Case Study: Owner Perceptions of Dog Itching

Your client today is a veterinarian who specializes in skin diseases on dogs. Here's what they do when they suspect a dog has a skin allergy. They first put the dog on a special non-allergenic diet for six weeks. At the end of the six weeks, if the owner thinks the dog is doing better, they put the dog back on the regular diet for two weeks as a challenge. If the owner thinks the dog is doing worse, then an allergy is diagnosed.

However, the veterinarian says that even when the owners say the dog has improved, she often doesn't think that they have. She thinks the owners are having a placebo effect. She is writing a grant to study this by having dogs randomly assigned to either the non-allergenic diet or the regular diet for the first six weeks. She has a connection in industry that can make the diets look identical. She'll then see if there is a difference in owner perception between the dogs on the non-allergenic diet and the dogs on the regular diet.

What questions do you have for this client? Anything you might change about the design? Or additional data you'd want to collect?

What kinds of analyses might you propose?

Name: _____

What was the most interesting way you heard to improve this experiment, or to analyze the resulting data?