CURRENT GUIDELINES FOR FEEDING CATS

Dogs and people are omnivores but cats are carnivores. They have a higher requirement for protein and their metabolism is different. As they've come to appreciate these differences, veterinary nutritionists are recommending that cats be fed differently than we have in the past. We'd like to dispel some myths about cat nutrition and give you some guidance as to what to feed your cat.

TARTAR CONTROL

Tartar control is important, since 80% of cats over age three have some degree of dental disease. We used to believe that cats and dogs eating dry diets had less tartar build-up on their teeth. However, many cats swallow small kibble whole. If they don't chew it, the diet doesn't have an effect on plaque or tartar build-up. Now we know that a diet has to be specifically formulated to reduce plaque – not any dry food will do.

If your cat is healthy otherwise, a dry tartar control food is great. Purina makes a great prescription diet for dental tartar control that is higher in protein and lower in carbohydrates. (It's called DH, for Dental health.) This is our favorite diet for adult cats because it addresses both our dental disease and weight control concerns. Hill's T/D diet, in contrast, is formulated for senior cats, so if your cat is age ten or older, T/D is likely what we will recommend.

WATER CONTENT

Cats in the wild don't drink a lot of water. They get much of their moisture from their prey, and they don't have a very strong thirst reflex. When eating dry diets, cats tend to hover on the edge of dehydration and produce strong, concentrated urine. Cats eating canned diets have more watery urine, which reduces risk for bladder crystals and stones, and hence urinary obstruction. The extra moisture in canned foods is also of benefit for older cats with decreased kidney function.

Many cats don't like canned cat food, especially if they were not introduced to canned diets in kittenhood. If a cat is refusing to eat a recommended canned diet, we can always work on increasing fluids in other ways. We might feed the cat a dry diet made for stones but also recommend a water fountain to encourage the cat to drink more. Many cats love to drink fresh flowing water and will consume more water when it's available this way. A product from Purina called Hydra Care may also be recommended for cats with kidney disease or dehydration.

CARBOHYDRATES

You've probably heard about grain-free diets, which have been popular the past few years. It is not true, despite what you may have read on the internet, that cats cannot digest carbohydrates, nor is it true that no cat should ever eat any carbohydrates. Carbs are not just empty calories, either. The carbohydrate portion of the diet includes beneficial fiber, which helps to prevent both diarrhea and constipation, and promotes healthy gut bacteria.

In the wild, cats catch and eat prey. Prey species have plants and grains in their digestive tracts, which cats eat and digest. Glucose and glycogen are carbohydrates every species uses to power their muscles, brain and tissues, so cats also ingest these simple carbohydrate molecules with every animal they eat. A mouse is 58% protein but also contains fat, carbohydrate, vitamins and minerals.

One study showed that when cats are able to choose the constituents of their diet, they will aim for 52% protein, 36% fat and 12% carbohydrates. They don't choose zero carbs!

A "grain-free" diet can still be high in carbohydrates, it will just contain potatoes or green peas instead of grain. It may also be high in fat. The fact that a cat food has grain in it doesn't make it bad or unnatural – it's part of their natural diet via their prey. It is also not true that plant ingredients like wheat are common allergens in pets with food allergies.

Unless a cat has kidney or liver disease, in which case lower protein diets are recommended, higher protein and lower carbohydrate levels are generally better. The problem

is, you have no way to tell by reading a pet food label how much fat, protein or carbohydrate is in the food. **What you see on the label are maximum and minimum amounts, not precise quantities.** In fact, it is impossible to tell by reading a pet food label how high quality the food is, because pet food labels are not designed to give us the information we need to make good choices. The information the FDA and USDA require on labels says very little about the quality of the food.

Most OTC diets, both canned and dry, don't have enough fatty acids or antioxidants in them. These nutrients are not listed on the label at all. Pet food stores sell some better quality diets, but it's difficult for a consumer to tell good from bad and many are not nearly as healthy as the fancy marketing campaigns make you think they are.

In contrast, with a high quality pet food, exact nutrient content is available on the company's website. The way veterinarians evaluate diets is by a scientific analysis on a dry matter basis. This is only available from companies that do testing and scientific analysis of their

diets. We don't use the information on the government-required label because it's inaccurate and misleading.

Watch our YouTube video on How to Choose a Good Pet Food to learn about some of the ways manufacturers can fudge labels and ingredient lists to make their food seem better than it really is. Visit our website or youtube and watch our nutrition videos to learn more about protein sources and evaluating pet food label. There are two videos, each about 10 minutes long. The links are:

How to Choose a Good Food

http://www.youtube.com/watch?v=Xzdjjuq0SzM&feature=plcp

Protein in Pet Foods

http://www.youtube.com/watch?v=lqBJBK-R7Cc&feature=plcp

OBESITY and DIABETES

The second most common health problem in cats, after dental disease, is obesity. About half the cats in the U.S. are overweight or obese, and this number has gone up 71% since 2005.

Unlike dogs and people, who feel full when they have eaten enough calories, cats feel full when they have eaten enough protein. When eating a diet lower in protein and higher in carbohydrate or fat, they tend to overeat because it takes a lot of food to get enough protein to achieve satiety – that full feeling of having eaten enough.

Most cat owners, unless advised otherwise, feed OTC dry diets by leaving the dish out all the time. Constant availability of high carbohydrate diets leads straight to obesity for many cats. Just 10



extra kibbles of dry food per day can cause 4 pounds of weight gain by age 10. Food should always be measured and metered out so that pets don't overeat.

It's difficult to create a dry food nugget with minimal carbohydrates because carbs are needed to create a dry food that holds together and doesn't get rancid. Canned diets, on the other hand, can be very low in carbohydrate. The dry versions of prescription "low carb" diets for cats contain about 15% carbohydrate while the canned versions contain only 5%. Along with obesity rates, diabetes cases in cats are soaring. Diabetes is an inherited disease but it often will never develop if a cat is maintained at a healthy weight. The more obese a cat becomes, the more likely it will become diabetic. The risk is highest in middle aged cats 8-12 years old, and males are affected twice as often as females. High protein, low-carb diets are used to treat both obesity and diabetes. Again, you cannot determine what cat foods fit this profile from a pet food label.

WET or DRY?

Some cat owners feed only canned food or canned food in addition to dry. This has drawbacks. It's more expensive to feed canned food and not as convenient. Dry food is easy and it doesn't dry out or spoil. There are also concerns about toxic chemicals leaching from the cans into the food when the diet is fish-based.

Over-the-counter canned diets usually contain lots of protein, but it is poor quality protein that is poorly digested and creates a lot of waste products for the liver and kidneys to handle. Young cats deal with these diets OK, but older cats or ones with kidney or liver problems do not. An older cat with failing kidneys will die of kidney failure years sooner if eating OTC canned diets like Friskies, Fancy Feast or 9 Lives. It's difficult to switch an older cat off these diets if they've been eating them all their lives, even when we know it would be life-saving if we could do so.



PRESCRIPTION DIETS

Notice that we have so far not recommended that you feed an over-the-counter food at all. If we had our way, every pet would be eating a prescription or therapeutic diet. (Hill's has copyrighted the word "prescription" for pet food, so other manufacturers use the word "therapeutic" for their veterinary-specific diets.) These diets are designed to address specific problems such as weight management, arthritis or dental disease.

OTC diets are required by law to provide nutrition that fits within certain parameters. These parameters don't allow for nutrients to be added in therapeutic amounts – extra fatty acids to treat arthritis for example. Prescription diets are different. They can legally contain

amounts of things, such as that fish oil for arthritis, that are high enough to treat diseases. You may see the words "contains glucosamine" on a bag of food at the pet store but the amount of glucosamine in an OTC diet cannot legally be enough to have a therapeutic effect on your pet.

Therapeutic diets can also contain less of some ingredients than is legally required for an OTC diet, such as lower amounts of fat or fiber to treat certain digestive disorders.

Almost every cat could benefit from one or more of these strategies. What you feed your cat makes a huge difference to

his or her life expectancy and quality of life. Therapeutic diets have been clinically proven to have health benefits, with research and quality control behind them. No matter how good the ads sound, most brands do not provide this level of nutrition.

Prescription diets have been tested and approved by the FDA just like drugs. They are made in the company's own facility so they have control over things like ingredient testing, cleanliness and processing. Nothing goes in the food that isn't on the label and nothing is on the label that isn't in the food. They have their own laboratory on-site so they can test each batch of ingredients and each batch of finished food to make sure it meets their standards. The facilities are inspected and are open for tours by veterinarians and veterinary technicians. Their nutrition research is published and the results of extensive food trials and testing on live dogs and cats are utilized when they formulate their diets.

If we had our choice, we would have every patient on a prescription diet! There is no pet that couldn't benefit from at least one of the extra benefits that high quality prescription diets provide.

PET FOOD COMPANY MYTHS

People are heavily influenced by marketing and PR when it comes to pet foods. Words like "no corn," "grain-free," "natural," "premium," "human grade" and "holistic" are thrown around with abandon yet mean very little as far as determining the quality of a pet food. Examples:

1) A pet food that says "holistic" on the label can just as easily be made in a dirty facility with inferior ingredients as one that does not.

2) When pet foods are analyzed, sometimes the ingredients don't even match what is on the label. A food that says chicken on the label can have no poultry DNA in it at all because some other meat was substituted instead, and the consumer will have no idea. One study showed that 40% of OTC diets have one or more meats in the food that are not listed on the label.

3) "Grain-free" is a marketing term that fails to give you any information about the actual amount of carbohydrate in the food. Glucose is glucose and fiber is fiber – it doesn't matter to the body whether it came from rice or potato or corn. The pet food company just wants you to think it matters so you'll buy their food! Furthermore, some ingredients in grain-free diets have been shown to cause problems. Green peas, for example, can cause bladder stones.

4) If you've been told by someone in a pet store that veterinarians don't have training in nutrition, or we get kickbacks from Hill's for selling Science Diet, you've been lied to. Don't believe everything you hear! Nutrition and health are intimately connected – of course we learned about nutrition! If you've been told that Hill's food is bad because it contains corn and fillers or it's been bought out and is no longer high quality, you've been exposed to the food industry's version of the political negative attack ad. Much of this propaganda, from a scientific standpoint, doesn't even make sense.

5) One last concern consumers have typically involves pet food company reputations. Many times people think they are buying a hand crafted, high quality diet from a small company that cares about their pet, but this is rarely true. Most pet foods are made by giant corporations. For example, the brands Diamond, Kirkland, Natural Balance, Wellness, Canidae, Chicken Soup and Premium Edge are all made in the same facility. This is why, when there is a pet food recall, it's common for many brands to be involved in the problem.

RECOMMENDATIONS

So what's the correct answer here? There really isn't one correct answer that fits every cat and every situation. Our diet recommendations are individualized for each patient because it's complicated. It also becomes difficult to choose what and how to feed when you have multiple cats with different needs. What you feed your pet matters. Good food promotes good health. We're always happy to help you pick and choose the best products available!

Our basic recommendations are:

- Feed dry Purina DH as your main diet if your cat is young and healthy.
- Measure out how much food you feed and meter it out throughout the day.
- Switch to T/D, which is Hill's tartar control diet, when your cat gets older. T/D is lower in protein and is designed for older cats with reduced kidney function.
- Feed at least some canned food right from the beginning so your cat is accustomed to it. That will make it easier to switch entirely over to canned food should you need to later in life.
- Avoid cheap grocery store foods like the plague, both canned and dry, unless your cat won't eat anything else.
- If your cat needs to lose weight, feed a prescription weight loss diet.



HOW TO FEED A CAT TO REDUCE STRESS

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Good nutrition for cats is not only about what to feed but also how and when you deliver that food.

Cats are natural-born nibblers

A cat's metabolism is designed to take in small amounts of food frequently throughout the day. It takes eight 35-calorie mice per day to feed an average-sized cat. This is approximately equal to ten kibbles of dry food. You may think it's normal for a cat to sit by a bowl and eat until it is empty, but cats normally prefer to graze. They eat a few mouthfuls of food and walk away, intending to come back later. Walking away from a food after a few bites doesn't mean your cat doesn't like her food or is being fussy! This is normal cat behavior.

Meal feeding twice a day can cause cats to overeat, and/or to gulp their food and regurgitate. It is also stressful for the cat, since it goes against their normal, instinctive behavior. Overeating at meals is especially common when there are multiple cats in the household competing with each other.

Cats aren't social eaters

Humans like to eat in groups, so many pet owners assume that cats do, too. Pet owners commonly feed multiple cats in the same location. In fact, some cats will eat poorly because of the anxiety associated with being forced to eat in a group, while others will overeat. Even cats that are socially compatible in other situations prefer to eat alone.

At-home advice for cat owners

- Weigh or measure the amount of food you feed each day.
- Divide the food up into multiple portions. Feed small, frequent meals.
- Deliver the food in ways that give the cat more control over food acquisition. Food puzzles or hiding small amounts of food in multiple locations helps cats to feel they are hunting for their dinner and burns

calories. Playing with your cat before meals also helps to simulate hunting and reduce stress.

• Cats feel safer at higher elevations, so feed cats from a counter, cat tree or perch when possible. Each platform should be small enough that only one cat can eat there at a time. Quiet locations are best.

• Feed cats separately. Establish multiple feeding stations. Automatic feeders that only open for the cat whose microchip or RFD tag has been programmed in can keep cats from eating each other's food. Some are designed to hold an ice pack to keep canned food from spoiling during the day.







