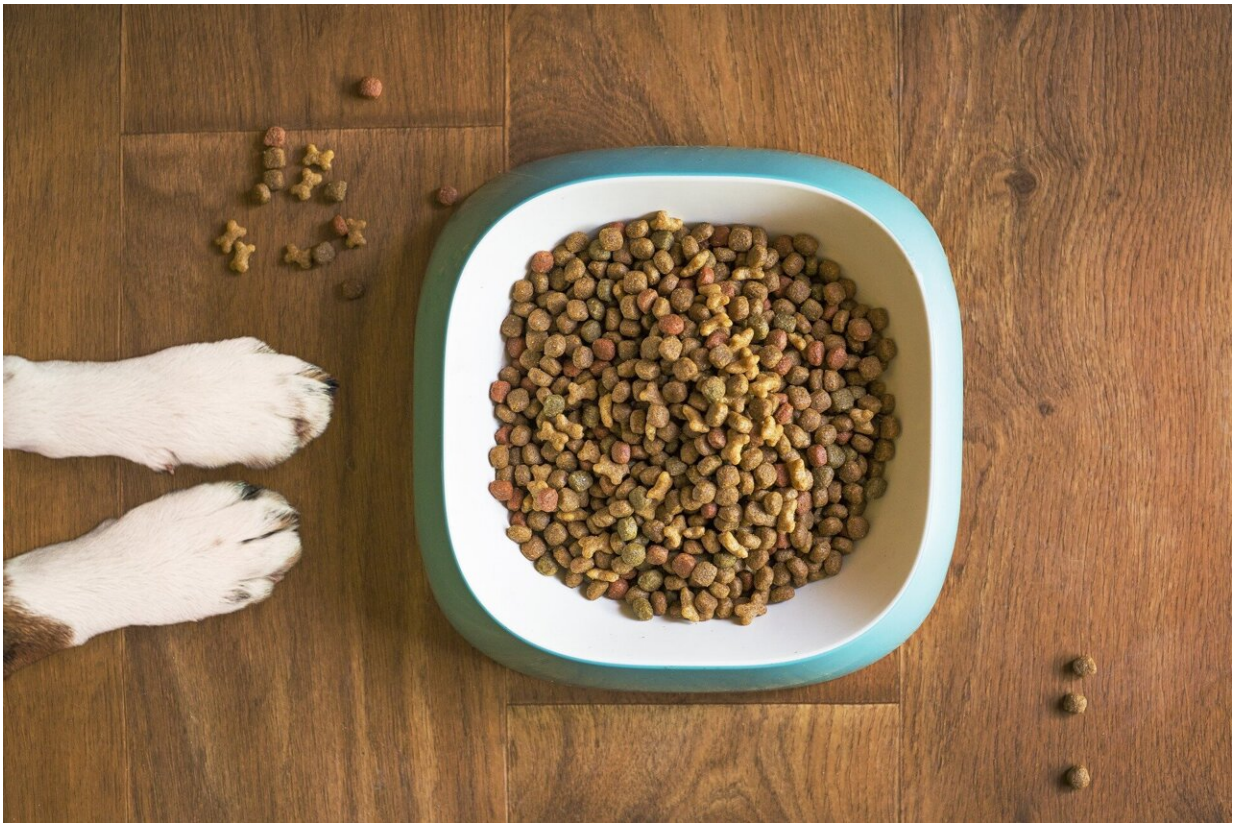


Study gives a thumbs up to carefully formulated vegan diets for dogs

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In today's pet food market, there are products to match nearly every lifestyle, value system, and price point pet owners demand, including vegan formulations. New University of Illinois research shows at least

two human-grade, lightly cooked vegan diets provide adequate nutrition for dogs.

"The trends of vegan foods and human grade foods are increasing for dogs. Because people are feeding these diets to their pets, it's important they be tested like all other foods to make sure they're safe and 'complete and balanced,'" says study co-author Kelly Swanson, professor in the Department of Animal Sciences, part of the College of Agricultural, Consumer and Environmental Sciences at U of I.

Swanson's team tested two human-grade vegan formulas (with and without a grain ingredient) from Bramble against a leading brand chicken-based kibble diet. They fed the diets to beagles for three weeks and sampled the dogs' blood chemistry, fecal quality, and microbiome, the collection of microbes present in the poop. Their results are published in the *Journal of Animal Science*.

The team also analyzed the foods themselves—the vegan diets were veterinary nutritionist-formulated mixtures of whole foods like lentils, garbanzo beans, [sweet potatoes](#), butternut squash, apples, blueberries, peas, and carrots—and confirmed both vegan diets and the chicken-based diet met standards set by the Association of American Feed Control Officials (AAFCO) for "complete and balanced" nutrition.

"One thing to remember is that animals don't have ingredient requirements, they have nutrient requirements. As long as they're consuming the [essential nutrients](#) in the correct amounts and ratios, dogs can be vegan, vegetarian, or meat-eaters," Swanson says. "Knowledge of ingredient composition and nutrient needs are critical, however. Anyone can slap together a vegan meal for their dog, but without careful formulation, you might have something that's really imbalanced."

In earlier studies, Swanson's group showed human-grade, fresh dog

foods to be highly digestible, resulting in dramatically less stool. That wasn't exactly the case for the vegan diets in the current study. All diets were highly digestible, but the vegan diets didn't generate any more or less stool than the chicken diet.

"It's not a surprise, really. With these ingredients, there's more fiber and oligosaccharides, which could be good for dogs that need to stay regular," Swanson notes.

The research team was surprised to find certain [blood metabolites](#)—chemicals in the blood that can indicate [health status](#)—differed between the vegan diets and the chicken-based diet. Notably, blood triglycerides and cholesterol, measures of circulating fats, were significantly lower in dogs fed the vegan diets. Swanson says that could benefit obese pets and help maintain a healthy weight.

When they analyzed the fecal microbiome and the chemicals produced by those microbes, the team noted more positive changes.

"There were some interesting and beneficial changes in the microbial community that I think reflect the blend of fibers that were present in the vegan diets. The fecal metabolites phenol and indole, both of which contribute to fecal odor, were dramatically decreased in those diets too. It's still going to smell, but probably less," Swanson says. "Overall, it looked like there were some beneficial shifts from a gut health perspective in dogs fed the vegan diets."

Swanson says he'd like to do head-to-head comparisons between human-grade diets with and without meat and [dairy products](#), but for the first study showing how fresh vegan diets perform in dogs, the results are promising.

"No one had tested digestibility of these diets in dogs before this. We

showed that these vegan diets resulted in desirable fecal characteristics, high nutrient digestibilities, and [positive changes](#) to certain blood and fecal metabolites," he says. "For people who are interested in feeding their pets a vegan [diet](#) that aligns with their personal values, the diets we tested are a good choice."

Swanson reiterates the diets were formulated by veterinary nutritionists, and that homemade [vegan](#) dog foods may not provide complete and balanced nutrition for [dogs](#).

More information: Leah J Roberts et al, Apparent Total Tract Macronutrient Digestibility of Mildly-Cooked Human-Grade Vegan Dog Foods and Their Effects on the Blood Metabolites and Fecal Characteristics, Microbiota, and Metabolites of Adult Dogs, *Journal of Animal Science* (2023). [DOI: 10.1093/jas/skad093](https://doi.org/10.1093/jas/skad093)

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