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Dog Tips

# New Dog Feeding Study - Can You Guess Their Crazy Conclusion?

If you saw these study results you'd likely never come to the same conclusion as they did. It's kind of crazy and hard to understand — until you read one of the final paragraphs. And then the light bulb clicks on. Don't bet your pet's life on their word though.

### Reviewed by <u>Dr. Becker</u>

## **STORY AT-A-GLANCE**

- A growing body of research proves conclusively that raw and lightly cooked diets are easier for dogs to digest than extruded diets (kibble)
- Dogs fed fresh food diets show positive microbiome changes and improved overall gut function
- In addition, dogs eating lightly cooked and raw food had reduced blood triglyceride levels, even though those diets had a higher fat content than extruded dog food
- A nutritionally balanced, biologically appropriate, fresh raw or gently cooked diet is always a better choice for pets than extruded diets

### Editor's Note: This article is a reprint. It was originally published October 12, 2018.

Not long ago, a team of university researchers published a study in the Journal of Animal Science revealing how different types of diets affect the gut bacteria (microbiome) of dogs.<sup>1</sup>

According to the researchers, the objective of the 28-day study was to determine fecal microbiota and metabolite concentrations in eight adult dogs fed four different diets that included 2 lightly cooked diets from Freshpet, a raw Freshpet diet and an extruded diet (Purina Dog Chow).

Not surprisingly, the study results showed there are indeed differences in gut bacteria depending on what diet dogs are fed, but beyond that, nothing unexpected or out of the ordinary was revealed. Interestingly, the researchers made a point to state that all the dogs "remained healthy throughout the study."

This seemed odd, since this was a relatively short 28-day study, and in addition, all four diets have been available on the market for years. If these foods, fed to millions of dogs every day, were making them sick, they would've been recalled long ago.

# Mildly Cooked and Raw Diets Have More Protein and/or Fat and Are More Digestible Than Extruded Diets

One of the study co-authors, Kelly Swanson, Ph.D., a professor of animal and nutritional sciences at the University of Illinois, told PetfoodIndustry.com the food dogs eat has a significant effect on the types of microorganisms found in their digestive tracts.

"The quality and chemical composition of the ingredients and nutrient digestibility are key factors," says Kelly. "That is an important factor in our study because the ingredient list, chemical composition (nutrient profile), and nutrient digestibility was quite different among diets. The mildly cooked and raw diets were generally higher in protein and/or fat and were more digestible than the extruded diet."<sup>2</sup>

Based on Swanson's statement, it seems the lightly cooked and raw diets performed better, in that they were easier for the dogs to digest than the highly processed extruded diet. If this was a surprise to the researchers, it really shouldn't have been. And PetfoodIndustry.com made this observation:

"... [D]espite having a higher fat content than extruded dog food, both lightly cooked and raw diets seemed to reduce blood triglyceride concentration, which would be considered beneficial long term. The biological reason for this is unknown."

This could be due to the fact that lightly cooked and raw diets are simply more biologically appropriate (and therefore less metabolically stressful) than the Purina Dog Chow (one of the lowest-quality, grain-based kibbles on the market), thus the decrease in the dogs' blood triglyceride values.

## Kibble Is NOT the Equivalent of Raw or Lightly Cooked Fresh Dog Food

After reading the study and the related PetfoodIndustry.com article, it's curious what the purpose of the research actually was. However, one of the final paragraphs of the PetfoodIndustry.com article may offer a hint:

"Since all three types of dog food didn't seem to result in health problems, one takeaway from this research may be that extruded, lightly cooked and raw dog foods can all meet dogs' nutritional needs if made using evidencebased guidelines and safety protocols."

There it is again, that strange reference to no health problems in the dogs who ate the four pet foods for 28 days. Perhaps the hoped-for outcome was that the dogs wouldn't do as well on the fresh or raw diets. Or perhaps it was an attempt to establish that fresh and processed dog foods are the same.

Whatever the intent of the research, it's good to see these types of studies are beginning to take place here in the U.S. It seems like the pet food industry has no choice but to begin evaluating the health benefits of <u>fresh (raw and</u> <u>gently cooked) pet foods</u> because of their popularity.

Dr. Anna Hielm-Björkman, professor at the veterinary school in Helsinki, Finland, is also studying dog metabolomics.

The DOGRISK program, conducted at the school, is involved in several innovative research programs evaluating the effects of different types of dog foods on canine health.

Björkman's findings support what Swanson found in this study — raw food is less metabolically stressful than kibble, and raw fed dogs have lower levels of inflammatory and disease markers compared to kibble fed dogs.

Swanson says that it doesn't matter whether dogs are fed fresh food or kibble, since presumably, both types of diets meet their nutritional needs. But on the contrary, the type of food we offer our animal companions matters very much to their long-term health and well-being.

### Studies Prove Raw Fed Dogs Have Healthier Guts Than Kibble Fed Dogs

Other research on how diet impacts the canine gut microbiome has provided better insight into the benefits of feeding species-appropriate diets to dogs. For example, an Italian study published recently compared the influence of a raw meat and vegetable diet versus an extruded diet in eight healthy Boxers.

The study authors concluded that feeding a raw diet "... promoted a more balanced growth of bacterial communities and a positive change in the readouts of healthy gut functions in comparison to [an extruded] diet."<sup>3</sup>

In another recent study in New Zealand of 15 adult dogs, the researchers discovered that the dogs fed a raw red meat diet showed higher levels of digestibility of protein and energy than dogs fed kibble. They also produced less poop with lower levels of fecal volatile fatty acids.<sup>4</sup> As for gut bacteria, the study authors noted that:

"Diet significantly affected 27 microbial families and 53 genera in the faeces. In particular, the abundances of Bacteriodes, Prevotella, Peptostreptococcus and Faecalibacterium were lower in dogs fed the meat diet, whereas Fusobacterium, Lactobacillus and Clostridium were all more abundant."

The shift in the microbiota correlates to protein and fat digestibility in the dogs. By understanding the relationship between a dog's microbiome and digestibility of the food consumed, we gain insight into the influence of diet on the overall well-being of pets.

## **Fresh Food Is the Best Food for Pets**

It's best to transition your pet away from "fast food" (kibble), and instead feed them a nutritionally balanced, speciesappropriate diet, which means food containing unadulterated, high-quality animal protein, moisture, healthy fats and fiber, with low to no starch content.

A nutritionally balanced raw or gently cooked homemade diet is the top choice for pets, but only for those pet parents who are committed to doing it right. If you don't want to deal with balancing diets at home, choosing to feed a prebalanced, commercially available raw food is a good alternative.

And be sure to incorporate a variety of fresh foods into your pet's diet, too. **Blueberries**, chia and hemp seeds in coconut oil, raw pumpkin seeds, fermented vegetables, and kefir can provide your furry family member with a variety of nutrition and flavors.

#### **Sources and References**

<sup>1</sup> Journal of Animal Science, Volume 95, Issue suppl 4, August 1, 2017, pages 111

<sup>2</sup> <u>PetfoodIndustry.com, July 19, 2022</u>

<sup>3</sup> BMC Veterinary Research. 2016; 13: 65

<sup>4</sup> PeerJ. 2017 Mar 2;5:e3019