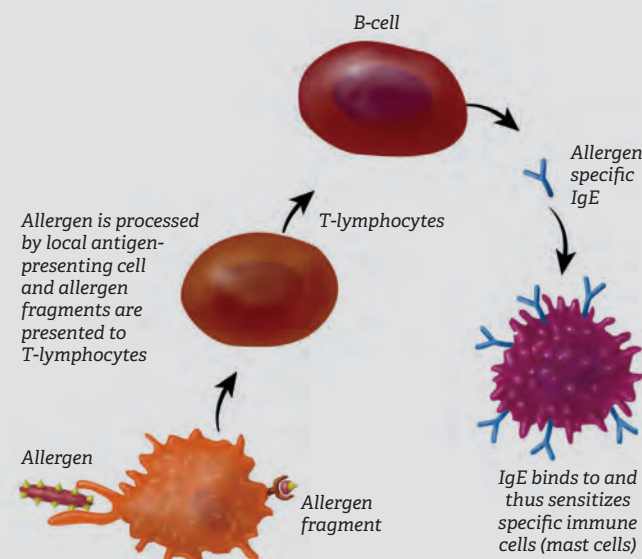


A CLOSER LOOK

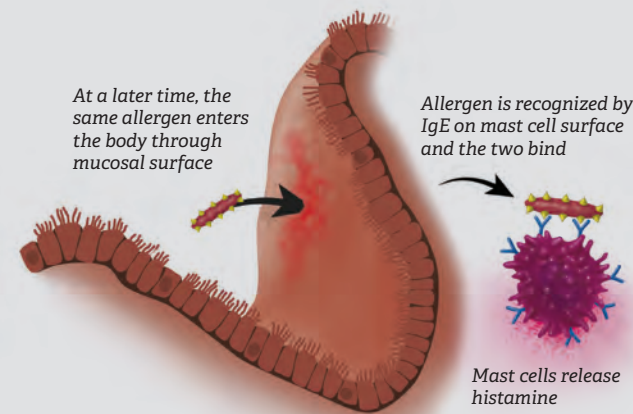
A GLIMPSE INSIDE THE SCIENCE

HOW IS AN ALLERGY DEVELOPED AND HOW DO HYDROLYZED PROTEINS WORK?

1 FOOD ALLERGY - DEVELOPMENT-SENSITIZATION

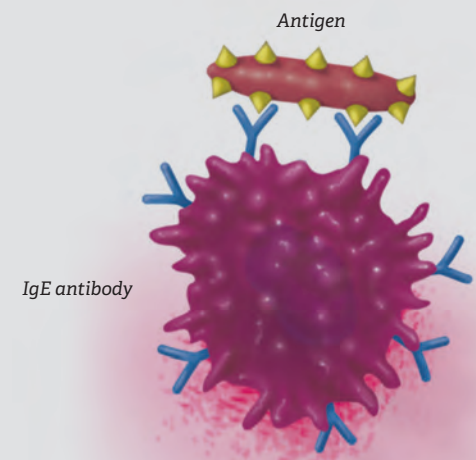


2 FOOD ALLERGY - RESPONSE TO ALLERGEN



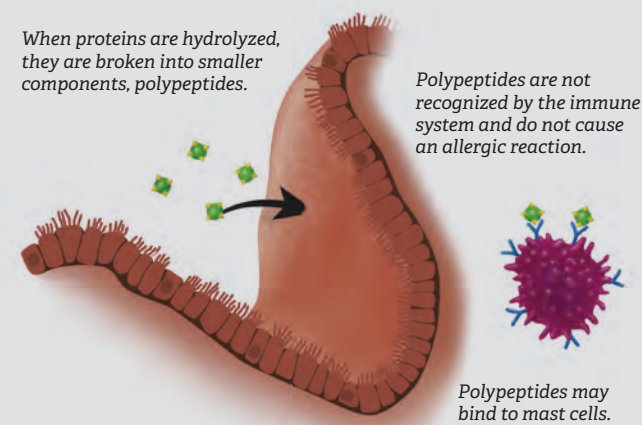
RESULT: Inflammation, pruritus and/or gastrointestinal disturbances

3 FOOD ALLERGY - SIZE, STRUCTURE AND ANTIGENICITY



Antigen must be large enough to "bridge" two IgE antibodies bound on mast cell to stimulate degranulation

4 HOW DO HYDROLYZED PROTEINS HELP?



Polypeptides still provide the same nutritional benefits as the intact protein

PURINA[®] PRO PLAN VETERINARY DIETS[®]



Learn more at www.ProPlanVeterinaryDiets.ca

For more information, visit www.ProPlanVeterinaryDiets.ca or call us at 1-866-884-VETS (8387). Have a Case consult? We are here to help. Contact our Canadian Veterinary Nutrition Team at canadavetconsult@purina.nestle.com

PURINA TRADEMARKS ARE OWNED BY SOCIÉTÉ DES PRODUITS NESTLÉ S.A. ANY OTHER MARKS ARE PROPERTY OF THEIR RESPECTIVE OWNERS. VET-2010E-HAFDET

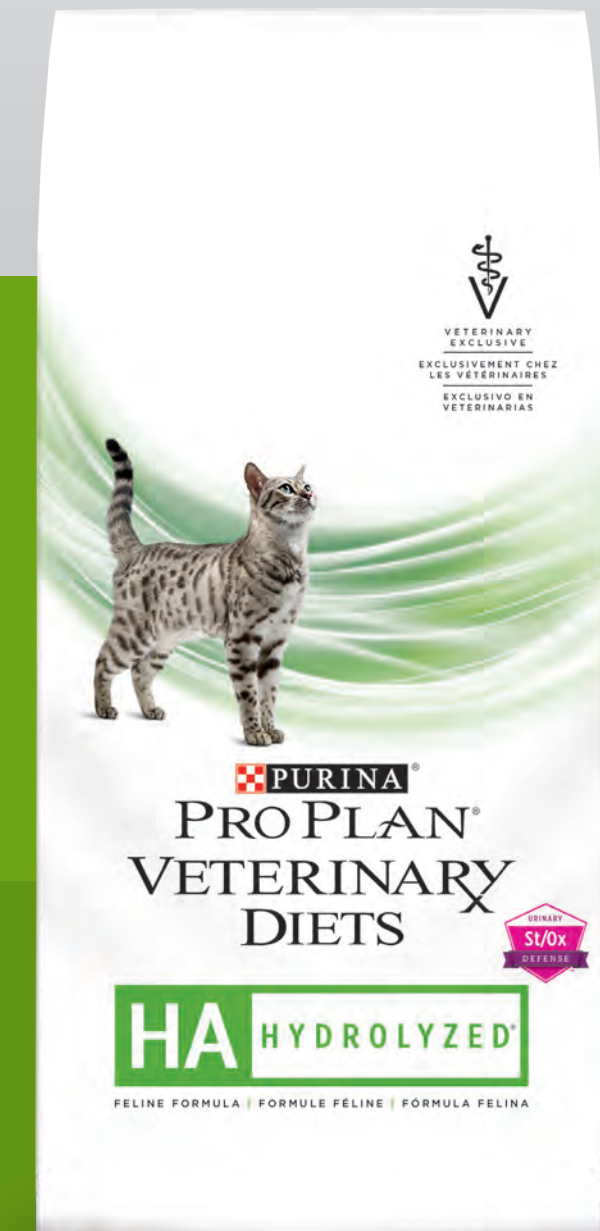
PURINA[®] PRO PLAN VETERINARY DIETS[®]

HA HYDROLYZED[®]

MEDICAL INDICATIONS

Multiple Indications for a Wide Range of Patients

- | | |
|-------------------------------------------------------------------|--------------------------------------------------------------|
| <input checked="" type="checkbox"/> Gastrointestinal | <input checked="" type="checkbox"/> Dermatologic |
| <input checked="" type="checkbox"/> Elimination diet trial | <input checked="" type="checkbox"/> Elimination diet trial |
| <input checked="" type="checkbox"/> Food allergic gastroenteritis | <input checked="" type="checkbox"/> Food allergic dermatitis |
| <input checked="" type="checkbox"/> Food intolerance | |
| <input checked="" type="checkbox"/> Inflammatory bowel disease | |
| <input checked="" type="checkbox"/> Pancreatitis | |



THE FELINE ALLERGY OPPORTUNITY

INDICATION RELEVANCE

Adverse food reactions account for approximately 10 - 15% of all allergic skin diseases in dogs and cats.¹ Also, 18% of cats visiting veterinary clinics were seen because of GI issues, and 17% were seen because of skin issues.²



DIETARY MODIFICATION

The 3 most common types of allergies are atopy, flea allergic dermatitis and food sensitivities. The most common food allergens for cats are beef, dairy, fish, and lamb³. Adverse food reactions can include both skin and GI symptoms³. Dietary modifications can help to nutritionally manage cats with food sensitivities by providing hydrolyzed sources of protein in a hypoallergenic diet.

¹Dermatology, Blackwell's five-minute veterinary consult. Canine and Feline, Fifth Edition. P. 491 (2011). Ames, Iowa, Blackwell; ²Veterinary Landscape Study, May 2015; ³Verlinden A, Hesta M, Millet S, et al. Food allergy in dogs and cats: a review. Crit Rev Food Sci Nutr. 2006;46:259-273.

HEALTH BENEFITS

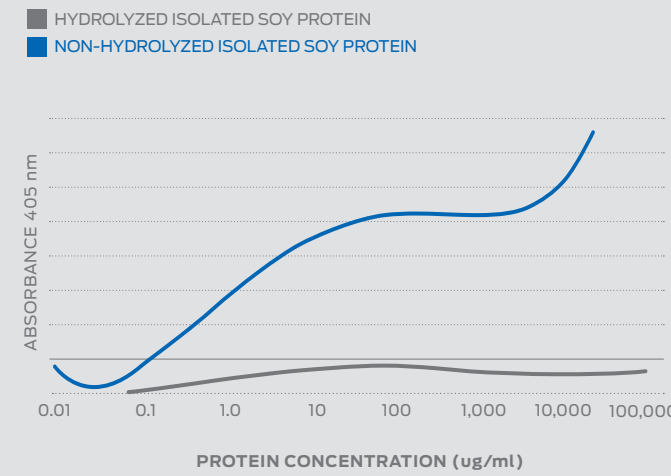
BENEFIT	INGREDIENTS	MECHANISM
LOW ANTIGENICITY FORMULA <ul style="list-style-type: none"> Total formula average molecular weight at 12,269 daltons Formulated with only hydrolyzed protein sources Single low-allergen starch source helps minimize the risk of an allergic reaction 	<ul style="list-style-type: none"> Protein from hydrolyzed soy protein isolate, hydrolyzed chicken liver, hydrolyzed chicken Starch from rice starch 	<ul style="list-style-type: none"> A hypoallergenic diet contains protein that has been reduced to small polypeptides through hydrolysis. Small polypeptides are not recognized as an antigen by the immune system The starch source in the formula is a highly refined starch that contains virtually no protein (<1% protein)
DIGESTIVE HEALTH <ul style="list-style-type: none"> Highly digestible formula made with quality ingredients and formulated to promote optimal nutrient absorption and facilitate digestion 	<ul style="list-style-type: none"> High-quality ingredients 	<ul style="list-style-type: none"> Total Formula Digestibility at 92.5% High protein digestibility at 92.9% and CHO digestibility at 97.2%
SKIN SUPPORT <ul style="list-style-type: none"> Helps maintain healthy skin with a nutrient blend of vitamins, minerals, high-quality protein and essential fatty acids 	<ul style="list-style-type: none"> Canola oil and corn oil as sources of Omega-6 fatty acids Mineral: Zn Vitamin A High-quality protein 	<ul style="list-style-type: none"> Omega-6 fatty acids are basic components of skin structure Zn is an essential cofactor in collagen formation
URINARY TRACT HEALTH <ul style="list-style-type: none"> Promotes a urinary environment unfavorable to the development of both struvite and calcium oxalate crystals 	<ul style="list-style-type: none"> Total complete formulation for growth and maintenance 	<ul style="list-style-type: none"> Validated by comprehensive urinary testing (RSS) for metastable urine saturation

RESEARCH AND RESULTS

ANTIGENICITY AND MOLECULAR WEIGHT

ANTIGENICITY OF INTACT AND HYDROLYZED SOY PROTEIN

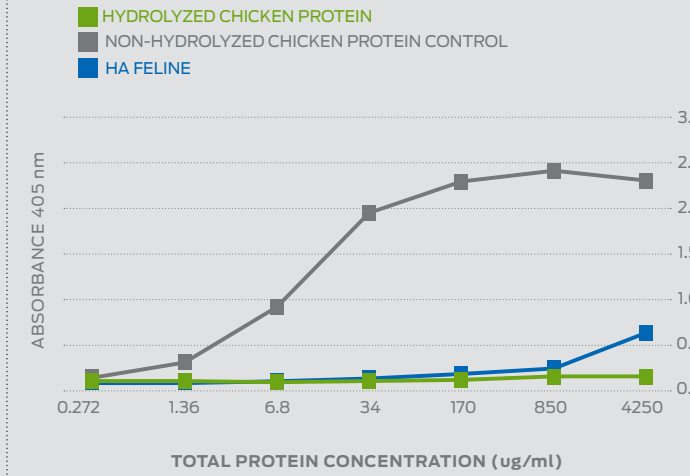
Breaking dietary protein into smaller fragments can drastically reduce its antigenicity. The hydrolyzed protein used in the HA formula is not recognized by soy-specific binding molecules.



Determined by Antigenicity Assay Methodology, NPPC Internal Data 1997

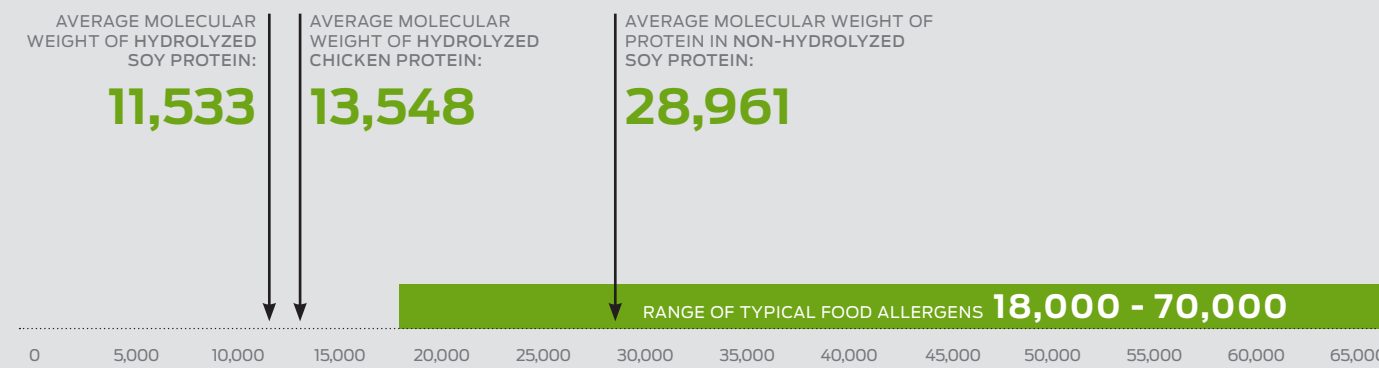
ANTIGENICITY OF INTACT AND HYDROLYZED CHICKEN PROTEIN

Breaking dietary protein into smaller fragments can drastically reduce its antigenicity. The hydrolyzed protein used in the HA formula is not recognized by chicken-specific binding molecules.



Determined by Antigenicity Assay Methodology, NPPC Internal Data May 2011

AVERAGE MOLECULAR WEIGHT IN DALTONS



Molecular weight (dalton) determined by HPLC Methodology, NPPC Internal Data 2008-2010

EVALUATING PATIENTS WITH SUSPECTED FOOD ALLERGY

