

UNLOCKING THE CANINE ANCESTRAL DIET

Healthier Dog Food
the ABC Way

Steve Brown

Dogwise[™]
Publishing

Wenatchee, Washington U.S.A.

Unlocking the Canine Ancestral Diet Healthier Dog the ABC Way

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Dogwise Publishing

A Division of Direct Book Service, Inc.

403 South Mission Street, Wenatchee, Washington 98801

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Graphic Design: Lindsay Peternell

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Some breeds, such as Dalmatians, can have problems with the purines in beef liver and hearts. Giant breed puppy owners should consult with their veterinarian or their puppy's breeder before making any dietary changes.

Library of Congress Cataloging-in-Publication Data

Brown, Steve, 1948-

Unlocking the canine ancestral diet : healthier dog the ABC way / Steve Brown.

p. cm.

Includes bibliographical references.

ISBN 978-1-929242-67-2

1. Dogs--Food. 2. Dogs--Nutrition. I. Title.

SF427.4.B763 2010

636.7'0852--dc22

2009043535

ISBN 978-1-929242-67-2

Printed in the U.S.A.

Make whatever food you feed—dry, canned, frozen or homemade—more like the canine ancestral diet by following the ABCs:

Amount of fat, protein, and carbohydrate based upon the ancestral diet

Balance the fats

Complete the nutrition with fresh foods

FOREWORD

“Let your food be your medicine, and your medicine be your food.”
Hippocrates

As a holistic veterinarian, these are words to live by, and *Unlocking the Canine Ancestral Diet*, by Steve Brown, epitomizes this approach to health and well being. In fact, there’s so much to like about this book, it’s hard to know where to begin.

For starters, Brown’s approach is to remind us that dogs are canines, and the wild ancestors of today’s domesticated dogs maintained their health by eating certain foods and by eating them in certain ways—thus the “Ancestral” part of the title. Taking this as a basis for formulating a healthy diet with today’s food sources, Brown recognizes that today’s commercial dog foods are woefully lacking in some dietary needs (especially high-quality proteins); they are especially heavy in others (grain-based carbohydrates); and they are often terribly unbalanced in some nutrients (the ratio of omega-6 to omega-3 fatty acids is typically far too high in commercial foods).

Holistic vets have long talked about the health-gap between what’s contained in commercial foods and what dogs should be eating. Most of us advocate a home-fixed diet as a means to compensate for the imbalance of nutrients. But *Unlocking the Canine Ancestral Diet* takes this approach to a new level of scientifically-based sophistication... and even argues that many of our home-fixed menus, while healthier than commercial dogfoods, may actually be out of balance.

Brown has done his homework and is able to present his case for feeding a nutrient mix that more closely matches what has been health food for hundreds of generations of canines. *Unlocking the Canine Ancestral Diet* is chock full of data-filled charts that support his premise that the ancestral diet is good stuff for today’s dogs.

Brown then shows how to easily achieve this mix by feeding the correct Amount of fats and carbohydrates based on the ancestral diet; Balancing the fats (creating the correct balance of omega-3, -6, -9's and making sure there is enough DHA in the diet); and Completing the nutrition balance with fresh foods. This ABC program creates a diet that is healthy, balanced, and easy to feed.

Best of all, to make it even easier, Brown shows us how we can achieve a balance of nutrients by feeding his suggested foods only one-day-a-week, whether we are feeding dry, canned, or frozen foods.

And for those of us who want to take the time and effort to go to the next step and feed the ancestral diet exclusively, Brown provides several recipes that use either beef or poultry.

Interestingly, because our home-fixed diets usually contain grain-fed meats (from conventionally fed livestock which produce meats high in omega 6's as opposed to grass fed livestock or wild prey animals that are higher in the needed omega-3's), we are likely feeding an imbalance of omega-6's and -3's, and this book shows us how to correct for that.

The short take on this book is that it is a must read for anyone (and this should include all of us who truly love our dogs) who believes that healthy and nutritious food is the one necessity for maintaining healthy pets. It's a good read, packed with scientifically-backed information, and it presents a practical approach for achieving the goal of helping us to make a healthy diet for our dogs. As easy as ABC.

I will be using this book in my "Fixing Good Foods for Pets" seminars, and I highly recommend it for anyone interested in the long term, overall health of their own best buddies. It would also be a good gift choice for anyone interested in holistic health for dogs, and especially for the veterinarian who still believes that the commercial dog foods he/she sells are all that dogs need.

Randy Kidd, DMV

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INTRODUCTION

“The ABC day made a huge difference,” Dr. Doreen Hock told me when I informed her I was struggling to complete this introduction and finish the book. “I could see the improvement in my dogs—and it’s easy,” she said. “Just tell people to follow the ABCs.” What do the ABCs stand for?

- **A** stands for the **amount** of fat, protein, and carbohydrate based upon the *ancestral* diet of the dog. This means *adding* protein to most commercial and homemade foods.
- **B** stands for **balancing** the fats. My view is that the health of a dog is dependent on the fats she eats—more than any other nutrient. The importance of the role of fats is something that nutritional experts have just recently established. Unfortunately, some important fats are either left out of commercial dog foods or deteriorate when included in processed, long shelf-life foods.
- **C** stands for **completing** your dog’s nutrition needs by feeding some fresh, whole foods.

Follow the ABCs for whatever type of food you feed—dry, canned, frozen, or homemade—and you’ll significantly improve your dog’s diet, which will increase the odds that your dog lives a healthy, happy life. No doubt about it, and it’s as simple as ABC.



The canine ancestral diet

You may have heard of the “Cave Man Diet” as it applies to humans, the theory being that unprocessed fresh foods high in protein and low in carbohydrates are best for people who evolved successfully over thousands and thousands of years consuming just such a diet. The concept of the “Canine Ancestral Diet” for dogs is similar in nature. Dogs and other canids evolved successfully through hunting and scavenging, consuming foods that were not at all like the kibble so many are fed today. Recent nutritional science increasingly supports an ancestral-type diet—high protein, balanced fats, and at least some fresh foods—as the healthiest approach to feeding most dogs.

While in theory one can feed a dog the ancestral diet, in practical terms—given modern lifestyles and busy schedules—it is just not realistic for the vast majority of pet owners. However, there *are* steps you can take to alter or augment what you currently feed your dog to make it more like the ancestral diet and thus improve the nutritional content of your dog’s diet.

The ABC way of feeding is based upon detailed analyses of the dog’s ancestral diet, supported by up-to-date nutritional science, and my twenty years experience in developing foods for national pet food companies. The ABC plans laid out in the following chapters focus first on correcting the weaknesses associated with modern dog food which generally contain not enough protein, too many carbohydrates, unbalanced fats, and lack the complete nutrition that can only be provided by fresh foods.

There is no need to dramatically change the type of foods you’re feeding. If you feed dry foods, for example, you can make *significant nutritional progress* if you make one day a week an ABC day. It’s easy, and you’ll probably see the difference in your dog within two to four weeks. If you are more ambitious, I have included additional strategies that involve preparing food for your dog that will take you even closer to the ancestral diet. Whatever you choose to do, the ABC way will help improve your dog’s diet and overall health.

How this book is organized

This book is intended for a wide audience: dog enthusiasts, veterinarians, and professional dog food formulators. For dog owners wanting a quick and easy way to improve the food they feed their dogs, I have



included simple explanations and plans to do so. For veterinarians and professional dog food formulators wanting to know the “why” behind the ABC concepts, I have furnished all the details.

The first three chapters are must-reads for anyone interested in the subject. Chapter 1 details the canine ancestral diet. What dogs ate in the wild prior to the advent of modern dog food represents an ideal diet—primarily consisting of high levels of protein, balanced fats, and fresh foods. This is the gold standard that modern feeders should try to replicate. Chapter 2 compares and contrasts modern dog foods with the ancestral diet with a focus on where modern foods come up short. Chapter 3 provides information on the health benefits of improving the ABCs of your dog’s diet, making it more similar to the ancestral diet.

Chapters 4, 5, and 6 are the ABC plans. Chapter 4—designed for dry, canned, and frozen food feeders—presents the ABC day concept. These are relatively simple and easy one-day-a-week plans to make your dog’s diet more like the canine ancestral diet. Chapter 5 is designed for readers who are interested in and are willing to devote more substantial amounts of time to preparing meals at home for their dog(s) and who want to understand the underlying science. This chapter provides step-by-step instruction on how to make balanced-fat, ancestral-type diets. Chapter 6 includes three detailed recipes that will help you replicate the canine ancestral diet for your dog(s).

The last two chapters focus on providing more detailed information to readers such as those involved in the dog health and food formulation industries. Chapter 7 discusses in more detail the important topic of proper storage of dry and frozen dog foods. The best dog foods in the world can be ruined, and even become unhealthy, by improper storage. Chapter 8 provides an overview on a variety of subjects including the chemistry of fats for dogs, the dog’s need for carbohydrates, high protein diets and their impact on the kidneys, and an introduction to pet food math. I have also included, in the appendices at the back of the book, additional recipes for dogs requiring low fat diets, sources of information, and a recommended reading list. Appendix C includes a list of all abbreviations used in the book.



Tell your friends about the ABCs

As you see the results with your dogs, I hope you will help spread the word about how easy and important it is to feed an ABC day each week. Together, we can help make a lot of dogs healthier and happier, which makes us humans healthier and happier. Thanks.

Readers are welcome to contact me through my website, www.sees-potlivelonger.com.

Steve Brown
August 2009

Chapter 7

STORING FOODS TO RETAIN QUALITY

HOW YOU STORE DRY AND FROZEN FOODS MAKES A HUGE DIFFERENCE

One of the most popular parts of my seminars is the discussion of proper storage of dry and frozen foods. It makes no sense to buy expensive, premium dog foods, whether dry or frozen, and then ruin them—actually making them unhealthy—by storing them too long or improperly. Recently produced, mass-market food is probably better than super-premium, top-of-the-line foods that have sat on the shelf for months. Here’s some important advice on ensuring the foods you buy are at their best when you feed them.

Dry foods: Buy recently produced and use up within 14 days after opening.

Would you keep a loaf of bread open in your kitchen or garage for 39 days? I hope not. That’s how long the typical purchased bag of dog food remains open before completely consumed. This lengthy shelf time, combined with often poor storage conditions, leads to oxidation of fats, nutrient degradation, and infestation by molds, mites, and other food spoilers. One in three dogs dies of cancer, and I think improper storage at home is a contributing factor.

Dry dog foods usually have a one-year “shelf life.” That means the food is “good” for up to one year after the manufacturing date. Many dry foods stamp a “best if used by” date on the package. This applies only to *unopened* bags.



If the bag is intact, without any holes or tears, not enough oxygen can migrate into the food in one year to cause significant oxidation, nutrient degradation, or microbial growth problems. *But as soon as you open the bag of dog food*, oxygen, moisture, light, mold spores, storage mites, and other potential spoilers enter the bag.

Oxidation of fats. Dog food companies use antioxidants (sometimes vitamin E and other natural sources) to forestall oxidation. Over time, with continual exposure to oxygen whenever you open the bag (and the bags are not perfect oxygen barriers either), the antioxidants are eventually all oxidized (used up) and the fats, beginning with the more fragile omega-3s, start turning rancid. As discussed above, studies show that frequent consumption of oxidized fats may cause cancer and contribute to many chronic health problems.⁴¹

Degradation of all micronutrients. The nutrition in the food at the bottom of a bag left open 39 days will be considerably reduced compared to that of the top of the bag. Vitamins particularly susceptible to loss of potency due to long-term room temperature storage include vitamin A, thiamin, most forms of folate, some forms of vitamin B6 (pyridoxal), vitamin C, and pantothenic acid.

Molds and mycotoxins. Storing open bags of dry dog food for 39 days in warm, humid areas (most kitchens) promotes the growth of molds. Some of the waste products of these molds (mycotoxins) are increasingly being implicated as long-term causes of cancer and other health problems in humans, poultry, pigs, and other animals. Dogs are particularly susceptible to these toxins.⁴²

When dry dog foods absorb moisture from the surrounding air, the antimicrobials used by manufacturers to delay mold growth can be overwhelmed, and mold can grow.⁴³ The molds that consume dry pet foods include the *Aspergillus flavus* mold, which produces Aflatoxin B1, the most potent naturally occurring carcinogenic substance known.

People can't see low levels of mold with the naked eye, and most dogs can't taste it.⁴⁴ While some dogs have died shortly after eating mycotoxin-contaminated foods, mycotoxins kill most dogs slowly



by suppressing the immune system and creating long-term health problems in all organs of the body.^{45, 46} This topic is covered at length in *See Spot Live Longer*.

Infestation. Bugs, storage mites, mice, and other unpleasant invaders thrive on dry dog food. Recent research has shown that allergic dogs frequently have reactions to the carcasses of storage mites. Storage mites may infest grains, especially those grains used in low cost dry dog foods.

Strategies to enhance storage life of dry food

Here are my recommendations:

1. Keep food in its original bag, even if you use an airtight container. Pouring the food out exposes all the pieces of kibble to air, increasing the potential for oxidation.
2. Buy small, recently produced, bags of food. Look for manufacturing or “best if used by” dates on the bag. If you don’t see one, ask the retailer for the date. If you can’t understand the code, ask the retailer to interpret it for you.
3. Once opened, plan to have food consumed within 7 days.
4. Keep food dry. If the food looks moist, throw it away.
5. Keep larger bags in the freezer.
6. If the food has changed color, throw it away.
7. If the food smells rancid or like paint, throw it away.
8. If your dog refuses to eat at mealtime, do not force her to eat.
9. Don’t buy bags that are torn.

These storage strategies are based upon an article written by Steve Brown and Beth Taylor, originally published on www.mercola.com.



The shelf life of commercial raw diets: three months

If you are feeding commercially prepared raw foods, it's important to buy recently produced frozen foods. Even if the meats and vegetables are all organic and the fats perfectly balanced, it is not a "quality" product, by USDA definition, if it is older than four months old. I'd prefer even fresher food.

Freezing is the best way to preserve meats, but the nutrients in the meat still degrade and the fats oxidize, even at 0 degrees F. Whole frozen meats have up to a one year "shelf life" in the freezer. However, ground meats—the number one ingredient in almost all commercial frozen raw diets—have a much shorter shelf life.

According to the USDA, ground meats, to be considered quality, have 3 to 4 month shelf lives when frozen. Here is a portion of the USDA frozen storage chart, based on frozen meats kept at a constant 0 degrees F (-18 degrees C).⁴⁷

Item	Months
Meat, uncooked roasts	4 to 12
Meat, uncooked steaks or chops	4 to 12
Meat, uncooked ground	3 to 4
Poultry, uncooked whole	12
Poultry, uncooked parts	9
Poultry, uncooked giblets	3 to 4

Grinding meats break the protective cell walls of the meat and fat cells, making the fragile nutrients more exposed to oxidizing agents, including the copper and iron released by the broken cells. These metals speed up the oxidation process.

Once the ground meat is frozen, oxidation and destruction of nutrients does not stop. Unless the food is packaged in glass or metal and is never opened, oxygen migrates into the food and oxidation occurs. The fats slowly turn rancid and the vitamins and antioxidants slowly degrade. The nutrients are further damaged by the growth of ice crystals. When raw meat freezes, the water within the meat forms ice crystals; the ice crystals grow even at a steady 0 degrees F. The longer



the time in the freezer, the larger the ice crystals become, and the more likely that they will further puncture cell walls, and break some of the double bonds in the polyunsaturated fats.

The way most raw diets are made—using ground meats mixed with vegetables and other nutrients—can accelerate degradation of nutrients, and shortens the shelf life. Ground vegetables are mostly water, which, when frozen, form more ice crystals, further damaging nutrients. Added fish oils shorten shelf lives further because the ice crystals can break some of the double bonds of the polyunsaturated fats. Ground fish products have the shortest shelf lives of all animal protein.

The best way to ensure that you are buying a quality (by USDA definition) product, is to look for the “produced-on date,” and then buy only products that are less than three months old. Many raw diet manufacturers give their products 12-month shelf lives (I did at my company, Steve’s Real Food, until I learned better), and place “best if used by” dates on their labels. In retrospect, this was not good enough as the buyer needs to know when it was produced. If you can’t make that determination from the packaging, contact the manufacturer or ask your retailer how to determine when the product was produced. Demand freshness.