

WELCOME TO RAW

2023 Veterinary Edition





CONTENTS

- 2 ABOUT INSTINCT®
- 3 OUR PROMISE AS THE RAW BRAND®
- 4 OUR FACILITY
- 5 OUR TEAM OF EXPERTS
- 6 INSTINCT IS COMMITTED TO RESEARCH
- 8 THE CALMS™ THEORY
- 9 MAKING SAFE RAW FOOD
- **13** WSAVA GUIDELINES
- 17 INSTINCT® RAW LONGEVITY™ PLATFORM OVERVIEW
- 21 INSTINCT VETERINARY PORTAL
- 22 WHY INSTINCT* RAW VS. HOMEMADE RAW

ABOUT INSTINCT®

OUR PROMISE AS THE RAW BRAND®

RAW NUTRITION GUIDES ALL THAT WE DO. Instinct believes that food and how it's made has the power to transform lives. That's why we incorporate raw into everything we do; from our 100% raw frozen and freeze-dried recipes to freeze-dried raw toppers to kibble recipes boosted with raw nutrition, we make it easy to include raw in a pet's diet in a variety of ways.

SCIENCE-BASED RAW NUTRITION. The science of raw food has always been at our core. Our first raw recipes were developed in partnership with University of Nebraska PhD nutritionists. Our Research and Development team has deep expertise that guides us through innovation, formulation and quality control. We have also partnered with university researchers to study the impact of raw food on dogs' health.

THE HIGHEST QUALITY & SAFETY STANDARDS. Instinct recipes start with the highest quality ingredients from vendors we trust, and our safety procedures are the best in the raw pet food industry. Instinct is SQF certified in both food safety and quality. SQF is a rigorous and credible food safety and quality audit with worldwide recognition. Our raw food undergoes high pressure processing to ensure it's free of pathogens and maintains more intact nutrients than cooked pet food. As a final safety step, all our food is tested by an external, ISO 17025 certified lab prior to it leaving our facilities.

PROUDLY MADE IN LINCOLN, NEBRASKA.

Instinct Pet Food began as Nature's Variety, and was established in 2002. Since the beginning, our raw recipes have been crafted in Lincoln, Nebraska. Made in small batches in our company-owned facilities, our raw food is minimally processed and held to the highest quality and safety standards.

Our deep history in raw started when our founder began working with big cats at the Lincoln Children's Zoo and then Omaha's Henry Doorly Zoo. A raw, meatbased diet led to positive changes in the



animals, like improved coat quality, better oral health, and better reproductive health. These transformative results inspired us to spread raw nutrition to dogs and cats. The rest is history!

Instinct Pet Food is a subsidiary of Agrolimen, a family-owned company focused on human food and pet food, headquartered in Barcelona, Spain. With sales of ~\$2 billion USD, Agrolimen produces and sells 25 #1 brands in over 100 countries and employs over 5,100 people. Agrolimen owns Affinity and Nature's Menu pet food brands in Europe.

The Instinct corporate office is located in St Louis, Missouri. We own and fully control all of our raw manufacturing facilities in Lincoln, Nebraska.



OUR FACILITY

As the leaders in raw safety, Instinct is proud to make all our raw recipes in Instinct-owned and operated kitchens.





Above: Renderings of the Instinct Center of Excellence

INSTINCT RAW IS PRODUCED IN-HOUSE

We believe in the transformative power of raw pet food. That's why we're investing in a new, state-of-the-art raw pet food production facility.

The Center of Excellence in Lincoln, NE will be one of the few LEED certified pet food manufacturing plants in the United States. Phase 1 construction, an investment of over \$100 million, spans 83,000 square feet and will be completed by 2024.

The new facility will bring all raw manufacturing and processing in house, ensuring Instinct remains a category leader when it comes to creating sustainable, safe and quality assured raw pet nutrition.

OUR TEAM OF EXPERTS

We have a dedicated team of experts formulating and making our raw recipes, from food scientists to quality control specialists to our on staff board certified Veterinary Nutritionist® and Vet Technicians. Together, they have decades of experience in pet food.



GORDON DUMESICH

Over 35 years' experience in marketing and sales management, including 15 years with Hill's Pet Nutrition. Gordon was Instinct's Chief Growth & Marketing Officer for four years before being appointed CEO in 2023.



JASON MEENTS VICE PRESIDENT OF **RESEARCH & DEVELOPMENT**

Jason has over 15 years of research & development experience in the human food and pet industry, with a primary focus on meat-based products.



SUSAN G. WYNN, DVM, **DACVIM (NUTRITION)**

SENIOR DIRECTOR OF SCIENTIFIC AFFAIRS,

Internationally renowned author, speaker, editor, consultant and teacher, Dr. Wynn has been involved with basic and clinical research in addition to her 31 years in veterinary practice.



JENNIFER BRICKLEY DIRECTOR OF FOOD **SAFETY & QUALITY,**

Over 20 years of food safety and quality experience in the human food industry (meat).



ROBBIE SWANSON DIRECTOR OF PRODUCTION

Over 20 years of operational leadership from accounting, frontline operational leadership to full operational general management in the human food and pet food industry (meat), specializing in ready-to-eat environments.



SUSY TEJAYADI. PHD

INSTINCT CONSULTANT

Instinct's former Chief Scientific Officer with over a decade of service in leading R&D, Regulatory and Scientific Affairs. Dr. Tejayadi has over 30 years of technical experience in pet and human food and earned her PhD in Food Science. Prior to Instinct, she served as a manager of product development at one of the largest pet food companies in the world.

INSTINCT IS COMMITTED TO RESEARCH

We believe in the health benefits of raw feeding and are dedicated to supporting studies to prove it. As The Raw Brand®, we pride ourselves in leading and discovering more research to prove the power of raw nutrition for our pets.

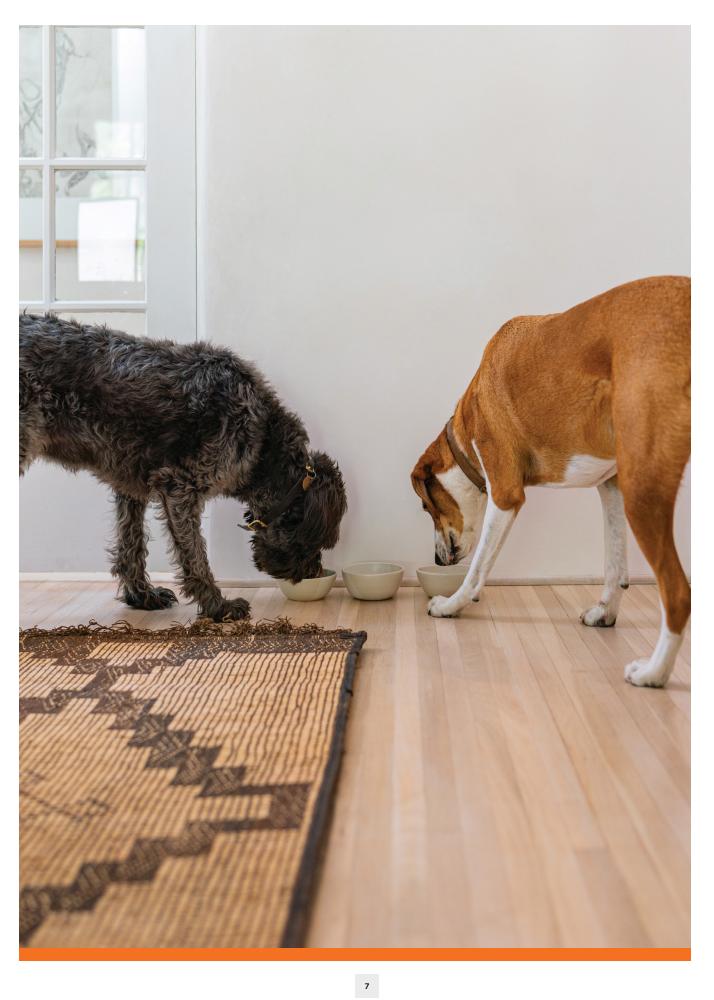
Instinct is proud to have a multiyear research agreement with Dr. Anna Hielm-Björkman and the DogRisk independent research program at the University of Helsinki. They are making groundbreaking discoveries to better understand the role of nutrition in our pets' health and well-being – including raw nutrition.

The DogRisk findings are survey-based, similar to the Golden Retriever and Dog Aging projects. Over 16,000 dogs are included. Published studies thus far have shown:

- Feeding raw to puppies is associated with a lower risk of developing atopic dermatitis, chronic GI issues, and hip dysplasia later in life compared to puppies fed kibble.
- Raw feeding changes skin metabolomics, reducing markers of inflammation.
- Raw feeding results in consistent changes in bloodwork including lower alkaline phosphatase and blood lipids compared to feeding kibble, which is confirmed by other independent studies.

Additional Instinct research has shown:

- A study with the Swanson lab at University of Illinois showed for the first time that our raw diet was associated with beneficial changes in gut function and no harmful changes in bloodwork.
- Instinct sponsored an ACVIM nutrition resident and her research at the University of Georgia. These researchers are comparing inflammatory markers in dogs eating raw vs kibble.
- Instinct conducts ongoing in-house studies, comparing advanced glycation end-products (AGEs) and bioactive factor retention between various types of processed pet foods.



THE CALMS™ THEORY OF RAW NUTRITION

"...the relatively recent focus on nutrients parallels an increasing discrepancy between theory and practice; the greater the focus on nutrients, the less healthful foods have become." JAMA AUG 11, 2010; 304(6)

"Whole Food Nutrition" is a trendy term, suggesting an eating strategy focusing on natural, unprocessed foods. The pet food industry by and large has made use of ingredients that are by-products of the human food industry, and while these ingredients are inexpensive and nutritious, they are food fractions. Pea protein, for instance, is not the same as whole peas − it's missing fiber, vitamins, minerals and fatty acids. At Instinct we have pioneered the CALMS™ Theory of raw food which explains the biochemical differences between raw and processed food.

THE CALMS™ THEORY



COMPLEXITY

Unprocessed food has a wider array and greater number of nutrients than processed food, where nutrients are lost to heat.



ANTIOXIDANTS

Mechanical processing of food oxidizes it, which means that the resident antioxidant activity of food is lost. Many antioxidants are also lost to heat in processed foods.



LOW AGES AND ALES

Cooking food can result in the formation of toxic Maillard reaction products, called Advanced Glycation and Advanced Lipid Oxidation End-Products. Raw food is free of these toxins.



MICROBIOME EFFECT

The microbiome of the gut and other niches of the body – and therefore the body as a whole - are profoundly influenced when dogs and cats are fed raw.



SYNERGY AND MATRIX EFFECT

Whole foods contain thousands of nutrients which may work synergistically. Synergy is the concept that "the whole is greater than the sum of its parts." Natural, whole food ingredients also present nutrients in a different and more complex matrix than do food fractions, potentially influencing nutrient bioavailability.



Food Safety Plan

Instinct Pet Food's safety and distribution procedures are the best in the raw pet food industry. We identify and implement best practices from the human and pet food industries into all of our product and manufacturing systems. A comprehensive food safety approach starts with the raw materials and proceeds through manufacturing, storage and distribution. We believe that each step of the process must be carefully monitored and controlled to provide the best quality and safest food possible.

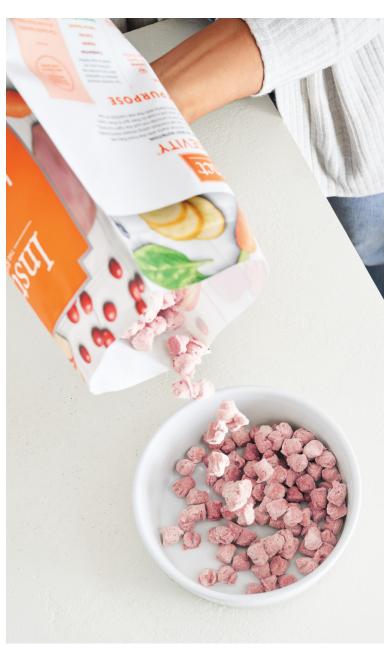


OUR CORE PRINCIPLES:

- Instinct carries a Safe Quality Food (SQF) Food Safety certification as well as a SQF Quality certification.
 - Under the umbrella of the Global Food Safety Initiative (GFSI), SQF is the most prevalent auditing standard, especially in the US.
 - The SQF Audit Program is a rigorous and credible food safety and quality audit program that is recognized by retailers, brand owners, and food service providers world-wide.
 - SQF certification isn't a requirement in the pet food industry, but Instinct chose to go above and beyond to show our commitment to food safety and quality.
- Instinct has a Supplier Approval Program in place. We require that all vendors have key programs and processes in place to assure compliance with our core values.
- Instinct facilities are registered with FDA and follow strict FDA manufacturing guidelines. Instinct is in compliance with the FDA Food Safety Modernization Act (FSMA) rules, including: Hazard Analysis and Risk-Based Preventive Controls for Animal Food, Food Fraud Mitigation, Food Defense Plan, Sanitary Transportation of Human and Animal Foods, and Foreign Supplier Verification Program.
- Preventive control programs in place include Good Manufacturing Practices, traceability, sanitation control, foreign material control, temperature control, equipment calibration, training program, packaging verification, preventative maintenance, raw material control, pest control, and environmental monitoring programs.
- A comprehensive environmental monitoring program ensures that our product is protected from potential pathogenic contamination by identifying, preventing, and eliminating of pathogens in the manufacturing environment.
- All of our products are tested for pathogens by an ISO 17025 certified external laboratory and the results are reviewed by certified Instinct Quality Assurance personnel prior to distribution to the marketplace to ensure we meet our Zero Tolerance policy.
- Comprehensive operational food safety and quality checks include metal detection, temperature checks, product color/texture and sensory characteristics, package integrity checks, ingredient verification, water activity checks, weight checks, and label verification.

COMPLETE AND BALANCED NUTRITION

Provision of a nutritional adequacy statement on a bag of food and assurance of actual nutritional adequacy are two different things. How do you know a pet food is actually complete and balanced beyond a claim on the bag?



Our formulation process is thorough, involving studies of commercial viability, desired claims, pricing, and whether nutritional targets can be met. Our formulators, formulating consultants, and board certified veterinary nutritionist® together have over 50 years of pet food formulation experience and have worked for the largest pet food companies on the planet.

Nutritional assurance starts with our ingredients. The first step is qualifying our vendors and ingredients – we require vendors to undergo a comprehensive assessment of their food and quality programs. Not only do we require a COA (Certificate of Analysis), ongoing testing to monitor the nutrient content of our ingredients is done regularly to verify the guaranteed analysis or nutrients that are on the label.

R&D tests a new pet food formula to learn about processability and set processing parameters for routine production. Samples are then submitted to more nutrient analysis, palatability testing, digestibility testing and other testing as needed.

Feeding trials are the most rigorous test procedure used to substantiate the nutrient content of a pet food. Our leading Instinct® Raw Longevity™ frozen formulas have undergone an AAFCO feeding trial for growth and maintenance.



ADDRESSING FOOD-BASED PATHOGENS

Using Cold Pressure as a kill-step:

What is HPP?

High Pressure Processing (HPP) is a technique utilizing high isostatic pressure at cold temperature which destroys bacteria by rupturing the cell membrane. The technique was first used in 1899 to pasteurize milk and has become widespread in foods for people, including juices, smoothies and ready to eat foods such as hummus, packaged meats and stir fry meal bags. HPP preserves the sensory and nutritional properties of food, because of the absence of heat treatment.

The time and degree of pressure are determined individually for each specific type of food or formula, as well as the organisms targeted for control. The pressure and duration are influenced by pH, water activity, and specific components of food. Raw pet foods are typically processed at pressures of 550-600 mPa (80,000-87,000 psi) for up to 7 minutes. Our HPP protocol has been validated specifically for our formulas through our collaboration with reputable independent research universities and organizations.

HPP preserves heat-sensitive compounds. While it can cause mild changes to protein, HPP does not disrupt covalent bonds, so these changes are much less extensive than those induced by cooking. High pressure has no significant influence on the primary and secondary structures of protein components in food products. Low molecular weight compounds such as flavor substances, nutrients, and aromatic components are not affected by HPP. HPP also retains immunoglobulin components in dairy products, increases resistant starch content in cereals, and reduces the glycemic index of fruit and vegetable products (Huang 2020).

HPP does not result in sterilized food - there are still organisms present by the end of the process. This means that if the frozen food is improperly handled, bacterial growth will resume. However, at Instinct our HPP processes have been validated for pathogens of concern and each step of the process is controlled and carefully monitored. Product is tested for the target pathogens and released for sale only after a negative test result is obtained.

WSAVA GUIDELINES



INSTINCT IS ALIGNED WITH BEST PRACTICES SUGGESTED IN THE WSAVA GUIDELINES ON SELECTING A PET FOOD

In 2011 (updated in 2021), the World Small Animal Veterinary Association (WSAVA) published a nutrition toolkit designed to help veterinarians and pet owners ensure that dogs and cats are on an optimal diet tailored to meet their pet's nutritional needs. These guidelines focus on two evaluations – what to look for in a brand, and what to look for on a pet food label. Instinct proudly meets the high standards described in the WSAVA guidelines.

WSAVA GUIDELINES

GUIDELINES ON SELECTING PET FOODS

What to look for in a brand

1. Do they employ a PhD or DACVIM (Nutrition)?

Yes, Instinct has a full-time Board Certified Veterinary Nutritionist®, Susan G. Wynn, DVM, DACVIM (Nutrition). Our chief formulator has a PhD in Food Science.

2. Who formulates the diet?

Our formulators and formulating consultants have college or advanced degrees in technical areas with over 50 years combined experience in formulating products for big companies—both in the human and pet food industry. Formulators collaborate with our board certified veterinary nutritionist® to develop advanced products.

3. What is the quality control process for ingredients and finished products?

Similar to the largest companies in the industry, our leading Instinct® Raw Longevity™ formulas have undergone AAFCO feeding trials for growth and maintenance. All of our kibble and canned products are formulated to meet the AAFCO Canine or Feline Nutrient Profiles. We confirm key nutrient levels by a 3rd party laboratory analysis, and run digestibility and palatability studies on our recipes. We audit our suppliers and co-packers and perform nutritional analyses on finished products on a regular basis.

In addition:

- Instinct is SQF certified in both food safety and quality.
- Our facilities are FSMA compliant.
- We check our facilities for cleanliness—both visually and using microbiologic testing—prior to production at all of our facilities.
- We monitor and microbiologically test our raw ingredients.
- We check and verify the correct ingredients are being used & in the correct amounts.
- We perform metal detection testing to prevent foreign material contamination.
- When packing our raw frozen recipes, we check for correct weights, clumping, product shape, color, temperature & water activity (for freeze-dried).
- Once blended, our raw recipes are sent to a reputable 3rd party SQF-certified company where they go through a pathogen reduction step called High Pressure Processing or HPP.
- After high pressure processing, our food is tested to validate that it does not contain pathogens.
- Our finished frozen and freeze-dried raw recipes go through pathogen testing to ensure we achieve Zero Tolerance for target pathogens prior to distribution to the customers.
- Our Environmental Monitoring Program is designed to prevent pathogens from contaminating our products.
- We have a training program in place to ensure employee competency.

4. What kind of product research or nutrition studies have been conducted? Is it published in peer-reviewed journals?

We are the sole U.S. Sponsor of the DogRisk study from the Veterinary Faculty at the University of Helsinki. We recently awarded a grant to support research on dilated cardiomyopathy at University of California, Davis. We conduct in-house research, most recently on biochemical attributes of raw vs processed foods. Finally, we are proud to have sponsored a nutrition resident and her studies at the University of Georgia during 2021-2022. The following are a list of published studies we have supported:

- Hemida M, Salin S, Vuori KA, Moore R, Anturienemi J, Rosendahl S, Barrouin-Melo SM, Hielm-Bjorkman A. Puppyhood diet as a factor in the development of owner-reported allergy/ atopy skin signs in adult dogs in Finland. J Vet Intern Med. 2021;1-10. View link
- Hemida M, et al. Early Life Modifiable Exposures and their Association with Owner Reported Inflammatory Bowel Disease Symptoms in Adult Dogs (2021) Front. Vet. Sci.2021; 8:552350.doi: 10.3389/fvets.2021.552350 View link
- Anturaniemi J, et al. The Effect of Atopic Dermatitis and Diet on the Skin Transcriptome in Staffordshire Bull Terriers. Front. Vet. Sci. 2020; 7:552251. doi: 10.3389/fvets.2020. 552251 View link
- Moore R, et al. Targeted Metabolomics With Ultraperformance Liquid Chromatography-Mass Spectrometry (UPLC-MS) Highlights Metabolic Differences in Healthy and Atopic Staffordshire Bull Terriers Fed Two Different Diets, A Pilot Study. Front. Vet. Sci. 2020; 7:554296. doi: 10.3389/ fvets.2020.554296 View link

- Hemida M, et al. Identification of modifiable pre- and postnatal dietary and environmental exposures associated with owner-reported canine atopic dermatitis in Finland using a web-based questionnaire.
 PLoS ONE 2020; 15(5): e0225675. https://doi.org/10.1371/ journal.pone.0225675 View link
- Vuori K, Hemida M, Moore R, Salin S, Rosendahl S, Hielm-Björkman A. The effect of puppyhood and adolescent diet on the incidence of chronic enteropathy in dogs later in life. Scientific Reports 2023;13:1830 <u>View link</u>
- Beloshapka AN, Duclos LM, Vester Boler BM, Swanson KS. Effects of inulin or yeast cellwall extract on nutrient digestibility, fecal fermentative end-product concentrations, and blood metabolite concentrations in adult dogs fed raw meat-based diets. AJVR 2012; 73(7):1016-1023 View link

What to look for on a label

5. Nutrition Adequacy Statement?

Our diets all bear AAFCO-specified nutritional adequacy statements, indicating whether the diet is complete and balanced or for intermittent/supplemental feeding, the appropriate life stage for feeding that diet, and how nutritional adequacy was determined.

6. How many calories per gram or serving of food?

That varies depending on the food. Please visit our website for a complete listing or contact our customer service department.

Phone: 1-888-519-7387

Email: cservice@instinctpetfood.com

Live Chat: instinctpetfood.com Monday-Friday 8 am-5 pm CST

7. Does the company provide immediate contact information such as a phone number or email address?

Phone: 1-888-519-7387

Website: instinctpetfood.com can be found on every package

This question also indicates that a company should be able to provide a typical nutrient analysis for all of their formulas. These are available on our website, or please contact our customer service department for more information.

Phone: 1-888-519-7387

Email: cservice@instinctpetfood.com

Live Chat: instinctpetfood.com Monday-Friday 8 am-5 pm CST

8. Who makes the food?

All our raw recipes are made in the USA. Instinct frozen and freeze-dried raw meals recipes are made in our own state-of-the-art facility, over which we have 100% control. Our canned and dry foods are produced by the largest co-packers in the industry, who also produce products for the largest pet food companies. If you are interested, please reach out to our customer service department and we will share the name of our co-packers.

If the manufacturer cannot or will not provide any of this information, veterinarians and owners should be cautious about feeding that brand.

We agree!

Instinct® THE RAW BRAND®

RAW LONGEVITY



INSTINCT® RAW LONGEVITY™ PLATFORMS



INSTINCT® RAW LONGEVITY™

Our most scientifically crafted formulas. Instinct® Raw Longevity™ is backed by 14 years of research of over 16,000 dogs conducted by the University of Helsinki. Instinct® Raw Longevity™ provides guaranteed nutrition that is customized for puppy, kitten, adult and adult 7+ in a variety of proteins. Every recipe supports heart, immune, gut and skin & coat health through enhanced raw recipes that are protein-packed along with a rainbow of vegetables and fruits to provide key nutrients pets need to stay healthy.

INSTINCT® RAW LONGEVITY™ FROZEN MEALS

Our most minimally processed recipes, never cooked, 100% raw nutrition

DOG

- · Proteins: Beef, Chicken, Lamb, Pollock, Rabbit
- Life stages: Puppy, Adult, Adult 7+
- · Forms: Bites, Patties

₽

- · Proteins: Beef, Beef & Cod, Chicken, Rabbit
- · Life stages: Kitten, Adult, Adult 7+
- Forms: Bites

INSTINCT® RAW LONGEVITY™ 100% FREEZE-DRIED RAW MEALS

Complete and balanced 100% raw meals that are freeze-dried to preserve the integrity of ingredients and nutrients

DOG

- · Proteins: Beef, Beef & Cod, Chicken, Lamb, Pollock, Rabbit
- Life stages: Puppy, Adult, Adult 7+
- Forms: Bites

CAT

- · Proteins: Beef. Beef & Cod. Chicken. Rabbit
- Life stages: Kitten, Adult, Adult 7+
- Forms: Bites



Research from the University of Helsinki shows 20% is the starting point of when pet parents begin to see benefits of raw feeding in their pet's health. These recipes make it easy for pet parents to start adding 20% raw to their pet's diet, jumpstarting their raw feeding journey.

D0G

- Proteins: Beef, Chicken
- Life stages: Puppy, Adult, Adult 7+
- % Freeze-Dried: 20%

SAT

· Proteins: Chicken

- · Life stages: Kitten, Adult
- % Freeze-Dried: 20%



TABLE OF CONTENTS

INSTINCT® RAW LONGEVITY™ RECOMMENDED DIETS BY LIFE STAGE

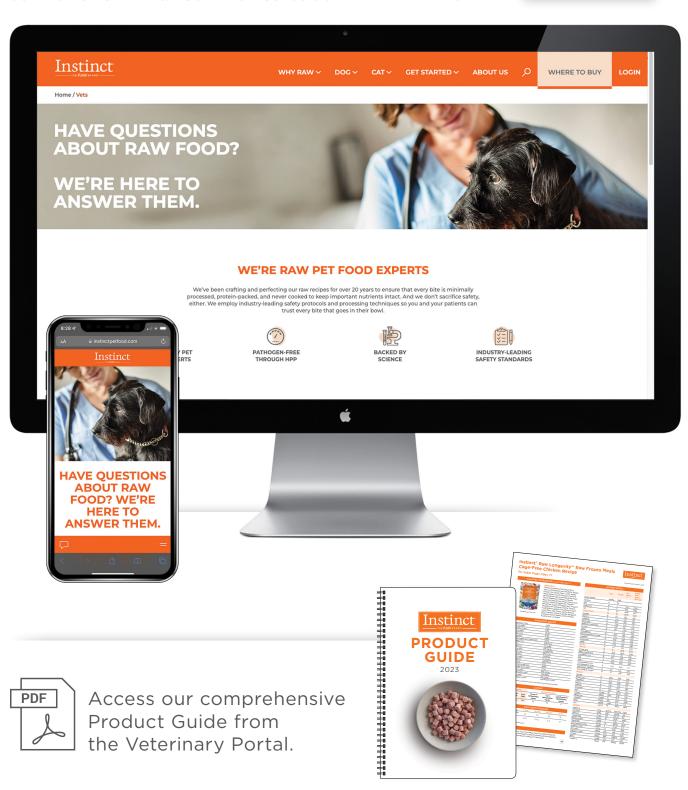


		RAW FROZEN MEALS	100% FREEZE-DRIED RAW MEALS	20% FREEZE-DRIED RAW MEAL BLEND
GROWTH	KITTEN	•	•	•
	PUPPY (excluding large breed puppies)	•	•	•
MAINTENANCE	ADULT CATS	•	•	•
	ADULT DOGS	•	•	•
SENIOR	HEALTHY ADULT CATS 7+ (individually assessed by breed and medical history)	•	•	_
	HEALTHY ADULT DOGS 7+ (individually assessed by breed and medical history)	•	•	•

INSTINCT VETERINARY PORTAL

Have questions about raw food?

SCAN OR CLICK THE QR CODE TO ACCESS OUR VETERINARY PORTAL



INSTINCT® RAW LONGEVITY™ vs. HOMEMADE

RAW CHECK LIST	INSTINCT® RAW LONGEVITY™	HOMEMADE RAW	HOMEMADE RAW ≈ COST to pet owner
Formulate a balanced food	YES	?	\$100 - \$600 every 2 years
Verify nutrient content in the final food product	YES	?	\$1500 - \$3000 once
Confirm that nutrient content doesn't change over time as ingredients may come from different agricultural sources	YES	?	\$500 - \$5000 every year
Confirm ingredients meet microbiologic specifications	YES	?	\$250 per ingredient
Test every batch of final food for pathogens (PCR)	YES	?	\$1000 per batch of food
Research investment: Develop a rigorous system to manage food safety risks and provide safe products, such as SQF	YES	NO	hundreds of thousands of dollars



THE BOTTOM LINE: AVOID THE UNNECESSARY RISK OF HOMEMADE RAW.

Instinct® follows strict quality procedures for creating COMPLETE, BALANCED and SAFE nutrition. If any of the safety steps above are missed, your pet could pay the price, up to and including death.

INSTINCT VETERINARY SUPPORT TEAM

CONTACT: VETEDUCATION@INSTINCTPETFOOD.COM



JC CASH, CVT
VET EDUCATION & VET ASSOCIATE
WITH INSTINCT SINCE 2016

Over 17 years' experience in the pet specialty and veterinary industries, with a focus in companion animal nutrition. JC has worked with both general practitioners and integrative/holistic veterinary practices.



STEPHANIE STRIAR, CVT VET EDUCATION & TRAINING MANAGER WITH INSTINCT SINCE 2019

Over 11 years in the veterinary and pet food industries, with a focus on companion animal nutrition. Currently pursuing a Master's degree in Animal Nutrition through University of Glasgow.

