

This Unsavory Pet Food Additive Could Destroy a Myth Cherished by Most Pet Parents

While their PR machines praise it to the high heavens, you're better off sidestepping this potential health bomb for your precious animal companions. Besides being so unsavory as to make your stomach roll, it's far from the best option even for seriously non-picky animals.

Reviewed by Dr. Becker

STORY AT-A-GLANCE

- Spray-dried animal plasma (SDAP) is a very common pet food additive used as a binder in canned diets
- SDAP is made from the blood of animals slaughtered for human consumption
- SDAP is more palatable and digestible for cats than other common binders, but it has no or neutral nutritional value and is typically found in low-quality processed pet foods
- A 2016 study suggests SDAP makes canned food more digestible for cats than wheat gluten binders, which makes sense since cats aren't designed to digest wheat or other grains
- As pet food additives go, SDAP is more species-appropriate than other choices, however, the processed pet food it is added to is not optimal nutrition for cats or dogs

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Ever heard of spray-dried animal plasma (SDAP)? It's added to pet food and it's exactly what it sounds like: dried components of animal blood in spray form. Sounds delicious, doesn't it? (Actually, while it sounds disgusting to humans, believe it or not, pets really do like it!)

In fact, spray-dried animal plasma is a very common pet food additive. Manufacturers use it as a binder in wet foods because it has high-gelling, water retention and emulsion properties. In addition, it has the capacity to absorb quality differences from one batch of meat by-products' raw material to the next.

And as if all that wasn't exciting enough, according to PetfoodIndustry.com, a 2016 APC Europe study¹ has demonstrated:

"... [T]he inclusion of spray-dried animal plasma (SDAP) in a wet pet food recipe as a binder also improved the digestibility of the diet in healthy adult cats, compared to recipes using wheat gluten as a binder.

*Digestibility of dry matter, crude fiber, ash, calcium and phosphorus appeared to improve after the addition of SDAP. Thirty grams per kilogram of SDAP or wheat gluten were used in the corresponding recipes."*²

Translation: Sprayed-on animal plasma is more digestible for cats than wheat gluten. No surprises here, since cats require animal protein to survive, and aren't designed to digest grain. Wheat gluten is just one of several biologically inappropriate ingredients found in processed cat food.

So What Exactly Is Spray-Dried Animal Plasma?

According to PetfoodIndustry.com:

"The blood of animals slaughtered for human consumption is centrifuged to remove the blood cells and other components besides the plasma.

*The spray-drying technique used in the production process of SDAP is a mild dehydration process that maintains the functional physicochemical and biological properties of the plasma."*³

If you're wondering how spray-dried animal plasma makes canned cat food more digestible, according to the study:

*"... [T]he improved digestibility may be due to the resistance and survival of some functional components present in SDAP to high pressures and to thermal processing conditions, or maybe to some bioactive components produced after the digestion of the plasma proteins."*⁴

Translation: SDAP may be better able to withstand the extreme processing methods used to make pet food than other types of binders. In the world of pet food manufacturing, that's a good thing, since many additives, ingredients and especially nutrients, don't hold up well at all.

"The improved digestibility of wet pet food recipes with the addition of a special binder like SDAP may be related to the healthy digestion of the diet and therefore may suggest a reduced output and improved consistency.

*This improved digestibility is an important observation for diets designed for all ages, and especially for adult pets."*⁵

For the record, there is no convincing evidence that SDAP creates "healthy digestion" in cats eating canned diets. However, most kitties are probably able to digest animal plasma better than wheat gluten.

Perspectives on Spray-Dried Animal Plasma

On the one hand, SDAP is more biologically appropriate for cats than other types of binders and gelling agents made from wheat gluten or other starches. It's spray-dried plasma derived from animal blood, and carnivores in the wild routinely consume the blood of prey animals.

SDAP has no or neutral nutritional value when added to canned pet food. However, feeding your kitty a processed diet containing poor-quality raw ingredients. Rendered meat by-products are the source of animal protein used in most inexpensive pet foods.

Meat by-products, especially those not specified as a certain kind of meat (chicken, beef, turkey, etc.) frequently contain dicey ingredients ground into the mix during processing like beaks, feathers, feet, hooves, hair or entrails — even tumors.

So if you're buying pet foods with fillers, SDAP is a better filler than other choices, including genetically modified ingredients or those containing pesticide residues.

Spray-dried animal plasma is more palatable and digestible than other types of binders, but of course, the health of the plasma depends on the health of the animal it came from — an animal that was probably factory-farmed and loaded up with chemicals throughout its life.

Then there's the issue of how the companies choose to stabilize the plasma for an adequate shelf life. The goal in feeding pets is to eliminate all unnecessary "extras" in the diet that aren't in foods to meet a specific nutrition goal.

Why Processed Pet Diets Are Not Recommended

Our pet population provides a place for recycling waste from the human food industry.

Grains that fail inspection, human food past its expiration date, uninspected pieces and parts of waste from the seafood industry, leftover restaurant grease, deceased livestock and even roadkill are collected and disposed of through rendering — a process that converts human food industry waste into raw materials for the pet food industry.

Pet food manufacturers purchase these raw materials and blend the rendered fat and meat with starch fillers.

They add bulk vitamin and mineral supplements (most from China), and then they extrude the mix at high temperatures (the process that makes kibble, or dry food), creating a variety of toxic reactions including advanced glycation end products and cancer-causing heterocyclic amines.

They call these crunchy little pellets and canned goo "pet food," and sell it to customers at a handsome profit. The entire system is flawed, but pet food industry giants are realizing that pet parents are becoming more educated, and so they're trying to clean up their image. We're beginning to see words like "natural" and "no by-products" on labels.

But exactly what is "natural?" No GMOs? No factory-farmed, nutrient-deficient meats? No high-arsenic rice? No synthetic preservatives or vitamins? The problem is there isn't a set "natural" standard, everyone's perception is different and almost all manufacturers are jumping on the bandwagon and using the term.

We see more "grain-free" on labels as well, and more peas, lentils, chickpeas and other glycemic and unnecessary starches in the bag as clients become aware that corn, wheat and rice have no place in **pet food**. But the substitutes have significant nutritional implications as well.

Manufacturers are hearing the rumblings of educated pet owners and are updating their marketing to try to regain lost customers by changing their ingredients to regain market share.

But the issues remain the same: using poor-quality ingredients, relying on synthetic nutrients (instead of nutrient-dense foods) and utilizing extensive processing techniques to extend shelf life means most pet food is dead food. Feeding a lifetime of processed foods makes it impossible for your pet's body to be as vibrantly healthy as it should be.

Optimal Nutrition for Dogs and Cats

Dogs and cats need quality protein, fats and a small amount of vegetables and fruits (roughage). Vegetables and fruits provide antioxidants and fiber to animals who no longer hunt whole prey.

Natural sources of trace minerals, vitamins and fatty acids must be added, since the soils in which foods are grown are depleted of many of the nutrients pets need. Also, food storage, whether it's in a freezer or a pantry, decreases critical essential fatty acid levels in foods.

Pets need unadulterated, fresh and whole foods that are moisture-dense. They don't need grains, fillers, artificial preservatives, colors, additives, chemicals, byproducts or processed foods. Although animals can eat some processed foods, they aren't designed to consume a lifetime of dry or canned diets.

Nutritional goals for veterinary patients include a diet that is as species-appropriate as possible (low in carbohydrates, high moisture content and unprocessed) and a variety of fresh, whole foods that are nutritionally complete and optimal for the species.

Sources and References

¹ [Animal Feed Science and Technology, June 2016, Volume 216, Pages 243-250](#)

^{2, 3, 4, 5} [PetfoodIndustry.com, July 5, 2016](#)
