The Differentiation of Freeze Dry Meat Products via Sourcing and Processing

Etta Says! Eat Simple! - The Best Raw Treat Option on the Market

The Freeze Dry treat category is a fast-growing product segment among pet parents looking for an all-natural single ingredient treat. Due to the fact that the products typically only have one ingredient, many pet parents struggle to understand if any differentiation exists between brands. Treat Planet asserts that no matter how simple the ingredient deck, dramatic differences *do* exist in these products. First, strong differentiation exists in sourcing and quality of the meat. Many traditional dog treat manufacturers use meal or renderings, combination of many left-over parts of the animal converted into a 'usable' meat. Treat Planet uses *real meat* sourced from a USDA, FSIS (Food Safety & Inspection Service). The meat is Non GMO and hormone and antibiotic free. Besides the highest quality of ingredients, Treat Planet uses a proprietary molding system, producing consistent, uniform medallion shaped treat.

The final step in the manufacturing process is probably also the most important. A key question any pet parent should ask themselves before treating with freeze dry meat is, "What method was used for the "kill-step"?

In mid 2015, the FDA announced a new zero tolerance policy on pathogens in all raw food and treat products in the pet food industry. This was based on the concerns of pet parents coming in contact with dangerous pathogens while handling pet treats or raw foods. To meet this requirement, the industry moved to two prominent "kill step" methods for their products – High Pressure Processing (HPP) & Irradiation.

HPP uses intense pressure (58,000 to 87,000 per square inch), rather than heat to destroy pathogens such as E. coli, Salmonella, and Listeria in raw meat. That is roughly the same as a 10 ton elephant standing on a postage stamp.

HPP has been shown to be an effective sterilization method for raw pet foods and treats. However, some species of bacteria are resistant to HPP, and beneficial bacteria, as well as enzymes that help with a pet's digestion, can be destroyed in the process.²

According to Dr. Karen Shaw Becker DVM, "Many advocates believe HPP is a method of processing whole living food into a modification of whole living food, and that we shouldn't confuse truly unadulterated raw food with raw food that has been high pressure processed (HPP)." Dr Becker also states that research has demonstrated that proteins denature based on the amount of pressure utilized in the process and HPP will also obliterate beneficial bacteria. Denaturing changes the shape of a protein which can alter the food's nutritional content. Dean Ricard, president of the Canadian Association of Raw Pet Food Manufacturers, agrees that HPP denatures some proteins causing a color change, but it doesn't significantly reduce the nutrient profile of the product. So although HPP is an effective kill step method, there are valid concerns on the nutritional impact of the process vs a truly raw product. Even with the differences in opinions, many manufacturers have felt that it is still the best commercial step available in the market.

Food irradiation is another food processing technique that is used as a "kill step" in pet foods and treats in the US. During this procedure, the food is exposed to doses of ionizing energy or radiation. Food is

irradiated to destroy bacteria, fungi, or insects that cause human disease to cause food to spoil. In the US, approximately 80 million pounds of spices are irradiated annually. Irradiated chicken is also sold at some retail and restaurants in the US. ³ In the United States, federal regulations require that all irradiated foods be labeled and carry a symbol called the radura. Foods that contain irradiated spices or foods serviced in restaurants do not have to be identified as being irradiated. Irradiation causes minimal changes to the chemical composition of food; however, it can alter the nutrient content of some foods because it reduces the level of some of the B-group vitamins.⁴

A common misconception is that irradiated food is radioactive. The radiation used to process foods is very different from the radioactive fallout that occurs after, for example, a nuclear accident. Irradiation is approved in 40 countries for some 40 different food products. Each year, about a billion pounds of food products and ingredients are irradiated worldwide. ³ Nevertheless, many consumers still hold a very negative connotation for irradiation. The fact that the federal government requires labeling of such products adds to the concern for the call out.

As reviewed, there are pros and cons to the most commonly utilized kill step processes in the US for dog treats and food.

Treat Planet decided to <u>not</u> subject its freeze dry meat products to either of these common processes. Treat Planet has taken a unique approach and its products undergo Freeze Dry Pasteurization while in the chamber. Specifically, Treat Planet use a proprietary freeze-dry algorithm with changes to the duration of the heat and sublimation process. The heat temperature does not go above 130 degrees Fahrenheit, so as to not cook the meat, while the duration and pressure allows for full pasteurization within the dryer. The result is a safe, sterilized product without having to undergo HPP or irradiation. This unique process has been extensively validated with scientific studies testing pathogen presence before and after. Further, as has become a common practice among quality manufacturers, every batch is extensively tested to verify the pathogen free results from the process.

In conclusion, not all single source protein freeze dry treats are created equal. Treat Planet utilizes the highest quality meats and freeze dries them into a consistent medallion shape for easy treating. Utilizing their proprietary freeze drying process, they are able to deliver a safe treat without subjecting the product to HPP or Irradiation. The Treat Planet Eat Simple line is simply the best freeze dried meat product on the market.

¹ "The Truth Behind the Growing Raw pet Food Recalls", Dr. Karen Shaw Becker, Healthy Pets, <u>www.healthypets.mercola.com</u>, 2015.

² "High-Pressure Processing and Raw Pet Food Diets: What You Need to Know", Paula Fitzsimmons, petMD, <u>www.petmd.com</u>, 2018.

³ "Food Safety", Food Irradiation: Questions & Answers, Sterigenics Food Safety, Oak Brook, ILL, <u>www.sterigenics.com</u>

^{4 &}quot;Food Irradiation - Better Health Channel", Australian Government, www.betterhealth.vic.gov.au, 2013