

BASICS OF NUTRITION

PROTEIN

Protein, the type of protein, where it comes from (plant vs. animal) and its ability to be digested is very important. Proteins are comprised of approximately 20 different amino acids, which are often called the “building blocks” of the tissues. The dog can create 13 of these amino acids, whereas the cat can create 12 from other nutrients in the food. The other remaining amino acids must be present in their food and are called “essential amino acids”. Highly digestible meat (and some vegetables) provide these essential nutrients. Taurine, is an amino acid/ vitamin like protein present only in animal tissues, is one of the essential amino acids for cats and it is needed for healthy eyes, ears, heart and immune function. Cats require a dietary source of taurine because they cannot synthesize enough taurine from dietary precursors.

What do proteins do? Once the protein is ingested it is broken down into the separate amino acids through the digestion process. These amino acids are then used as building blocks for a whole host of processes from the healthy growth & repair of tissues (e.g. muscle definition and coat health) to functioning as enzymes, hormones and antibodies. Additionally proteins are important for numerous body processes such as water balancing and transporting nutrients around the body. A constant supply of highly digestible animal proteins in the food is needed for everyday and long term health. Cats are carnivorous and require a higher level of protein when compared to omnivorous dogs. This is because they have maintained many of the meat eating traits of their ancestors and even their extended family, such as tigers. Cats prefer to use proteins for energy and rely less on carbohydrates when compared to dogs. They also need higher levels of certain essential amino acids which are very important in maintaining their health.

Where should the protein come from in my pet’s meal? Meat is the most ideal source of protein for dogs and cats. However, it is important to balance the amino acids from animal, plants and pure amino acids to ensure the best health. Animal proteins are the most complete and cats in particular, must obtain most of their essential amino acids from them. The other non-essential amino acids are readily available from plant proteins. Ideally, you should always choose a pet food which offers a good meat source.

Can I feed too much protein? It’s all about balance. It is important to remember that very high protein does not necessarily mean better health. In theory, if a healthy animal consumes too much protein, a proportion of this will be excreted in the urine and the rest will be used as calories or converted to fat. Some studies have indicated that chronic excessive feeding of protein is unnecessary and may cause an extra burden on the kidneys. OILS & FATS Oils & Fats are needed in the diet to provide essential fatty acids (including omega 6 and omega 3) and energy. Essential fatty acids cannot be manufactured by the body and need to be supplied in the diet. They are involved in many aspects of health including skin and coat condition, brain and eye health, reproduction and kidney functioning

Omega 6: Linoleic acid is an Omega 6 Fatty Acid and it is important for many bodily processes including the maintenance of the skin and coat, cell membrane structure and the absorption of fat-soluble vitamins. They are primarily found in animal tissues and fats. However, it can also be found in vegetable fats such as sunflower oil. 2

Omega 3: Linolenic acid, DHA and EPA are Omega 3 Fatty Acids and they are important for the immune system, reducing inflammation and helping to promote joint health. It may also help heart health and blood pressure. DHA and EPA are critical and are found primarily in fish oils (especially salmon, mackerel and herring.) Linolenic can also be found in vegetable sources such as linseed. CARBOHYDRATES Carbohydrates provide a good source of energy in our pet foods and they are made up of primarily starches and more complex fermentable and non-fermentable carbohydrates such as cellulose (fibre). They are supplied in the diet from vegetables and grains such as potato, rice and peas. Highly digestible sources encourage lower feed requirements and smaller firmer stools. If adequate carbohydrate is supplied from the diet, a dog will always use this as the energy source over protein which can be then utilised elsewhere e.g. for tissue repair and growth. Cat foods tend to have lower carbohydrate levels because they have an adaptation to a low carbohydrate diet, however, they are very efficient in starch digestion. VITAMINS & MINERALS these are really important for the long term health of your pet. Vitamins are necessary for many of the body's processes and they can act as antioxidants which helps prevent aging. Minerals, such as Calcium and Phosphorus, sometimes collectively called Ash, are required for tissue cell balance, enzyme reactions as well as bone growth. Vitamins and minerals must all be carefully balanced and supplied in the correct proportions to create a complete food. Dogs and cats require different levels of vitamins and minerals For example, Dogs can utilise Beta Carotene as a source of Vitamin A, whereas cats cannot. FUNCTIONAL INGREDIENTS

Mannan oligosaccharides (Pre-biotic MOS) MOS is widely associated with gastrointestinal health and performance. It is thought to help to reduce pathogenic or disease-producing bacteria in the intestine; in doing so, it may bind pathogenic bacteria, while continuing to enhance absorption and utilization of nutrients from the intestine.

Fructooligosaccharides (Pre-biotic FOS) FOS is a pre-biotic that beneficially affects the host by acting as a food source for beneficial microorganisms and selectively stimulating the growth and/or activity of these along the digestive tract, thus improving host health.

Glucosamine, Chondroitin & Methylsulfonylmethane (MSM) Glucosamine provides building blocks to synthesise new joint cartilage and together with Chondroitin and MSM they promote mobility, longevity and health of the joints. They have been shown to promote the maintenance of connective tissue, tendons, ligaments and cartilage.

Yucca Schidigera Extract Yucca Schidigera Extract is recognised in helping to aid digestion. It may help to clean the gut, not only on the surface but deep around the villi. It is also known to help reduce faecal odours.

Allergy-X[®] This unique blend of herbs may help to alleviate "allergic signs such as itching, hair loss and mucky ears".

Verm-X[®] This is a natural herbal product that may help to control internal parasites.

Puppy:

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya

- ✓ Contains Glucosamine, MSM, Chondroitin Sulphate & Omega 3 Fatty Acids which helps to promote joint repair and mobility
- ✓ With added pre-biotics MOS (Mannanligosaccharides) and FOS (Fructooligosaccharides) which helps to promote the growth of healthy gut bacteria and thus aid digestion
- ✓ Contains Yucca Schidigera Extract which may help to reduce faecal odour
- ✓ L-Carnitine to promote a healthy weight and lean muscle development
- ✓ MAPS. Encourages the digestive system to recognise Multiple Animal Protein Sources which may help to prevent allergies in later life

Large Breed Puppy:

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya.
- ✓ Contains high levels of Fish and Potato for optimum palatability and small firm stools Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat Contains vitamins and minerals to help maintain a healthy immune system
- ✓ Larger Kibble - designed for bigger, more robust puppies
- ✓ Salmon – A good source of omega 3 oils which have been associated with a healthy skin, smooth shiny coat and protection against inflammation
- ✓ Beet Pulp - A good source of soluble and insoluble dietary fibre which are important for maintaining normal intestinal transit time and motility

Chicken & Rice Adult Dog:

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya
- ✓ Contains high levels of Chicken and Rice for optimum palatability and small firm stools
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system Contains Yucca Schidigera Extract which may help to reduce faecal odour
- ✓ Beet Pulp - A good source of soluble and insoluble dietary fibre which are important for maintaining normal intestinal transit time and motility
- ✓ Formulated with a single animal protein source, chicken, to help dogs with a sensitive digestive tract

Lamb & Rice Adult Dog:

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya
- ✓ Contains high levels of Lamb and Rice for optimum palatability and small firm stools
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system
- ✓ Oats for sustained energy release
- ✓ An ideal alternative for dogs with a sensitivity to beef or chicken – Formulated with a single animal protein source, lamb, to help dogs with a sensitive digestive tract
- ✓ Contains Yucca Schidigera Extract which may help to reduce faecal odour

Turkey & Rice Adult Dog:

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya
- ✓ Contains high levels of Turkey and Rice for optimum palatability and small firm stools
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system
- ✓ An excellent alternative to chicken or lamb which provides a complete food for adult dogs
Formulated with a single animal protein source, turkey, to help dogs with a sensitive digestive tract
- ✓ Contains Seaweed which is thought to benefit dogs by supporting thyroid health, heart health, coat condition and digestion

Senior/ Light Adult Dog:

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya
- ✓ Contains Glucosamine, MSM, Chondroitin Sulphate & Omega 3 Fatty Acids which helps to promote joint repair and mobility
- ✓ Contains vitamins and minerals to help maintain a healthy immune system
- ✓ Contains over 40% less fat when compared to the standard salmon and potato product
- ✓ Contains Yucca Schidigera Extract which may help to reduce stool odour
- ✓ Beet Pulp - A good source of soluble and insoluble dietary fibre, which are important for maintaining normal intestinal transit time and motility

Salmon & Potato Adult Dog:

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya
- ✓ Contains high levels of Fish and Potato for optimum palatability and small firm stools
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system Salmon – Highly palatable and digestible making it ideal for fussy eaters
- ✓ Maize adds a crunchy and fibrous texture to the kibble which helps to promote oral health

Duck & Potato Adult Dog:

- ✓ No Added Grains & Hypoallergenic – formulated without grains, wheat, wheat gluten, dairy or soya
- ✓ Contains high levels of Duck and Potato for optimum palatability and small firm stools
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system
- ✓ Formulated with a single animal protein source, duck, and no added grains, making it ideal for dogs with sensitivities
- ✓ Potato – a highly digestible carbohydrate source and alternative to grains

Fish & Potato with Allergy- X®:

- ✓ No Added Grains & Hypoallergenic – formulated without grains, wheat, wheat gluten, dairy or soya
- ✓ Contains high levels of Fish and Potato for optimum palatability and small firm stools
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system
- ✓ Formulated without grains or cereals
- ✓ Contains two fish sources, salmon & trout to promote an excellent palatability
- ✓ Allergy- X®; contains a herbal blend which may help to alleviate allergies

CAT FOOD

Although domestic cats do not vary in size to the same degree as dog breeds, this does not mean that they are simple to feed. Cats cannot even be fed the same food as dogs due to their complex nutritional requirements. At the most basic level there are 41 essential nutrients which are required by cats (in comparison to 37 in dogs) and they have a much shorter digestive tract. This means that they need highly digestible meats and carbohydrates and they are much less able to digest plant material. They have a higher requirement for protein than dogs. Cats break down and replace their own body proteins very rapidly and they are unable to reduce this rate of breakdown to adapt when dietary protein supplies are low. They are particularly sensitive to deficiencies of amino acids, such as Arginine. Arginine is essential for metabolism and not only do cats break it down quickly. They are unable to manufacture their own. Another essential acid is Taurine which is important for healthy eyes, ears, heart and immune function. Cats cannot produce Taurine and they rely on it being within the food they eat. Nearly all Taurine comes from meat, poultry or shellfish, so it is important that there is a good meat source within your cat's diet. Additionally cats also need a dietary source of the essential fatty acid, Arachidonic Acid, as they lack the pathway to make their own. This essential fatty acid is really only found within animal fats. Vitamins are another important area for cats. Cats cannot create Vitamin A or convert it from Beta Carotene like dogs. This means it is especially important to provide a form in significant quantities that they can utilise. Niacin, which is a B complex vitamin, can be manufactured by dogs using the amino acid tryptophan. However, the enzyme system responsible for this conversion is not very efficient in cats so they require extra in their food. As you can see, feline nutrition has many factors which need to be taken into account. By feeding a complete and balanced food, high in meat and digestible carbohydrates and balanced with oils, vitamins and minerals, you can rest assured that the nutrition is being taken care and your pet will live a long and healthy life.

Kitten:

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system
- ✓ With added pre-biotics MOS (Mannan oligosaccharides) and FOS (Fructooligosaccharides) which helps to promote the growth of healthy gut bacteria and thus aid digestion
- ✓ MAPS. Encourages the digestive system to recognise Multiple Animal Protein Sources which may help to prevent allergies in later life

Chicken Cat Food

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya
- ✓ Contains high levels of Chicken for optimum palatability and small firm stools
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system
- ✓ With added pre-biotics MOS (Mannanligosaccharides) and FOS (Fructooligosaccharides) which helps to promote the growth of healthy gut bacteria and thus aid digestion
- ✓ Whole grains and pre-biotic fibres to keep insides healthy
- ✓ MAPS. Encourages the digestive system to recognise Multiple Animal Protein Sources which may help to prevent allergies in later life
- ✓ Maize adds a crunchy and fibrous texture to the kibble which cats love and it helps to promote oral health

Salmon Cat Food

- ✓ Hypoallergenic – formulated without wheat, wheat gluten, dairy or soya
- ✓ Contains high levels of Salmon for optimum palatability and small firm stools
- ✓ Contains Omega 3 & 6 essential fatty acids, Zinc and Biotin to help maintain a healthy skin & coat
- ✓ Contains vitamins and minerals to help maintain a healthy immune system
- ✓ With added pre-biotics MOS (Mannanligosaccharides) and FOS (Fructooligosaccharides) which helps to promote the growth of healthy gut bacteria and thus aid digestion
- ✓ Whole grains and pre-biotic fibres to keep insides healthy
- ✓ Contains high levels of meat and rice for optimum palatability and small firm stools
- ✓ Maize adds a crunchy texture to the kibble which cats love and it helps to promote oral health