

High Protein/ Low Carbohydrate (grain-free) diets

Nutritionally speaking, cats are “obligate carnivores”. This means they need very high levels of protein to thrive and don’t have a very good ability for utilizing carbohydrates (grains, sugars). Cats also need some nutrients that can only be obtained from animal tissue, not plants. By ancestry, cats are descendents of desert cats (African wild cat, *F. lybica*). This is why they have very concentrated urine and don’t need to drink as much as other species of similar size. In the wild, cats hunt primarily small rodents and birds as prey. All these creatures are about 70% moisture. This is how cats in the wild get most of their water requirements.

Now let’s think about what we typically feed our cats over their lifetime. They usually get most of their food in the form of dry kibble. Some people feed canned food but rarely exclusively. This traditional way of feeding cats presents two major problems as discussed below.

First, most of the common brands of cat foods are full of carbohydrates in the form of grains (corn, rice, soy, wheat). As “obligate carnivores”, cats aren’t designed to use high levels of carbohydrates for nutrition. Cats specifically do not have the enzymes in their liver or saliva that are optimal to process carbohydrates. Their mouths, teeth, digestive tracts, pancreas, and liver are specifically designed for a high protein diet. *So why are most pet food companies putting so many grains (carbohydrates) into cat food?* The answers could be many including convenience, larger profit margins, or the mistaken conception that cats are small dogs. When reading the ingredient label on food, a meat source is usually listed first but this doesn’t mean the diet is high protein. If the next several ingredients are a form of grain (listed above), this is a high carbohydrate food. Plants do contain protein, but for an obligate carnivore like cats, this is a lower quality protein. Animal based proteins have biologic values (a measure of usability) ranging from 100% (egg) to 78% (beef). Plant based proteins range from 67% (soybean) to 45% (corn).

What does a carbohydrate loaded diet mean in the long run to your cat? High carbohydrates can predispose to obesity, just like in people. Diabetes is common in cats and high carbohydrate diets and obesity are known to be risk factors. Obesity also leads to arthritis. Add to this scenario the typical spoiled, well-loved cat that doesn’t have to “hunt” for its food, and you have a sedentary lifestyle that also increases the risk of obesity and diabetes. It is known that a high carbohydrate diet actually changes the pH level and thus the bacterial types that grow in the mouth and digestive tracts. This change in bacterial content can lead to intestinal problems in some cats. Grains can be a source of allergies for some cats too.

The second problem a dry diet creates is a potentially dehydrated cat. Wild cats get most of their moisture from the prey they eat (mouse=70% water). The average dry food is only 10% water. Most feline practitioners and internal medicine specialists are now recommending an exclusively canned diet since the moisture in canned food most closely mimics their natural prey. It is thought that the lack of moisture in dry diets can contribute to urinary tract disease such as cystitis, crystals, and stones.

Many people have been told canned food is bad for teeth and can lead to dental disease. This is only partially true. Although canned food can leave more residue on the teeth than dry food, dry food does virtually nothing to help keep the teeth clean. It would be the equivalent of your dentist telling you it is ok to eat crunchy cookies to help clean your teeth. There are a few dental diets on the market that do a better job at scraping plaque off the teeth, but they are high carbohydrate and are only minimally effective at actual cleaning. *The real reason for dental disease is lack of daily care.* Obviously it is difficult to get a cat to accept daily tooth brushing, but there are some “cat friendly” options available. Your veterinarian can advise you on these products.

****So what should your cat eat for optimal health? The more moisture your cat receives, the better. If your cat loves canned food and you don’t mind feeding it exclusively, it is currently thought to be the best option as it mimics their moisture requirement. Grain-free canned food is the lowest in carbohydrates. If your cat refuses to eat canned food, the grain free dry foods are still the best option nutritionally. Many cats will accept the dry food with some water added. It is imperative to have fresh water available at all times.**

It is important to realize there is no such thing as the perfect pet food. Changing brands every once and a while or mixing brands may help ensure your cat gets the best each company has to offer. It is also good to offer variety so we don’t train our cats to become finicky eaters. There are many grain free dry and canned foods on the market. High protein levels may not be advisable for select medical conditions. Please talk to your veterinarian regarding the recommendations for your cat.