

# GRAIN FREE PET FOOD FOR CATS AND DOGS

Grain free pet foods have recently become popular and they link in to the concept of the ancestral diet; the diet a non domesticated dog or cat would have eaten in the wild. Feeding a high protein diet is very appealing to some owners and it can still be achieved in diets that contain some grains.

### WHAT ARE GRAINS?

Grains are a group of ingredients that contain carbohydrates and are used in pet foods, including rice, wheat, barley, sorghum, maize (corn), etc.

### DOES GRAIN FREE MEAN CARBOHYDRATE FREE?

Not necessarily. Carbohydrates are also present in other ingredients for instance, potatoes and sweet potatoes.

### ARE GRAIN FREE PET FOODS HEALTHIER?

The most important consideration when deciding what diet to feed is whether it provides complete and balanced nutrition. If there is too much of one nutrient and not enough of others, it will impact the pet's health. This principal is true regardless of whether the pet food contains grain or not. The nutrient profile of a product is more important than any one ingredient.

The best way to ensure a healthy diet is to feed a complete pet food appropriate to the pet type and their life stage. After that, it comes down to consumer choice, for those that prefer a grain free pet food – there is a good selection of products on the market.

## NORMAL HEALTHY CATS AND DOGS HAVE NO DIETARY NEED FOR CARBOHYDRATES SO WHY ARE THEY USED IN PET FOODS?

Whilst cats and dogs have no absolute dietary need for carbohydrate, it can play an important and beneficial role in their diet. Carbohydrate in pet food provides a useful and readily available

source of metabolisable energy and fibre. By using carbohydrate instead of fat or protein to obtain energy, these other nutrients can be used to optimise healthy skin, coat, immune systems etc.

The classification of carbohydrates also includes dietary fibre. Certain fibres, for example moderately fermentable fibres (e.g. beet pulp or rice bran), can also have a beneficial effect on the health of the digestive tract<sup>1</sup>. The carbohydrate levels found in prepared pet foods are well tolerated by the vast majority of dogs and cats<sup>2</sup>.



- 1 Hand, Thatcher, Remillard, Roudebush: Small Animal Clinical Nutrition: 4th Edition, pp 1192
- 2 Case LP, Carey DP, Hirakawa DA, Daristotle L. Nutritional idiosyncrasies of the cat. In: Canine and Feline Nutrition: a resource for companion animal professionals. & Morris, Trudell, Pencovic: Carbohydrate digestion by the domestic cat, British Journal of Nutrition, 1977, 37, 365



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### ARE GRAIN FREE DIETS BETTER FOR PETS WITH ALLERGIES?

There is an assumption that grain free diets are the best diets for pets with food allergies. While food allergies do occur in pets, the incidence of true dietary intolerance or allergies in pets is actually rare. On the whole, the prevalence of all food allergies in the dog and cat population is thought to be around 0.1%.4

Whilst a very small number of pets, like humans, may be intolerant or allergic to a particular grain, this does not mean that all animals will be affected, or that any one grain is inherently bad.

Available research has highlighted that the most common proven allergens for cats and dogs include beef, chicken and dairy products. In one literature review5, 278 dogs with food allergies were evaluated and the problem ingredient was clearly identified for each dog. Beef was the most common allergen, being responsible for 95 of the cases reported. Dairy was responsible for 55 cases, making it the second most frequent cause. Corn was identified as the offender in only 7 cases. In cats, the situation is similar. Fifty-six cats were evaluated in this study6. Forty-five of the food allergies resulted from eating beef, dairy, and/or fish. Corn, meanwhile, was responsible for only 4 cases.

Owners concerned about dietary intolerances or allergies should speak to their vet.

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### **FURTHER READING**

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- Harvey RG. Food allergy and dietary intolerance in dogs: a report of 25 cases. J Sm Anim Pract 1993;34:175-179.
- Ishida R, Masuda K, Sakaguchi M, et al. Antigen-specific histamine release in dogs with food hypersensitivity. J Vet Med Sci 2003; 65:435-438.
- Ishida R, Masuda K, Kurata K, et al. Lymphocyte blastogenic responses to inciting food allergens in dogs with food hypersensitivity. J Vet Intern Med 2004; 18:25-30.

### **DID YOU KNOW?**

Did you know? All pet foods labelled as 'complete' must contain all the nutrients a pet needs in the right balance for healthy bodily function – this is a requirement set down in legislation. Members of the PFMA produce their diets in line with the FEDIAF Nutritional Guidelines, these guidelines detail the nutritional needs of pets at different life stages and they are peer reviewed by veterinary experts throughout Europe.

- 4 Buffington, T, Holloway, C, Abood, Manual of Veterinary Dietetics pg 118.
- 5 What is grain pet food really? Huston, L www.petmd.com
- 6 Nutrient Requirements of Dogs and Cats 2006, Animal Nutrition Series: National Research Council, pg 72.