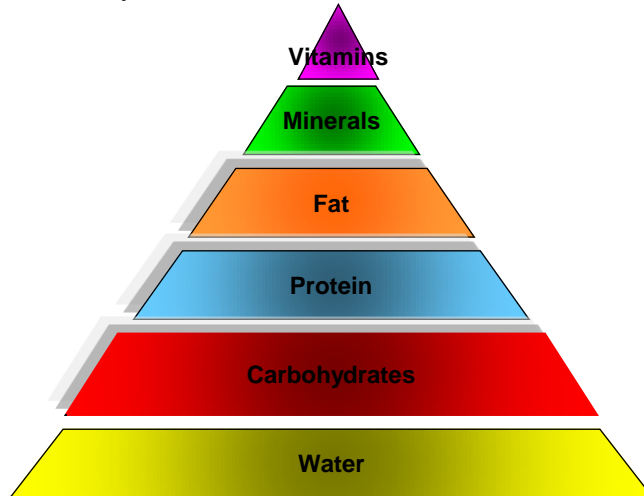




What's More Important – Ingredients Or Nutrients?

Pyramid of Essential Nutrients



The following pet food ingredients supply many of the essential nutrients in the pyramid above:

- **Corn, Rice, Barley, Sorghum** – carbohydrates for energy; essential fatty acids for healthy skin and coat
- **Animal Fat, Fish Oil, Vegetable Oil** – fats and essential fatty acids for energy, healthy skin and coat, and taste
- **Meat, Chicken, Poultry By-product Meal, Meat By-products, Soybean Meal, Egg** – protein for muscle tone and development, and for healthy skin

Key Facts

- Ingredients should be selected for the nutrients they supply, and for their quality and taste
- Nutrients are vital because the body absorbs nutrients, not ingredients
- Ingredients are delivery vehicles for nutrients, and the presence or absence of a single ingredient doesn't determine a pet food's quality.
- A pet food is the sum of its parts. A balance of quality ingredients delivers protein, fat, fiber, carbohydrates, vitamins, and minerals to meet a pet's nutritional needs.
- As ingredient quality increases, so does a pet's ability to absorb and use the nutrients needed for optimum health.
- **QUALITY PET FOOD** requires a precise blend of ingredients to create a specific nutrient profile based on a pet's lifestage, lifestyle or disease condition.
- Don't assume a food is right for your pet simply by reading the ingredient list, because **THE BODY NEEDS NUTRIENTS, NOT INGREDIENTS!**



What is The REAL Power of Protein?

Category	Messages in <i>The Power of Protein</i> ¹ from Nestlé Purina	Evidence-Based Clinical Nutrition from Hill's
Weight Management	Increasing dietary protein maintains lean body mass during weight loss	Clinical studies show that cats fed Prescription Diet® r/d® or m/d®, and dogs fed r/d dry formula, maintain lean body mass during weight loss ^{2,3}
Adverse Reactions to Food	Protein hydrolysates are more effective than novel proteins in managing canine food allergies	Hill's has canine and feline protein hydrolysate formulas (z/d®) For some patients, novel protein foods are appropriate (d/d®)
Diabetes Mellitus—cats	Cats should be fed high-protein, low-carbohydrate food	Prescription Diet m/d is high-protein and low-carbohydrate High-protein isn't for all cats—w/d® appropriate for some
Renal Failure—dogs	Protein does not cause kidney damage in healthy dogs, but protein restriction may help dogs with chronic renal failure	A clinical study of dogs with chronic renal failure showed that consuming Canine k/d® helped delay progression of kidney disease and increase survival time ⁴
Senior Dog Nutrition	Older dogs need more protein to maintain protein reserves	Research shows that older dogs consuming foods with 18% (DMB) protein maintain normal protein status and nitrogen balance. ^{5,6} Science Diet® Senior 7+ dog food has 19.2% (DMB) protein
Protein and Immune Function	Immune function is influenced by nutrition and dietary protein	But one level of dietary protein is not appropriate for all disease conditions and life stages—and high protein foods are not necessary to maintain immune function in all animals

¹The Power of Protein. Purina Veterinary Diets® February, 2005; VET 6546. ²Schoenherr WD. Effects of a low-calorie, high-fiber food vs a low carbohydrate, high-protein food on weight loss in obese cats. Unpublished data. Hill's Science & Technology, Topeka KS, 2003. ³Gross KL, Wedekind KJ, Kirk CA, et al. Effect of dietary carnitine and chromium on weight loss and composition of obese dogs (abstract). J An Sci. 1998; 76(Suppl. 1):175.
⁴Jacob F, Polzin DJ, Osborne CA, et al. Clinical evaluation of dietary modification for treatment of spontaneous chronic renal failure in dogs. J Am Vet Med Assoc 2002; 220:1163-1170. ⁵Finco DR, Brown SA, Crowell WA, et al. Effects of aging and dietary protein intake on uninephrectomized geriatric dogs. Am J Vet Res 1994; 55:1282-1290. ⁶Williams CC, Cummins KA, Hayek MG, et al. Effects of protein on whole-body protein turnover and endocrine function in young-adult and aging dogs. J Anim Sci 2001; 79:3128-3136.
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Nutrients come from Ingredients!

Nutrient Ingredient	Vitamins	Amino Acids	Proteins	Carbohydrates	Fats	Natural Glucosamine	Natural Chondroitin	Natural Fatty Acids	Natural Antioxidants	Fiber	EPA & DHA – (Fatty Acids)	Omega -3 Fatty acids
Chicken By-Product Meal		✓	✓		✓	✓	✓					
Corn Gluten Meal	✓	✓	✓	✓	✓					✓		
Dried Beet Pulp										✓		
Dried Chicken Cartilage						✓	✓					
Dried Egg Product	✓	✓	✓	✓	✓			✓	✓			✓
Fish Oil					✓			✓			✓	✓
Flaxseed	✓			✓	✓							✓
Whole Grain Corn	✓	✓	✓	✓	✓			✓	✓	✓		✓
Whole Grain Sorghum	✓	✓	✓	✓	✓							✓
Whole Grain Wheat	✓	✓	✓	✓	✓							
Soybean Oil	✓				✓							

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Nutrients come from Ingredients!

Vitamins	Vitamins are compounds that are essential for normal metabolic activities in all living things.
Amino Acids	Organic compounds that serve as building blocks for protein.
Proteins	The building blocks of all cellular materials.
Carbohydrate	Energy Source -Composed of starches and sugars. A quick and simple energy source for all living things.
Fat	A source of energy.
Glucosamine	Glucosamine is beneficial for joints. Glucosamine is a substance that protects and supports joint fluid, cartilage and the surrounding tissues. Sources can be shrimp & lobster shells (exoskeletons), chicken cartilage, chicken and poultry by products.
Chondroitin	A substance that protects and supports joint fluid, cartilage and the surrounding tissues. Sources can be bovine trachea (cartilage) chicken cartilage, chicken and poultry by products.
Fatty Acids	are lipids, (organic compounds with limited solubility in water), that can be directly utilized as a source of energy by most body cells. Required in the body for cell membrane function and integrity and healthy skin.
Natural Antioxidants	Natural substances that prevent or delay deterioration by the action of oxygen (Vitamin E, C, Rosemary, selenium, or beta-carotene), that are capable of counteracting the damaging effects of oxidation in animal tissue.
Fiber	A small portion of ingested foodstuffs that cannot be broken down by intestinal enzymes and juices of monogastric animals and, therefore, passes through the small intestine undigested. It is composed of cellulose, hemicellulose, gums, pectin and other indigestible carbohydrates. An important source of energy for intestinal bacteria which are important for digestion.
EPA & DHA	Docosahexaenoic acid (DHA) and Eicosapentaenoic acid (EPA) are polyunsaturated omega-3 fatty acids present in fish oil. DHA is an important structural component of brain tissue. Brain cell membranes and photoreceptor membranes have large amounts of DHA. DHA is important for development of the brain and retina—during both fetal and neonatal periods. EPA is important for maintaining normal cartilage in joints.
Omega - 3 Fatty acids	Omega - 3 fatty acids are important and fundamental molecules in the activity of cells and especially cell membranes. Omega - 3 fatty acids are essential for development and growth and are a key and critical component in allowing dogs and cats to have shiny healthy coats and skin.

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