

Dog Tips

These 2 Popular Proteins Can Cause GI Upset and Allergies

I wouldn't touch these 2 proteins with a 10-foot pole, and I advise you to do the same for your pet's comfort and health. Not only are they cheap, low-quality proteins that food manufacturers love to stuff in their foods, they can impact your pet's development of lean tissue and body flab.

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

STORY AT-A-GLANCE

- Proteins are the "building blocks of life," and are essential to the existence of animals
- Despite what some "experts" in pet food would have you believe, plant-based proteins are not interchangeable with animal-based proteins when it comes to nourishing your pet
- Studies show that adult and senior dogs, as well as canine athletes, do best when fed a diet of high-quality, animal-based protein
- It's important to remember that not all protein is created equal. Even some forms of animal protein (e.g., "meat meals" and feather protein) have poor biologic value, and cannot be digested or assimilated by your pet
- These rendered proteins can be difficult for the body to process, leading to the common recommendation to decrease protein levels in the diet. A better solution is to increase the quality of protein used in pet foods

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The importance of protein in both human and pet diets is constantly in the news these days, and for good reason.

Proteins are often called the "building blocks of life," essential to the survival of animals, and found in every organism on the planet. Some facts about protein according to the Weston A. Price Foundation:¹

- It is essential to a healthy heart and body
- Animal sources of protein, including eggs, are better nutritionally because they contain all the essential amino acids (amino acids are called the "building blocks of protein")
- Too much poor quality protein and too little protein can be damaging to the body
- Protein isn't stored in the body like fat it must be eaten daily
- The one nutritive substance that stands before all others is protein

Your dog's body is literally made of protein, including his bones, muscles, arteries, veins, skin, hair, and nails. The tissues of his heart, brain, liver, kidneys, and lungs are made of proteins.

Proteins oxygenate the blood and transport fat and cholesterol throughout your pet's body. The enzymes in proteins help to digest the food he eats, synthesize essential substances, and break down waste products.

Proteins in combination with sterols produce hormones that regulate the sensitive chemical changes that take place constantly within your dog's body. And the chromosomes that will be passed on to your pet's offspring (and that were passed on to him) include proteins in their structure.

Study Shows Animal Meat Beats Plant-Based Protein By a Mile

According to many presumed experts in pet food, such as pet food manufacturers and pet food-related journals like PetfoodIndustry.com:

"The protein in pet foods can be supplied by animal sources, plant sources or a combination of the two. Common animal-based protein sources used in pet food include chicken, lamb, fish meal, and beef; while common plant-based protein sources include corn-gluten meal and soybean meal."²

Sadly, many veterinary nutritionists have also been trained to look only at amino acid profiles on paper.

While it's true that many commercial pet food formulas contain (species-inappropriate) plant-based protein sources, the above statement is misleading in that it suggests animal protein and plant protein are equivalent forms of nutrition for dogs and cats.

This is absolutely not true, and I'll add that of all the plant-based protein sources available, corn gluten meal and soybean meal are two that I would never recommend feeding to any pet..

Gluten is highly allergenic and causes gastrointestinal fermentation and other GI upsets. Corn in all forms is a high glycemic, poor quality, incomplete, biologically inappropriate protein source for pets. It's a cheap filler ingredient that is highly allergenic.

In addition, unless the label specifically states all ingredients in your pet's food are non-GMO, it's a sure bet any corn products in the formula are genetically modified and as such, are at high risk of aflatoxin contamination — in my opinion a grossly underestimated culprit of cancer and chronic disease in pet populations.

Soybeans and soybean-related products (including soybean meal) are considered a low-quality, incomplete protein well known to create food allergies in pets.

Soybeans contain large quantities of anti-nutrients (natural toxins), including enzyme inhibitors that interfere with the body's ability to digest protein. These substances can cause significant gastric upset, reduced protein digestion, and chronic deficiencies in amino acid uptake.

Additionally, soybeans are a food source of estrogen, something most spayed and neutered pets absolutely don't need more of.

I believe excess estrogens coming from adrenal gland over production, xenoestrogens in the environment, and food sources (like soy) are contributing to increased incidence of breast cancer and atypical Cushing's disease (adrenal disease), not to mention the thyroid epidemic occurring in pets.

A major pet food company conducted a study several years ago that examined how the type of protein fed to adult and senior dogs affected body composition (muscle versus fat). The dogs were fed diets with varying amounts of protein from chicken and corn gluten meal.³

Dogs in one group were fed a diet of exclusively chicken; the rest were fed diets with decreasing amounts of chicken and increasing amounts of corn gluten meal. Compared with the dogs fed 100% chicken, the other dogs had:

- A decrease in lean tissue
- An increase in body fat
- Decreased levels of blood proteins that are universal markers of a well-nourished body

High Animal Protein Diets Are Also Ideal for Senior Dogs

The same company did another study focused on the decline in body composition and muscle-specific proteins in aging dogs.⁴ Senior dogs were fed a 32% chicken-based diet, a 32% chicken and corn gluten meal diet, or a 16% chicken-based diet.

The dogs fed the 32% chicken-based diet had better body composition than healthy young adult dogs, and identical muscle-specific protein levels. Neither of the other two groups of senior dogs (those fed chicken + corn gluten meal or the diet with just 16% chicken) had similar results.

The pet food company concluded that feeding dogs diets that contain primarily animal-based protein sources provides several benefits, including:

- Helps to maintain muscle mass
- Reverses some age-related changes in skeletal muscles in senior dogs
- Enhances the long-term health and well-being of both adult and senior dogs

Sadly, despite the company's conclusion years ago that animal-based protein is the best type of protein for dogs, it doesn't appear they've incorporated their study findings into their dog food formulas. A quick glance at the ingredient lists for several of the company's senior and mature adult dog foods reveal corn meal and a variety of other plant-based ingredients at the top of the list.

Canine Athletes Also Thrive on Animal Protein-Packed Diets

Dr. Joseph J. Wakshlag of Cornell University College of Veterinary Medicine studies nutrition as it relates to active dogs, in particular, their protein requirements. Most of what is known on the subject focuses exclusively on sprinting dogs like the Greyhound, or endurance sled dogs like the Husky.

According to Wakshlag, there was one study in particular that focused on dietary protein, and its unparalleled ability to preserve musculoskeletal integrity, as well as appropriate total protein, albumin, and red blood cell status.⁵

Hematocrit and serum albumin levels tend to drop while a dog is training and racing, and adequate dietary protein intake can improve the situation. Studies in endurance and sprinting dogs suggest that from 24% to 30% of the metabolizable energy (ME) in the dogs' diets should be highly digestible animal protein, for example, lamb, beef, and

chicken.

According to PetfoodIndustry.com, "Active, sporting, working — whatever term you use to describe dogs that do a specific job like running, hunting, sniffing or jumping, really means that they are a canine that requires a very specific diet to maintain their rigorous lifestyle." 6

A very active, athletic dog needs a nutrient-dense diet that provides optimum energy in a small quantity of food. The protein source should be excellent quality and animal-based, and the diet should be relatively high in dietary fat, including supplementation with raw organic coconut oil.

The main components of a balanced fresh food diet for a canine athlete with no health problems include raw meaty bones, muscle and organ meats, a few dark green vegetables, appropriate supplementation as needed, and a constant supply of fresh, clean water.

Reminder: Not All Protein Is Created Equal!

Protein quality is extremely variable, including protein sourced from animals. There are highly assimilable and digestible proteins that are easy for your dog's body to absorb and use, and there are proteins that are impossible to digest. For example, beaks, feet/hooves, hides, tails, and snouts are 100% animal protein, but all 100% is indigestible.

All protein has a biologic value, which is its usable amino acid content. Eggs have the highest biologic value at 100%. Fish is a close second at 92% (though I don't recommend feeding most fish to pets on a daily basis). Feathers, as you might guess, have zero biologic value.

I mentioned soy a little earlier, and while it's very poor nutrition for pets and I recommend avoiding it, it has a relatively high biologic value of 67%. Both soy and corn are included in many popular commercial pet foods because they provide a cheap way for pet food manufacturers to boost the total protein content on the guaranteed analysis printed on the label.

Digestion and assimilation are not measured for pet foods, so manufacturers can include other types of protein that have no biologic value for the species of animal eating it.

Sources and References

PetfoodIndustry.com September 12, 2014

¹ The Weston A. Price Foundation

^{2,5,6} PetfoodIndustry.com

^{3,4} IAMS