

**Dog Tips** 

# Don't Fall for the 'No-Grain' Trick by Some Pet Food Makers

Maybe it's time to quit listening to these 'experts' at all, given the propensity for harm from their skewed advice. They should know better, but they exchange the truth for a lie. Please don't be a pawn in their hocus-pocus any longer.

#### Analysis by <u>Dr. Karen Shaw Becker</u>

#### STORY AT-A-GLANCE

- Conventional veterinarians often give grain-free diets for dogs a thumbs down; holistic vets like me believe they represent optimal nutrition for most dogs
- Dogs have no biological requirement for carbohydrates, and grains are carbohydrates. Canines are carnivores whose bodies are designed to eat animal flesh and fat, not starch, which turns to sugar in your dog's body
- Dry dog food can be grain-free, but it can't be carb-free because carbohydrates are required to form kibble. Many grain-free foods have a higher starch content than regular foods.
- The Association of American Feed Control Officials (AAFCO) does not require starch content to be listed on a pet food label, so I recommend calculating the amount of starch you are feeding with simple math
- The optimal diet for healthy dogs is meat-based and raw, grain-free, moisture-rich, living and fresh

#### Editor's Note: This article is a reprint. It was originally published December 12, 2016.

Every now and again I hear or read advice from veterinarians regarding grain-free diets for dogs. The discussion usually starts with a question from a pet owner. For example, "Is grain-free food really better for dogs?"

The answer most often depends on whether the advice is being offered by a conventional veterinarian or a member of the holistic veterinary community. Many conventional vets believe in and promote grain-based diets for dogs; most holistic vets recommend the opposite.

As a holistic vet who is passionate about feeding pets species-appropriate nutrition, I'm frankly appalled at the number of veterinarians pushing grain-based dog food. All veterinarians are aware dogs have no biological requirement for starch ... and all grains (and other carbs) break down into starch and ultimately, sugar.

It's also common knowledge that the natural diets of canines contain almost no carbs, with the primary source being predigested grasses, fruits and veggies found in the stomachs of prey animals.

Dogs have short digestive tracts and are adapted to metabolize animal flesh and fat, not grains and simple sugars, including starch.

If the natural design of dogs precludes the need for carbs, why would we feed them carbs, including grain? If their bodies aren't designed to use carbs, why would we feed them something their digestive tracts aren't equipped to process?

I realize grain-based pet food is inexpensive and convenient. From a veterinarian's perspective, however, every day I see the consequences of feeding dogs (and cats) highly processed, biologically inappropriate food for a lifetime.

# **But ... What About Fiber in Grains? Don't Dogs Need Fiber?**

Many veterinarians, including board-certified veterinary nutritionists, claim that grain-free diets don't contain enough fiber, and a lack of grain-based fiber leads to digestive issues.

Dogs with poor stool quality, intermittent diarrhea, gassiness and other GI disturbances are definitely not suffering from a lack of grain-based fiber. That's a little like linking a human's digestive issues to a need for more Twinkies or Ho-Hos in the diet.

The canine evolutionary diet contains about 4% roughage, including hair, skin, teeth, indigestible fibrous parts of plants and other odds and ends.

Most dogs with excess gas and poor stool quality are dealing with chronic GI inflammation and allergies or sensitivities to one or more ingredients in the food they're eating — not a lack of fiber in their diet.

If occasional constipation is the issue, it can often be resolved by adding some extra veggies, fruit fiber, psyllium husks or 100% canned pumpkin to the diet.

# **But ... Aren't Dogs Omnivores? Don't Omnivores Eat Grains?**

Another argument for grain-based dog food is that canines are omnivores, not carnivores, that have "evolved and adapted" to eat human foods over time. I couldn't disagree more. Canines are scavenging carnivores, and you need look no further than your dog's teeth to see nature's carnivorous design.

The teeth of animals are specifically intended for the food they are born to eat. Omnivores have both sharp, meat-tearing teeth and wide, flat molars to grind plant matter. Tell Buddy to open wide and you'll see exactly zero molars because nature didn't intend for him to eat plants.

The following table demonstrates the anatomical and physiological differences between herbivores, omnivores and carnivores:

#### **Carnivores (Meat Eaters: wolves, dogs and cats)**

- Sharp, elongated teeth designed for tearing and killing prey, not grinding plants, plus jaws that move vertically and open widely, providing a smooth cutting motion, and the ability to swallow large chunks of meat
- Short, simple and acidic digestive tracts that quickly and easily digest protein and fat from animal sources,
  plus kill bacteria found in decaying meat
- No amylase in saliva

#### **Herbivores (Plant Eaters: cows, sheep)**

- Square and flat molars that provide an ideal surface to crush and grind plants (but not meats), plus a lower jaw with a distinct sideways motion that facilitates the grinding needed to chew plants
- Long digestive tracts up to 10 times their body length to break down plant foods
- Saliva contains the carbohydrate-digesting enzyme amylase needed to digest starch. Herbivores methodically chew their food to ensure the thorough mixing with amylase

#### **Omnivores (Both Meat and Plant Eaters: pigs, bears and humans)**

- Flat molars and sharp teeth developed for both grinding and tearing, plus the ability of the jaw to move sideways to grind food
- Medium length digestive tracts that provide the flexibility to digest both vegetation and animal proteins
- Saliva contains the carbohydrate-digesting enzyme amylase needed to digest starch

Ninety-nine percent of your dog's DNA is shared with wolf DNA — neither dogs nor wolves have evolved into plant-eaters in the last 100 years. Dogs are, however, quite resilient and can withstand more nutritional abuse that most species. They can survive eating grain-based foods.

But they do not thrive on diets that contain biologically inappropriate ingredients and less than optimal amounts of animal protein. The goal should be to mimic the canine ancestral diet as closely as possible. Feeding food very different from what nature intended is a root cause of many of the diet-related diseases we see in pets today.

"Is grain-free food really better for dogs?" Yes, it is. No ifs, ands or buts about it. Unless the grains have been replaced with other starches, such as potatoes, lentils, peas or tapioca. Replacing grains with other high-glycemic carbs won't help your dog prevent or conquer disease. It simply gives you the false sense you're feeding healthy food with a hefty price tag.

# The Label Says 'Grain-Free,' so I'm Good, Right? WRONG!

This is where so many pet parents get confused, and rightly so. If you're feeding a dry diet, it might be free of grains, but it can't be free of carbs, because carbs are necessary to form kibble. If you look at the package label, you'll see potato, sweet potato, lentils, peas (pea starch), chickpeas, tapioca or another carbohydrate source(s).

And unfortunately, many dry formulas are loaded with carbs, which can lead to blood sugar fluctuations, insulin resistance, obesity, diabetes and other health problems in dogs.

Conventional dry dog foods can exceed 40% to 50% in total carbohydrate content. This means that around half the dog's diet is composed of non-essential simple sugars. This isn't something many dog parents are aware of because pet food manufacturers aren't required to list carbohydrate content on package labels.

Carb intake above the daily needs of dogs (which, according to 30-year veteran pet food formulator Richard Patton, is less than 8% for all dog species) triggers internal enzyme factors to store the excess as body fat. The livers of adult dogs are able to easily synthesize glucose from protein and fats, so there is no need to supply carbohydrates in the diet.

# **How the Grain-Free Craze Began**

I remember very well the day my dear friend Steve Brown launched the first commercially available raw dog food diet 20 years ago.

"I may go bankrupt," said Steve, "but I have provided what pet owners deserve to feed to their best friends; the very first human grade, species-appropriate diet they don't have to make themselves. I love dogs, and feeding dogs according to their nutritional requirements will help them thrive."

I'm also thankful pet guardians have put enough pressure on the pet food industry that grain-free dry food options have come to market. But these formulas, like most, come with a fair share of industry deception.

Eliminating grains was certainly a step in the right direction. But replacing them with higher glycemic ingredients such as peas, tapioca, potatoes and lentils has only confused the average consumer and padded the pockets of pet food industry executives even more. It has also helped to create an epidemic of sugar-related health conditions in pets.

The incidence of obesity, cancer, diabetes and several other chronic health conditions is much worse now than it was 20 years ago. And many of these sick pets were weaned onto grain-free foods because their owners assumed they contained less sugar, in the form of starch, than regular pet foods.

I will also never forget the 2015 Association of American Feed Control Officials (AAFCO) conference in Denver, Colorado, where a tiny group of proactive pet advocates, led by **Truth About Pet Food's Susan Thixton**, attended a meeting in which a Blue Buffalo representative petitioned that carbohydrate content be intentionally left off pet food labels "so as not to confuse pet owners." Really? How about just telling the truth?

Carbohydrate content is intentionally left off pet food labels to deceive pet owners into believing many grain-free foods are healthier than other types of pet foods! If dog owners really knew the amount of starch they were feeding, they would never buy that \$65.00 bag of food!

What most pet parents don't know is that all foods containing starch break down into sugar, even though you don't see sugar on the label. The glycemic index of white rice is 82, but baked potatoes are 111!<sup>1</sup>

# How to Determine the Carb Content of Grain-Free Dog Food

So what do you do if you still feed dry pet food, or have decided to "upgrade" to grain-free dry food? Do the math to see if the brand you're feeding or planning to feed is less than 10% carbs (which is what you want). Here's the formula:

100 - % protein - % fat - % moisture - % ash (if not listed, assume 6%) = % carbs

Fiber is the indigestible roughage that doesn't break down into sugar, so you don't have to include it in the formula. Below is an image of the guaranteed analysis on the side of a bag of popular grain-free dog food.



Plugging in our formula:

100 - protein at 20% - fat at 8% - moisture at 10% - ash at 6% = carbs at 56%

The average bag of inexpensive, grain-based dog food contains fewer carbohydrates than the grain-free example above. So if, for instance, your dog is fighting cancer or diabetes, she would be eating more sugar with the popular grain-free kibble than the cheaper grain-based formula. Sure, the grain-free food may contain better quality ingredients, but the sugar burden certainly isn't any better.

## How to Feed a Grain and Starch-Free Species-Appropriate Diet

Feeding a species-appropriate diet means the food you offer your dog:

- Is grain-free and carb-free no corn, no wheat, no rice, no millet, no oatmeal, no potato, no sweet potato, no tapioca, no peas, etc.
- Is in its biologically correct form raw, whole, unadulterated and un-denatured meat
- Contains all the moisture needed for your dog's body to process the food with very little metabolic stress

My first recommendation is to feed a raw-food diet. It's grain-free, moisture rich, living, and of course, it's fresh. My alternative recommendation is canned food or a gently dehydrated (air-dried) raw food that can be reconstituted with water to contain at least 70% moisture. (For additional recommendations, read "From Best to Worst - My New Rankings of 13 Pet Foods.")

The difference between air dehydrated foods and extruded foods is temperature. Foods that are not cooked or extruded at high temperatures retain more nutritional value. When air-dried foods are reconstituted with water, they also become moisture rich and significantly healthier than any dry kibble on the market.

Also check with the pet food manufacturer to make sure whatever food you choose is nutritionally balanced. Many of the new niche pet foods appearing on store shelves are intended for intermittent feeding only — it should say that on the label. This means the formula doesn't meet AAFCO standards for a complete balanced pet food, and must be fed in rotation with other nutritionally complete foods to create a balanced diet for your canine companion.

### **Sources and References**

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<sup>1</sup> Harvard Health Publications