

Dog Tips

**Cat Tips** 

# Watch Out for This Breaking Food Fad That Can Pummel Your Pet's Health

Make no mistake, these researchers hope you'll fall for this new food fad that's being tested by eight unfortunate Beagles, nine unlucky cats, and for some unknown reason, a few fish. Fall for it, and your pet's long-term prospects may be doomed.

#### Reviewed by Dr. Becker

#### STORY AT-A-GLANCE

- Researchers are developing a dog food made from pulse crops, specifically chickpeas, beans, and lentils (also called legumes)
- Chickpeas, beans, and lentils are high in protein but not the type of protein dogs and cats thrive on, which is animal protein
- Legumes also contain phytates and lectins, two substances that carnivores should not consume on a consistent basis
- The researchers have received funding for a very expensive high resolution ultrasound microscope to monitor the cardiovascular and reproductive health of the animals in their study
- When dogs and cats are fed species-appropriate nutrition, there's no need to monitor the potential damage their diet is doing to their health

Editor's Note: This article is a reprint. It was originally published February 1, 2016.

According to a pet food industry journal headline:

"University of Saskatchewan researchers developing pet food made from pulse crops"

In 2016, researchers at the university received funding for a three-year project to develop a commercial dog food made from pulse crops "to determine whether pulses are beneficial to the health of pets."

The pet food will be developed from chickpeas, beans, and lentils, none of which are species-appropriate for carnivorous dogs and cats.

Since those plants are already used in a multitude of dog foods, and since there's no mention of meat or animal protein at all, we can assume this new food will be **vegetarian**, which is downright disturbing.

The \$172,000 in funding will be used to purchase a high-resolution ultrasound microscope that will enable the researchers to monitor the cardiovascular and reproductive health of the animals (eight unfortunate Beagles, nine unlucky cats, and for some unknown reason, a few fish) forced to eat the pulse crop-based diet.

According to Lynn Weber of the university's Western College of Veterinary Medicine, "It seems early results are that it really is beneficial, but this machine will really allow us to really confirm that."

But beneficial for whom? One of the comments to the article, posted by "jdd123," read:

"Canids are scavenging carnivores that have evolved eating a diet of meat (killed or scavenged) and whatever edible fruit or vegetables they could find.

At no point have we found evidence that dogs consumed pulses or grains yet that now makes up the majority of the diet of kibble fed dogs. They are eating a modern, processed food diet and, surprise surprise, they are suffering from diseases that we only really associate with modern living.

Diabetes, increasing rates of cancer, hormone imbalances, dental decay ... But hey, they have a powerful microscope so they must know better than hundreds of thousands of years of evolution."<sup>2</sup>

## **Pulse Crops Primer**

Pulse crops, also called pulses or legumes, are plants with a pod. "Pulse" is the term used to identify the edible seeds of legumes, and is derived from the Latin word puls, meaning thick soup.

The Food and Agriculture Organization of the United Nations (FAO)<sup>3</sup> recognizes 11 primary pulses: <sup>4</sup>

- Dry beans (kidney, lima, adzuki, mung, black gram, scarlet runner, rice, moth, and tepary)
- Lentil
- · Dry broad beans (horse, broad, field)
- Bambara groundnut
- Dry peas (garden, protein)
- Vetch
- · Chickpea
- Lupins
- Dry cowpea
- Minor pulses (lablab, jack, winged, velvet, and yam beans)
- Pigeon pea

Because they are high in fiber, folate, iron (when eaten with a source of vitamin C), and complex carbohydrates, and are also low in fat, pulse crops are considered nutritious for humans by some nutritionists, and not by others.

The reason some nutritionists advise keeping legume intake minimal is the same reason it's best to avoid feeding these foods to pets — the presence of phytates and lectins that are naturally found in legumes.

Phytates are substances that carnivores can't break down because they lack phytase, the enzyme necessary to process phytic acid. Phytates bind minerals (including zinc, iron, calcium and magnesium), leeching them out of your pet's body.

Lectins are sticky proteins that when consumed in large quantities may contribute to GI disturbances and leaky gut.

Of course, dogs and cats are carnivores, not omnivores or herbivores, but that pesky little fact certainly hasn't interfered with the pet food industry's relentless drive to make diets for carnivores using ingredients nature didn't design them to eat.

#### **Plant Protein Versus Animal Protein**

Chickpeas, beans, lentils and other plant-based ingredients are a poor substitute for animal protein in the diets of dogs and cats. However, they are certainly less costly, which is why processed pet food manufacturers are so fond of them.

These ingredients provide a way for manufacturers to boost the total percentage of protein in their formulas. Sadly, this is often misleading for many pet owners who are simply trying to feed their animal companions a species-appropriate diet.

It's very important to remember that the total protein percentage on most pet food labels does not reveal how much of that protein is from animals, which is the type of protein most appropriate for cats and dogs.

A large proportion of the total protein in most processed pet food is sourced from plants, not animals.

### **Ingredient Splitting**

It's also important to keep in mind that pet food manufacturers are required to list each item on the ingredient label in order of precooked weight. Using a little gimmick known as ingredient splitting, they are able to artificially raise a meat ingredient to a higher position on the ingredients list, while simultaneously dropping an inferior ingredient lower on the list. Here's a great example of ingredient splitting from Dog Food Advisor:<sup>5</sup>

Let's say we have a dog food that is primarily full of corn and rice, which is quite common in low-quality, inexpensive brands. Corn and rice are significantly less nutritious for dogs than meat (actually, they aren't even in the same ballpark), making them inferior ingredients.

Before Splitting			After Splitting		
Rank	Ingredient	Content	Rank	Ingredient	Content
1	Corn	30%	1	Chicken meal	18%
2	Rice	20%	2	Corn meal	15%
3	Chicken meal	18%	3	Corn flour	15%
4	Etc.	0.000.000	4	Rice gluten	10%
5	Etc.		5	Rice bran	10%
6	Etc.		6	Etc.	
7	Etc.		7	Etc.	ujiji

Looking at the ingredients in this dog food "Before Splitting," it's quite clear corn is the predominant ingredient, followed by rice. Chicken meal, which is the only species-appropriate ingredient of the three, comes in third. However, as you can see from the "After Splitting" example, when the manufacturer gets a little creative, using a couple of different corn and rice products, he can list them separately (split them), and ... voila!

Chicken meal pops to the top of the list, which is enough to convince many pet owners the food is meat-based and high quality.

## Just Say No to 'Pulse Crop Pet Food'

It's rather alarming to contemplate that the University of Saskatchewan researchers need a fantastically expensive ultrasound machine to evaluate whether their new pulse crop pet food is doing a number on the cardiovascular and reproductive health of their dog and cat (and fish?) study subjects.

The very need for such a machine would be a tip-off that perhaps pulse crops aren't the wave of the future in pet food. As always, it's best to nourish your dog or cat with a fresh, balanced, organic, non-GMO, species-appropriate diet. If you can prepare it yourself, even better!

#### **Sources and References**

PetfoodIndustry.com January 22, 2015

- 1, 2 CBC News, January 21, 2015
- <sup>3</sup> Food and Agriculture Organization of the United Nations
- <sup>4</sup> FAO, Definition and Classification of Commodities, 4. Pulses and Derived Products
- <sup>5</sup> Dog Food Advisor April 30, 2024