

The Whole Dog Journal™



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A monthly guide to natural dog care and training

FEBRUARY 2017

FEATURES

3 Try These Dry Tips

Ten tasty tips for selecting a new dry dog food.

5 WDJ's Approved Dry Dog Foods

It's a much shorter list since we asked companies to prove their products were "complete and balanced." Has your dog's food fallen off the list?

11 "Most Important" Traits Vary

Every dog owner has different needs and priorities that affect their food buying decisions – but the food's "performance" should top the list.

12 Parvo Panic

This highly infectious disease is treatable – but it's far easier to prevent.

16 Trade Agreements

Positive techniques for recovering items you don't want your dog to have.

21 Weight Loss for Senior Dogs

Help your older dog slim down; she'll live longer, and enjoy life more as a fit dog!



How to Choose?
Dry food shopping tips
Page 3



Surviving Parvovirus
Vaccinating
Beats Treating
Page 12

ALSO IN THIS ISSUE

- 2 Editor's Note
- 22 Letters From Readers
- 24 Resources



Jabba the Pup
Put the dog on a diet
before it's too late!
page 21



The Whole Dog



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EDITOR'S NOTE

What to Expect

What WDJ's about, what we're not.

BY NANCY KERNS

In any given month, we have a number of new subscribers – people who are opening the pages of WDJ for the first time. They may have heard about us from a friend, trainer, or breeder. They may have been told that we review commercial foods and discuss home-prepared diets. Or they may have heard that we're a great source of information about dog-friendly training, and offer honest product reviews. They may have learned about WDJ when doing a web search for holistic treatments for a vexing health problem afflicting their dog. Within an issue or two or three, they should see that, indeed, we offer all that. But new readers may not realize right away what they *won't* find in WDJ.

First, they won't find articles recommending that they buy a shock collar or a choke chain, or that they should roll their dogs over and hold them down, or rub their noses in anything. We're here to explain how you can train your dog with methods that make sense to you *and* to him – effective methods that will build his trust and confidence in you as his benevolent, fair leader. We won't suggest any training techniques that are unsafe for you or your dog.

Our approach to “holistic” canine health care may be too nuanced for some dog owners. Some prefer a purely *alternative* approach; they distrust antibiotics and vaccines in favor of homeopathic remedies and nosodes; that's not us. In our view, renouncing conventional veterinary medicine is ridiculous; it offers so many valuable tools! Veterinarians are critically important members of your dog's healthcare team, as are veterinary chiropractors, acupuncturists, physical therapists, massage practitioners, and herbalists! We endorse *integrative* care – the most effective, evidence-based treatments with the fewest documented side effects.

We neither promote the practice of vaccinating all dogs with the same cookie-cutter vaccination protocol, nor vaccinating *all* dogs for *all* diseases every three years

– but we strongly believe that all dogs should be vaccinated for the core diseases, titer-tested to make sure they developed protective antibodies, and then re-vaccinated infrequently – if ever – again. (The rabies vaccine requires a different discussion, since it's the only vaccination required by law. Skirting the law by skipping rabies vaccinations can have serious repercussions if the dog ever bites or is bitten.)

We're not zealots when it comes to nutrition; while we think home-prepared diets are ideal, we understand that not all dog owners are ready, willing, or able to shop for and prepare a homemade diet for their dogs. We'll help you learn about and find healthful foods for your dog, whether you feed commercial kibble, canned, dehydrated, or frozen diets, or make his food from scratch.

While you're getting to know WDJ, it would be helpful if you told us a little bit about yourself! Are you a fairly new dog owner? A highly experienced one? Is your dog trained and titled in several canine sports, or are you still struggling to get him to stop pulling on leash? Are you most interested in health-related articles, product reviews, discussions of training techniques, or all of that, with equal passion? Drop us a line and let us know – and welcome!

NK

MISSION STATEMENT: WDJ's mission is to provide dog guardians with in-depth information on effective holistic healthcare methods and successful nonviolent training. The methods we discuss will endeavor to do no harm to dogs; we do not advocate perpetrating even minor transgressions in the name of “greater good.” We intend our articles to enable readers to immediately apply training and healthcare techniques to their own dogs with visible and enjoyable success. All topics should contribute to improving the dog's health and vitality, and deepening the canine/human bond. Above all, we wish to contribute information that will enable consumers to make kind, healthy, and informed decisions about caring for their own dogs.

Try These Dry Tips

How to select dry foods for your dog.

BY NANCY KERNS

How do you select your dog's food? Do you just buy what your dog's breeder recommended? Get what's on sale? Ask the sales clerk for his opinion? Well, that's too bad; *none* of these methods allow for a thorough analysis, or take into account all the factors that should be considered in order to buy and feed the food that best suits your dog and you. There's a better way! Here are 10 important points to investigate and contemplate as you shop.

1 BUY THE BEST FOOD THAT'S IN YOUR BUDGET. Good dog food costs a lot more than low-quality dog food because good dog food is made with better-quality ingredients, which cost more than low-quality ingredients.

That said, the most expensive food is not necessarily the best, nor does the price always correlate precisely with a food's quality. There are lots of low-quality foods that are sold for good-food prices, because some companies spend a ton on marketing and advertising!

There are bad, better, good, and best foods at every price level. You should have an idea of how much you are willing to spend; look for the best foods you can find at the level you can afford.

How can you determine which foods are the good and bad ones at your price point? Read on!

If you have more than one dog, don't forget that you can, and maybe should, feed each of your dogs a different food. Your adolescent Lab-mix might be able to eat practically anything and look like a million bucks, but your arthritic, allergic Border Collie might need a grain-free food with a novel protein in order to keep sound and not constantly itching.

2 DON'T ALWAYS CHOOSE THE SAME FOOD, OR EVEN FOODS FROM THE SAME COMPANY. Many companies use the same vitamin/mineral pre-mix in every one of their products. This means that the nutrient levels in all the foods

in the company's product line will likely have very similar nutrient levels. If you feed the same food (or even different foods from the same company) for months or years on end, your dog could develop problems caused by nutritional deficiencies or excesses.

It seems odd, but there is a wide range of nutrient levels allowed in foods that are legally described as "complete and balanced." (For more information about why this is so, see "Food Shopping" in the February 2016 issue.) Some products have levels of some minerals or fat-soluble vitamins that are inadequate or excessive. These imbalances won't cause problems in a short period of time, but if you never vary your dog's diet, the deficiencies or excesses compound over time and can cause health problems. Periodically switching your dog's diet

to products from different companies prevents this.

3 LOOK FOR THE AAFCO STATEMENT AND MAKE SURE THE FOOD IS "COMPLETE AND BALANCED" FOR DOGS IN YOUR DOG'S LIFE STAGE.

Some foods are formulated to meet the nutritional requirements of adult dogs only. If you are feeding a puppy, a high-performance athlete, a pregnant or nursing female, a dog who needs to gain weight, or a debilitated dog, you should look for a product that is formulated for dogs "of all life stages." Products labelled with that statement must meet the higher nutrient requirements of puppies and pregnant or nursing mothers.

4 CHECK THE PROTEIN AND FAT LEVELS IN THE GUARANTEED ANALYSIS. The minimum levels of protein and fat that are guaranteed to be present in the food are listed in the "guaranteed analysis" (GA) section on the label. When you switch your dog's food to a new one, you should be aware of how much protein and fat the old food contained, and how much is present in the new food. If the new food contains a lot more fat than the old food (as just one example), you will probably need to reduce the amount you feed your dog.

5 LOOK FOR THE "BEST BY" DATE. In general, you want to buy and feed the freshest food available. If a product is within six or fewer months of its "best by" date, we'd look through the pile for a fresher bag.

6 SAVE SO-CALLED "NOVEL" PROTEINS AND EXOTIC CARBOHYDRATE SOURCES FOR DOGS WHO REALLY NEED THEM. There is zero benefit to feeding



Shopping is hard, especially when you have dogs with different needs.

ostrich or alligator or even rabbit or quail to a dog who easily digests the most common animal proteins used in pet food (such as chicken, beef, lamb, and pork). However, if your dog ever develops an allergy to or intolerance of these common animal proteins, it will be invaluable to be able to employ more exotic animal proteins in an “elimination diet” (in which a protein that the dog has never eaten before is used).

The same principle applies to exotic carb sources. Carbohydrates such as quinoa, chickpeas, peas, and others are showing up in mainstream foods more and more frequently. Avoid them unless you need them for an elimination trial. (For more detail on this topic, see “Food Elimination Trials” in the April 2011 issue.)

7 LOOK FOR INGREDIENTS THAT YOUR DOG IS ALLERGIC TO OR INTOLERANT OF. This is (obviously) so you can avoid feeding a product that will distress your dog.

If you have proven, through your own feeding trials of various products, that your dog reacts badly to certain ingredients, you should be reading the ingredients list of every product you buy, to make sure the problematic ingredient isn't present in the product. Don't count on the fact that the ingredient wasn't present in the last bag of the same product; food manufacturers do change their formulas from time to time.

8 LOOK FOR THE FOLLOWING; THESE ARE GOOD THINGS YOU WANT TO SEE ON THE INGREDIENTS LIST:

✓ **Lots of animal protein at the top of the ingredients list.** Ingredients in pet food, just like human food, are listed in order of the weight of that ingredient in the formula, so you want to see a named animal protein or named animal protein meal first on the list. (“Named” means the species is identified: chicken, beef, lamb, etc. “Meal” means a dry, rendered product made from an identified species.)

✓ **When a fresh, named meat is first on the ingredient list, there should be a named animal-protein meal immediately or closely following that fresh meat.** Fresh meat contains a lot of moisture (which is heavy), so if meat is first on the list, it acts like a diluted protein source; while it adds an appealing flavor and aroma to

the food, it doesn't actually contribute that much protein. That's why another named source of animal protein should appear in the top three or so ingredients.

✓ **When vegetables, fruits, grains, and or carbohydrate sources such as potatoes, chickpeas, or sweet potatoes are used, they should be whole.** Fresh, unprocessed food ingredients contain nutrients in all their complex glory, with their vitamins, enzymes, and antioxidants intact. Don't be too alarmed by one or two “fractions” (a by-product or part of an ingredient, like tomato pomace or oatmeal), especially if they are lower on the ingredient list. But the more fractions present in the food, and the higher they appear on the list, the lower quality the result.

9 DON'T BUY FOODS THAT CONTAIN THE FOLLOWING INGREDIENTS; THESE ARE THINGS TO LOOK OUT FOR:

X **Meat by-products, poultry by-products, meat by-product meal, and poultry by-product meal.** Many of the animal tissues that are defined as animal by-products are highly nutritious, but they are also considered waste products of the human food industry.

X **“Generic” fat sources.** “Animal fat” can literally be *any* mixed fat of animal origin; it need not have originated from slaughtered animals. Meaning, it can be obtained from renderers that process dead animals. “Poultry” fat is not quite as suspect as “animal fat,” but “chicken fat” or “duck fat” is better (and traceable).

X **Added sweeteners.** Dogs, like humans, enjoy the taste of sweet foods. Sweeteners effectively persuade many dogs to eat foods comprised mainly of grain fragments (and containing less healthy animal protein and fats).

X **Artificial colors, flavors, or preservatives (such as BHA, BHT, ethoxyquin).** The color of the food doesn't matter to your dog. And it should be flavored well enough with healthy meats and fats to be enticing. Natural preservatives, such as mixed tocopherols, can be used instead.

10 CONTACT YOUR FAVORITE DOG FOOD MAKERS AND ASK THEM FOR THE COMPLETE NUTRIENT ANALYSES OF THEIR

PRODUCTS. It was a shock to learn, not long ago, that pet food companies don't have to show regulators (or anyone else) any sort of proof that their foods contain all the nutrients that dogs need. Instead, they fill out and sign an affidavit stating that “This product meets the nutrient levels established in the AAFCO Dog Food Nutrient Profiles for (growth/reproduction, maintenance, or all life stages).”

In our opinion, since pet food companies make food that's meant to provide 100 percent of the nutrients dogs need, they ought to be able to show some proof that their finished products do, in fact, contain the nutrients, in appropriate amounts, that they are supposed to, so we have begun asking companies to provide us with these analyses.

Some companies readily provided us with that information, and we have designated their products as our “Gold Star” foods. Good job! Others provided us with computer-generated analyses of the nutrient levels that are *expected* in their finished foods. That's something, but a little less than proof positive that those nutrient levels are, in fact, in line with the AAFCO Dog Food Nutrient Profiles. Those companies appear on our approved foods list, but without the “Gold Star” designation.






Companies who provided us with no documentation regarding the nutrient levels in their products have been omitted from our approved foods list.








For more information about why consumers should demand to see proof that their dogs' food truly is “complete and balanced,” see “Ask For More” in the October 2016 issue.







LIST OF APPROVED FOODS







Starting on the facing page is a list of a number of foods that meet all of our selection criteria. **Please note that these are not the only foods on the market that meet our selection criteria.** There may be other foods available to you that we are not familiar with. Read the label; if it meets the criteria we've outlined above, and it fits your budget and suits your dog, great! We suggest that you contact the company and ask for the complete nutrient analysis for your dog's food, so you can compare it to the standards for “complete and balanced” canine diets. Then you can make an intelligent, informed decision to buy or not buy the food, based on their response. 🐾

WDJ'S APPROVED DRY DOG FOODS FOR 2015

COMPANY INFO	MFR: SELF OR CO-PACK?	NUTRIENT ANALYSES	# OF VARIETIES, GRAIN-FREE?	MEAT, MEAL, OR BOTH?	PROTEIN RANGE, FAT RANGE	ANY RECALLS	PRICE	NOTES
ACANA Champion Petfoods Morinville, Alberta (877) 939-0006 acana.com	Self, in Canada and Kentucky	Provided lab results 	Acana Heritage: 4	Both	33% 17%	No	\$2-3 /lb	<ul style="list-style-type: none"> Acana Classics varieties contain 55-65% meat; Acana Regionals contain 60% meat; Acana Singles contain 50% single-source animal protein Only a single supplement is added to Acana Singles: zinc. They are complete and balanced without a vitamin/mineral premix
			Acana Regionals: 4 grain-free	Both	33% 17%			
			Acana Singles: 4	Both	27% 17%			
ADDICTION Kent, WA (425) 251-0330 addictionfoods.com	Self, in New Zealand	Provided lab results 	6 grain-free	Meals; kangaroo variety made with dried meat	22% - 26% 11% - 14%	No	>\$4 /lb	<ul style="list-style-type: none"> Varieties include lamb, pork, venison, kangaroo, and two salmon foods. Foreign manufacturing
AVODERM Central Garden & Pet Walnut Creek, CA (866) 500-6286 avodermnatural.com	Self, in California	Provided lab results 	21, 4 grain-free	Most with meals; 7 use both	20% - 30% 8% - 16%	Yes: Salmonella in 2012	\$1-2 /lb	<ul style="list-style-type: none"> Complete nutrient analyses are on the websites for all AvoDerm varieties Three of AvoDerm's varieties are baked, not extruded; all contain avocado
BENCH & FIELD Grand Rapids, MI (800) 525-4802 benchandfield.com	Co-packed, in Wisconsin	Provided lab results 	1	Meals	24% 15%	No	\$1-2 /lb	<ul style="list-style-type: none"> Only one variety is offered Sold direct and in Trader Joe's stores
BORÉAL Beamsville, ON (800) 253-8128 borealpetfood.com	Co-packed, in Ontario	Provided computer analyses	Original: 4, 3 grain-free	Both	28% - 29% 15% - 18%	No	\$3-4 /lb	<ul style="list-style-type: none"> Made in Canada, available only in Canada All foods made with low-carb formulas, "low glycemic" ingredients
			Proper: 3	Both	24%-27% 14%-15%			
			Vital: 2	Meal	26%-27% 14%-15%			
BLACKWOOD BrightPet Nutrition Group, Lisbon, OH (888) 843-1738 blackwoodpetfood.com	Co-packed, in Ohio	Provided lab results 	14 varieties, 3 grain-free	Meal	23% - 33% 9% - 23%	No	\$1-2 /lb	<ul style="list-style-type: none"> All formulas include omega-3 and -6 levels in GA. Some also include prebiotic and probiotic levels in GA Blackwood is a "house brand" for BrightPet Nutrition Group One formula (ExPro) uses porcine plasma (not our fave protein booster)


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CARNA4 Toronto, Ontario (855) 422-7624 carna4.com	Co-packed, in Quebec	Provided lab results 	2, 1 grain-free	Meat	28%-29% 15%-17%	No	>\$6 /lb	<ul style="list-style-type: none"> • Food is baked • No vitamins or minerals are included; "complete and balanced" from its food ingredients alone
CASTOR & POLLUX Merrick Pet Care (Nestlé Purina) Amarillo, TX (800) 875-7518 castorpolluxpet.com	Self, in Texas and Kansas	Provided lab results 	Organix: 9, 5 grain-free	Both	26%-32% 11%-14%	No	\$1-2 /lb	<ul style="list-style-type: none"> • Organix contains mostly (not all) organic ingredients, including organic chicken • One new grain-free Organix formula contains cubes of freeze-dried fish; new grain-free Ultramix formula contains cubes of freeze-dried beef
			Ultramix: 6, 4 grain-free	Both	25%-38% 12%-17%			
CHICKEN SOUP Cos Cob, CT (800) 658-0624 chickensouppets.com	Co-pack, in Kansas	Provided lab results 	11, 4 grain-free	Both	21% - 30% 6% - 18%	No	\$1-2 /lb	<ul style="list-style-type: none"> • Formerly licensed by Diamond, the brand is now independent and restored to the "Chicken Soup" rights-holder
DR. GARY'S BEST BREED Findlay, OH (800) 500-5999 bestbreed.com	Co-packed, in Ohio	Provided lab results 	15, 2 grain-free	Meals	21% - 32% 7% - 22%	No	\$1-2 /lb	<ul style="list-style-type: none"> • Company claims products are GMO-free • Product line includes 6 specific breed foods
DR. TIM'S PET FOOD Marquette, MI (906) 249-8486 drtims.com	Co-packed, in Nebraska	Provided lab results 	15, 2 grain-free	Meals	21% -32% 7% - 22%	No	\$1-2 /lb	<ul style="list-style-type: none"> • Company says all foods are low-ash, with high levels of quality fats a priority • All formulas contain porcine plasma (not our fave) as a protein source, but fairly low – 13th on the ingredients list
EAGLE PACK WellPet Tewksbury, MA (800) 225-0904 eaglepack.com	Self, in Indiana	Provided lab results 	9	Meals	23% - 30% 6% - 19%	No	\$1-2 /lb	<ul style="list-style-type: none"> • Most of these foods contain moderate levels of protein and fat; one has reduced fat; one is high-fat and high-protein
EVANGER'S Wheeling, IL (847) 537-0102 evangersdogfood.com	Co-packed, in Texas	Provided lab results 	5, 3 grain-free	Both	24% - 33% 12% - 16%	No	\$1-2 /lb	<ul style="list-style-type: none"> • Three formulas are chicken-free, for those looking for an alternative to this common ingredient
FARMINA (N&D) Colts Neck, NJ (732) 850-3693 usa.farmina.com	Self, in Italy	Computer analyses	N&D Low Ancestral Grain: 17	Fresh and dehydrated meats	27% - 35% 11% - 22%	No	\$2-3 /lb	<ul style="list-style-type: none"> • "Ancestral Grain" line uses organic spelt and oats • Grain-free line are high-protein, moderate fat foods
			Grain-Free: 24		30% - 42% 18% - 22%			

COMPANY INFO	MFR: SELF OR CO-PACK?	NUTRIENT ANALYSES	# OF VARIETIES, GRAIN-FREE?	MEAT, MEAL, OR BOTH?	PROTEIN RANGE, FAT RANGE	ANY RECALLS	PRICE	NOTES
GRANDMA MAE'S New York, NY (888) 653-8021 grandmamaes.com	Co-pack, in New York	Provided lab results 	10, 5 grain-free	6 have both; 4 have meals only	23% - 30% 7% - 15%	No	\$1-2 /lb	<ul style="list-style-type: none"> Sold only in independent stores in the midwest Senior variety includes dried chicken liver; a maximum of fat is also guaranteed in this variety
HALO Tampa, FL (800) 426-4256 halopets.com	Co-pack (company does not disclose location)	Provided lab results 	14, 5 grain-free	Meats only, except vegan variety	20% - 30% 10% - 20%	No	\$2-3 /lb	<ul style="list-style-type: none"> All varieties (except vegan one) contain fresh meat and eggs Vegan variety only for dogs with allergies to multiple animal proteins
HOLISTIC SELECT WellPet Tewksbury, MA (800) 225-0904 holisticselect.com	Self, in Indiana	Provided lab results 	15, 3 grain-free	Meals, except 2 grain-free foods use both	21% - 32% 7% - 20%	No	\$2-3 /lb	<ul style="list-style-type: none"> Holistic Select line has "digestive health support" features
IAMS HEALTHY NATURALS Mars, Inc. Dayton, OH (800) 675-3849 iams.com	Self (company does not disclose location)	Provided computer analyses	6, 1 grain-free	Both	20% - 25% 10% - 14%	Yes, Salmonella in 2013	<\$1-1 /lb	<ul style="list-style-type: none"> One of the 6 foods in this line do NOT meet our selection criteria; the "Ocean Fish & Rice" variety contains "animal fat" A named meat appears first on 4 of the 5 remaining products; chicken is second to sorghum in the "Weight Management" variety
LIFE'S ABUNDANCE Jupiter, FL (877) 387-4564 lifesabundance.com	Co-packed, in Ohio	Provided lab results 	5, 1 grain-free	Both	25% - 30% 11% - 19%	No	\$2-3 /lb	
LOTUS PET FOODS Torrance, CA (888) 995-6887 lotuspetfoods.com	Co-packed, in Quebec	Provided computer analyses	6, 3 grain-free	3 Both, 3 Meat	18% - 27% 8% - 14%	No	\$2-4 /lb	
MERRICK (Nestlé Purina) Amarillo, TX (800) 664-7387 merrickpetcare.com	Self, in Texas	Provided lab results 	Merrick: 16, all grain-free	Both	30% - 38% 8% - 17%	No	\$2-3 /lb	<ul style="list-style-type: none"> Merrick line is 60% animal proteins, 70% in the grain-free varieties Merrick Pet Care was sold to Nestlé Purina in 2015
NATURE'S SELECT Anaheim, CA (714) 993-5500 naturalpetfooddelivery.com	Co-packed, in Texas	Provided lab results 	7, 1 grain-free	All but one use meals; one uses both	22% - 33% 10% - 17%	No	\$1-2 /lb	<ul style="list-style-type: none"> Company angle: delivered direct to you, super fresh Availability limited to areas with local distributors; free delivery

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NATURE'S VARIETY St. Louis, MO (888) 519-7387 naturesvariety.com	Co-packed, in Kansas and Nebraska	Provided lab results 	Instinct: 5, all grain-free	Both	33% - 38% 18% - 20%	No	\$2-3 /lb	<ul style="list-style-type: none"> • Instinct line includes 4 "limited ingredient" foods and 2 "healthy weight" foods, which also contain freeze-dried meat • Prairie line contains whole grains; protein and fat levels are more moderate than Instinct line
			Instinct with Raw Boost: 12, all grain-free	Meal, meat, & freeze-dried meat	32% - 38% 10% - 20%		\$2-3 /lb	
			Prairie: 4	2 use both; 2 use meal	23% - 27% 14%		\$1-2 /lb	
NUTRAM Elmira, ON (844)234-2464 nutram.com	Self, in Ohio	Provided lab results 	14, 5 grain-free	Both	22% - 36% 12% - 17%	No	\$?	<ul style="list-style-type: none"> • Sold in Canada; supposedly sold in U.S., too, but we couldn't find a location
ORIJEN Champion Petfoods Morinville, Alberta (877) 939-0006 orijen.ca	Self, in Canada	Provided lab results 	Orijen: 7 grain-free	Both	38% 15% - 20%	No	\$3-4 /lb	<ul style="list-style-type: none"> • Orijen varieties contain 80% meat • Champion built a new manufacturing facility in Kentucky; food sold in U.S. is made here, food made in Canada is sold there
PARTY ANIMAL West Hollywood, CA (855) 727-8926 partyanimalpetfood.com	Co-packed (does not disclose location)	Provided computer models	1	Both	23% 14%	No	\$2-3 /lb	<ul style="list-style-type: none"> • Only one variety offered: Organic chicken (with chicken meal), and several whole organic grains
PET CHEF EXPRESS New Westminster, BC (604) 916-2433 petchefexpress.ca	Co-packed, in British Columbia	Provided lab results 	1	Meal	25% 10%	No	\$?	<ul style="list-style-type: none"> • One variety offered: Salmon. • Home-delivered within British Columbia
PETCUREAN Chilliwack, BC (866) 864-6112 petcurean.com	Co-packed, Ontario	Provided lab results 	Go!: 11, 3 grain-free	Both	22% - 36% 12% - 18%	No	\$2-3 /lb	<ul style="list-style-type: none"> • Go! Fit + Free is grain-free; Sensitivity + Shine and Daily Defense are single-protein foods • Now Fresh foods contain only fresh meats • Lower-cost line Summit is available only in Canada • Gather foods are organic; contain no meals, GMO. Farm-to-bowl approach
			Now Fresh: 11 grain-free	Meat only	24% - 28% 10% - 18%		\$3-4 /lb	
			Summit: 4	Meal only	21% - 28% 8% - 17%		\$1-2 /lb	
			Gather: 3	Meat, dehydrated meat	22% - 30% 11% - 15%		>\$6 /lb	
PINNACLE Central Garden & Pet Walnut Creek, CA (866) 500-6286 pinnaclepet.com	Self, in California	Provided lab results 	6, 6 grain-free	Both	27% - 42% 10% - 22%	No	\$2-3 /lb	<ul style="list-style-type: none"> • Complete nutrient analyses are on website • Pinnacle foods contain only one animal protein per variety

COMPANY INFO	MFR: SELF OR CO-PACK?	NUTRIENT ANALYSES	# OF VARIETIES, GRAIN-FREE?	MEAT, MEAL, OR BOTH?	PROTEIN RANGE, FAT RANGE	ANY RECALLS	PRICE	NOTES
PREMIUM EDGE Diamond Pet Foods Meta, MO (800) 977-8797 premiumedge petfood.com	Self, in Missouri, California, Arkansas	Provided lab results ★	6	Both	20% - 44% 8% - 15%	Yes: Salmonella in 2012	\$1-2 /lb	• Fresh meat is included in each formula
PROFESSIONAL+ Diamond Pet Foods Meta, MO (800) 342-4808 professionalpet food.com	Self, in Missouri, California, Arkansas	Provided lab results ★	4	Both	21% - 26% 10% - 15%	No	\$1-2 /lb	• Fresh meat is included in each formula
SOLID GOLD El Cajon, CA (800) 364-4863 solidgoldpet.com	Co-packed (does not disclose location)	Provided lab results ★	9, 2 grain-free	Most contain both; 2 contain meal only	18% - 41% 9% - 20%	Yes: Salmonella in May 2012	\$2-3 /lb	• Highest protein foods are the two grain-free varieties
SPORT DOG FOOD Ronkonkoma, NY (631) 662-2185 sportdogfood.com	Co-packed, in Texas	Provided lab results ★	12, 7 grain-free	Meals	20% - 30% 10% - 20%	No	\$1-2 /lb	• Many are single-protein, limited ingredient foods • Company angle: direct shipped to you
TASTE OF THE WILD Diamond Pet Foods Meta, MO (800) 977-8797 tasteofthewild petfood.com	Self, in Missouri, California, Arkansas	Provided lab results ★	9, 3 grain-free	Both	25% - 32% 15% - 18%	No	\$1-2 /lb	• Taste of the Wild grain-free foods each contain multiple protein sources
TUSCAN NATURAL Pyramid Pet Products Las Vegas, NV (888) 408-0895 tuscannatural.com	Co-packed, in Kansas	Provided lab results ★	5, 1 grain-free	3 with meals; 2 with both	21% - 35% 11% - 20%	No	>\$3 /lb	• "Simply Pure" varieties are limited-ingredient • Grain-free variety is high protein, high fat
VERUS PET FOODS Abingdon, MD (888) 828-3787 veruspetfoods.com	Co-packed, in New York	Provided lab results ★	8	Meals, except for 3 new varieties with both	17% - 26% 8% - 16%	No	\$2-3 /lb	• VeRUS says it uses an exclusive 100% guaranteed non-China-sourced vitamin/mineral mix in its foods
WHOLE EARTH FARMS Merrick Pet Care (Nestlé Purina) Amarillo, TX (800) 323-3353 feedgoodness.com	Self, in Texas	Provided lab results ★	7, 6 grain-free	Both	24% - 26% 8% - 13%	No	\$1-2 /lb	• Whole Earth is Merrick's economy line



COMPANY INFO	MFR: SELF OR CO-PACK?	NUTRIENT ANALYSES	# OF VARIETIES, GRAIN-FREE?	MEAT, MEAL, OR BOTH?	PROTEIN RANGE, FAT RANGE	ANY RECALLS	PRICE	NOTES
WELLNESS WellPet Tewksbury, MA (800) 225-0904 wellnesspetfood.com	Self, in Indiana	Provided lab results 	Complete Health: 20, 6 grain-free	Both	22% - 32% 10% - 18%	Salmonella in May 2012	\$1-2 /lb	<ul style="list-style-type: none"> • Complete Health has sub-lines of foods for toy, small, and large breeds, as well as foods for puppies and seniors • Core foods are all grain-free, and high in protein, with moderate fat levels • Simple foods are limited-ingredient diets with a single animal protein each
	TruFood is co-packed, in Quebec		Core: 7 grain-free	Both	33% - 36% 10% - 18%	No	\$2-3 /lb	
	Core Air Dried is co-packed, in Utah		Simple: 6, 4 grain-free	Both, except for one with meat only	21% - 29% 8% - 14%	No	\$2-3 /lb	
			TruFood: 5, 2 grain-free	Both	29% - 36% 15% - 17%	No	\$3- >\$4 /lb	

MISSING FROM OUR APPROVED FOODS LIST

The companies that are listed below have products that meet our selection criteria based on their ingredients, and each has appeared on our “approved foods” list in the past. This year, when we asked for lab analyses of their products, they either declined, didn’t respond, or asked for more time.

A few companies responded with something *close* to what we wanted. Rather than sending us laboratory test results, they sent us the projections of their products’ nutritional content. Virtually every pet food today is formulated with computer software that, given the particulars of the recipe and the ingredient sources, can predict the nutrient values of the finished product. But there are a number of things that can cause the nutrient levels in the food to depart significantly from what was expected. So, we’ve allowed these computer models for now, but have noted in the list of “Approved Foods” (above and on the preceding pages) which companies provided us with what we asked for – our “Gold Star” products.

In the course of collecting this information, we’ve been told a number of times that these analyses represent a significant financial burden to produce, especially for a small company. Our response is, “You are in the business of making and selling

a product that dogs will depend on for their very well-being, and you don’t have one lab test result that confirms the diet does actually contain all the nutrients, in appropriate amounts, that dogs are known to require?”

Besides the cost, we can’t think of any good reasons that a pet food company *wouldn’t* test its products to ensure they contain the nutrients they are supposed to, in the proper amounts. One would imagine this was done at least once, when each formula was finalized; one would hope that another test is run any time a formula is significantly changed, or the company moves its production to another manufacturer, or has a new supplier of major ingredient/s.

If these companies were producing *treats*, we probably wouldn’t care that they couldn’t or wouldn’t provide us (and consumers) with nutritional analyses of their products. But their products are labeled, sold, and fed as “complete and balanced” diets for dogs. For many (most?) dogs, dry food is the sole source of their nutrition. What if it turned out that the food you feed *your* dog *doesn’t* actually contain all the amino acids, fatty acids, vitamins, and minerals that he or she requires for optimum health?

Missing from the approved list:

Artemis
Azmira
Back to Basics (discontinued)
Bake to Nature
Blue Buffalo
ByNature
California Natural
Canidae
Canine Caviar
Dogswell
Dr. E’s Limited Ingredient

Drs. Foster & Smith
Earthborn Holistic
Evo
Firstmate
Great Life (discontinued)
Health Extension
Hi-Tek Naturals
Horizon
Kasik’s
Leonard Powell Signature
Life-4K9
Natural Balance

Natural Planet
Newman’s Own
Nutrisource
Nutro Ultra
Pioneer Naturals
Petguard
PureVita
SmartPak
Spring Naturals (discontinued)
Precise
Viand
Zignature

WEIGHING THE FACTORS THAT AFFECT FOOD SELECTION

Our primary goal with food reviews is to help make you aware of the many characteristics of dog food that can affect your dog – to use an industry term, how well the food will “perform” for your dog. His specific needs, and your needs, should dictate what foods you select. What would be the point of us identifying the 10 foods we think are “best” if you can’t afford most of them, your dog can’t tolerate some of them, and the rest contain far too much fat for your dog?

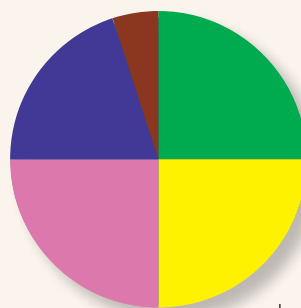
The companies that appear on our “Approved Foods” list offer products that meet our basic selection criteria: they contain good ingredients, they *don’t* contain any “red flag” ingredients, and their makers are reasonably transparent about their manufacturing and formulation. This list is a start – meant to give you examples of companies with better-quality products

FACTORS TO BE CONSIDERED

- Cost** – How much can you afford? How many dogs do you have? What size dogs?
- Availability** – Do you shop locally only, or are you willing to drive some distance? Is the food you like available online?
- Ingredient factors** – Are you considering only those foods with grain, or grain-free? Are there ingredients your dog can’t handle because of allergies or intolerance? Does your dog need a “novel” protein or carb source?
- Nutritional factors** – Are you looking for a food that has a specific amount of protein, fat, and/or certain “added-benefit” nutrients (such as glucosamine, DHA, omega-3 fatty acids, etc.)?
- Performance** – Your dog likes it and does well on it, with good coat, stool, and energy; and no itching or excessive gas.
- Marketing** – Did the company win you over with persuasive advertising, or a particularly attractive label?
- Company transparency** – If you call the company, does a human answer the phone? Can you be immediately connected with a knowledgeable customer service representative? Can the company readily provide you with nutritional analyses of its products? Does the company readily disclose its manufacturing sites and ingredient sources?
- Company reputation** – People have different levels of comfort regarding past offenses. Are you comfortable knowing that the company that makes your dog’s food had a recall last year? What if it had a recall five years ago? What if there have been no recalls, but you hear persistent rumors of company misdeeds? Taking this from another angle, some people distrust the largest companies, the corporate behemoths; others have greater concerns about small, “seat of the pants” companies owned by individuals with eclectic backgrounds.

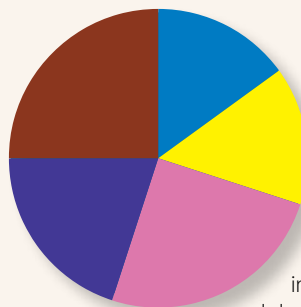
than those found in grocery and big-box stores, and lower-end pet supply stores. The list *purposely* contains products that range in quality and cost, from “wildly expensive” to “not cheap.” Inexpensive foods will *not* meet our selection criteria, because it’s impossible to make a low-cost food that contains superior ingredients.

We’d love for you to take our selection criteria into account as a starting place – only that, though, because there are a lot of other factors that people take into consideration when buying food for their dogs, and everyone will weigh these factors differently, depending on their individual needs and beliefs. If we made up a pie chart illustrating the weight of these factors, each dog owner’s “important food buying factors” chart would be different, and each would be valid.



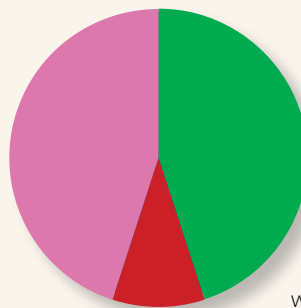
WDJ Editor Nancy Kerns: “I have two large dogs, and, frequently, a litter of foster puppies, so cost matters; I can’t afford to feed all of them the most expensive food. I look for foods that have higher than average levels of protein and fat. My dogs’ response to the food is critical; if it makes them gassy or develop diarrhea, I won’t buy it again.

The company’s transparency is important to me; a company is out of my consideration if I call them with a question and there are no humans answering the phone, no customer service representative is available to answer my question, or the representative can’t or won’t provide the information I ask for.”



Owner of two West Highland White Terriers; had a dog die of suspected melamine poisoning in 2007:

“The company’s reputation and transparency are most important to me. I won’t buy food from a company who has *ever* had a product recalled or has been involved in a lawsuit. My dogs are small and don’t each much, so as long as they do well on the food, I will buy it, no matter how much it costs. They don’t like foods with fish or lamb in them – and I have to make sure the food doesn’t contain too much copper, because Westies are prone to copper toxicosis.”



Owner of five Labrador Retrievers, lives 45 miles from closest place to buy food:

“With so many big dogs, cost is an important factor. If I can’t buy the food in my town, forget it; it’s not worth the hassle. Of course, the food has to suit my dogs; I hunt with them, and they need to stay healthy, energetic, and at a good weight, even in the harshest winter.”

Parvo Panic?

This highly infectious disease is treatable – but it’s far easier to prevent.

BY BARBARA DOBBINS

The year was 1980, and I was working as a veterinary assistant for my local veterinarian. All of a sudden we started seeing a large number of puppies coming into the hospital frighteningly ill, with symptoms of vomiting, severe lethargy, and bloody diarrhea. Canine Parvovirus (CPV-2) had reached our small rural town.

It was incredibly scary. Dozens of our furry friends were dying before our eyes, and there seemed little we could do. Most of the puppies under five months old and about two to three percent of older dogs died from CPV-2 when it first emerged. There is a distinct odor to the feces of dogs who are infected with the disease and that memory is cemented in my olfactory system. I also recall that bleach seemed to have become my personal scent, and I kept a wardrobe in the garage so I could change my clothes before I went into my own home after a day at the veterinary hospital.

HISTORY

Canine parvovirus – CPV-2, more commonly known as “parvo” – is an extremely virulent pathogen of domestic and wild canids, first emerging in Europe around 1976. It is a tiny (*parvo* means “small” in Latin), round, non-enveloped single-stranded DNA virus that has been determined by phylogenetic analysis to have descended from a single ancestor sometime in the mid-1970s. It is theorized that it evolved as a mutated variant of the long-known feline panleucopenia virus (FPV) that infects cats, minks, and raccoons (but not canines or cultured

dog cells), and it adapted to dogs via non-domestic carnivores such as minks and foxes. CPV-2 and all its known variants (CPV-2a, CPV-2b, and CPV-2c) are highly infectious and cause acute hemorrhagic gastroenteritis (bloody diarrhea). They can also cause myocarditis (inflammation of the myocardium, the middle layer of the heart wall).

Parvo spread worldwide rapidly; the virus is extremely hardy and easily transmitted, and dogs had no immunity to the new disease, causing a pandemic during the late 1970s and early 1980s. Within a few years, though, intense collaborative research resulted in the development of effective vaccines (allowing for prevention) and treatment

procedures that resulted in survival, culminating in disease control. Today, parvo is nearly unheard of in areas where most dogs are vaccinated, yet it remains a scourge in areas where vaccination compliance is low.

SUSCEPTIBILITY

CPV-2 infection occurs worldwide in domestic dogs and other members of the dog family (foxes, wolves, coyotes), but there is no evidence that it is zoonotic (transmissible to humans).

All dogs are susceptible, but it has been described that some breeds, specifically Rottweilers, Labrador Retrievers, English Springer Spaniels, American Staffordshire Terriers, Doberman Pinschers, Alaskan Sled Dogs, and German Shepherd Dogs are at increased risk for contracting the virus. The Koret Shelter Medicine Program at the University of California, Davis, suggests that “these breed tendencies likely evolve and change over time as a result of natural selection against susceptible lineages, and no one breed should be assumed to be more or less susceptible than another.”

However, according to one of the world’s leading canine vaccine researchers, Ronald D. Schultz, PhD, professor and Chair of the Department of Pathobiological Sciences at the University of Wisconsin-Madison, there *are* breeds (most notably the Rottweiler and Doberman) that respond less reliably to vaccinations and the CPV-2 vaccine in particular. This underscores the importance and value of confirming that your



The faster treatment begins, the better the prognosis. Puppies with lethargy, vomiting, diarrhea, and inappetence need to be seen by a veterinarian ASAP.

dog has been successfully immunized by performing a vaccine titer test after the last of his puppy vaccines have been administered. (More on the below.)

The virus can affect dogs of any age, but it is most prevalent and severe in puppies from six weeks to six months of age. If a puppy receives CPV-2 antibodies from its mother via colostrum ingestion, he should be protected from infection for the first few weeks of life; susceptibility increases as these maternal antibodies wane. Any unvaccinated dogs and incompletely immunized dogs are also very susceptible. Adult dogs who contract the disease generally respond better to treatment than puppies, but if a dog is on steroids, immune-suppressive medication, or is immunocompromised in any way, he may be at higher risk of death from the disease.

The incidence of CPV-2 infection (as well as other infectious diseases) is higher in areas where large numbers of dogs congregate, such as animal shelters, dog shows, pet stores, breeding kennels, and boarding/training facilities.

TRANSMISSION

Canine parvovirus is highly infectious. The virus is present in a concentrated form in the dog's stool. Infected dogs may start shedding the virus in their stool within four to five days of exposure (which can be before clinical signs of the illness emerge); their stool will also be loaded with the virus throughout the period of their illness, and for about 10 to 14 days after clinical recovery. Once exposed, unprotected dogs will generally start showing signs of the infection within three to 14 days, with an average of five to seven days.

The parvovirus infection causes severe diarrhea – and so anything that comes into contact with that stool can spread the virus. An unvaccinated dog who sniffs infected stool, an infected dog's rear end (the virus will be all over the hair on the dog's rear end), or even a shoe that stepped in a bit of the infected stool can become infected. The virus can “catch a ride” on anything that might be exposed to feces from an infected dog, including clothing, shoes or boots, dog toys, and kennel equipment (such as bedding, resting platforms, hoses, bowls, buckets, mops, wheelbarrows, etc.), can spread the disease.

Unprotected dogs can contract parvo year-round, but infection appears to

naturally increase during spring and summer months. It's more prevalent in areas where vaccination of animals is not widely practiced.

PATHOGENESIS AND SYMPTOMS

CPV-2 preferentially infects and destroys the rapidly dividing cells of the gastrointestinal system, lymph tissue, and bone marrow. The virus enters a dog's body through the mouth and begins attacking the tonsils or lymph nodes of the throat. In the lymph nodes, the virus replicates in significant amounts, releasing into the bloodstream after a couple of days. As CPV-2 requires rapidly dividing cells to successfully cause disease, it travels to locations containing these cells, primarily those in the bone marrow and intestinal system. When the virus infects the bone marrow, it destroys the new cells of the immune system (white blood cells) effectively knocking out the body's best defensive mechanism and making it difficult to combat infection.

It also appears to make it easier for the virus to invade the gastrointestinal system, where the virus does severe damage. In the small intestines, system, the virus attacks the glands in the epithelial lining where new cells are formed for the intestinal villi that provide for absorption of fluid and nutrients. New cells are prevented from forming and the system becomes unable to absorb nutrients, resulting in diarrhea and nausea. The intestinal lining can become so damaged it breaks down, allowing the digestive bacteria normally confined to the gut to pass through the intestinal walls and enter the bloodstream, causing fluid loss and widespread infection.

At this point in an infection, because the virus has already damaged the immune system, it is difficult for the body to fight the infection. Canine parvovirus is not always fatal, but death can occur from either the septic conditions created by the intestinal bacteria in the bloodstream, or dehydration and shock.

Clinical signs of CPV-2 infection generally include a quick onset of inappetence, vomiting, extreme lethargy,

depression, diarrhea (often severe and containing blood), and dehydration. Additionally, the abdomen may be tender or painful and appear bloated, the heart may beat rapidly, gums and whites of the eyes may become noticeably red. When CPV-2 first presents, there is a slight rise in temperature, but it gradually falls to below normal with the advancement of the disease, and the affected dog often develops hypothermia.

Dogs become weak and dehydrated quickly due to the damage being done to the intestinal tract and the inability to absorb nutrients and fluids. Severely affected dogs may be in a collapsed state, with prolonged capillary refill time, poor pulse quality, and/or tachycardia. Laboratory analysis may show evidence of leukopenia and neutropenia (low levels of white blood cells). Most deaths from CPV-2 occur within 48 to 72 hours following the onset of clinical signs; early treatment is critical.

DIAGNOSIS

In most cases, diagnosis of CPV-2 is fairly straightforward; a presumptive diagnosis can often be made based on the dog's history, clinical symptoms, physical examination, and laboratory tests (such as white blood cell count). Sudden onset of vomiting and bloody diarrhea is highly suspicious in susceptible dogs.

Fecal testing confirms the diagnosis.

In-hospital viral antigen detection tests, such as the enzyme-linked immunosorbent assay (ELISA), are most commonly used. These tests use the same type of technology as home pregnancy tests and are reported to be fairly accurate and sensitive for recently emerged strains of the virus and can be completed with results in less than 15 minutes. There are, however, some limitations to the test. Results can be skewed by recent vaccination with a live vaccine, showing a positive reading from detecting the live virus from the vaccine, not from a CPV-2 infection.

The polymerase chain reaction (PCR) test is another fecal-based test that can be used to detect the virus; it is highly accurate, but it requires a sample be sent to a laboratory, which can take valuable



time. Sometimes more than one type of test may be necessary to achieve optimal diagnosis.

TREATMENT

Treatment options will vary depending on how sick the patient is, and also on the owner's ability to pay. Optimal care can be expensive and is most effectively administered in a veterinary hospital that provides 24-hour care. Aggressive treatment protocols involve supportive care and management of symptoms until the dog's immune system recovers, usually for two to seven days. There are no drugs available that can kill the CPV-2 virus, but immediate supportive treatment is crucial to saving the life of the dog.

The basic treatment protocol employs broad-spectrum prophylactic antibiotics, steroids, and antiemetic medication (to stop vomiting), and restoration of fluid,

electrolyte, and metabolic abnormalities primarily via intravenous therapy. The patients must also be kept warm, clean, and comfortable.

The patients should also be monitored for development of hypokalemia (dangerously low potassium levels) and hypoglycemia (low blood sugar). In severe cases, blood transfusions may be warranted to boost low blood-cell counts resulting from bone marrow infection. Recent evidence suggests that providing enteral nutrition (tube feeding) earlier in the patient's illness is associated with faster clinical improvement, weight gain, and improved gut barrier function. When vomiting has ceased for 12 to 24 hours, it is recommended that water and a bland, easily digestible low-fat diet be gradually reintroduced.

CPV-2 can be fatal even with aggressive treatment. The disease is most

severe in younger puppies, especially those younger than 12 weeks, and most puppies without veterinary intervention usually die. Successful outcomes require early diagnosis and treatment. If a dog survives the first three to four days, he will usually recover rapidly (usually within one week), and he will become immune to the virus for life.

CONTROL

The CPV-2 virus is extraordinarily hardy; it can remain viable for months, perhaps even years, outside its canine host. The virus survives through winter, through freezing temperatures, and is resistant to most household cleaning products. An infected dog can shed 35 million viral particles in an ounce of feces; a typical infectious dose to an unvaccinated dog is only 1,000 viral particles. That makes it very difficult to disinfect an area once it has been exposed.

Dogs with confirmed or suspected canine parvovirus should be isolated to prevent spreading the disease to other susceptible dogs and to limit environmental exposure. Only fully vaccinated older puppies and adult dogs should be exposed to the home environment of a dog recently diagnosed with CPV-2. Puppies especially should not be allowed to come into contact with the fecal waste of other dogs as this a prime vector for transmission of CPV-2.

Contaminated environments need to be sanitized through repeated cleaning to remove all organic debris and dirt, along with the virus, followed by use of disinfectants with proven efficacy. Effective choices include household bleach (5 percent sodium hypochlorite) at ½ cup per gallon of water (1:32 dilution). Like

PIXEL: A TINY SUCCESS STORY



Two years ago I helped my sister foster and nurse a young pup recovering from parvo that came from the shelter where she worked as a registered veterinary technician. This pup arrived at the shelter with a female dog and two other puppies. All of the puppies appeared to be littermates, about five weeks old. Based on clinical signs, they were suspected of being infected with parvovirus; a SNAP test confirmed that two of the pups were positive.

The pups with parvo were isolated, treated, and survived, but the tiniest female, all 2.2 pounds of her (down from 3.5 pounds at intake) suffered from complications of maldigestion, malabsorption,

anemia, and hypoglycemia. The disease had ravaged her tiny digestive tract and it was touch and go for days. The tiny pup could barely stand and when she did, it was in a hunched posture. Also, her body couldn't maintain a normal temperature, so when she wasn't curled up with my Border Collie, she had a special heating disc to keep her warm.

When she finally developed an interest in eating, it was a challenge to find something she would eat more than once – and when she did eat, the food often came out looking like it did when it went in. My sister provided her with constant care and love, and, happily she bounced back.

It was at this point this speck of a pup was given her name – Pixel – and her permanent home (with my sister of course). Today she eats ravenously as if to make up for lost time and she has no side effects from her severe illness.



all disinfectants, bleach must be stored and used correctly in order to be effective. Bleach is an acceptable method for cleaning any indoor areas, surfaces, and equipment (including bowls and beds). Avoid using mops to clean.

Launder clothing, bedding, towels, etc., in hot water with detergent and bleach. Do not overload the washing machine, and use a clothes dryer rather than hanging items up to dry. Make sure that all objects that have come into contact with an infected dog have been discarded or disinfected.

PREVENTION

Because CPV-2 can be found anywhere infected dogs have visited, the cornerstone to protecting your dog from the disease is vaccination. Since the development of the vaccine, the incidence of infection has been greatly reduced. A single modified live vaccine can confer protection within three to five days. Although parvoviruses continue to evolve, vaccination appears to confer reliable protection against all known strains.

As with other infectious diseases of dogs, puppies from mothers with immunity are protected by maternal antibodies, acquired via colostrum. This natural protection can, however, create a problem in prevention, as pups can become susceptible between the waning of the maternal antibodies and the administration of the vaccine. There is a high rate of infection reported in pups older than six weeks of age, about the time when maternal protection wanes in most puppies.

Most cases of CPV-2 infection tend to be in unvaccinated or partially vaccinated puppies. For this reason, until they are fully immunized, puppies should be provided with very limited exposure to public places, and should not be taken to areas where lots of dogs congregate or are walked. Until their immunization is complete, puppies should never be taken to dog parks or pet supply stores.

The age at which puppies receive their first vaccination and subsequent vaccinations varies widely, depending on their environment. Shelters usually vaccinate all puppies over four weeks of age upon admission to the shelter, and at least every three weeks after that until the puppies are older than 16 to 18 weeks. An experienced breeder with superior control over her dogs' environment and visitors might wait until a puppy is eight

HOME TREATMENT FOR PARVO?

The gold standard of treatment for dogs or puppies who are infected with parvovirus can be expensive, and too often, owners who are given the worst-case estimate of the cost of this treatment will opt to have their canine companion euthanized, since they lack funds to pay for those estimated costs. In theory, though, the treatment that parvo patients need to recover is not in and of itself expensive; the greatest contributor to the cost is the amount of time and attention required to nurse the animal through the illness.

In order to try to save lives by preventing "economic euthanasia," researchers at Colorado State University's College of Veterinary Medicine and Biomedical Sciences Veterinary Teaching Hospital developed a protocol that could be made available to highly motivated owners who wanted a second option: a chance to care for the patient at home.

Their protocol is meant to be administered under a veterinarian's supervision, and requires constant communication with and oversight from a willing veterinarian. The owner will have to administer subcutaneous fluids and other injections, monitor the patient's body temperature and keep him especially warm, provide nutrition as needed by syringe-feeding a high-calorie canned food, and be alert to changes in the patient's condition that may require a return to the veterinarian for lab tests and additional medications.

In a study comparing the efficacy of the protocol to conventional gold-standard treatment, CSU researchers determined that 80 percent of the patients treated with the home-care protocol recovered, compared to 90 percent of the conventionally treated patients.

See "New Home Treatment for Parvo May Prevent 'Economic Euthanasia,'" WDJ November 2013, for more information. A link to the Colorado State home treatment protocol is here: tinyurl.com/csu-parvohometreatment.

weeks or older, and vaccinate as few as two times, with the last vaccination being administered after the puppy is 18 weeks old. The goal is to administer vaccine as quickly as possible after the pup's maternal antibodies have faded, and since it's impossible to predict exactly when this might happen, the vaccinations are repeated until the last possible time that the maternal antibodies could possibly interfere with immunization.

Adult dogs, over the age of one year, generally need only one vaccination. A vaccine titer test, administered at least three weeks after the dog or puppy's final vaccination, can confirm whether the dog has developed protective antibodies.

Dogs who have been infected by CPV-2 and survived tend to be antigenically stable (immune to further infection).

See "Puppy Vaccinations" in the October 2016 issue for more about the number and timing of the vaccines needed to protect puppies from parvo and other diseases.

PROGNOSIS

Today, survival rates in quickly diagnosed and appropriately treated dogs from CPV-2 infection are reported as being in the 75 to 90 percent range. In untreated dogs, the mortality rate often exceeds 90 percent. Note that these are averages and individual morbidity and mortality rates vary according to the age of the dog, the severity of infection, the presence of concurrent health problems, and the speed with which the illness was diagnosed and treated.

Local shelters and veterinarians can give you information about parvovirus outbreaks and the prevalence of the disease in your community. Often, shelter workers are aware of specific neighborhoods where parvo is particularly endemic. 🐾

Barbara Dobbins, a former dog trainer, writes about dogs and studies canine ethology. She lives in the San Francisco Bay area with her new puppy, Tico.

Trade Agreements

Positive techniques for recovering items you don't want your dog to have.

BY PAT MILLER, CBCC-KA, CPDT-KA

It's a rare dog owner who hasn't, on one or more occasions, had to retrieve something from her dog that the dog wasn't supposed to have. In the best of circumstances it's something of little or no value that the human would merely prefer the dog not ingest – a used tissue, say, or a dropped vitamin tablet. In the worst of times, it's something invaluable – a family heirloom, for example – or something toxic to the dog, that the human *must* get away from the dog.

In years past, I instructed dog owners and my student dog trainers in the fine points of teaching dogs a “Leave It” behavior. To teach this behavior, I would place a high-value item (such as a cube of freeze-dried liver) under my foot, and generally, a dog would try to get it by pawing at or pushing my shoe with his nose. I would wait patiently, then mark and reinforce the dog for any behavior other than trying to get it out from under my foot – even just a brief glance away.

There is more to the technique (most recently discussed in WDJ in the August 2008 issue), but I won't go into it in more detail, because I have abandoned this method for much simpler and more effective methods!

Today, my preference is to teach dogs a “Trade” behavior for those instances when the dog already has something in his mouth that I don't want him to have, and “Walk Away,” which can be used whether the dog has a forbidden item in his mouth or has just spotted a forbidden item. Since I have incorporated these behaviors into my dogs' and my students' behavior repertoire, I have noticed that the behavior I want happens much more quickly and with less frustration for dogs and humans.

One possible reason for the greater success of these behaviors (compared to “Leave It”) is the fact that in these protocols, you teach the dog something to *do*, which is far easier for a dog to

understand than something to *not* do. In teaching “Trade” or “Walk Away,” we show the dog how to earn treats by *doing* something (either trading or walking away), rather than just refraining from doing something else (grabbing or eating a certain item). These behaviors offer the dog a clear path to success!

Our 13-year-old Corgi, Lucy, has long known the “Leave It” behavior. I recently

taught her the “Walk Away” behavior, and then did an experiment, setting up parallel high-value challenges and cueing “Leave It” one time, and “Walk Away” another. I randomized the cues, so that sometimes “Walk Away” came first, and sometimes “Leave It” was cued first. One hundred percent of the time she responded more quickly to the simpler “Walk Away” cue, and with softer body language, than she did to the more difficult “Leave It” cue. This small trial made a believer out of me!

Whether your dog has snatched up something he shouldn't have, or is about to, the likelihood of your success in getting it away from him is considerably greater if you stay calm, rather than freak out and start to yell and grab or chase the dog. The potential for success skyrockets if you have previously taken the time to teach your dog one of the protocols that follows, so your dog actively, happily, and willingly relinquishes that or any other object on cue.

Note: These behaviors will be easiest to teach if you haven't already created an adversarial relationship with your dog over his ill-gotten gains. If you've attempted to forcefully remove things from your dog's mouth and he is now a serious resource-guarder, enlist the help



If you've ever chased your dog when he grabbed something he shouldn't have, you will likely have to work to show him that the “trade” game is actually much more fun and rewarding than “keep away.”

of a qualified force-free trainer before attempting to teach “Trade.” (See “On Guard,” WDJ August 2015, for more information about resource-guarding.) If you’ve chased him when he had things he ought not, he may think “keep away” is fun, in which case, you’ll need to convince him that “Trade” is a better game.

TEACHING TRADE

In teaching your dog “Trade,” you are promising to give him something of value in exchange for the valuable item he has in his mouth. (Cat poop may be abhorrent to humans, but it is of very high value to many dogs!)

Here’s how to teach “Trade.”

1 Say “Take it!” and give your dog a low-value object – something he will easily and willingly give up in exchange for the high-value treat you will offer him next. (If his first instinct is to take the item and run, you may need to put a leash on him and step on the leash or tether him to something solid, so he can’t run off with the item before he realizes there are more potential benefits to this negotiation!)

2 Offer him some high-value treats. You may need to hold the treats close enough to his nose that he can smell them, but don’t try to push them into his mouth; anything that resembles coercion will likely increase his resistance. Make sure you have a large enough supply of the high-value treats that it will take him a few moments to eat them.

If he doesn’t drop the object he has in his mouth in favor of your treats, you need a higher-value treat (think meat, not dry biscuits) and/or a lower-value item to trade for.

Notice you didn’t use a cue yet. We don’t add the cue until we *know* the dog will drop the item.

3 When he drops the item, click your clicker (or use a mouth click or verbal marker, such as the word “Yes!”), and while you keep him occupied nibbling at the high-value treats in one hand, with your other hand, pick up the object and hide it behind your back. This part is really important. You must use two hands! If you let him eat the high-value treat and then try to race him back to the object, you’re likely to lose the race – and you may elicit resource-guarding.

If you feel at all uncomfortable



You might need to start teaching “Trade” with your dog on leash. Keep him occupied with nibbling the treats out of one hand while you pick up the item he’s dropped with the other, and hide it behind your back. After he finishes eating the treats, give him back the item. If he loses interest in taking the object, bring out a higher-value toy.

reaching for the item as your dog munches on the treats, you can sprinkle the treats in a short “Hansel and Gretel” trail, starting under his nose and leading to a spot a foot or two away from the dropped item. Engage his mouth with the treats in your hand after he follows the trail, while you pick up the item with your other hand.

4 As soon as he finishes eating the treats in your hand, bring out the object from behind your back, say, “Take it!” and give it back to him. This teaches him that he doesn’t always lose the item; he can trade with you and then get the item right back. This will make him more willing to trade again in the future. He gives you his good stuff, he gets more good stuff, and then he gets good stuff back again. It’s a win/win for him!

5 When you can reliably predict that he will drop the item when you offer your treats, add the cue. Give your cue first (“Trade!”), and pause for a second or two. Then offer the treats, click (or say “Yes!”) when he drops the item, and pick up the item with your free hand while you keep his mouth busy nibbling treats from your hand.

6 After several repetitions, sometimes pause a few seconds longer before offering your treats. Your goal is to get him to drop the object when you say, “Trade!” *before* you offer the treats. When he will do this reliably, it means you have the behavior “on cue” – that is, he is dropping the object because he heard and understood the cue, not just because you stuck high-value treats under his nose.

While ideally you will always have something in hand (or in pocket) to offer your dog in trade, if you train this behavior well enough and practice it often, in an emergency your dog will still give up that poisonous mushroom (or whatever) when he hears the “Trade!” cue. This is most likely to work if you use your cheerful “training game” voice and not an “Omigosh, it’s an emergency” panicked voice. Your training diligence might even save your dog’s life!

WALK AWAY

In addition to the invaluable “Trade” cue, you can also teach your dog a very useful “Walk Away” behavior. This is particularly useful *before* your dog has a forbidden object in his mouth, but it can

also be effective after he has picked up something you don't want him to have.

I was introduced to this protocol by friend and fellow behavior professional Kelly Fahey, PMCT2. Fahey created this approach, based on Patel's "Drop it" protocol (described in sidebar, below), as a simpler and less-frustrating alternative to "Leave It." It can also be used to help modify resource-guarding.

Note: If at any point during the protocol you see resistance, tension, or signs of aggression in your dog, back up a few steps and proceed again more slowly, with more repetitions at each step. If your dog is prone to guarding and you are concerned about your safety or the safety of family members, seek the assistance of a qualified force-free professional to help you modify his guarding behavior.

Here's how to teach "Walk Away."

1 Say, "Walk away!" in a cheerful voice and toss several treats on the ground. Point at the treats as the dog finds them (at a safe distance if your dog is likely to guard the food). Repeat 10-12 times (or more) until dog eagerly responds to the "Walk away!" cue.

While in most cases, you add a cue

only after you are reliably eliciting a certain behavior, in this case, you are giving your dog a positive association with the cue *before* you introduce the potential for conflict with having something in his mouth. And by pointing at the food, you give your dog a positive association with your hand in the vicinity of treats on the ground, to avert or reduce the potential for resource-guarding.

2 Place a neutral object (one that's not valuable to your dog) on the ground. When your dog sniffs it, say, "Walk away!" and toss several treats on the ground, about two to four feet from the object. Point at the treats as the dog finds them; again, and in every single step that follows, point from a safe distance if your dog is prone to guarding food. Repeat at least 10-12 times (or more), until your dog immediately moves away from the object in response to the cue. Use a variety of objects as the neutral object if necessary to keep your dog interested in approaching and then "walking away" from them.

3 Place an object that is of relatively low value to your dog on the ground –



Point to and even flick the tossed treats. You are both bringing your dog's attention to them, and getting him accustomed to your hand reaching toward and near his coveted items and food.

perhaps a toy that he sometimes plays with (not one of his favorites) or a type of biscuit he will only sometimes eat. When your dog approaches or sniffs it, say, "Walk away!" and toss several treats on the ground, about two to four feet from the object. Point at the treats as the dog finds them. Repeat at least 10-12 times (or more) until your dog immediately moves away from the object in response to the cue. Use a variety of objects if necessary to reignite his interest.

DROP IT

British trainer Chirag Patel, CPDT-KA, DipCABT, owner of Domesticated Manners in London, has developed another alternative, an innovative protocol for asking your dog to give up something in her mouth. It's demonstrated beautifully in a video you can watch on YouTube (tinyurl.com/patel-drop).

Patel starts with a dog who actually has nothing in her mouth. He gives a signal – a bright, cheery, "Drop!" – that is immediately followed by high-value food treats being immediately tossed on the ground near the dog. He points to and even flicks the treats on the ground with his fingers, to bring the dog's attention to each little tidbit; this helps the dog become accustomed to and comfortable with a human hand reaching down and toward the dog's treats.

Patel recommends practicing many repetitions of this exercise, and incorporating it into every sort of activity around the house and yard: while sweeping the kitchen, carrying a bag of trash out to the garage, sitting on the couch, and so on. The goal is to get the dog to understand that you might give the cue at any time, in the midst of any activity, and it always means treats are about to be flung her way!

Once the dog understands the cue "Drop!" as a signal that treats are on the way, and she starts scanning the nearby

ground for the treats immediately after hearing the cue, Patel introduces an item to the training environment that the dog shouldn't have much interest in. If the dog so much as looks toward the item, he gives the "Drop!" cue, and tosses the treats, pointing each one out to the dog each time.

After many repetitions, the next step is the introduction of a low-value toy; Patel waits for the dog to sniff or pick up the toy, and then gives the "Drop!" cue and tosses the treats. If the exercise has been sufficiently practiced, the dog should immediately drop the toy and enthusiastically pursue the treats as she has so many times before.

The exercise is repeated many times with increasingly valuable toys, and even food items, as the dog becomes completely comfortable with the concept that "Drop!" means treats are on the way, and her human will even help her find each one.

In the video, Patel demonstrates that with enough repetitions of the Drop exercise, the dog becomes completely unconcerned about immediately dropping whatever she might have in her mouth and allowing the person to take the item; she learns that the cue signals that she will certainly gain lots of terrific treats, and will almost always also be given the item back.

4 Place an object that is of slightly greater value to your dog on the ground. When your dog sniffs it, say, “Walk away!” and toss several treats on the ground, about two to four feet from the object. Point at the treats as the dog finds them. Repeat at least 10-12 times (or more) until your dog immediately moves away from the object in response to the cue. Use a variety of objects if necessary.

5 Place an object that is of high value to your dog on the ground. When your dog sniffs it, say, “Walk away!” and toss several treats on the ground two to four feet from the object. Point at the treats as the dog finds them. Repeat at least 10-12 times (or more) until your dog immediately moves away from the object in response to the cue. Use a variety of objects if necessary.

6 Place an empty food bowl on the ground. When your dog sniffs it, say, “Walk away!” and toss several treats on the ground, about two to four feet from the object. Point at the treats as the dog finds them. Repeat at least 10-12 times (or more) until your dog immediately moves away from the bowl in response to the cue.

7 Put a handful of relatively low-value food (such as dry kibble) in a food bowl and place it on the ground. When your dog sniffs it, say, “Walk away!” and toss several treats on the ground, about two to four feet from the object. Point at the treats as the dog finds them. Repeat at least 10-12 times (or more) until your dog immediately moves away from the bowl in response to the cue.

8 Put a handful of higher-value food (such as kibble mixed with a little canned food) in a bowl and place it on the ground. When your dog sniffs it, say, “Walk away!” and toss several treats on the ground, about two to four feet from the bowl. Point at the treats as the dog finds them. Repeat at least 10-12 times



THE VALUE OF MONEY

Our dog Bonnie, now 12 years old, has always been very oral, so “Trade” has been a life- and relationship-saver for us. Even now as a maturing senior, she will pick up random objects she finds on the floor. In fact, she has learned that if she brings me small pebbles from our driveway that get tracked into our house on our shoes, I will reliably trade her for a treat.

In the old days (more than two decades ago), prior to my crossover to force-free training, I would have found this annoying at best, and probably punished her for her naughtiness. Today, instead, I take pride in her cognitive abilities – she recognizes the value of currency!

Think about it. Those wrinkled pieces of green paper in your wallet have no intrinsic value. You can’t eat them, they don’t keep you warm, and they aren’t entertaining. They are only valuable because you can trade them for food, shelter, clothing, tuition, books, tickets to movies, and other goods that do have intrinsic value. Pebbles have no intrinsic value to Bonnie. She can’t eat them (well, she could, but they have no nutritional value or taste), she can’t buy her way into a movie theater, and they don’t keep her warm. But she has learned that she can trade them for treats – she can buy food with them. She has learned the value of pebble money. If you ask me, that’s pretty smart – and pretty darned cognitive!



until your dog immediately moves away from the bowl in response to the cue.

9 Put a handful of high-value food (such as canned food or meat) in a food bowl and place it on the ground. When your dog sniffs it, say, “Walk away!” and toss several treats on the ground, about two to four feet from the bowl. Point at the treats as the dog finds them. Repeat at least 10-12 times until your dog immediately moves away from the bowl in response to the cue.

10 When your dog is relaxed and happily moving away from objects and/or food bowls, add a “pick up the object or bowl” step into the protocol. Say, “Walk away!” and toss treats, then pick up the object or bowl, hand-feed him a few treats, and put object or bowl back on ground as you toss a few additional treats near the object/bowl.

Tennis balls are Woody’s highest-value toy, but after a few dozen repetitions of the Walk Away exercise, he’s happily dropping the ball on cue, midstride.

USE THE TOOL THAT’S MOST USEFUL TO YOU

These protocols can get you and your dog out of a lot of difficult situations. I daresay “Trade” saved my relationship with another one of our dogs that could have gone very badly if I was still an old-fashioned coercion-based dog trainer when we adopted her (see “The Value of Money,” above).

In addition, numerous clients have shared stories with me where “Trade” has literally saved their dogs’ lives, by enabling them to retrieve a toxic object from their dogs’ mouths, hassle-free. If you have an inspiring “Trade,” “Walk Away” or “Leave It” experience, we’d love to hear it! 🐾

Author Pat Miller, CBCC-KA, CPDT-KA, is WDJ’s Training Editor. She and her husband Paul live in Fairplay, Maryland, site of her Peaceable Paws training center. Miller is also the author of many books on positive training. Her newest is Beware of the Dog: Positive Solutions for Aggressive Behavior in Dogs (Dogwise Publishing, 2016). See page 24 for more information.

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Weight Loss Tips for Senior Dogs

Ten tips to help you help your older dog to slim down – and maybe even enjoy life longer.

BY CJ PUOTINEN

Older dogs, like older people, have an easier time getting around if they aren't overweight. Losing weight can be a challenge at any age, but more so as we grow older. Still, weight loss is worth the effort. Slender dogs not only get around more easily, but also actually live longer. A 14-year study showed that dogs fed 25 percent fewer calories than their free-fed littermates lived nearly two years longer, showed fewer visible signs of aging, and enjoyed an extra three years of pain-free mobility before developing arthritis.

Health problems that are more common in overweight dogs include pancreatitis, diabetes, heart disease, disc disease, ruptured cruciate ligaments, hip dysplasia, other forms of joint disease, surgical complications, compromised immune systems, and several types of cancer. And sadly, studies show that

more than half of America's dogs are overweight – and nearly *all* of their owners are in denial! If you can't easily feel your dog's ribs and shoulder blades, if her waist is not discernable (a tuck behind the ribs), or if there's a roll of fat at the base of her tail, it's time to face reality and put your dog on a diet.

As WDJ contributor Mary Straus explains, "Because we're so used to seeing overweight dogs, many folks think a dog at his proper weight is too skinny, but as long as the hips and spine are not protruding, and no more than the last rib or two are slightly visible, he's not too thin. If in doubt, ask your vet for an opinion, or go to an agility competition to see what fit dogs look like."

Here are 10 tips for helping your best friend lose weight.

1 FEED MORE PROTEIN AND LESS CARBOHYDRATES. When it comes to weight loss, the ratio of carbohydrates to fats and protein matters more than calories do. Most prescription weight-loss diets are high in carbohydrates, low in fat, and low in protein, a combination that makes it difficult to lose weight. Dogs thrive on a high-protein diet, which builds lean muscle, and they don't need carbohydrates at all. The ideal canine weight-loss diet is high in protein, low in carbohydrates, and moderate in fat, which satisfies the appetite.

2 AVOID HIGH-FIBER FOODS. Increased fiber, the indigestible part of carbohydrates, will not help your dog feel satisfied, and too much can interfere with nutrient absorption. Grains are a common source of fiber, and many grain-free foods are high in protein and low in carbs, which can make them effective foods for weight loss (as long as they don't contain too much fat).



This six-year-old dog is morbidly obese, and if she doesn't start losing weight soon, she will start developing soundness issues that make it difficult to exercise, which will compound the problem. The time to start fixing this is now!

3 MAKE YOUR DOG'S FOOD. Another option is to make your own high-protein, moderate-fat, low-carbohydrate diet (see "You Can Make It," WDJ July 2012, for guidelines).

"If you feed a homemade diet, use lean meats, low-fat dairy, and green vegetables in place of most grains and starches," Straus suggests. "Remove the skin from poultry (except for breasts) and remove separable fat from meats. Avoid fatty meats such as lamb, pork, and high-fat beef, or cook them to remove most of the fat. It's okay to include eggs in moderate amounts. You can also use these foods to replace up to 25 percent of a commercial pet food, which will increase the total amount of protein and decrease carbohydrates in the diet.

"There's a common misconception that replacing a large portion of the diet with green beans will help your dog not feel hungry," she adds. "While there's no harm in adding some green beans or other non-starchy veggies to your dog's diet, the extra bulk won't help your dog feel satisfied if you're feeding too few calories or too little fat. It is fat that most helps to satiate your dog; just adding bulk isn't enough. Replacing too much food with green beans can also lead to a protein deficiency, causing the loss of lean muscle rather than fat."

4 FEED THE RIGHT FATS. Recent human and canine studies show that the omega-3 fatty acids EPA and DHA from fish oil promote weight loss and help dieters feel more satisfied. Straus recommends giving fish oil that provides 1 to 1.5 mg combined EPA and DHA per pound of body weight daily for healthy dogs, or up to 3 mg for dogs with health problems (such as heart disease, kidney disease, cancer, arthritis, allergies, and other conditions causing inflammation or affecting the immune system). Some cod liver oils, such as Carlson Norwegian Cod Liver Oil with Omega 3s (carlsonlabs.com), provide vitamins D and A for additional health benefits (see "D is for Dogs," WDJ July 2016).

When adding oils to your dog's diet, keep in mind that oils are pure fat, adding more than 40 calories per teaspoon. Label directions for many liquid fish-oil products are higher than they should be, adding too many calories to your dog's diet. If your dog needs high doses of EPA and DHA, look for more concentrated

softgels. Other oils, such as coconut and olive oil, should be carefully measured to be sure you're not adding too much fat.

5 REDUCE PORTION SIZE. Instead of making drastic changes all at once, cut your dog's food back by about five percent and feed that slightly smaller amount for a week or two. This reduction is about 1 ounce per pound or ½ cup per two cups of food. Weigh your dog today and again in one or two weeks. If she doesn't lose weight, reduce the food by another five percent and continue at that amount for one to two weeks. Keep gradually reducing the amount of food until your dog begins to lose weight, then continue feeding that amount.

This strategy helps because reducing the amount of food too suddenly will change your dog's metabolism, making it harder to lose weight and easier to gain it back. Slow, steady weight loss is more likely to result in long-term success.

If you switch to a food that's considerably higher in protein and fat than your current food, cut the quantity by up to one-third, as foods that are more nutrient dense will provide more calories in smaller portions. Even though the total amount your dog receives is less than before, he may be more satisfied.

Feeding smaller portions more often will help your dog feel less hungry. Replace some dry food with canned or fresh, high-protein food so he thinks he's getting something special. Put his meals in a Kong, Buster Cube, or other food-dispensing toy so he has to work for them, leaving him feeling more satisfied. Freeze his wet food, or dry food mixed with nonfat yogurt, in a Kong toy to make a meal last even longer.

6 MEASURE EVERYTHING. "It's critical to accurately measure your dog's food," says Straus. "I learned

the hard way that when I try to eyeball my dogs' food, they gain weight. The only way I've found to achieve consistent weight control is by using an electronic scale to weigh everything I feed. You can find scales at office and kitchen supply stores and online. Most handle up to five pounds with accuracy to one tenth of an ounce, and they can switch to grams for very small measurements."

7 MAKE IT A FAMILY PROJECT. Measuring everything and writing it in your dog's diet book or food log helps family members realize just how much the dog is eating. Feeding a small dinner won't help if Fido is getting breakfast leftovers, afternoon snacks, and training treats all day. Discuss the diet plan with everyone who feeds your dog and get their cooperation. You can give each family member a specific number of small training treats to reward the dog with, and encourage everyone to focus on games, walks, playing fetch, and favorite activities as calorie-free rewards that will keep your dog motivated.

8 WEIGH YOUR DOG. If your dog is small, you can weigh her on a baby scale or a postal scale designed for packages. Your veterinary clinic has a walk-on scale that accommodates dogs of all sizes, so if your large dog is willing, take her there every one or two weeks. If your dog associates the clinic with unpleasant experiences, use low-calorie, high-value treats to help change her attitude. Most dogs respond well to short visits that include treats, eagerly hopping on the scale, and sitting or standing still for a minute before going home.

"Aim for weight loss of three to fivepercent of body weight per month, or one percent per week," says Straus. "A 50-pound dog should lose about half a pound per week, or two pounds per month. Once your dog begins losing weight steadily, you can go longer between weigh-ins, but recheck monthly to make sure you're still on track. It's easy to slip back into giving too much food and not notice until your dog has gained back a lot of weight. Caloric needs can also change over time as your dog ages, after neutering, or if his activity level varies seasonally. If you're weighing your



Weighing your dog's food is the best way to accurately maintain or reduce his caloric intake.



Weighing your dog on a scale at your veterinarian's office at least once a month is the best way to monitor your success at helping him achieve a healthy weight.

dog regularly, you'll be able to catch and correct any weight gain before you have a bigger problem."

9 RETHINK TREATS. When Ella, her Norwich Terrier, gained weight even with reduced meals, Straus realized that she had to consider the calories Ella received from training treats. "I fed her cooked chicken breast to counter-condition her shyness around strangers that we met on our walks," Straus says. "I put treats in a Kong toy when I had to leave her alone to reduce any anxiety she might feel about my leaving, and I used clicker training to improve my communication with Ella. Altogether, those treats were adding up to a lot of calories."

Fortunately, dogs care more about the number of treats they receive than the size of each treat, so it's more rewarding for a dog to receive several small treats than one big one. For a dog Ella's size, Straus switched to really tiny treats. "I now use treats for nose work training, where I need high-value treats. I cut slices of turkey bacon (17.5 calories per slice) into 35 pieces that are just half a calorie each. Zukes Lil' Links (16 calories each) are cut into 16 pieces, one calorie each. Happy Howie's beef and turkey rolls have 52-60 calories per ounce and can be cut into small cubes of no more than one calorie each (note the lamb variety is much higher in calories). Slice treats in half or quarters lengthwise before dicing to create lots of small pieces."

Treats that are high in fat and calories, such as hot dogs and peanut butter, can pack on the pounds. Instead, try raw baby carrots, zucchini slices, other crunchy vegetables, or small slices of

apple, banana, or melon. Make your own treats out of low-fat organ meats like heart or liver. Grapes, raisins, and anything containing xylitol (a sugar substitute) should not be used, as they can be toxic to dogs.

Another strategy is to feed some of your dog's dinner as treats during the day. Just be sure to reduce her meal size accordingly.

10 FIND THE RIGHT CHEW. Dogs love to chew, and if you can find a low-fat, long-lasting chew, it can keep your dog busy, satisfied, and out of caloric trouble. Dried tendons, steer sticks, and similar chews work well unless they're small enough for the dog to swallow.

If you use rawhide, WDJ recommends high-quality, thick, unbleached (not white) rawhides without added flavorings or smoking, made from one solid piece, and preferably made in the U.S., such as those from Wholesome Hide (wholesomehide.com). See "Finding the Right Rawhide," WDJ May 2009, for information on healthy rawhide chews.

Fresh, raw bones can also be used for chewing, but Straus adds an important caveat, "Bones, like any hard chew, have the potential to break teeth, particularly in older dogs whose teeth are more brittle. Bones that are too big for dogs to get between their molars and chomp down on, such as knuckles, are less likely to cause problems than marrow bones, which are filled with fat and therefore not a good choice." 🐾

Freelance writer CJ Puotinen is the author of The Encyclopedia of Natural Pet Care and other books.

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