

Nutrition – Feeding Guidelines for Cats

Feeding your cat the appropriate amount of a well balanced diet is vital to the maintenance of overall health and well-being, just as eating a well balanced diet is for us. In order to understand how and what to feed cats, it is necessary to understand how the nutritional requirements of the cat have developed through the process of biological evolution.

Do cats have any special dietary needs?

From a biological evolution perspective, there are two important factors that influence a cat's diet. These factors are:

- 1) Cats are *obligate carnivores*
- 2) They are of *desert origin*

"Cats cannot be vegetarians!"

An *obligate or true carnivore* is an animal that requires meat in its diet. They may eat other foods offered to them, especially animal products like cheese and bone marrow or sweet sugary substances such as honey and syrup. These foods are not essential and are not consumed on a regular basis. True carnivores lack the metabolism required for the proper digestion of vegetable matter. Some carnivorous mammals eat vegetation specifically as an *emetic* or substance that causes vomiting. While some cat owners may find the fact that the domestic cat is an obligate carnivore disturbing or objectionable, it is important to bear in mind the practical consequences - cats cannot be vegetarians!



Through evolution, cats have become dependent on the specific forms of nutrients found only in animal tissue. Examples include certain essential fatty acids, minerals and vitamins (especially calcium, Vitamin A and niacin). These nutrients are not found in plant tissue in forms that can be used by cats. Equally important, as an obligate carnivore, cats require high levels of dietary protein with the appropriate balance of amino acids (the building blocks from which proteins are made).

Most mammals, including humans and cats, use the protein in food to build and maintain tissue and carry out biological reactions. However, unlike other mammals, cats have evolved in such a way as to be "obliged" to use protein as its primary source of daily

calories! By comparison, humans and dogs have evolved to use carbohydrates as our primary energy source.

The high levels of the correct types of protein that cats need can only be found in animal tissue. In fact, diets based solely on plant protein are not digested as efficiently, and could be harmful or even fatal if fed as the only source of protein because they contain inappropriate levels of certain critical amino acids. These critical amino acids are called essential amino acids because they must be supplied in the diet; cats require a greater number of these essential amino acids than either humans or dogs.

"Their desert origin allows them to conserve water more efficiently."

The second evolutionary fact unique to the domestic cat is that its ancestors were of *desert origin*. Because of this origin, many aspects of a cat's needs are different from other mammals. On a practical basis, because their desert origin allows them to conserve water more efficiently, cats can drink less water per day than a dog of similar size. Fresh drinking water should still always be provided for domestic cats. However, do not be alarmed if your cat seems to drink very little water. Some cats fed moist or canned foods get most of their water directly from the food and their owners rarely see the cat drink!

What is the natural feeding behavior of cats?

On their own, most domestic cats are "nibblers" and will eat small meals frequently throughout the day and night. In fact, depending on the individual and the type of food, some cats will eat from 12 - 20 meals a day! This is especially true for cats eating dry foods, whereas moist or canned foods are usually consumed quickly as one to three larger meals per day.

"Cats appear to prefer food with a strong odor."

As anyone that has ever owned a cat can attest, cats can be "finicky"! This simply reflects the fact that the texture, odor, temperature, and flavor of food are strong influences on a cat's food preferences. Cats often develop preferences for specific textures and/or shapes of food, and some cats will choose the familiar over the novel shape. Cats appear to prefer food with a strong odor. Food temperature influences its odor, and since warm food has more aroma or smell, cats eat it more readily. This is a helpful tactic to use when cats are sick; in many cases, they can be encouraged to eat simply by warming up their food.

What is the most practical way to feed a cat?

With the unique nutritional requirements and feeding behavior of the domestic cat in mind, it is easy to appreciate practical recommendations for feeding. In all cases, your cat should have access to fresh, clean drinking water.



Feeding kittens

Young kittens need to eat frequently. Although they need relatively large quantities of food because they are growing rapidly, they have limited space in their tiny stomachs.

At **eight weeks of age**, they need to be fed about **5 meals a day**.

By **6 months**, the need for food is decreased as kittens are about 75% of their adult size and can be fed **2 meals a day**.

A good quality kitten food has advantages over adult cat food since it has been specially formulated for a kitten's demanding nutritional requirements. Because of their rapid growth, any nutritional "mistakes" made during kittenhood will have severe, even irreversible, consequences. For most kittens, growth is almost complete by six months of age. They can be changed to "adult" cat food at 8-10 months of age.

"Kittens and adult cats do not need milk."

Contrary to popular myth, kittens and adult cats do not need milk. In fact, by about 12 weeks of age most kittens lose the ability to digest milk sugar (lactose). Therefore, while small amounts may be tolerated, too much milk can lead to intestinal upset and diarrhea because the cat cannot digest it properly!

Feeding the adult cat

A high-quality commercial adult cat food should always be fed because these diets have been specially formulated to contain all the nutrients that a cat requires. Dry or wet food can be used but care should be taken to feed the correct amount, especially when feeding canned diets since it is easy to overfeed a cat. Once a cat becomes overweight or obese, it is much harder to lose the excess weight than it is to prevent them becoming overweight in the first place. Many owners prefer to feed small meals of moist food once or twice a day and provide dry food in between meals. This is fine as long as you ensure that your cat is receiving the proper number of calories and getting enough physical activity.

It is important to remember that when it comes to diet and feeding behaviors, each cat is an individual with unique needs and characteristics. The number of meals offered and the amount and type of food used will vary with individual preferences and activity levels. For example, outdoor cats may need more calories than less active indoor cats. In addition, nutritional requirements and dietary preferences change over the course of the cat's lifetime. Kittens, adults and senior cats all have different nutritional needs. Your cat should be fed a diet specially formulated for these life stages. Cats with certain illnesses

will benefit from a special therapeutic or "prescription" diet that may control symptoms and delay progression of disease.

Choosing a high quality food from the hundreds of available brands can be challenging. The pet nutrition industry is very competitive and relies on persuasive advertising to sell their products. Not all pet foods are created equally, although many commercially available foods are good balanced diets. However, the quality of ingredients can vary, and it can be difficult to determine their quality based strictly on reading the label. Our staff at the veterinary clinic can help you interpret the information, based on scientific principles, and can help you choose a diet that meets your cat's specific needs. When you have questions about a particular food or food ingredient, your best source of help is your professional veterinary health care providers.

This client information sheet is based on material written by: Ernest Ward, DVM
© Copyright 2009 Lifelearn Inc. Used and/or modified with permission under license.