levels too low.

Most raw diets also require pulverized vegetables (dogs cannot digest whole vegetables because they lack the enzyme to break down cellulose), especially green leafy veggies such as dandelion greens and collard greens. Then, to be sure you have all the essential vitamins and minerals covered, you need to add a good multivitamin, olive oil or vegetable oil for omega-6 fatty acids and fish body oil or flax seed oil for omega-3 fatty acids. (Some dogs show a sensitivity to flax seed oil, so watch for itching or other signs of sensitivity.) Some raw food authorities advocate adding cooked grains such as millet or bulgur. Still others encourage you to add trace minerals in the form of kelp and alfalfa, and supplemental antioxidants such as vitamins C and E. Then there are the yummy extras that dogs love, and that are good for them too, such as raw egg yolks and plain yogurt.

Sound complicated? Not really, once you understand the theory behind it and have established a routine to feeding. But you should not embark on a raw diet until you have done your homework and have found a detailed diet to follow. "Many people hear about feeding raw and start doing so before reading this book and others like it," says Billinghamurst. "As a result, they don't



Reading Up on Raw

Here are some of the more popular raw diet books. Most are available from www.amazon.com, as well as www.dogwise.com.

The BARF Diet: Raw Feeding Using Evolutionary Principles is an updated book by raw-feeding guru Ian Billinghurst (Barfworld, \$17.95). His earlier books, which are equally as commonsense and reassuring, are the self-published *Give Your Dog a Bone* (\$27.95) and *Grow Your Pups With Bones* (\$34.95).

Natural Nutrition for Dogs and Cats: The Ultimate Diet by Kymthy R. Schultze (Hay House, \$8.95). A little pithier than Billinghurst, this is a good choice for those who find "Dog" in the details, as Schultze provides approximate amounts and sample monthly menus.

Dr. Pitcairn's Complete Guide to Natural Health for Dogs and Cats by Richard H. Pitcairn and Susan Hubble Pitcairn (Rodale Press, \$17.95). A discussion of raw feeding (supplemented with grains) kicks off this popular book, which also includes an in-depth look at homeopathy.

Holistic Guide for a Healthy Dog by Wendy Volhard and Kerry Brown (Howell, \$16.95). Volhard developed her Natural Diet two decades ago, and she describes it in this classic bestseller, along with complementary therapies and vaccine concerns.

Raw Meaty Bones: Promote Health by Tom Lonsdale (Rivetco, \$29.95). Written by an Australian veterinarian, this is the latest addition to the raw feeding oeuvre.

Also worth a cyber-visit are the many websites of dog owners and breeders who have had practical experience feeding a raw diet for years, even generations. While visiting someone's site is not a substitute for buying one of the raw diet books and doing in-depth research, those personal Web pages will show you how people are integrating this natural feeding regimen into their lives.

supplement properly or give the correct ratio of raw meaty bones to muscle meat."

The most common mistake, says Billinghurst, is feeding an all or mostly meat diet, with no bone content. "This mistake is particularly critical in the case of young animals," he says, leading to severe calcium deficiencies and, in turn, weak and easily broken bones. Holistic veterinarian Susan Wynn says this is precisely why she is reluctant to encourage the wholesale adoption of raw food

SWITCHING GEARS

Gung-ho about going raw? While that's understandable and commendable, be sure to give your dog time to make the switch, especially if you are going from a poor-quality kibble to a raw diet.

While some raw feeders advocate going cold turkey—switching from kibble to raw in one meal and never looking back—many animals, no matter how young or healthy, can be overwhelmed by the sudden influx of healthy and healthful ingredients. A sudden change could trigger a “healing crisis”—basically, a full-blown detoxification. While the end result may be good—the dog eliminates all the toxins in his body—the process itself can be unpleasant and messy for both you and your dog, including bouts of diarrhea, vomiting, mucous discharge and skin eruptions.

Instead, make the change slowly, feeding small amounts of raw food and gradually decreasing the amount of kibble. Because feeding raw meat and kibble simultaneously can cause diarrhea, consider breaking up meals into several feedings over the course of the day.

In the case of elderly or ill animals, proceed very carefully—and maybe not at all. Some animals may simply not have the constitution to handle a raw-food diet.

diets. “I personally have seen smart people who read the books and who drifted to feeding pure meat”—a disaster waiting to happen.

Bottom line: If you are going to start your dog on any non-commercial diet, you must be able to do it correctly, or not at all.

Minimizing the Hassle

One of the biggest drawbacks to a raw diet is that it can be time-consuming to prepare. Pulping vegetables, grinding bones (if you choose to take that added precaution) and ferreting out sales in the meat department can take as much time as cooking for your own family. Here are some shortcuts.

Get chummy with your local health-food store. Most of these establishments have a juice bar where they use organically grown fruits and vegetables. Juicing produces lots of wonderful

pulp that is perfect for raw-fed dogs (or any dog—even if you feed kibble or cook for your dog at home, you can supplement with freshly pulped veggies). Most health-food stores would be happy to give you their excess pulp.

Find bargains in numbers. Chances are there are many folks in your area who are feeding raw—you just don't know about them. Search for e-mail groups of BARF feeders in certain geographic areas on websites such as www.yahogroups.com. If enough of you band together and approach your butcher, you might be able to persuade him to start buying preservative- and pesticide-free meat for you in bulk. My local butcher found that the demand among raw feeders was so high that he invested in a grinder, and now prepackages ground meat and vegetables in two-pound sleeves. They fit easily in the freezer, and can be defrosted and served in a snap. His business has skyrocketed, and his customers have a convenient, healthy and cost-effective way to feed their dogs. Remember, if there is an economic advantage to supplying raw feeders, a smart butcher (like mine) will try to accommodate you.

A HOME-COOKED DIET

Let's say for whatever reason, you can't or won't feed your dog a raw diet. Home cooking is another option. The downside, raw food advocates say, is that you are destroying beneficial enzymes and nutrients in the food during the cooking process. But even if it is cooked, the food will still be far more healthy and bioavailable than commercially prepared dog foods. Because you are not feeding bones, you will have to supplement with a calcium source such as calcium carbonate or bone meal. As with a raw diet, be sure to pulp the vegetables, since dogs cannot digest them whole and they would then pass through the digestive system unused.

And, of course, be sure to feed a veterinarian-approved multi-vitamin daily.

Most traditional vets are supportive of home-cooked diets, and often will provide you with recipes and instructions. There are also plenty of suggested menus and recipes on the Internet; plug the words "home-cooked dog food" into any search engine to find them. As with a raw diet, if at any time you are worried



Recipes for Home Cooking

There are some wonderful books available that outline easy home-cooked recipes for dogs.

Barker's Grub by Ruth Edalati (Three River Press, \$12)

Home-Prepared Dog & Cat Diets: The Healthful Alternative by Donald R. Strombeck (Iowa State University Press, \$37.99)

Natural Food Recipes for Healthy Dogs by Carol Boyle (Howell Book House, \$14.95)

that your dog is not getting proper nutrition, you can always ask your vet to run a blood chemistry panel to check your dog's overall health.

KIBBLE

For the vast majority of consumers, dry commercial dog food, or kibble, is the dog food option of choice. But from a holistic point of view, kibble is probably the least appropriate option for feeding your dog. In order to be converted into dry form for a long shelf life, kibble goes through a process called extrusion, in which it is dried at high temperatures so that much of the moisture is removed. This also removes many naturally occurring enzymes, nutrients and antioxidants that are vital for your dog's health. The dog food companies then add back additives to compensate for the lost nutrients, and spray the desiccated food with flavor enhancers to make it palatable.

It hardly sounds natural, and it isn't.

Another thing to consider is the source of the ingredients that go into dog food. Many dog food companies—especially the mass market name brands in your supermarket aisle—are not in business solely to make dog food. In fact, most of the major dog food companies are subsidiaries of larger companies that make the food we eat. Nestle, for example, owns Ralston Purina, Colgate-Palmolive is the parent company of Science Diet,

Procter & Gamble has Eukanuba and Iams under its corporate umbrella, and the list goes on and on. This isn't coincidence. It's good business: When a company makes, say, cereal or granola bars, there are a lot of byproducts from the process that are not fit for human consumption. They are, however, fodder for dog food.

The meat used in dog food is almost always the leftovers from slaughterhouses after the human-grade meat is removed. Some animals may have died from disease, others may have been road kill or euthanized. Although dog food companies say they do not use the carcasses of euthanized companion animals—including cats and dogs—in their foods, it is perfectly legal for them to do so. Rendering companies can and do use carcasses picked up from shelters in the rendered—basically, melted down—meat they sell to dog food companies. Since the sodium pentobarbital often used in euthanization does not degrade during the rendering process, residue can find its way into dog food that uses rendered meat meal. And the nutritional label on that bag of dog food is no help whatsoever in determining the source or quality of its ingredients.

All that said, if you do decide to feed a commercial dry dog food, be aware that not all kibbles are created equal. Some have better quality ingredients and less fillers than others. A look at the ingredients label can be a real eye-opener if you know what you're looking at. And don't stop at the so-called "premium" foods sold in pet supply stores, or even the waiting rooms of vet offices, because there are lots of private-label kibbles that are much healthier. It may take a while to find them, but searching the Internet and talking to fellow dog owners can get you started.

Despite all the quality control associated with the commercial manufacture of dog food, kibble does have risks of its own—just as every feeding method does. One concern is mycotoxins, which are toxins produced by mold or fungus from contaminated grains. Responsible for several kibble recalls in the 1990s, mycotoxins can cause vomiting, appetite loss, liver damage and in some cases even death. Be sure to check the expiration date on your bag of kibble.

Reading the Label

If you need any special skill in selecting a kibble for your dog, it's mastering the art of label reading. Here are just some of the ingredients you might find in that tiny box on the back of your bag of kibble. (Ingredients are listed on the label in descending order of weight, so that theoretically the first ingredient listed makes up the most content of the food. However, some manufacturers will split up a poor quality ingredient into several different entries, so they appear lower on the list. See "Corn," below, for more on how this can happen.)

Animal fat. A blended, rendered product that includes, among other things, restaurant grease. It is sprayed onto kibble to make the little food pieces more palatable.

Beet pulp. The dried residue from the processing of sugar beets, this ingredient is used to add dietary fiber. There is debate over whether this is desirable or not. But having beet pulp high up in the first several ingredients is probably not a good thing.

BHA (butylated hydroxyanisole), BHT (butylated hydroxytoluene) and ethoxyquin. These preservatives were once widely used to increase the shelf life of kibble. Concerns over the possibility that all three might be carcinogens prompted dog food companies to start using more "natural" preserving agents such as vitamin C (**ascorbic acid** and/or **sodium ascorbate**) and vitamin E (**alpha tocopherol**).

Byproduct. This is a euphemism you will encounter frequently on dog food labels. Basically, these are proteins that by law cannot be used in food consumed by humans. "Meat byproducts" are the non-rendered parts of slaughtered mammals that do not include meat but can contain lungs, spleens, kidneys, brains and most other organs. Hair, teeth, horns and hoofs are excluded. Generally speaking, it's better to buy a food with a named byproduct (such as "lamb byproduct") rather than the vaguer "meat byproduct."

Byproduct meal. This is a very cheap—and usually not good quality—source of animal protein. Avoid it.

Corn. In and of itself, corn isn't necessarily a bad ingredient. But warning bells should go off if it is listed high up in the ingredient



Resources for Kibble

If you have decided that your lifestyle and budget compel you to continue to feed kibble, your work has just begun. There are many brands of dog food, all claiming to be the best. One cyber-source for label comparisons is the popular and long-lived home.hawaii.rr.com/wolfepack/, which lists the ingredients of many brands.

Another ongoing source of information about canine nutrition is the *Whole Dog Journal*. To subscribe, call (800) 424-7887 or visit their website at www.Whole-Dog-Journal.com. The online address is a good place to research and order back articles, including commercial food reviews and the magazine's recommendations for dry and wet dog foods.

The ominously titled *Food Pets Die For* by Ann N. Martin (NewSage Press, \$13.95) is a no-holds-barred look at how commercial food is manufactured. It also offers some recipes for a home-cooked diet for dogs. The author does not support raw feeding.

list under several guises, such as “ground corn” and again as “corn gluten meal.” It means that the manufacturer has split up the overall corn content by listing it in several categories, allowing other, more desirable ingredients, such as meat-based ones, to climb up the ingredient list.

Meal. This is the euphemism for animal tissues and bone that have been ground and rendered—basically, heated until they turn to liquid. Excluded are blood, hair, hide trim, manure, hoofs, contents of the intestines or “extraneous materials.” Lamb, turkey and chicken meal is self-explanatory. As with byproducts, avoid the generic term “meat meal,” and choose brands that use a *named* meal.

Natural. Using this word on a bag of dog food simply means the food does not use synthetic ingredients (except for vitamins or minerals). It does not mean it contains organic or healthy ingredients.

Propylene glycol. A chemical preservative, often added to keep semi-moist dog food chewy.

Sodium nitrite. A color fixative and flavor enhancer, this food additive has been shown to create cancer-causing agents called nitrosamines.

Soy. Soybeans are a major ingredient in some dog foods. Many dogs have difficulty digesting this protein, leading to flatulence.

CANNED FOOD

Perhaps the greatest difference between canned dog food and dry is the moisture content. Canned dog food is mostly water, but check the label to see where the water comes from. Unlike kibble, good-quality canned food often uses whole meats in their natural state, which is where the high moisture content comes from. Yes, the ingredients are still cooked and processed, losing much of their original nutritional value, but they are still more bioavailable than dry kibble.

Canned foods tend to contain better quality ingredients, such as whole meats instead of meat byproducts—again, read the label to be sure. And, by virtue of their packaging, they also usually contain less preservatives. The big drawback is that they are much more expensive than kibble, especially if you opt for a very high-quality brand that uses human-grade meat.

THE MIDDLE GROUND

Because many dog lovers feel very strongly about their feeding methods, this subject can degenerate into judgmental posturing and take-it-or-leave-it standoffs. The implication, sometimes, is that if you don't feed raw or home-cooked, you're a bad person who doesn't care about your dog's well-being.

As I've already said, there may be very legitimate reasons of lifestyle and economics that prevent you from taking a more natural approach to your dog's nutrition right now. Instead of getting caught up in black and white, look for shades of gray. Many dog owners successfully feed a half raw, half kibble diet, giving one in the morning and the other in the evening. Since raw meat and kibble have different rates of digestion, feeding them together in the same sitting may very well cause diarrhea. But many dogs do well on this "split-personality" diet.

WATER WISDOM

Up until a few years ago, I used to think it was the height of indulgence to give dogs bottled water to drink. Here's what happened to change my mind.

We had moved into an old Victorian house in a geographic area known for its high breast-cancer rates. Growing up in nearby New York City, which has a high-quality water supply, we could literally *smell* the difference in the water that came out of our suburban tap. So as a precaution, we decided not to drink it—we used bottled water for making coffee, even for boiling pasta.

Enter Blitz, our Rhodesian Ridgeback puppy. As he grew through puppyhood, his coat was a disappointment—blotchy and tweedy, it always looked like he had just come in out of the rain. We chalked it up to genetics, and thought little more about it until a year later, when we acquired Diva, another Ridgeback from the same breeder. After a month or so at our house, Diva's coat turned the same ugly color as Blitz's. When we went to visit her littermate brother outside of Philadelphia, we were shocked to see the disparity in their coats: His was a gleaming, deep red; hers was a speckled, dull tweed.

We racked our brains for possible environmental causes. Both dogs ate a hormone- and pesticide-free raw meat diet. We don't use chemicals in our yard, and neither do most of our neighbors. The only possible culprit was the water.

So we switched from tap water to bottled spring water, and within weeks, the difference was miraculous. Each dog's coat was transformed into what it should have been all along. Diva's became a rich red to match her brother's; Blitz's was a warm honey-tinged wheaten that we had never seen before.

While I didn't perform a double-blind study to confirm my hunch, my dogs never again drank tap water and their ugly coats never returned. And that experience drove home an important lesson: If something is not good enough for you, it's not good enough for your dog.

Bottled natural spring water is best for your dog. Some holistic practitioners recommend distilled water; others consider it to be "dead," stripped of the energy found in spring water. If your budget or lifestyle preclude giving your dog spring water, filter your tap water to try and screen out as many impurities and contaminants as possible.

20 The Holistic Dog Book

Even if you are committed to an all-kibble diet, resist the temptation to believe that everything your dog needs is contained in that brightly colored bag. Here are some things you can do to make commercial food more healthful.

Add Fresh Ingredients

Just because you're feeding kibble doesn't mean you can't supplement with healthy, whole foods. Pulp some veggies in the food processor and pour them over your dog's food. (Anything but raw onions, that is. They are toxic to dogs.) Cook some chicken and brown rice and mix it in. Just be sure to subtract an equivalent amount of kibble if you are adding significantly more calories.

Add Enzymes

One of the biggest drawbacks of overprocessed foods—whether for humans or animals—is that they are stripped of the naturally occurring enzymes that help in the process of digestion and in aiding the body to assimilate nutrients in the food. Adding an enzymatic supplement, such as Prozyme, to your dog's kibble can help increase the absorption of its nutrients.

Switch Brands

Although some dogs have sensitive stomachs and delicate digestive systems, the vast majority of canines can gradually switch from one brand of food to another over several days and be no worse for wear. Switching brands has two advantages: First, it gives your dog that diversity of nutritional intake that is a little closer to the wolf model mentioned earlier in the chapter; second, it ensures that you are not wedded to one company's formula. By varying the brands, you're increasing the chances that your dog is getting as balanced a diet as possible.

How often should you switch? I know one person who changes brands every few days; another who switches foods every three months. The best answer is to use your own judgment, and take into consideration the habits of your own dog when making your decision.

Add Supplements

These can include nutritional “pluses.” Some to consider:

Apple cider vinegar. This common pantry item is a health booster for you and your dog alike. It kills germs and bacteria, flushes out toxins, oxygenates the blood and boosts fertility. Apple cider vinegar—*not* white distilled vinegar—can be added to your dog’s water bowl daily; just a teaspoon or two will do. (Make sure your dog does not find the taste offensive, and will still drink his water.) Buy an organic brand that contains “the Mother”—a cloudy weblike sediment that indicates the vinegar has not been overprocessed and depleted of vital minerals and enzymes.

Kelp. This food supplement contains important trace minerals and amino acids. It helps clear up dry skin and dull coats, and aids thyroid function, making it a good choice for dogs with hypothyroidism. Make sure the kelp is deep-ocean harvested, so it is as pure as possible. Supplement with kelp about twice a week—don’t overdo it.

Vitamin C. Dogs can and do manufacture their own vitamin C, which helps boost the immune system, but their stores of this antioxidant can be depleted rapidly by stress and environmental toxins. Most experts suggest supplementing with doses “to bowel tolerance”—that is, build up slowly and if the dog develops diarrhea, lower the dose you are feeding. Generally, most large dogs can handle a minimum of 500 mg a day.

Vitamin E. Another powerful antioxidant, vitamin E helps deactivate

A PANTRY MUST-HAVE

Pumpkins aren’t just for Halloween. In fact, you should keep a supply of canned pumpkin on your kitchen shelf year-round. (Be sure to buy only *plain* pumpkin, *not* pumpkin pie mix, which has added sweeteners and spices.) Pumpkin is a very effective and natural remedy for diarrhea. It is also a very helpful antidote for constipation. Most dogs like the taste, and it can be added to your dog’s food or given alone. Because pumpkin contains a lot of fiber, it is very filling and can be given to a dieting dog to create a feeling of fullness.

22 The Holistic Dog Book

free radicals that can trigger cell damage that leads to heart disease and cancer. Figure 200 IUs of this fat-soluble vitamin to be an appropriate daily dose for a large dog. More is not better, so do not overdose.

Yogurt. There is some debate about whether it is a good idea to include dairy products in a canine diet, because dogs have difficulty digesting lactose. So while you don't want to overdo it, an occasional dollop of yogurt containing active cultures such as acidophilus will help with intestinal functioning.