Quality You Can Trust:

BLUE Natural Veterinary Diet™ Formulas for Dermatologic Indications

All BLUE Natural Veterinary Diet dermatologic formulas undergo rigorous testing to ensure they meet our strict standards for evidence of contaminating proteins.

Adverse Food Reactions (AFR) are common clinical presentations in veterinary small animal practices. Treating AFR involves a multi-modal approach, which can include topical therapeutics, antibiotics to treat secondary bacterial infections, systemic antipruritic pharmaceuticals, and veterinary therapeutic diets.

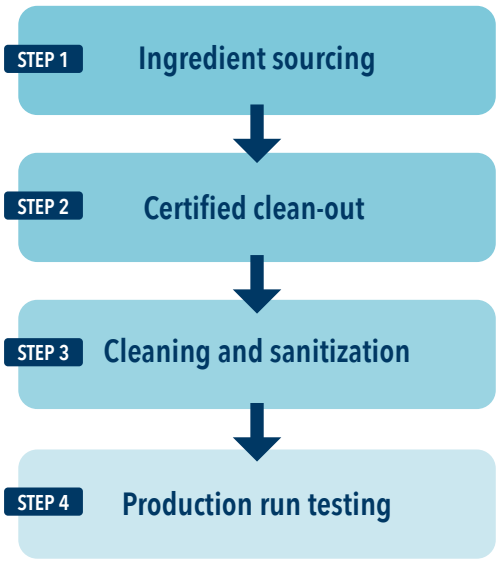
The therapeutic diets used to diagnose and manage AFR include commercial limited-antigen, novel protein, and hydrolyzed protein formulations. However, the commercial diets available to manage dermatological conditions in dogs and cats are not created equal.

Numerous scientific studies have demonstrated protein contamination in both veterinary and over-the-counter (OTC) diets. Various methodologies, including Enzyme-Linked Immunosorbent Assay (ELISA) and Polymerase Chain Reaction (PCR), have been used to demonstrate evidence of protein contamination in finished pet food products, including those labeled "limited ingredient".[1,2]

Even veterinary therapeutic diets are at risk for contamination. A study completed by Willis-Mahn, et al., showed that two veterinary diets tested positive for soy even though soy was not listed on the ingredient panel.[3]

Offering your clients veterinary therapeutic diets that meet strict standards for evidence of protein contamination should be the gold standard for prescribing therapeutic diets for adverse food reactions.

All BLUE Natural Veterinary Diet dermatologic formulas undergo a robust manufacturing and quality assurance protocol to ensure they meet our strict standards for evidence of protein contamination.



1 We procure only clean ingredients that are sourced with strict standards from approved suppliers.

2 All of our trucks undergo a certified clean-out prior to loading with materials. Evidence of clean-out must be presented at the manufacturing plant.

3 An extended downtime is necessary to achieve this mandatory clean break changeover. All contact surfaces, manufacturing equipment, and storage equipment are emptied and cleaned.

4 Samples from the start, middle, and end of each production run are submitted for ELISA and/or PCR testing for evidence of protein contamination.

Healthy Holistic

BLUE

NATURAL

Veterinary Diet™

Enhanced with Vitamins, Minerals and Other Nutrients

BLUE always performs diagnostic testing to ensure our Natural Veterinary Diet dermatologic formulas meet our strict standards for evidence of protein contamination.

- Testing is used to validate our clean ingredient sourcing, processing, and manufacturing equipment cleanout procedures during manufacturing as well as on finished product.
- Primary ingredients are analyzed to test for protein contamination before pet food manufacturing occurs. *(fig. 1)*
- Before releasing any of our BLUE Natural Veterinary Diet HF Hydrolyzed for Food Intolerance and NP Novel Protein-Alligator diets as finished products, we perform **ELISA and/or PCR testing** *(fig. 2)* to ensure each formula meets our strict standards for evidence of contaminating proteins.
  - **ELISA testing uses antibodies** to detect specific protein antigens and signals a color change if a positive result is observed. ELISA testing is performed at the beginning, middle, and end of manufacturing runs to ensure each product meets our strict standards for protein contamination from common pet food protein sources including beef, poultry, and soy.
  - In addition to ELISA testing, we use PCR testing to validate that our **NP Novel Protein-Alligator products meet our strict standards for common animal protein contamination**. The very sensitive PCR test is able to detect and amplify even microscopic pieces of DNA to determine if present.

SAMPLE ELISA RESULTS ANALYZING FINISHED PRODUCT

fig. 1

ANALYTICAL RESULTS: RESULTS APPLY ONLY TO THE SAMPLES AS RECEIVED

CONTROL #	SAMPLE DESCRIPTION	ANALYSIS IDENTIFICATION	RESULT
2202155–1	NVD HF Salmon Dog – BEGINNING – LINE 1 Time – 08:13 20230817L 2/15/22	500610 Cooked **Beef** Species ELISA	**NEGATIVE**
2202155–2	NVD HF Salmon Dog – MIDDLE – LINE 1 Time – 13:39 20230817L 2/15/22	500610 Cooked **Beef** Species ELISA	**NEGATIVE**
2202155–3	NVD HF Salmon Dog – END – LINE 1 Time – 17:35 20230817L 2/15/22	500610 Cooked **Beef** Species ELISA	**NEGATIVE**
2202155–1	NVD HF Salmon Dog – BEGINNING – LINE 1 Time – 08:13 20230817L 2/15/22	500630 Cooked **Poultry** Species ELISA	**NEGATIVE**
2202155–2	NVD HF Salmon Dog – MIDDLE – LINE 1 Time – 13:39 20230817L 2/15/22	500630 Cooked **Poultry** Species ELISA	**NEGATIVE**
2202155–3	NVD HF Salmon Dog – END – LINE 1 Time – 17:35 20230817L 2/15/22	500630 Cooked **Poultry** Species ELISA	**NEGATIVE**

fig. 2

ANALYTICAL RESULTS: RESULTS APPLY ONLY TO THE SAMPLES AS RECEIVED

CONTROL #	SAMPLE DESCRIPTION	ANALYSIS IDENTIFICATION	SOY
2202154–1	NVD HF Salmon Cat – BEGINNING – LINE 1 Time – 13:40 20230818L 2/16/22	**SOY Assay**	**Not Detected**
2202154–2	NVD HF Salmon Cat – MIDDLE – LINE 1 Time – 13:49 20230818L 2/16/22	**SOY Assay**	**Not Detected**
2202154–3	NVD HF Salmon Cat – END – LINE 1 Time – 13:59 20230818L 2/16/22	**SOY Assay**	**Not Detected**

Conclusion:

All BLUE Natural Veterinary Diet formulas indicated for dermatologic conditions undergo extensive testing to ensure they meet our strict standards for evidence of contaminating proteins before they are released as final products.

[1] Raditic DM et al. ELISA testing for common food antigens in four dog dry food used in dietary elimination trials. *J Anim Physiol Anim Nutr* 2011; 95: 90-97.
[2] Ricci R et al. Identification of undeclared source of animal origin in canine dry foods used in dietary elimination trials. *J Anim Physiol Anim Nutr* 2013; 97; 32-38.
[3] Willis-Mahn C et al. ELISA testing for soy antigens in dry dog foods used in dietary elimination trials. *J Am Anim Hosp Assoc* 2014; 50; 383-389.