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A monthly guide to natural dog care and training

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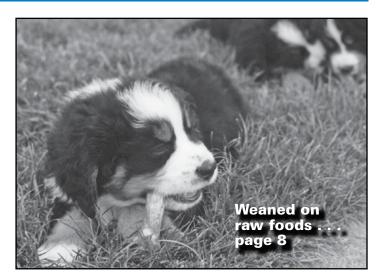
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Wake-up Call

Pet food can't be taken for granted.

BY NANCY KERNS

irst, let me express my deep sympathy for everyone whose pets were recently exposed to toxins in foods containing a contaminated ingredient. I'm sure that every animal lover can empathize with your pain and concern for your canine and feline companions.

If there *can* be an upside to this disaster. it's that the event is already shaking the pet food industry to its core. America woke up, started looking at its pet food labels, and had a few questions. Every pet food company in this country has been buried in calls, letters, and e-mails from pet owners who wanted to know how the disaster had happened – and what the makers of their dogs' foods were doing to prevent it from happening again. That's a *good* thing.

Another positive result is that the industry seems to be taking this event very seriously and very personally (as well they should). I guarantee you that every pet food company executive alive has spent many hours of the past month in meetings about improving their company's ingredient sourcing and testing, manufacturing practices, customer relations, product liability, and more.

I'll have an amazing opportunity to eavesdrop on the conversation of some of these executives as they gather in mid-April at Petfood Forum, an annual industry event sponsored by *Petfood Industry* magazine and its publisher, Watt Publishing. The editor of Petfood Industry, Tim Phillips, DVM, invited me to speak at the conference about "scrutinizing super-premium pet foods." After 10 years of criticizing the pet food industry, I feel a little bit like a hen invited to a foxhouse, if there is such a thing. I'm terribly excited.

Like the pet food companies, we've also received lots of calls and letters about the recent recall. I've printed a sampling of the letters (and my responses) on pages 22-23. I hope that this exchange, and my article on page 3 (about what you can do to help protect your pets from future disasters), will help answer some of your questions.

Of perhaps even more use to owners who may have lost faith in the pet food industry is the second installment of our series on homeprepared diets, which appears on page 8.

In the first article, published in the April issue, author Mary Straus presented an overview on home-prepared diets - everything you ought to understand about making your dog's food before actually feeding the stuff to your dog. This month, she gets down to the nitty-gritty regarding diets that include raw meaty bones. Next month, she'll discussed cooked diets, for those owners not yet ready to "go raw." And in the July issue, her topic is "the reality of home feeding." Straus will describe how different people go about building their dogs' diets in different ways, and offer tips on finding economical sources of nutritious ingredients and ways to

> limit preparation time. husband. But another disaster might change all that.

Like a lot of you, I'm not quite ready to cook more for the dog than I do for my

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Pet Food Disaster

How to protect your dog from being a victim of defective foods.

BY NANCY KERNS

éjà vu all over again ... In October of 2004 we published an article ("When Foods Go Bad") that discussed how owners could protect their pets from serious harm from contaminated or toxin-adulterated food. It outlined the lessons learned from the three previous commercial pet food disasters: the 1995 event involving vomitoxin in Nature's Recipe dry foods; the 1998 aflatoxin event involving dry foods made by Doane Products; and the still-unidentified problem that sickened and killed dogs who ate certain lots of Go! Natural dry food in 2003.

Since then, there have been two more well-publicized pet food recalls: the aflatoxin poisonings caused by some dry foods made by Diamond Pet Food in late 2005, and the very recent event involving canned *and* at least one dry food made with (in the leading theory) contaminated wheat gluten.

These events – the most recent one in particular – have given us all quite a bit to

think about, from the local (how did my pet store respond to news of the recall?) to the global (how does the global economy affect us?); from the specific (what foods are safe to buy for my dog right now?) to the general (what types of food pose the greatest risk to their consumers?).

Lessons learned

Past recalls have taught us the following:

■ You should always store dry food in the bag it came in. This helps keep the food fresh, but more importantly, keeps the date/code information with the food. If a problem arises, this information will be critical to a proper response and/or investigation. If you feed canned food, rinse each can and keep it for at least a week or two.

■ Don't feed your dog any food that looks or smells bad or abnormal. If a dry food is covered with green, hairy structures, it's moldy and should not be fed! Contact the



In most cases, the amount of damage done by defective pet food depends upon how much of the food the animal ate. Pay attention if your dog is reluctant to eat, refuses his food, or becomes ill, and stop feeding that type of food.

What you can do . . .

- Consider your dog's food as a potential cause any time your dog becomes ill, is reluctant to eat his food, or refuses to eat the food. Stop feeding the suspected food; offer your dog another food, made by another company.
- Contact your veterinarian as soon as possible.
- Report any suspected product injury to the maker of the food and appropriate authorities.
 The Whole Dog Journal

food company or your local retailer and ask for a replacement. Usually, you will be asked to bring the food to the store from which it was purchased for a replacement. It helps if you retained the receipt, proving it was purchased from that store.

• Owners should always be alert to the response of their dogs to their food. Vomiting or diarrhea are the most obvious signs of a problem with the food, but any changes in your dog's elimination and consumption patterns changes are notable. If we've said it once, we've said it a thousand times: write down and date any odd response or change in a notebook or on your calendar. Your memory is not as good as a written record.

■ With all but perennially fussy dogs, it's significant when a dog declines or is reluctant to eat a food. This is important every time you open a new bag or can, but is also significant if the dog becomes increasingly reluctant the deeper you reach into the bag of food. In past cases where foods sickened

Problems With Reporting System

As tens of thousands of frightened and angry pet owners learned recently, contacting a pet food company to report a suspected problem with its products – or to ask what they can tell you about the suspected problem – can be an exercise in pure frustration, especially after suspicion has blossomed into confirmation. It's important, however, to persist in any way you can to report any problem that your vet agrees may be related to your dog's food. When a company receives several reports of illness in animals eating its products, it must investigate.

■ Look on the label of your dog's food. You should see a toll-free number to call. (Not all companies list a number; they may list only an address, forcing you to track down the number through directory assistance.) Contact the company, date/code information from the product in hand. Company representatives will have a difficult time helping you, or recording information that can help others, if they cannot tie the trouble your pet is having to a specific lot of their product.

■ Be prepared to give contact information for your veterinarian. The company rep should also ask for information about your dog and how to reach you.

■ Ask whether the product is manufactured in the company's own plant or if it is made by a contract manufacturer. If they do use a co-packer, press them for assurance that the co-packer will be notified about your dog's problem.

■ Ask what sort of follow-up you should expect. Ideally, a company representative would contact you to let you know whether company tests on the food have revealed any problem, or whether they had received other reports of suspected product injury.

■ If the defect is serious and/or the problem affects a high volume of food, the company's phone lines may become overwhelmed and the sheer volume of calls may make it very difficult for its staff to respond as well as they should.

REPORTING TO GOVERNMENT REGULATORS

Your veterinarian should also report any suspected product injury to the "state veterinarian" in your state. This is the official who oversees animal health issues in each state; notifying the state veterinarian can help ensure the suspected product injury will be investigated.

Finding contact information can be a challenge if you don't use the Internet (a list of the state vets can be seen at aphis.usda.gov/vs/sregs/official.html). Most states locate their state veterinarians in their departments of agriculture; others are in state regulatory offices, boards or bureaus of animal health, or other offices.

Also, be sure to report the suspected product injury to the Food and Drug Administration (FDA). Again, this is harder than it should be. While there is a form on the FDA's Center for Veterinary Medicine website that enables an owner to fill out, print, and mail to the FDA to report an adverse event caused by veterinary medicines, there is no way to file an online report for defective pet foods. Instead, you must call the FDA's district office consumer complaint coordinator for your geographic area. These numbers are listed online (fda. gov/opacom/backgrounders/complain.html), but may be difficult to track down via telephone directory service.

At the risk of sounding repetitive, it may be very difficult to get through to the appropriate authorities. In a large-scale event, their phone lines may be completely overwhelmed. In this case, you'll undoubtedly be able to receive some information from the media, and have ample opportunity to add your report as the authorities' ability to gather information improves. Keep in mind that it's the earliest reports of trouble that are the most critical for officials to receive; no investigation or recall can start until they are made aware of a problem. animals, the individuals who ate the most of the bad food fared the worst . . .

■ ... so, stop feeding the food if your dog won't eat it, or if he becomes very reluctant to eat it, and contact its maker. Give the company the date/code information, ask specifically if the company has received any *other* reports about that food recently, and ask what the company will do for you.

■ The same goes, of course, if your dog becomes ill after eating a food. Stop feeding the food. Contact your veterinarian to discuss your dog's symptoms, and make sure the vet makes a note of your discussion in your dog's file. Get any sick dog to the veterinarian ASAP!

■ Following a bad reaction to one food, do provide your dog with another food, from a different company, while you monitor his response. If possible, feed him a product you can confirm is made (not just sold) by a different manufacturer.

By the way, we don't recommend feeding a combination of commercial foods at the same time. In case of a reaction, you may be confused as to which food caused the problem, and will have to suspect both products. (See "Switch, But Don't Mix," June 2004 for more information.)

■ Contact the maker of the suspect food to discuss, date/code information in hand. Be prepared to give the company your veterinarian's contact information, also.

When you contact the manufacturer, persist until you are satisfied that the company representative will record your complaint (including your dog's symptoms and the date/code information from the food).

If you feel brushed off, ask to speak to the company's veterinarian, nutritionist, or customer service supervisor – anyone who can discuss the issue with you further. A over-casual or defensive response from the company, in our opinion, is grounds for a "divorce." We would avoid that company's products in the future. There are too many good foods on the market today to pledge your undying loyalty to a company that can't wholeheartedly support its products.

■ Ask your veterinarian to report the suspected product injury to his or her state veterinarian and the FDA. Please note

that this might take some real effort! See "Problems With Reporting System," left.

You get what you pay for

During the Menu Foods/wet foods/wheat gluten incident, we quickly lost patience when hearing owners who said, "We thought we were paying for the best foods available for our pets, and now this!" If an ingredient is needed to make other ingredients resemble meat, when meat could (and should) be used instead, you're not dealing with a top-quality food.

One of our most dearly held principles of dog food selection is that whole food ingredients are more desirable than food "fragments." This means wheat, yes; wheat gluten, wheat mill run, wheat bran, no! Chicken meal, yes; chicken by-product meal, no! This is for two main reasons.

First, unprocessed foods enjoy less exposure to potentially harmful agents in the course of processing, storage, and transport. Second, fresh and minimally processed foods are more nutritious than ingredients that are several operations (and perhaps many months and many miles) from harvest. Processing reduces the vitamin content of many foods, and can destroy any unique nutrient properties they may contain, such as antioxidants, flavonoids, and enzymes.

In some cases, the fractions used in low-cost pet food are truly "fillers," and comprised of the part of a raw food that human food manufacturers have little use for; peanut hulls and cereal fines come to mind here. In other cases, pet food formulators utilize certain fractions to provide just the right amount of a needed nutrient or attribute. Tomato pomace and beet pulp are examples of truly functional fragments.

We're also sticklers for the use of whole meats from named species of animals (i.e., chicken rather than poultry; beef rather than "meat") and meals made from whole meats from named species (chicken meal rather than poultry meal). All animal proteins (even by-products, which tend to be of lower quality than muscle meats) have more to offer dogs (and especially cats) than plant-derived proteins, especially wheat gluten and corn gluten (a case can be made for a certain amount of rice gluten).

We can't think of any pet food recall in the past 10 years that was due to a problem with the meat (or meat by-products, to be fair) in the food. If one arises, however, we'll bet the farm that the animal proteins in question will be low-cost by-products, rather than high-priced muscle meats.

In our opinion, the presence of an inexpensive fraction or by-product high on the list of a pet food's ingredients should warn you that the maker of the food has cut a corner. If the food contains several fractions or inexpensive ingredients, its maker is definitely utilizing "least-cost formulation," as in, "What's the cheapest way to make a food and still meet these

About the One Recalled Food That Was on Our "Top Foods" List

Only one of the foods that was implicated in the most recent pet food recall has ever been on one of WDJ's "top foods" lists. We put Nutro Product's "Nutro Natural Choice Ultra" on our "top wet food list" in 2006, even though it was a weaker candidate than many of the other highlighted foods, containing wheat gluten (fourth on the ingredients list) in greater amounts than its first carbohydrate (rice, fifth on the ingredients list).

On our 2007 list, we highlighted another Nutro product in-

stead, "Nutro Natural Choice Chicken, Rice, and Oatmeal," which does not contain wheat gluten. It does contain *rice* gluten, but this item is farther down the list of ingredients (seventh), behind two (whole) carbohydrate sources, rice and oatmeal. We noted at that time (March 2007) that the Nutro product is not as good as some on our list, but is worlds better than most foods available in grocery stores.

The suspected source of contamina-

tion in the recent dog food recall is an ingredient that really doesn't *have* to be in dog food, and in fact, is *not* present in the best foods. Wheat gluten, the protein-containing portion of the wheat grain, is used in wet pet foods to boost the protein content of the food. It also helps thicken and bind together the "meat analogue" – the mechanically formed "chunks" or "slices" of material that resemble chunks or slices of meat (but may be comprised of other animal tissues, fat, grains, and/or other food "fractions").

In our dry and wet dog food selection criteria, we suggest that owners seek out products that contain whole grains and other whole foods, and avoid products that contain so-called fractions – ingredients that result from the processing of a whole food, and that represent just one part of the original food item. Often, this fraction is the part of the food that is not used (or is less valuable for use) in human food production.

However, we don't disqualify foods with grain or vegetable fractions from our "approved foods" lists. Here's what we say about them in our list of food selection criteria: "We look for [products containing] whole grains and vegetables. That said, some grains and vegetables have valuable constituents that accomplish specific tasks in a dog food formula. We don't get too excited about one vegetable fragment and one grain by-product on the ingredients panel. Our tolerance diminishes in direct proportion to the *number* of fragments and by-products contained in a food and the prominence on a label; the more there are, and/or the higher they appear on the ingredients list, the lower-quality the food."

We do try to present a range of products on our "top foods" lists – products that range from "as good as a commercial food can possibly get" down to "much better than most grocery store foods." The recalled Nutro product falls in the latter range, in our opinion.

So, that's our excuse.

Understand, however, one should not expect that our selections – or *any* commercial foods, regardless of price, quality, or organic content – are immune from the potential for manufacturing or ingredient defects. Mistakes and oversights happen in every industry, and in every food production plant. But there *are* ways to tilt the odds of avoiding defective products in your (and your dog's) favor; see the main text, above.



nutrient levels?" The more fractions and other inexpensive ingredients a food contains, and the lower a product's price, the less confidence you should have in its quality.

Of course, pet foods that meet all of our selection criteria tend to be far more expensive than grocery store brands. You can't buy filet mignon at a hamburger price, and you can't expect top-quality ingredients to go into a product that retails for pennies per pound.

Hallmarks of quality

Buying products that contain whole food ingredients (and do not contain by-products) is one way consumers can tilt the odds in their favor. Another way is to choose products sold by companies that readily share information about their products with consumers.

This has been a long time coming, but it's a trend that is picking up steam (at least among the companies that aspire to the "premium foods" segment of the market). When WDJ began publishing in 1998, not a single pet food company would tell us where their products were made. Today, many disclose that information and much more. Some disclose the origin of their ingredients, or offer certification that confirms the quality (and traceability) of their ingredients.

Still others are eager to discuss the quality controls they exert on their manufacturing process, including in-person supervision of co-packers, independent audits, and certification from outside inspectors such as the American Institute of Baking.

We understand all the various justifications that pet food companies have for *not* disclosing information about their ingredients or manufacture. But the advantages of nondisclosure are all theirs.

Too much disclosure is a risk in a competitive market, but truthful information about ingredient quality and good manufacturing practices helps pet owners discern and appreciate the differences between products – and win their long-term loyalty.

Ye of lost faith

Given the scope and severity of the latest pet food recall, we don't blame dog owners who are considering feeding their canine companions a home-prepared diet, due to anxiety over the safety of commercial food. We support the impulse, though we do feel there are *better* reasons to feed a home-prepared diet (for example, we strongly feel that a well-formulated diet of fresh and varied ingredients is healthier for dogs). *Don't* just jump into the practice with a recipe off the Internet, however; these diets require a little homework.

Last month, we began a series of articles on how to formulate and prepare a complete and balanced diet for dogs using fresh, species-appropriate ingredients. The series will discuss cooked and raw diets, those that contain bone and those that do not, and those that contain grains as well as grain-free diets. The second installment starts on page 8, and the series will continue through the July issue.

Nancy Kerns is Editor of WDJ.

Should You Boycott (Fill in the Blank)? It Depends

In 2003, there was another well-publicized pet food recall involving a product made by a contract manufacturer. The product in that case was a food that was on WDJ's "top dry foods" list. Many of our readers felt the food should be stricken from our lists forever; some thought that the other products sold by the same company should be taken off our lists, too. Some even thought that every product made by the co-packer should be taken off of our lists in perpetuity.

We don't think it's useful to boycott every food from a company whose name was on the label of a defective product, or every food that comes out of a plant that produced a "bad" food. From what we've observed, nobody checks as well for aflatoxin in its corn supplies as a company that lost millions due to a past event where aflatoxin was found in its products. One costly disaster *should* "vaccinate" all responsible parties forever.

We would, however, enthusiastically endorse a boycott of products from any company that had anything to do with a *second* occurrence of a life-threatening defect.

Bad things can happen to even the best foods – once. While good management practices and quality control *should* prevent *all* disasters, statistically speaking, stuff happens. If stuff happens more than once, it's a sign that the company's management failed to take appropriate steps to remediate its quality control practices, and may fail again.

That said, another factor to consider, post-disaster, is the response to pet owners made by the parties involved. A company that takes responsibility, and responds to pet owners quickly and generously would earn our repeat business. In contrast, it would be easy to walk away from products made by a company that blamed others, refused responsibility, or failed to compensate owners promptly for their losses (to the extent this is even possible when you are talking about the health of a beloved companion).

Here's another unpleasant factor: In cases where a product had a clear defect, one that caused readily proven injuries, the consumer stands a fair chance of receiving some compensation. The owners of dogs who become ill after eating foods that are found to contain aflatoxin will have their vet bills paid. But the owners of dogs who became ill after eating foods that do not demonstrate an undeniably harmful defect may be hung out to dry.

In past articles, we've discussed the relative merits and disadvantages of pet food companies using their own facilities to make their own products, as contrasted with using a co-packer. We're aware of certain advantages to using contract manufacturers; many of the best-quality foods on our "top foods" lists are made in relatively small batches by co-packers for small companies that could never afford their own plants. However, we have not previously appreciated the potential risk of responsibility for the product's safety slipping through the cracks between a food company and its co-packer.

We wonder: In the case of the wet pet diets made by Menu Foods, who will ultimately take responsibility for the vet bills and other losses suffered by consumers? It would be smart – and ethical – for the companies whose names were on the labels of the toxic pet foods to step up and pay the owners' vet bills, at the very least.

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A Raw Deal

Formulate and prepare a canine diet that includes raw meaty bones.

BY MARY STRAUS

ountless dog owners have witnessed the benefits of feeding their dogs a home-prepared diet, such as cleaner teeth, brighter eyes, thicker and glossier coats, more lean muscle and less body fat, and better energy level – hyper dogs often become calmer, while couch potatoes may become more energetic.

In last month's article, "Have Dinner In," we discussed those benefits at length and introduced the fact that there are many different styles of homemade diets. In this article, we'll explain how to formulate a raw diet that includes bones – perhaps the most commonly used "evolutionary" diet for dogs. In a later installment, we'll discuss cooked diets.

When I first began to consider feeding my dogs a homemade diet, one of my biggest concerns was the fact that I am not comfortable in the kitchen. I don't really cook for myself, so the thought of preparing meals for my dogs was overwhelming. Once I started, though, I was happy to discover that it was not as much trouble as I had feared – in fact, it was quite rewarding. Dogs are usually so appreciative of everything we offer that it makes meal time a real joy. I feed a great deal of variety, yet my dog Piglet tells me that each and every meal I put in front of her is her absolute favorite, and she devours it, practically licking the finish off the bowl (I call it "checking for molecules"). How can you resist something that makes your dog so happy?

Raw meaty bones

Most of us who feed a raw diet to our dogs include whole raw meaty bones (RMBs), animal parts that are at least half meat but also include bone that is fully (or mostly) consumed. This is in contrast to recreational bones, such as knuckle and marrow bones, which usually have little meat and where the bone itself is not eaten.

RMBs that are commonly fed include chicken necks, backs, and leg quarters; turkey necks; lamb breast and necks; pork breast (riblets) and necks; and canned fish with bones, such as jack mackerel, pink salmon, and sardines (preferably packed in water rather than oil). Raw fish can also be fed, though some may harbor parasites (freshwater fish are more likely to have

What you can do . . .

- Feed a wide variety of different foods from different sources in appropriate proportions.
- Consider getting an extra freezer that will allow you to buy food in bulk, for more variety and better prices.
- Look for local groups where people band together to buy directly from vendors.
- Do what works for your dog, and what you're comfortable with.

It's okay to feed ground food if you or your dogs have a problem with whole bones.



problems than saltwater fish). Never feed raw salmon or trout from the Pacific Northwest (California to Alaska), as this can cause a fatal disease called *salmon poisoning* in dogs. Cooking makes salmon safe to eat; canned fish is cooked, so there's no concern about salmon poisoning from canned salmon.

It's not always easy to find RMBs. Ask your local meat manager or butcher; they can often order them for you, though you may have to buy a case at a time. (Most of us who feed our dogs a raw diet have purchased a separate freezer to help store the food!) Ethnic markets often have a wider selection than grocery stores do. There are a number of raw food co-ops and groups who share information and buy in quantity directly from vendors, both to lower the cost and to gain access to a wider variety of foods. If there is no group in your area, consider starting one.



Tomo pulls meat and other nutritious tissues off a beef leg. Many fans of raw diets form clubs to buy ingredients in bulk and share unexpected wealth, like this meat from a rancher with an unsellable dead cow. *Photo by and courtesy of Ginny Wilken.*

You can keep costs down by buying in bulk, looking for sales, and buying meat that is close to its expiration date and marked down. It helps to develop a relationship with your suppliers, who may be willing to save bargain-priced meats for you.

RMBs should make up 30 to 50 percent (one third to one half) of the total diet, or possibly a little more if the parts you feed have a great deal more meat than bone (e.g., whole chickens or rabbits). The natural diet of the wolf in the wild contains 15 percent bone or less, based on the amount of edible bone in the large prey animals they feed upon. While a reasonable amount of raw bone won't harm an adult dog, more than 15 percent is not needed and reduces the amount of other valuable foods that can be fed.

Too much bone can also cause constipation, and the excess calcium can block the absorption of certain minerals. The stools of raw fed dogs are naturally smaller and harder than those fed commercial foods, and often turn white and crumble to dust after a few days. If the stools come out white and crumbly, or if your dog has to strain to eliminate feces, you should reduce the amount of bone in his diet.

Most dogs do fine with raw meaty bones, but a few may have problems, including choking and (rarely) broken teeth on the hardest bones. In my experience, turkey parts are associated with the most problems, though many dogs eat them regularly with no trouble.

If you are concerned about feeding whole RMBs, you can buy them in ground form or grind them yourself. You can buy a grinder for \$100 to \$150 that can handle most chicken parts and possibly a few other kinds of bones. More expensive grinders may be able to handle bones that are somewhat harder, but they all have a similar chute size, which makes it difficult to fit in larger parts. Note that none of the makers of these grinders claim their products have the ability to grind bones.

Another option that I use for my older dogs, whose teeth are too worn to be able to chew bones properly, is to cut up the parts into bite-sized pieces using Joyce Chen kitchen scissors. These scissors handle chicken parts and lamb breast easily (except for the hardest end of the ribs).

For harder bones, such as turkey, pork, and lamb bones, you can use a hatchet or a cleaver that you hit with a mallet (which is safer than swinging the cleaver). While

Dangers of Raw Meat?

Many people are concerned about the dangers of bacteria and parasites when feeding raw meat, eggs, and dairy to our dogs. Remember that wolves and dogs evolved to be able to cope with bacteria found in carrion and meat that has been buried for long periods. Their digestive systems are designed to move food through quickly, before bacteria has a chance to proliferate or cause problems. Bacteria such as salmonella are found in the digestive systems of as many as 40 percent of healthy dogs, including those fed only commercial foods. While these bacteria can affect dogs, it would be unusual for a healthy dog to have any problems with the bacteria found in raw meat and other products considered fit for human consumption.

There are a few parasites that might be a cause for concern, though freezing meat for a period of three weeks will destroy most of them (freezing has no effect on bacteria).

You may want to consider feeding a cooked diet to your dog if you're concerned about the possibility of problems from raw meat, your dog's immune system is compromised due to illness or medication, or your dog just doesn't seem to do well on a raw diet. See next month's article for more information on cooked diets.

ground and cut up RMBs will not provide the same chewing pleasure or dental benefits, many people who feed ground RMBs report that their dogs' teeth stay cleaner than when they fed packaged foods.

You can also feed larger, harder bones with a lot of meat on them; just take the bone away when your dog is done removing the meat. I have done this with beef rib and neck bones; people with large dogs use bigger bones. There is still some danger of broken teeth, but less than if you allow the dog to continue to chew on the bone after he's eaten the meat (bones dry out and become harder over time).

Remember that if you feed a diet that includes 30 to 50 percent RMBs, there is no need to add calcium supplements.

Organ meat

Organs are an important part of a raw diet. **Liver** and **kidney** in particular are nutrient-dense and provide a great deal of nutritional value. These foods should make up 5 to 10 percent of the total diet. Note that they may cause loose stools if too much is fed at one time. It's better to feed smaller amounts daily or every other day than to feed larger amounts once or twice a week.

Heart is nutritionally more like muscle meat than organ meat, but it is rich in taurine and other nutrients. If possible, make heart another 5 to 10 percent of the diet. More can be fed; just remember that too much can lead to loose stools in some dogs. **Other organs**, such as spleen, eyeballs, sweetbreads (pancreas and thymus glands), brain, etc. are nutritious and can be added to the diet in small amounts.

Muscle meat, eggs, and more

The rest of the diet will be made up of muscle meat and eggs, along with dairy products and other healthy foods.

Muscle meat consists of all meat that is not considered organ meat. Feed muscle meat from a variety of sources, such as beef, lamb, pork, chicken, and turkey. Muscle meat can be fed ground or in chunks. If you have difficulty feeding much variety in your raw meaty bones, you can make up for it in this category. For example, if your raw meaty bones are mostly poultry, then you can feed beef, lamb, and pork muscle meat. Never feed more than half the total diet from a single protein source, such as chicken.

Eggs are an excellent source of nutrition. They can be fed raw or cooked; cooking actually makes the whites more digestible. You can feed as many eggs as you want, as long as you still feed lots of variety.

Dairy products, such as yogurt, kefir, and cottage cheese, are well tolerated by most dogs and offer good nutritional value. Yogurt and kefir have the added advantage of providing beneficial bacteria (probiotics). Dairy fat is a source of medium-chain triglycerides, a form of fat that is easier to digest for dogs with pancreatic disorders and other forms of fat intolerance. Green tripe, which is the stomach lining from cows and other animals, is an excellent food for dogs, but be warned that it smells awful – at least to us; dogs love it. Nutritionally, it is similar to muscle meat. Green tripe can be purchased only from sources that sell food for dogs; it cannot be sold for human consumption. The tripe that you find in your grocery store has been bleached and treated and does not provide the same nutritional value as green tripe.

It is also fine to feed **healthy leftovers** (food you would eat yourself, not the scraps you would throw away) to your dog as long as they are not too great a percentage of the diet -10 to 20 percent of the diet should be okay.

Vegetables, fruits, and grains

Feeding vegetables, fruits, and grains is optional, as dogs do not require carbohydrates in their diet. Even though these foods would make up a tiny percentage of the natural diet, they provide some nutritional value, especially trace minerals and phytonutrients from leafy green vegetables.

If you feed **veggies**, they need to be either cooked or pureed in a food processor, juicer, or blender. Whole, raw veggies are not harmful, but their cell walls are not broken down during digestion so they provide little nutritional value to dogs. Most veggies have few calories, so they should be added on top of the amount of food you feed, rather than calculating them as a percentage of the diet.

Good veggies to feed include broccoli, cauliflower, brussels sprouts, cabbage, all kinds of leafy greens, celery, cucumber, bell peppers, zucchini and other summer squashes, carrots, and more. You can mix up a large batch and then freeze them in ice cube trays or muffin tins for easy mealsized portions.

Steaming is the best method to cook fresh or frozen veggies. You can add the water used to steam veggies to the meal, as it will contain the minerals that were leached out during cooking. Small amounts of leftover meat juices, drippings, sauces, and gravy will make this into a savory soup.

Some dogs enjoy vegetables, but others refuse to eat them no matter how they're prepared. If your dog won't eat vegetables, or you prefer not to feed them, you may want to add a blend of kelp and alfalfa, or a green food supplement (more on this below).

Sample Diets

Remember that it's not necessary to feed a balanced diet every day, as long as the diet is balanced over time. For example, it would be fine to feed eggs one day alternating with organ meat the next, rather than feeding both foods every day. Or you might feed just muscle meat one day, with a mix of organ meat, eggs, and dairy the next. Many raw feeders feed two meals a day: one meal of raw meaty bones and one meal of everything else.

Following are sample diets for a 40-pound dog. Remember that amounts will vary depending on the individual dog.

SAMPLE DAILY RAW DIET

- 6 to 8 ounces raw meaty bones (may include canned fish with bones once or twice a week)
- 4 to 6 ounces muscle meat/heart/tripe/leftovers
- 1 to 2 ounces liver or kidney
- 1 to 2 eggs (daily or every other day)
- spoonful of yogurt or cottage cheese
- 1 to 4 ounces pureed or cooked vegetables (optional)

SAMPLE DAILY RAW DIET USING BRAVO! COMMERCIAL DIET BLENDS:

- 7 to 14 ounces Bravo! Original Formula Blends (may replace up to half with canned fish with bones once or twice a week)
- 2 to 4 ounces muscle meat/heart/tripe/leftovers/Bravo! Boneless Meats
- ¹/₂ to 1 ounce liver or kidney, or 1 to 2 ounces Bravo! Organs (daily or every other day)
- 1 or 2 eggs (daily or every other day)
- spoonful of yogurt or cottage cheese

SAMPLE DAILY SUPPLEMENTS (OPTIONAL)

- 1 or 2 fish oil capsules
- 200 IUs vitamin E (required at least a couple of times a week if giving oils)
- $\frac{1}{4}$ tsp each kelp and alfalfa, or $\frac{1}{4}$ to $\frac{1}{2}$ tsp sea blend
- 500-1,000 mg vitamin C once or twice a day
- vitamin B-50 complex once or twice a day
- cod liver oil in an amount yielding around 100 IUs vitamin D
- $\frac{1}{2}$ teaspoon organic apple cider vinegar mixed with $\frac{1}{2}$ teaspoon raw honey
- 1 clove fresh crushed raw garlic
- 1-2 tablespoons nutritional yeast

Fruits such as apples, bananas, papayas, mangoes, berries, and melon can be added to the diet in small amounts. Don't feed grapes or raisins, which can cause kidney damage in some dogs.

Grains, legumes, and starchy veggies, such as potatoes, sweet potatoes, and winter squashes, are a source of inexpensive calories but don't provide as much nutritional value to dogs as foods from animal sources do. These starchy foods need to be cooked in order to be properly digested by dogs.

Many health problems can be caused or exacerbated by grains and other starchy carbohydrates. If your dog is overweight or suffers from allergies, arthritis, seizures, IBD, or other digestive disorders, you may want to try feeding a diet without these foods to see if your dog improves. If you decide to feed them, it's best if they make up no more than 20 percent of the diet.

Potatoes (not sweet potatoes), tomatoes, peppers (all kinds), and eggplant may aggravate arthritis pain, but are otherwise fine to feed. Grains and starchy veggies may also aggravate arthritis and other forms of inflammation.

Fresh food supplements

Healthy dogs that are fed a wide variety of appropriate foods should have no need of supplements, but there are several fresh food supplements that may provide additional benefits when added in small amounts: • Fish body oil, such as salmon oil, provides beneficial omega-3 fatty acids that help to reduce inflammation and regulate the immune system. However, you must add vitamin E to the dog's diet whenever you supplement with oils; otherwise fish oils can induce a relative deficiency of vitamin E.

• Sea blend, green blend, or kelp/alfalfa mixture supplies trace minerals. These are especially good to add if you don't feed green veggies.

• Organic (unpasteurized) apple cider vinegar provides some trace minerals.

• Raw honey has antibacterial properties and offers a variety of nutritional benefits.

• Fresh crushed garlic has antiinflammatory and antibacterial properties, as well as other benefits, and may help to repel fleas. Give no more than 1 small clove (one small portion of the bulb) per 20 pounds of body weight daily, as high doses can cause anemia.

• Ginger is good for digestion and may help with inflammation.

• Nutritional yeast is an excellent source of B vitamins, along with trace minerals.

• Dark molasses can also be used in small amounts as a source of trace minerals.

More information on supplements will be provided in the upcoming article on cooked diets.

Prey model

There is a style of raw feeding called "prey model," that advocates feeding a diet based on whole prey and excludes anything else, such as dairy, vegetables, fruit, or supplements. This is based on a desire to mimic the diet of the wolf in the wild. The true prey model involves feeding large chunks of meat along with small amounts of bone, organs, and eggs. It is certainly possible to feed a good diet using this model, but there are some factors that should be taken into consideration.

Feeding parts is not the same as feeding



Eleven-year-old Tomo enjoys a "prey model" diet that includes raw meat, bones, and organs (including liver, above) from a wide variety of species.

whole prey. When wolves in the wild eat a deer, they consume almost everything except the stomach contents and some of the hardest bones from the skull and legs. That includes not only the muscle meat, bones, liver, and heart, but the eyes, tongue, brain, blood, intestines, kidneys, lungs, and various other organs. If you are not feeding actual whole prey, you may be missing parts of the diet that include important nutrients.

In addition, whole, large, grass-fed prey such as deer, moose, and bison have different nutrient profiles than animals that are farm-raised, and smaller animals such as chickens. The nutrient content of animals raised in various ways (wild animals, grain-fed animals, animals raised on grass from depleted soils) also varies widely. Even if you feed whole rabbits or chickens, the nutrition will not match that of the large ruminants that our dogs evolved to eat.

While some people swear by prey model diets, I believe there is no benefit to be gained by leaving healthy foods such as dairy and vegetables out of the diet. The more restrictions you place on a diet and the less variety you feed, the higher the likelihood that something may be missing. I believe that adding foods and supplements not found in the natural diet of the wolf can help our dogs live the longest, healthiest lives possible.

Commercial raw diets

There are two types of commercial raw, frozen diets currently available. The first type is a complete diet, formulated to meet the nutrient levels suggested by the Association of American Feed Control Officials (AAFCO). Examples include Prairie from Nature's Variety, Home Made 4 Life, and Steve's Real Food for Dogs.

These foods can be used just as you would commercial dry or canned foods, with no need to add anything else (though just as with other commercial diets, it's best to rotate between different brands and protein sources, and it's fine to add some fresh food as well). Complete commercial raw diets are generally quite expensive; they're usually not an option for those who have large dogs or limited funds.

The second type of commercial raw, frozen diets provide a variety

of different parts that can be combined, along with other foods, to create a complete diet. These parts may include meat, bone, organs, and vegetables, but generally nothing else. Examples of companies that offer these types of diets include Bravo!, Oma's Pride, and an increasing number of small, independent local companies. These are great foods to include in the diet you feed your dogs, but you cannot feed them alone, without adding anything else.

When you compare the ingredients of the complete diets to those of the incomplete blends, you will notice that the complete diets add a number of foods in addition to meat, bone, and organs, including such things as eggs, kefir, tripe, kelp, alfalfa (sprouts or dried), garlic, raw honey, organic apple cider vinegar, ginger, oils (fish, flaxseed, olive, coconut, cod liver), seeds (sprouted or ground), nuts, and a wide variety of fruits and vegetables. They also sometimes add specific vitamin and mineral supplements, such as vitamin E, manganese, zinc, iron, and copper, or a natural source of minerals, such as montmorillonite clay. Note that complete diets usually include more muscle and organ meat and less bone than the meat/bone/organ/veggie blends.

If you want to use incomplete blends as the basis for the diet you feed, most often you'll want to add a bit more organ meat (particularly liver), some additional muscle meat that does not include bone, and a variety of other healthy foods, including eggs, dairy, canned fish with bones, green tripe, healthy leftovers, and some fresh food supplements. Fish oil and vitamin E would also be good additions to the diet. The fewer foods you add, the more important supplements will be.

For example, the Bravo! blends are approximately 10 percent organ meats (equal parts heart, liver, and either kidney or gizzards), 15 percent vegetables, and the rest ground meat and bones. These blends should be used as one half to two thirds of the total diet, with a mixture of the other foods listed above making up the rest of the diet. You can get some of these other foods, including muscle meat and organ meat, from Bravo! or at your grocery store.

Puppies

For the most part, puppies can be fed the same diet as adult dogs, though young puppies will benefit from the addition of goat's milk to the diet. It is even more crucial that you get the proportions correct and feed a wide variety of foods when feeding puppies. It is also imperative that you feed an appropriate amount of bone, neither too much nor too little, especially to largeand giant-breed puppies under the age of six months, when they have less ability to regulate their uptake of calcium, and both calcium deficiencies and excesses can lead to serious orthopedic problems.

Raw meaty bones should comprise around 30 to 50 percent of the diet. Be careful if you supplement with cod liver oil or another form of vitamin D. Vitamin D increases the absorption of calcium, so if you feed high amounts of bone and vitamin D, you increase the likelihood that too much calcium will be absorbed. Never add calcium to a diet that includes appropriate amounts of bone.

Remember that high-protein diets will not cause excessive growth or lead to orthopedic problems in puppies. These problems are caused by overfeeding and by improper calcium amounts (either too much or too little). In order to avoid or-



Yup, that pup is chewing a raw chicken neck with his tiny teeth. Puppies take to raw foods with gusto; their owners say raw-fed build stronger bodies than kibble-fed pups from having to work at pulling meat off the bones.

thopedic problems, keep your puppy lean and slow-growing by limiting the total amount fed.

Remember the rules

As a reminder, there are three basic rules to feeding a homemade diet: variety, balance over time, and calcium.

All homemade diets need to contain a variety of different foods, including different types of meat and raw meaty bones, different parts (especially organs), and different foods, such as eggs and dairy. A lot of people depend on chicken since it's cheap, but if your dog gets nothing but chicken, even if you feed organs along with muscle meat and bone, he will not get all the nourishment that he needs. As a general rule, you should never feed one kind of food as more than half the diet, and preferably less.

When you feed a variety of different foods, every meal does not need to be "complete and balanced." You should ensure that all of your dog's nutritional needs are met over a period of a week or two, but that can be done by feeding different foods at different meals, and on different days; you don't have to combine all the different foods into a single meal. It's also fine to feed just beef, for example, for a couple of weeks, and then switch to another meat source for the next two weeks.

A raw diet that includes 30 to 50

percent raw meaty bones will supply the proper amount of calcium; there is no need to add more.

Amounts to feed

As a general rule of thumb, dogs will eat around 2 to 3 percent of their body weight in fresh food daily, but remember that each dog is an individual, and the amounts they eat can vary considerably. There will be more details on calculating amounts to feed in the article on cooked diets.

Making the switch

The first time we feed raw meaty bones to our dogs is always frightening. We've been told so many times to never feed bones to dogs that it's hard to believe they won't drop dead when we do. It's important to remember that the warnings are about cooked bones, not raw, and that eating bones is natural for dogs.

Most raw feeders can empathize with my friend, Mindy Fenton, who says, "The first time I fed one of my dogs a raw chicken wing, I followed her around for three days, terrified that I was going to kill her, and waiting for that darned wing to come out whole because I was sure it would. Of course, she was perfectly fine, but it took some time before I became relaxed about feeding raw meaty bones."

The choice of what to start with can vary according to your comfort level, and

how likely you think your dogs are to gulp their food. Many people advocate feeding pieces that are too large to be swallowed, requiring the dog to chew on them first. This doesn't always work, since large pieces become small pieces as the dog eats them, and he may still try to swallow pieces too large to go down easily.

I am most comfortable with feeding chicken necks and backs to my dogs; the bones are soft and easily chewed, and the pieces are small enough to be swallowed even if the dog does not chew them well (small dogs may have problems with chicken necks). Others feed chicken wings or leg quarters. If your dog is not protective of his food, you can try holding onto one end while she chews on the other, to help her learn to chew rather than gulp, but watch your fingers, and don't try this if it makes your dog anxious.

Many people worry that their dogs may be too old to switch to a raw diet, but in my experience, older dogs do as well as younger ones with the change. My oldest dog was 13 years old when I switched him overnight to a raw diet, and he had no problems.

Most dogs do just fine when switched "cold turkey" from commercial food to a homemade diet, but a few will experience digestive upset. The longer a dog has been fed the same food with no variation, the more likely he is to have a problem if his diet is changed too quickly. Dogs that are prone to digestive upset may also benefit from a slower, more careful approach.

To make the change gradually, start by adding small amounts of fresh food to the current diet, then gradually increase. If problems develop, return to the prior diet and make the change more carefully once your dog's digestive system is back to normal. That may include feeding the new food separately from the old (at least a few hours in between meals), or feeding only one new food at a time, to see if your dog reacts to any of the new ingredients.

The one exception to mixing foods is when you feed raw meaty bones. I find that the consumption of kibble interferes with the digestion of bones; digestive problems

Home-Prepared Diet Resources

GRINDERS

SillyPugs sells the popular Tasin grinder along with other more expensive models, sillypugs.com or (925) 778-2340

Northern Tool sells two popular grinders, items #168620 and 168632 (good only for soft bones, in small amounts), northerntool.com, (800) 221-0516

American Eagle makes stainless steel heavy-duty grinders that are more expensive, but do handle most raw meaty bones that you can fit down the chute. Made by American Eagle Food Machinery (ameagle.biz, 800-836-5756). Available at retailers such as Pierce Equipment (pierceequipment.com, 877-354-1265) and North Coast Pets (northcoastpets.com, 877-231-7416).

JOYCE CHEN SCISSORS

Made by Columbian Home Products; information available at joycechen.com. May be purchased from Vieco's Kitchen (858-487-5321, viecokitchen.com) or Cooking.com (800-663-8810, cooking.com) and other retailers.

COMMERCIAL RAW DIETS

Nature's Variety Prairie, naturesvariety.com, (888) 519-7387

Home Made 4 Life, homemade4life.com. Manufactured in the U.S. by Aunt Jeni's Home Made (auntjeni.com, 301-702-0123) and in Canada by Pets 4 Life (519-372-1818, pets4life.com).

Steve's Real Food for Dogs, stevesrealfood.com, (888) 526-1900

Bravo!, bravorawdiet.com, (866) 922-9222. Bravo! offers a booklet called *Bravo Beginnings* that will help you get started using their foods.

Oma's Pride, omaspride.com, (800) 678-6627

See the author's Web page at dogaware.com/dogfeeding.html for more information on home feeding books, websites, and e-mail groups; supplements; commercial raw diets; and local raw food co-ops and groups.

are more likely if you mix the two together. If you are feeding whole raw meaty bones, feed them separately from kibble, at least a few hours apart.

It's fine to start with limited variety until you see how your dog does, but don't feed just one food for long periods of time. Sometimes people will start with just chicken parts, for example, but this may lead to constipation if there is too much bone in the diet. While you may want to feed just chicken at the beginning, be sure to feed plenty of meat as well as bone, and don't feed such a limited diet for more than a week or two.

If your dog has any problems with the new diet, back up and start again, making the change more slowly this time. Do not blame problems on "detox." If your dog develops diarrhea or other forms of digestive upset, it is because his diet was changed too quickly, or because he is reacting to one or more of the ingredients in the new diet.

In that case, again, go back to what you were feeding before (or what you know your dog can tolerate without a problem), then add new foods one at a time in order to identify which one(s) are causing problems. Also, while most dogs improve when fed raw foods, a few cannot tolerate it for some reason and may need a cooked diet instead. There will be information on cooked diets in next month's article.

The rewards

Preparing your dog's meals yourself is not as easy as simply opening a can or pouring kibble out of a bag. However, once you've done the initial work of devising the diet and finding sources for the products you will feed, it isn't terribly time-consuming. The actual preparation is fairly simple; the hardest part is buying products in bulk and then splitting them up into meal-sized portions for feeding. But the rewards can make it all worthwhile.

Most people who switch their dogs to a raw diet notice improvements even in dogs who seemed to be perfectly healthy before. Feeding a homemade diet may cost a little more, but many people report a decline in vet bills. Best of all is watching the enjoyment our dogs get from their meals, and taking pride in knowing we are doing the best we can for our dogs.

Mary Straus does research on canine health and nutrition as an avocation, and is owner of the DogAware.com website.

Positive Mistakes

The top five errors committed when training with positive techniques.

BY PAT MILLER

ou'll never hear me say that coercive methods don't work; they can. Nor will you ever hear me say that positive training turns every dog into a model canine citizen. It doesn't.

There is a big difference, however, between positive and coercive training. When methods that rely on the use of force and application of pain fail, it's often because of the dog's inability to tolerate coercion and intimidation. This can result in serious long-term behavioral damage and sometimes physical injury.

Dogs at the assertive end of the canine personality continuum may fight back assertively against coercive techniques, while those who are too soft to tolerate physical punishment may bite defensively or simply shut down. Positive methods, however, are most likely to fail because of mistakes made in the implementation of the method. If you misuse your clicker and treats you may end up with a fat,

happy, out-of-control dog, but you're far less likely to do any long-term physical or psychological damage.

The ideal, of course, is to have a healthy, happy, well-behaved dog. In order to accomplish this with positive training methods, you'll want to be sure to avoid the common mistakes described below.

Mistake #1: "Positive = permissive"

You may hear non-positive trainers insist that there has to be a negative consequence for a dog's inappropriate behavior or he'll never learn what's not allowed. It might surprise you to hear that positive trainers don't disagree. We just differ on the nature of the consequence. A well-implemented positive training program combines good management, to prevent the dog from having the opportunity to be reinforced for undesirable behavior, and negative punishment, in which the dog's inappropriate behavior makes a good thing go away.



Trainer Ruthanna Levy properly manages a meeting between a teen at a park and her dog, Ziggy. She limits Ziggy's reach without tension, instructs the boy in how to act, and clicks and rewards Ziggy's gentle greeting.

What you can do . . .

- Review your own training program to identify which of the training mistakes you might be making.
- Implement changes to your training protocols to help you avoid the mistakes and improve the efficacy of your training.
- If necessary, renew your commitment to positive training methods that encourage a relationship betweer you and your dog based on mutual trust, cooperation, The Whole Dog Journa and respect.

Consider this comparison:

Coercive - Dog is on leash, goes to jump up on an approaching pedestrian. Handler gives a sharp correction (punishment) by jerking hard on the leash. Jumping up is punished; dog learns that bad things happen if he tries to jump up. Note that he may also learn that approaching people makes bad things happen, a possible foundation for future aggressive or fearful behavior with strangers.

Positive – Dog is on leash, goes to jump up on an approaching pedestrian. Handler restrains dog so he can't reach the stranger, and asks the stranger to stop and wait for the dog to sit before petting. Jumping up is managed; dog learns that jumping up gets nothing, but sitting makes good things happen, a foundation for future good manners/ polite greeting behavior.

Permissive – Dog is on leash, goes to

jump up on approaching stranger. Handler allows dog to jump up and stranger pets dog. Jumping up is reinforced; dog learns that jumping up makes good things happen, and will continue to jump up to greet visitors, perhaps even intensify his efforts to jump up.

Management plays a vital role in the "positive doesn't equal permissive" piece of positive training. By removing the positive reinforcement for unwanted behaviors, you prevent your dog from being rewarded by them. This is true whether you're restraining with a leash to prevent jumping up, crating to stop adolescent house-destruction, clearing tables to manage counter-surfing, putting tempting objects out of reach to avoid chewing, or any of a long list of other management applications.

Behaviors that aren't rewarded in some way eventually extinguish, especially if you make it a point to reinforce an alternative and preferably incompatible behavior.

Mistake #2: Dependency on luring

Unless you're a dedicated pure shaper, if you train with positive methods you probably use luring to some degree.

Luring is using a treat to show your dog what you want him to do. To lure a "down," for example, hold the treat in front of your dog's nose while he's sitting, then lower it a tiny bit toward the floor. As his nose follows the tidbit, "mark" the behavior that you want with the click! of a clicker or a verbal marker, such as the word "Yes!", and feed him the treat.

Continue gradually moving the treat toward the floor, clicking and treating along the way, until he's lying down. If at any time he stands up, say "Oops!" and have him sit again, then resume luring the down, moving the treat toward the floor in smaller increments this time.

Luring to teach behaviors is just fine. Forgetting to "fade" (gradually remove) the lure is not. If you don't fade the lure early in the training process, you *and* your dog can become dependent on the presence of treats to get the behavior to happen. While I almost always *have* treats in my pockets or close by, I don't want to have to *rely* on treats to get my dog to offer behaviors when I ask for them.

Here's how to fade the lure with the "down" behavior:



Levy used a lure to teach Ziggy to put his head down and is fading its use in favor of a physical cue (her finger pointing down). At this stage, Ziggy more readily responds to the cue if Levy is bent over, as if she were about to use the lure.

1. Use the lure until the "down" happens easily – when you lure to the floor your dog follows into a down position immediately, with one click! and treat at the end. For most dogs this should only take a halfdozen or so repetitions.

2. Stand in front of your dog with your hands at your sides, a treat in the hand you've been using to lure with. If your dog mugs that hand for the treat, hide it behind your back.

3. With your dog sitting in front of you, ask for the "down."

4. Wait a second or two, and if he doesn't lie down (he probably won't), lure him to the ground.

5. Repeat Steps 3 and 4 several times, sometimes waiting a little bit longer to lure, sometimes a little shorter.

6. If he's not lying down when you ask after a half-dozen repetitions, start fading the lure in gradual steps. Ask for the "down," pause, and when you lure, instead of moving the treat all the way to the floor, move it three-quarters of the way, and then whisk it behind your back, parallel to the floor (if you lift it *up* you'll lure him back into a sit). Since he's three-quarters of the way down, he's likely to continue all the way to the floor, even though the treat is gone. If not, repeat again and go seveneighths of the way to the floor. 7. Repeat Step 6, gradually decreasing the distance you lure toward the floor, until you've faded the lure completely.

You can apply this same process to any behavior you teach initially by luring. As soon as the dog can perform the behavior easily for the lure, begin fading. You are, in essence, translating for your dog, showing him that the word you're using is the equivalent of the lure. When you say the verbal cue "down," pause, and then lure, it's as if you're saying, "Dog, the word *down* means exactly the same thing as putting the treat in front of your nose and moving it toward the floor."

Mistake #3: Dependence on treats

Even if you do a good job of fading the lure, you can still find yourself dependent on treats – feeling like you have to click! and treat your dog *every* time he performs, or the behavior might go away.

This is known as a *continuous schedule* of reinforcement (CSR). Dogs can achieve superb, reliable behaviors on a CSR, but the behaviors are probably not very *durable*. If for some reason you *stop* giving a click! and treat for each repetition of the behavior, the dog will probably stop doing as you ask in fairly short order, since he no longer gets his primary reinforcer (the food).

Enter the very important concept of *intermittent reinforcement*. When your dog performs reliably on a CSR, that is, offers the desired behavior in response to your



Trainer Sarah Richardson uses clicks and treats to teach Quaid to stay in the down position until he is released to eat from his bowl. Sometimes, though, dinner is the reward jackpot!



With good timing, you can mark the precise moment when your dog moves in a specific way (and then reward it), and eventually teach him to duplicate this move on cue.

cue at least eight out of ten times, it's time to start reinforcing intermittently. In plain English, that means every once in a while you skip a click! and treat, and praise your dog instead. At first just skip an occasional click!, and as you practice this, over time you can skip more and more, until your dog works primarily for praise (or other life rewards).

If you include praise regularly as part of your clicker training – click!, treat, "Good dog!" your dog will have a very positive association with praise, and it will still have value even when the click! and treat are absent.

Note: In my training, a click! *always* means a food treat is coming. When I start using intermittent reinforcement, I *don't* click! if I'm going to use praise alone. This helps to maintain the value and power of the clicker.

You can use other rewards as well, when you want to reinforce without a click! and treat. Anything your dog *loves* can be used as a reinforcer if you can figure out how to control your dog's access to it and use it to reward desirable behaviors: a ball, a favorite toy, a car ride, a walk on-leash, or a scratch behind the ear.

Sometimes I reinforce my dogs for waiting politely at the door by opening the door and telling them they can run through. They get to dash outside and poop, pee, and play. These are all valuable "life rewards" – things that are naturally reinforcing to dogs.

Of course, sometimes they *don't* get to run out the door. Intermittent reinforcement makes a behavior *very* durable. Like a gambler at a slot machines, your dog will keep playing the game because he's learned it will *eventually* pay off.

Mistake #4: Poor timing

Some trainers will tell you the consequence must happen within "x" amount of time in order for it to be effective; that is, in order for the dog to understand the connection between the behavior and the reward (or punishment). I've heard as much as five seconds (which I would suggest is *far* too long) and as little as one second (which is much more likely to be accurate).

Suffice it to say that the results are optimal when the consequence happens as close to the instant the behavior happens as possible. This is true whether the consequence is positive reinforcement (treat, praise, toy, play, petting), negative punishment (where the dog's behavior makes a good thing go away), or "positive punishment" (where the dog's behavior makes a bad thing happen). Of course, positive trainers studiously try to avoid using positive punishment.

The greatest value of a reward marker – such as the click! of a clicker or the word "yes!" – is that it enables you to have perfect timing. With a marker, you can *always* have perfect, or at least near-perfect timing, because the marker *bridges* the time gap between the behavior and the delivery of the treat. Of course the marker still has to be given the instant the behavior happens – or very close thereto – but it gives you a few seconds of breathing room in which to deliver the treat.

If you have poor timing, you may inadvertently but consistently reinforce a behavior other than the one you want your dog to perform. At best, this is confusing for the dog, slows learning, and is frustrating for both of you. At worst, you might reinforce the exact opposite of the behavior you're trying to teach, and end up training your dog to do an entirely different behavior, perhaps even a highly undesirable one!

Let's say you're trying to teach your dog the polite greeting behavior of "sit" when he approaches visitors in your home. When your guests arrive, you have him on leash so you can manage his jumping up behavior. As your first guest enters the door, your dog executes a brilliant "sit" on the doormat! You fumble for your clicker, and just as you press the metal tongue he decides he's not getting reinforced for the sit and jumps on Aunt Martha. Click! - and major oops! Of course you haven't done terminal damage - unless Aunt Martha is 90 years old and breaks her hip when your dog knocked her down. But every time you're too slow with your marker and it arrives when your dog is jumping up instead of sitting, you're telling him that jumping is a good thing to do; it earns a marker and reward!

Herein lies one of the values of having a verbal marker, such as the word "Yes," or a clicking sound you make with your tongue. If you're caught off guard and you don't have your clicker handy – just let loose your verbal marker and follow with one of the treats you *always* have in your pocket.

If you realize your timing is sloppy even with your clicker ready in hand, then do some clicker-timing practice. With your dog out of earshot, turn your television onto the sports channel and find a tennis match. Watch closely. Every time a player hits the ball, click! your clicker. When your click! regularly coincides with the "Thwack!" of the ball hitting the racket, you're ready to go back to work with your dog. (Note: this sort of practice isn't nearly as effective with golf or baseball.)

Mistake #5: Lacking sufficient courage of your convictions

When you're training your dog and things don't seem to be working as they should, it can be tempting to let yourself be led astray. You can always find a ready supply of friends, family members, and other animal care professionals who are happy to tell you that you need to correct, alpha roll, intimidate, and/or shock your recalcitrant dog into submission.

Perhaps you're a crossover trainer and even your own past success using forceful methods prompts that little voice in your brain to say, "I could just jerk his collar one time . . ."

STOP!

One of the things we value so much about positive training is the trust it builds between dog and human. Your dog trusts that he can try behaviors without getting hurt – you'll let him know when he's right, but you won't frighten or hurt him when he's wrong. When you violate that trust, you risk negative behavioral consequences that are sometimes significant, ranging from aggression at one end of the spectrum, to shutting down, or *learned helplessness*, at the other.

When a dog becomes aggressive, his future becomes questionable. When a dog shuts down, losing his willingness to offer behaviors for fear he'll be punished, it makes his training even more frustrating.

Aggression aside, using coercion along with positive training has serious consequences. If you punish your dog for failing to perform a cue that you "know" he knows, you "poison" that cue; in other words, you give him a negative association with it. The cue becomes ambiguous; the dog doesn't know if it predicts "good stuff" (click! and treat) or "bad stuff" (punishment). This ambiguity creates stress, and can turn a happy working dog into one whose tail starts to lower and enthusiasm starts to wane.

A poisoned cue is very difficult, if not impossible, to rehabilitate. If you poison a cue you're better off introducing a new one than trying to regain the consistently positive association with the old one.

You always have a choice as to how to behave with your dog. One of the many things I love about positive training is that if one way isn't working, there are many more possibilities to try to get the behavior you want to reinforce, without resorting to coercion or intimidation. Use of force in an otherwise positive training program is detrimental to future training, as well as evidence of lack of creativity and lack of commitment to a pain/intimidation-free relationship with your dog.

At a recent seminar, the owner of a lovely Bernese Mountain Dog admitted to me that he "had" to use a forced retrieve (ear pinch) on his otherwise positively trained dog. I gently suggested that he didn't "have" to, but rather he "chose" to use this pain-inducing method. I wasn't surprised when we got to the shaping exercise in the seminar and the Berner sat next to his owner, staring unwaveringly into his eyes, not offering a single bit of behavior, while the rest of the dogs in the group happily engaged in the shaping game and learned to move toward, and eventually onto, their mats. His choice definitely affected his dog and their relationship.

Positive works. If you're committed to positive training, you can find a way to teach a retrieve without pinching your dog's ear, or overcome your own training challenge. There are plenty of great books, videos, positive trainers, and supportive e-mail lists that can help you through your training program. Or you can decide that teaching the retrieve isn't important enough to lose your soul over, and find something else to do with your dog that doesn't "require" the infliction of pain. It's your choice. Choose wisely.

Special thanks to trainers Ruthanna Levy of Alameda, CA, and Sarah Richardson of Chico, CA, for demonstrating proper positive training techniques for this article. For contact information, see "Resources," page 24.

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Cause or Effect?

Another yeast species is implicated in chronic itching and scratching.

BY CJ PUOTINEN

sk a dozen health experts about allergies and you'll get at least that many theories about what they are, why they happen, and how to fix them. What's interesting is that even when they disagree, most allergy theories point to the same underlying causes. This is because allergic reactions are symptoms of a deeper imbalance. Dogs don't develop allergies because they are exposed to allergens. Dogs are exposed to allergens all the time, usually with no reaction. Dogs develop allergies because something has made them vulnerable, and the culprit is often a combination of diet, stress, conventional medical treatments, heredity, and environmental factors.

Four months ago we explored *Candida albicans* ("Canine Candida," February 2007), considered by some to be a major factor in canine allergies. This article explores the links between canine allergies and leaky gut syndrome, a different species of yeast called *Malassezia pachydermatis*, and detoxification support.

What you can do . . .

- Improve your dog's food by avoiding corn, wheat, and soy, which can contribute to canine allergies.
- Help heal the digestive tract with supplements like Seacure, probiotics, and digestive enzymes.
- Make ears less hospitable to Malassezia yeast infections by cleaning them with vinegar diluted with water.
- Add systemsupporting herbs or herbal tea to your dog's food.





Dogs who perennially itch (and chew and scratch) benefit from any efforts to improve the health of their digestive tracts – whatever the cause of their itching, whether it is *Candida, Malassezia,* "leaky gut syndrome," or anything else.

Leaky gut syndrome

Also known as intestinal permeability, leaky gut syndrome is exactly what it sounds like, a condition in which damage to the small intestine creates spaces between cells in the intestinal lining, spaces that are large enough to allow fragments of partially digested food, toxins, and bacteria to migrate from the intestinal tract into the bloodstream. The results include impaired digestion, incomplete absorption of nutrients, and the presence of what the immune system identifies as foreign invaders throughout the body. The immune system responds with its usual weapons, which produce inflammation and allergic reactions.

Soon the liver and kidneys, the body's main filters, become overwhelmed, and toxins spill over into the bloodstream, which carries bacteria, toxins, and partially digested food particles to muscles and connective tissue throughout the body. Leaky gut syndrome is blamed for respiratory and skin allergies, arthritis, irritable bowel disease, autoimmune disorders, diabetes, and a host of other problems.

Leaky gut syndrome is a vicious cycle. Something (usually diet-related) causes injury to the small intestine, resulting in impaired digestion, which leads to bacterial overgrowth and other problems, resulting in further damage, and the cycle continues. Some of the conditions blamed for leaky gut syndrome include high-carbohydrate diets, antibiotics, parasites, yeast or fungal infections, nonsteroidal anti-inflammatory drugs, and mineral deficiencies. Some of these, such as parasite infestations, yeast or fungal infections, and mineral deficiencies, can result from the syndrome as well as help cause it.

At Reinhardt Ranch Holistic Nutrition Center for Pets in Elk Grove, California, nutritional consultant Elaine Reinhardt hears every day from people whose dogs have chronic allergies. "Leaky gut syndrome is at the root of many illnesses," she says, "including autoimmune diseases, joint diseases, and allergic reactions. Since much of your immune function is in your gut, it makes sense to look there first. Certainly this is true when it comes to allergies."

A large number of the dogs she works with were adopted from shelters or rescue groups. Most, she says, are underweight. Even in their new homes and on an improved diet, they can't gain an ounce. Reinhardt suspects that conditions that interfere with their gaining weight, such as leaky gut syndrome and malabsorption, contribute to behavioral problems, hyperactivity, and other factors that prompted their previous owners to give them up. "Add all the health problems that come with leaky gut syndrome and an inflamed intestinal tract," she says, "and the expense of conventional medical treatment, and I suspect that many of these dogs were given up because their owners couldn't afford the time and expense their treatment required."

Symptoms as varied as ear infections; seasonal or respiratory allergies; itchy skin; hair and coat problems; diarrhea; and an inability to gain weight can all stem from digestive problems, she says.

To heal the digestive tract, Reinhardt recommends an improved diet with higherquality protein and the elimination of soy, corn, wheat, and chicken fat. "Soy, corn, and wheat are at the top of the list of foods that irritate canine digestion," she says, "and I like to stay away from chicken fat because it contains residues of whatever the chicken was exposed to in the way of drugs and toxins. Fat from organically raised, pastured chickens is fine, but that's not what you'll find in commercial dog food."

Reinhardt then recommends three supplements that she considers crucial for rapid healing and recovery: Seacure, probiotics, and digestive enzymes.

Seacure, described in "Securing Seacure" (WDJ April 2003) and "Accelerated Wound Healing" (August 2006), is a very fishy smelling powder made from fermented deep sea white fish. Because the fermentation process predigests the fish and breaks it into amino acids and peptides, which the body uses as building blocks to repair damaged tissue and speed healing, it requires no digestive effort and is assimilated on contact.

"I started taking Seacure seriously," says Reinhardt, "when I gave it to some cats who were dying. They literally responded within 15 minutes. Their eyes went from dull to sparkling in that short a time. Since then, I've seen the same response again and again, including seriously ill and unresponsive dogs who sat up, began grooming themselves, wagged their tails, interacted with their owners, and took an interest in their surroundings, all within 15 minutes. I'm not saying that they all get well, but when any pet in dire straits responds dramatically, it's wonderful."

In most cases, she says, underweight dogs and dogs with allergy symptoms begin to improve within a few days, and within a month or two, they have gained



weight, their coats have improved, bald spots have disappeared, and they no longer chew on their paws. "The food that goes in stays in," she says. "It doesn't come shooting out the other end as bright yellow diarrhea. Seacure provides the deep nourishment that helps with conditions across the board."

Reinhardt usually starts with the labelrecommended dose of ¹/₄ teaspoon per 10 pounds of body weight per day, but for dogs weighing over 100 pounds, she finds that 2¹/₂ teaspoons works well. "Larger animals don't necessarily need a greater dose," she says, "and dogs who don't need a lot of digestive support do well on half the recommended dose."

Reinhardt says that when she adds probiotics (beneficial bacterial) and digestive enzymes, the dogs' health improves even faster.

Some probiotics (see "Probing Probiotics," August 2006) are labeled for pet or veterinary use. Among the many strains of probiotics for which canine health claims are made, one of the most interesting is *Lactobacillus sporogenes*. Unlike *L. acidophilus* and similar strains, *L. sporogenes* reproduces rapidly, so it acts faster in keeping yeasts and fungi in check. Some human product lines, such as Thorne Research, carry *L. sporogenes* supplements, which can be safely given to dogs.

Several canine probiotic supplements, such as Jarrow Formula's Pet Dophilus Powder, contain *Enterococcus faecium*, a strain that is native to dogs and which some nutrition experts consider essential to canine health.

Enzyme products that have helped dogs with allergies include digestive enzymes that are added to food, such as Prozyme and NZymes, and systemic oral enzymes, such as Wobenzym and FlavenZym, which are given between meals on an empty stomach (see "Banking on Enzymes," January 2001, and "Digest These Benefits," October 2005).

Reinhardt prefers PetLabs360 DigestAbles tablets. "They're chewable," she says, "so they can be fed directly to dogs or put in their food. They're beef and cheese flavored, so even finicky dogs like them, and the results are excellent."

Her favorite product for dogs suffering from airborne allergens is SeaVive, a companion product to Seacure. SeaVive contains Seacure, colostrum, Beta-1,3-D glucan, and vitamin C. Another supplement that has helped dogs with all types of allergies is Willard Water (see "Willard Water," June 2006), which can be added to drinking water or herbal tea and diluted and added to food to improve digestion and increase the assimilation of nutrients.

Malassezia

Malassezia pachydermatis is a yeast commonly found in the ears and on the skin of dogs. Held in check by the immune systems of healthy dogs, it can multiply until it becomes pathogenic in susceptible dogs, resulting in itchy, oily, or scaly skin, hair loss, redness or blackening of the skin, thickening of the skin, and an offensive greasy odor.

Affected areas tend to be the ears and skin folds on or around the face, elbow, underarm, and tail. Dogs with an overgrowth of *Malassezia* may lick their feet incessantly because of atopic or environmental allergies that accompany the yeast overgrowth. Cocker Spaniels, Basset Hounds, and West Highland White Terriers are said to be especially susceptible, but any dog can experience a *Malassezia* overgrowth.

Malassezia yeast cells can be identified under a microscope. A skin lesion can be scraped or swabbed, or a sample can be collected on scotch tape. Conventional veterinary treatment of *Malassezia* usually involves a shampoo containing one or more topical antifungal medications, such as miconazole, clortrimazole, or ketocanazole. Oral anti-fungal drugs are prescribed in cases that don't respond to topical treatment.

Holistic veterinarian Susan Wynn, DVM, thinks that Melassezia, not Candida, is implicated in many itchy dogs' uncomfortable plight. "Malassezia is a yeast species that can cause thickened, hyperpigmented skin, bad ears, fatigue, and lethargy," she says. "Of course, Malassezia is also a secondary problem to whatever is going on with the dog. Malassezia is the primary yeast that causes opportunistic (secondary) infections in dogs and is diagnosed regularly on the skin or in the ears. Secondary infections by Candida *albicans* are possible but much more rare. and most of the holistic veterinarians I know treat leaky gut syndrome instead of candidiasis."

Dr. Wynn does not believe treatment with anti-fungal medications or herbs is always necessary before giving an affected dog probiotics and changing the dog's diet, and she emphasizes that leaky gut syndrome can occur independently of candida overgrowth.

For *Malassezia*-infected ears, Dr. Wynn recommends daily cleaning with vinegar diluted with an equal amount of water, which is a gentle way to lower the pH in the ear, making it less hospitable to yeasts and fungi. A pinch of boric acid has a similar effect (as described in "A New Old Ear Treatment," June 2004). For topical treatment of the skin, Dr. Wynn recommends Selsun Blue shampoo or the application of a 10-percent tea tree oil spray, which has proven antifungal properties.

Our literature search of holistic treatments for *Malassezia* produced recommendations identical to holistic treatments for candidiasis. "You've discovered exactly the point," says Dr. Wynn. "And if you look further, you will

discover that the treatment is very much like what we recommend for any chronic allergic or immune-mediated disease, many of them centering on abnormal gut permeability.

"To wit, we have diseases that respond to diet changes, probiotics, and various herbal tonics or specifics, and we can only document the presence of fungi in some cases, so we look for a different cause. This is why so many vet-

erinary practitioners look at chronic yeast infections as a problem that pops up in immunocompromised animals and not as the primary disease. Holistic treatments like improved diet and probiotics work, but they work directly on the immune system, strengthening the body so that it resists yeast, rather than by killing the yeast directly."

Dr. Wynn almost never recommends conventional antifungals like Nystatin for *Malassezia*, finding that Selsun Blue shampoos works well for all but the most serious cases in combination with holistic treatment for leaky gut syndrome.

Detoxification support

Most of us think of detoxification as something that happens when we go on a "detox" program of fasting, herbs, juices, or supplements that speed the body's release of impurities. In fact, detoxification goes on constantly as the body breaks down and removes waste products.

If the liver receives the nutrients it needs to perform this function well, it maintains itself in a state of health. If the process is impaired, health suffers. Unfortunately, dogs are often overwhelmed with the burden of detoxification – and undernourished by low-quality commercial diets. This combination can contribute to leaky gut syndrome, yeast overgrowth, and a variety of allergy symptoms.

During the first stage of the detoxification process (Phase I), the body's filters identify and separate waste products and toxins from the blood and lymph. Watersoluble material gets sent to the kidneys for excretion. Dehydration complicates this process, which is why consuming clean drinking water is so important. Additional nutrients are required by the liver to per-

form Phase II functions, the elimination of materials that couldn't be made water-soluble in Phase I.

When a dog is deficient in key nutrients, backups and spillovers of waste products can occur. Partially processed toxins traveling through the bloodstream may find a home in fatty tissue, or they may stay in the blood, infect healthy tissue, and cause new illnesses.

Incomplete detoxification and leaky gut syndrome (and the allergy symptoms they aggravate) can be corrected with an improved diet and supplements that support the digestive tract.

Seacure, described above, is an important whole-food source of amino acids and an aid to Phase II detoxification. Digestive enzymes taken between meals help support the process. So do whole-food nutritional supplements, such as Standard Process Canine Dermal Support, which targets skin conditions, or Canine Hepatic Support, which improves liver function.

Dogs are well known for finding their own treatments when given the opportunity. Renee Votta, an herbalist in New Braunfels, Texas, adopted a mixed-breed dog she found. "We had just had a huge flood, and many animals were homeless due to houses being destroyed and animals



Bonnie's sores healed when

her owner noticed her eating

fresh cleavers, and started

giving the dog supplemental

forms of the herb.

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being caught in the river. I looked for her owners but no one claimed her."

Votta named the dog Bonnie and took her to a veterinary clinic for spaying and to have the open sores on her legs treated. "She licked at them all the time," says Votta. "Most were an inch wide and an inch long, some smaller and a few larger. The vet said they were caused by contact dermatitis having something to do with the grass, weeds, and green things that grow here all year. The vet said we would have to live with them because it's the kind of problem that keeps coming back."

That winter, Votta experimented with topical treatments. A mix of aloe vera, vitamin E, and olive oil worked best, but even though the sores got smaller, they never went away and new sores often developed.

One day, Votta realized that Bonnie, standing in a weed patch, was carefully harvesting cleavers (Galium aparine). "I couldn't get over it," she says. "Bonnie was ignoring all the other weeds. At that moment I realized that her condition had nothing to do with external factors. Her problems were inside her."

Votta encouraged Bonnie to eat all the cleavers she wanted from the yard, plus she made cleavers tea to add to the dog's water. She also added minced cleavers and raw garlic to Bonnie's dry food.

Within a month, all of the sores on Bonnie's legs cleared up and in the eight years since, she has never had another open sore. She continues to graze on cleavers, especially when the plants first emerge in the spring. "Eating a few strands of them every so often is enough to keep her healthy and her blood clean," says Votta.

In her book Veterinary Herbal Medicine, Dr. Wynn describes cleavers as a mildly astringent and mildly diuretic herb that is a tonic for the lymph system. It has been used for dry skin eruptions, as a remedy for ulcers and tumors, and for the treatment of psoriasis. In All You Ever Wanted to Know about Herbs for Pets, Mary Wulff-Tilford and Gregory Tilford describe cleavers as an herb that enhances the body's waste management by improving lymphatic circulation, thus "washing" body tissues.

Because cleavers is an invasive weed with a wide range, it's probably growing in your neighborhood. Consult a plant identification guide or search for cleavers online; several herbal websites offer descriptions and photos. In addition to having a distinctive appearance, cleavers feels sticky to the touch and clings to whatever it contacts. Avoid herbs that grow near highways, busy parking lots, or fields treated with pesticides or agricultural chemicals.

To try Bonnie's remedy, finely chop or mince fresh cleavers and add it to your dog's food, starting with small amounts and increasing to about 1 tablespoon minced herb per 25 to 30 pounds of body weight per day in divided doses. For convenience, store fresh cleavers in the freezer by pureeing the herb in a small amount of water, placing it in ice cube trays, and as soon as it's frozen, transfer to a tightly sealed plastic bag. Remove a cube at a time as needed.

Dried wildcrafted cleavers can be ordered from Jean's Greens and other herbal supply companies. To brew cleavers tea, pour 1 cup boiling water over 2 tablespoons fresh or 2 teaspoons dried cleavers, cover, and let stand until cool. Add the tea to food at the rate of 1 teaspoon tea per 10 pounds of body weight. Refrigerated tea can be kept for up to 5 days.

The Jean's Greens tea blend Pollution Solution, which combines cleavers with elderflower, rosemary, dandelion leaf, peppermint, cinnamon, echinacea leaf, and red clover, provides gentle detoxification support and can be brewed and used in the same manner. 🕸

WDJ contributor CJ Puotinen lives with her husband, Joel, and Labrador Retriever, Chloe, in New York.

Resources Mentioned in This Article

Elaine Reinhardt, Reinhardt Ranch Holistic Nutrition Center for Pets, Elk Grove, CA. (800) 689-2956, reinhardtranch@frontiernet.net

Susan G. Wynn, DVM. Bells Ferry Veterinary Hospital, Acworth, GA. bfvh com

Renee Votta, Self Heal Gardens, New Braunfels, TX, 830-626-8349, gaiacita@gmail.com

HERBAL REFERENCES

All You Ever Wanted to Know about Herbs for Pets, by Mary L. Wulff-Tilford and Gregory L. Tilford. Bow Tie Press, 1999.

Veterinary Herbal Medicine, by Susan G. Wynn, DVM, and Barbara Fougere, BVSc. Mosby, 2006.

RECOMMENDED PRODUCTS

DigestAbles for Dogs, PetLabs300 Chewable Digestive Tablets, petlabs360.com. Sold online and at pet supply stores.

Fastrack canine probiotics. Moore Agri-Sales, (866) 263-2818, mooreagrisales.com

FlavenZym, a systemic oral enzyme formula identical to Wobenzym. Nutraceutical Sciences Institute, (800) 776-2887, gonsi.com

Jean's Greens Herbal Tea Works, Schodack, NY, (518) 479-0471, jeansgreens.com

Lactobacillus sporogenes. Veterinary probiotic. Thorne Research (thorne.com), sold by WellVet.com and other retailers.

NZymes. Biopet, nzymes.com, (877) 816-6500

Pet Dophilus, Jarrow Formulas, jarrow.com. Sold in pet supply and health food stores.



Prozyme. Prozyme Products, prozymeproducts.com, (522) 5537, extension 201. Free sample.

Seacure® and SeaVive®. Proper Nutrition, Reading, PA. (800) 555-8868, propernutrition.com. Mention WDJ for a 10-percent discount and free ground shipping.

Standard Process. Palmyra, WI. standardprocess. com. Canine supplements sold through licensed health-care practitioners.

Willard Water. Nutrition Coalition, Fargo, ND. (800) 447-4793 or (218) 236-9783, willardswater.com. Mention WDJ for free samples.

Wobenzym and Fido Wobenzym. Naturally Vitamins, naturally vitamins. com, and the Wobenzym Place, buywobenzym.com, (800) 588-8139

Mad About Food

Pet owners suddenly have more questions about the pet food industry than it is prepared to answer.

Ithough I have received WDJ for at least three years, I was thinking of letting my subscription lapse until I heard the terrible news of the dog food recall. If it wasn't for your newsletter I would still be feeding a terrible canned dog food (that I thought was high quality) to my two dogs. Needless to say my renewal is in the mail. I realize that this can happen to any dog food but I hope that the companies who care enough to use the best ingredients are also vigilant about safety. Please keep educating us on what to look for in dog food.

> Mary Wright Latrobe, PA

Thanks, Mary, for your continued support of WDJ. Long-time readers know how much we, too, have learned about the industry over the 10 years WDJ has been in print. Our goal is to continue to dig for new and ever-more-helpful information about the best canine diets.

We received many letters similar to the one below, but inquiring about different pet food companies.

have a question regarding the food made by Timberwolf Organics. I currently feed this food (the bison/salmon variety) to my two dogs, and in light of recent events with the toxic dog food scare, I wanted to find out who manufactured it. I realize it is not involved in the recall; I just wanted to know.

Timberwolf Organics' website says that due to proprietary/legal reasons they do not give out the name of their manufacturer.

Do you know who manufactures this food, and do you think it odd that they will not say who makes their products?

I don't know who manufactures that food (although I may have known at one time), and no, it's not odd that they won't say where their products are made. I should say that it's not odd, but it's not right, either (in my humble opinion).

We've long stated our preference for foods from companies that are willing to disclose detailed information about their products. A few years ago, that was a short list to choose from. Today, disclosure about manufacturing and even ingredient sourcing is becoming common enough to provide you with plenty of top-quality alternatives.

have been contacting companies to see if they have products made by Menu Foods. There are a lot of us who don't want anything to do with this company, whether our foods were made at the plant that made the contaminated foods or another plant owned by Menu.

It would be nice to have a list of where the dog foods are actually made. Can you help compile a list?

I think this information should be listed on the label.

That's funny; I was just thinking how helpful it would be if the manufacturer was listed on food labels alongside the (legally required) information for the company that sells the food.

I just made a snap decision. Given that we have long recommended that owners choose foods from companies that disclose their site (or sites) of manufacture, I'm going to start including the site (or sites) of manufacture for all the products on WDJ's "top foods" lists. If a company won't disclose this information, its products won't appear on our lists.

Here's the thing: as I stated in "Should You Boycott (Fill In the Blank)?" on page 6 of this issue, I don't think it's all that useful to boycott a pet food company, a contract manufacturer, or (especially) all the products made by a contract manufacturer following a single adverse event. Stuff happens, and even though the scale of this event was huge, and the injuries caused are horrific, it's unlikely that it will ever be repeated. Of course, if Menu ever **did** have another deadly problem with its ingredients, I'd join the protesters.

fter the recent recall of some foods manufactured by Menu Foods, I have been very surprised to learn that some of the holistic brands on your "top wet foods" list are made by Menu, even if they are not part of the recall.

Why do these companies outsource the manufacturing of their foods to Menu Foods? How are we supposed to trust these brands if they have their foods manufactured in the same plants as low-quality foods? What about contamination?

How can we verify that all ingredients are originated in the U.S., not in China or elsewhere?

Do you intend to do an investigation on the origin of ingredients in foods? It would be a good idea to list all the brands that are manufactured in the U.S., with only American ingredients.

> Judith Cassidy Howell, Michigan

Thanks for your great questions.

First: Did I know that many of WDJ's "top wet foods" were made by Menu? Yes.

Why do companies with good products use Menu, which also produces some really low-quality foods? Because Menu is the largest contract manufacturer of wet pet foods in the U.S. No other co-packer has anything close to its capacity. And there are very few other options for the pet food companies that are large enough to need a high-capacity plant, but too small to be able to afford to buy or build a canning plant from scratch. Also, prior to this event, Menu had a very good reputation for the quality and reliability of its work.

What about contamination? Some companies source their own ingredients (or

some of their ingredients). Most take advantage of Menu's massive buying power to procure supplies of other ingredients at a lower cost. The companies should be well aware of the quality of the ingredients sourced by Menu, however; specifications for each ingredient are generally spelled out in their contract with the co-packer. If a company wants (and pays for) only the best-quality ingredients in its foods, Menu can supply them. If the pet food company wants to provide Menu with ingredients it has sourced independently, Menu can deal with that, too. Pet food executives trust Menu to keep these ingredients straight largely thanks to Menu's long-term reputation for doing so.

As far as disclosing information about the source of the ingredients used in the products it makes for other companies – Menu is contractually prohibited from doing so. Pet food companies and copackers routinely sign nondisclosure agreements, in order to protect the pet food companies' "trade secrets." If the source of the ingredients in your dog's food is important to you, ask the company whose name is on the label for information. If you are not satisfied with their answers, move on.

Finally, I will write an article about the global market for pet food ingredients in an upcoming issue. Thanks for an excellent suggestion!

know the pet food contamination story has been beaten to death, yet new facts keep coming to light, and I still have questions, such as:

Why would a (Canadian) company located in the middle of the American wheat belt (Kansas) buy wheat products that have to be shipped half way around the world? It is not like we don't have enough wheat of our own; why are we buying wheat from China? And how many dogs and cats in China have been killed by that product? Come to think of it, how many people in China die from contaminated food? We will never know.

I have always made an effort to buy pet food made in the USA; it isn't difficult. However, it *is* difficult to buy treats that are made in the U.S. Nine out of ten treat products are made in Asia or South America. I avoid them on the theory that the lax manufacturing oversight in the U.S. is better than no oversight at all.

It appears that I am going to have to rethink my criteria for food, and buy food with all its ingredients grown and processed in the USA. I hereby challenge all companies claiming to make a top tier food to meet that challenge and say on the bag that the ingredients are 100 percent North American-sourced and -processed. I would be glad to vote with my pet food dollars.

> Mike Burks via e-mail

We've learned that wheat gluten from China costs about 10 cents less per **pound** than U.S.-grown and -processed wheat gluten, which costs around 60 cents per pound. Multiply that by the 792 metric tons of wheat gluten imported in the same lot as the contaminated product bought by Menu, and you begin to understand the size of the problem. I don't know how much of this wheat gluten Menu bought, but I do know that it's very difficult for companies to take a "pass" on savings of that magnitude.

Of course, we've also now seen what the hidden price of a bargain ingredient may be.

Using U.S.-grown and -processed sources of ingredients that are abundant here makes sense.



Intravenous fluids and supportive care may pull some injured animals through this crisis, but vets are warning that the long-term effects of this exposure are unknown.

just read Mary Straus' first article on feeding home-prepared diets to dogs. Although she is preaching to the "converted" with regard to me, I am still delighted to know that we will be getting the benefit of her excellent research and expertise. I have great respect for Mary, having read many of her articles in various media, and I'm eagerly looking forward to the rest of the series.

I am getting a new GSD puppy in three weeks and having never fed a pup a homeprepared diet (although my last dog was fed a raw diet for eight years). I'm relieved that I will have Mary to advise me on the best way to proceed.

WDJ is the best thing to ever happen to those of us who care about the health and mental well-being of our dogs. (I've also purchased Pat Miller's book on positive dog training. Her training articles are excellent.)

> Carol Marsh Kanata, Ontario

hy can't WDJ list all of its "top foods" on its website for all dog owners to benefit from? I contacted your customer service department and was told I

would have to pay for a subscription or a back issue if I wanted that information. I'm looking for safe foods. Clearly you care more about profits than saving the lives

> of dogs. I will never subscribe and support a company that puts its profits before anyone else. Besides, I found the information on a website for free.

Wow.

First, because we do not sell advertising, we must charge for our content. If we gave it away, we wouldn't be able to pay our contributors, printer, etc., and we wouldn't be able to continue to research and analyze the pet food industry (and other caninehealth-related industries).

Yes, our publisher is a forprofit company, and we expect to be paid for expert analysis. We don't think that makes us puppy killers. You must value what we have to say, or you wouldn't be driven to search for a free way to access it! We would think your peace of mind would be worth the price of a subscription.



RESOURCES

TRAINING AND INSTRUCTION

Ruthanna Levy, Canine Freestyle With Ruthanna, Alameda, CA. Puppy and dog training, private consultations, and Canine Freestyle workshops and classes. (510) 748-9740; dgydance.com

Pat Miller, CPDT, Peaceable Paws Dog and Puppy Training, Hagerstown, MD. Train with modern, dog-friendly positive methods. Group and private training, Rally, behavior modification, workshops, intern and apprentice programs. (301) 582-9420; peaceablepaws.com

Sarah Richardson, PhD, CPDT, CDBC, The Canine Connection, Chico, CA. Positive reinforcement dog training and owner education, behavior consultations, and group and private training. (530) 345-1912; thecanineconnection.com

The Association of Pet Dog Trainers (APDT) (800) 738-3647; apdt.com.

BOOKS

WDJ Training Editor Pat Miller is author of two books: *The Power of Positive Dog Training* and *Positive Perspectives: Love Your Dog, Train Your Dog.* Both books are available from DogWise, (800) 776-2665 or dogwise.com

The Encyclopedia of Natural Pet Care and Natural Remedies for Dogs and Cats, by WDJ contributor CJ Puotinen, are available from DogWise, (800) 776-2665 or dogwise.com. Puotinen is also author of several books about human health including Natural Relief from Aches and Pains, available from your favorite bookseller.

HOLISTIC VETERINARIANS

American Holistic Veterinary Medical Association (AHVMA), 2214 Old Emmorton Road, Bel Air, MD 21015. (410) 569-0795. Send a self-addressed, stamped envelope for a list of holistic veterinarians in your area, or search ahvma.org



WHAT'S AHEAD

Home-Cooked Meals for Fido

The third installment of our series on home-prepared diets discusses when cooking your dog's food is advised.

Go to the Top of Your Class

How to get the most out of a dog or puppy training class.

Truly Essential Fatty Acids

A guide to the best sources of these nutrients, which can vastly improve the condition of your dog's skin and coat.

Update on Cancer Treatments

The latest developments in the fight against canine cancers.

Dogs and Cats Living Together

How proper management and training can enable your cat, bird, rabbit, and other small animals to live safely in the same house as your dog.

The Word On Her Lipomas

Many dogs, especially older dogs, develop fatty tumors. Most of the time, they cause no harm. Here's how to know when you **should** deal with them, and how.