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What to Feed? Hydrolyzed Diet vs. Novel-Protein Diet

Food allergies often manifest themselves with signs of skin disease. Allergies are most commonly a reaction to a protein source, and the goal of feeding a “hypoallergenic” diet is to decrease immune reactions to the offered protein source and, therefore, improve the skin disease. To diagnose a food allergy, one must feed a strict diet with one protein source that is either commercially prepared or home-cooked. The commercial diets discussed here consist of either one novel-protein source or a hydrolyzed protein diet. Some animals can have reactions to proteins associated with a carbohydrate source, so these diets are also prepared with one carbohydrate source.

So how do you choose a diet for your pet?

A novel protein diet consists of a protein source that your pet has likely not been previously exposed to and therefore cannot have developed an immune response to it. The novel protein diets have more options in terms of potential protein sources as well as canned varieties compared to the hydrolyzed diets. These diets are typically more calorie dense than the hydrolyzed diets so portion control must be followed closely to prevent weight gain. One thing to keep in mind when choosing a diet is that pets with beef allergy may react to venison and pets with chicken allergy may react to duck protein sources.

A hydrolyzed protein diet consists of a single protein source that is specially processed to break the structure of the protein down into multiple, tiny particles that the immune system will not recognize as an allergen. This method has been used for several years in infant formula to decrease food hypersensitivity. Soy and chicken are common protein sources used in making these diets. Soy may be preferable since few dogs have been fed soy based diets previously so it is less likely that they have been sensitized to it. It has been found that hydrolyzed soy is extremely digestible and well absorbed from the gut. Clients occasionally report that their pets find these diets more palatable than the novel protein diets. Unfortunately, whole soy is not an option for home-cooked diets.

| <u>Company</u> | <u>Protein Source</u> | <u>Carbohydrate Source</u> | <u>Canned/Dry</u> |
|----------------|-----------------------|----------------------------|-------------------|
|----------------|-----------------------|----------------------------|-------------------|

Novel Protein

| | | | |
|-----------------|-----------|------------------|---------|
| Hill's | | | |
| Diet d/d | Duck | potato/green pea | can/dry |
| | Salmon | potato | can/dry |
| | Rabbit | potato/green pea | can/dry |
| | Lamb | rice | can |
| | Egg | rice | dry |
| | Venison | green pea | can/dry |
| Iams/Eukanuba | | | |
| | Fish | potato | can/dry |
| | Kangaroo | oat flour | dry |
| Royal Canin/IVD | | | |
| | Rabbit | potato/green pea | can/dry |
| | Duck | potato/green pea | can/dry |
| | Venison | potato | can/dry |
| | Whitefish | potato | can/dry |
| | Lamb | green pea | dry |

Hydrolyzed Diets

| | | | |
|------------------|---------------------|------------------------|---------|
| Hill's z/d ultra | Chicken | corn starch, cellulose | can/dry |
| Purina HA | Soy | corn starch, cellulose | dry |
| Royal Canin | Soy, poultry, liver | rice beet pulp | dry |