Analyzing the Ease of Digestion in Dogs Through the Absorbency of Different Types of Dog Foods

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Dogs do not chew their food well because of the structure of their teeth and their natural instincts. It can cause dogs to not always be able to fully absorb the nutrients from their food. In this experiment, it was hypothesized that all dog food brands will have similar if not the same water absorbency because they are compacted and dried in similar methods. In this study, six different types of dog foods were tested including one control which was made from a different main ingredient than the rest. Each brand of dog food went through ten trials. The water absorbency for each dog food was found by weighing 50 grams of dog food. Water was heated up to 49 degrees celsius to simulate a dog's internal temperature and then 120 mL of the water was poured into the dog food. It was left for 15 minutes to soak and then it was drained and reweighed to see the amount of water the dog food absorbed. The data showed that the dog foods were different because the error bars between all the dog foods and the Purina dog food did not overlap. This means the Purina dog food's absorbency level is statistically significant and has a higher water absorbency than the other dog food brands. It is important for dog food to break down in the dog's digestive system so dogs can acquire more nutrients.

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