

Kitchen Cats: Why a Cat Can't Be Vegetarian

Can cats survive on a diet lacking animal-source ingredients? Not surprisingly, no.

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Are cats really carnivores? Or, like dogs, are they omnivores that can survive without meat? The answer to the first question is yes and no. By nature, cats are true carnivores; they must eat meat to survive in the wild. But thanks to modern food technology, you can feed a cat a healthy diet without using meat.

Before you consider feeding your cat a vegetarian diet, it's important to understand how its body works and why it has specific nutritional needs.

First, let's look at amino acids, the building blocks of protein. Cats require 22 amino acids. Their bodies can manufacture 12 of those, so 10 must be present in the diet. It's possible to provide appropriate amounts of each of these using a mixture of plant protein sources, such as soy, corn and wheat.

Cats have an absolute dietary requirement for an additional amino acid-like nutrient called taurine, which other species' bodies can manufacture from certain amino acids. Taurine is not used as a building block for protein but is essential for normal vision, heart function and reproduction. Meat and fish contain considerable taurine, so cats in the wild can obtain adequate amounts from prey. Vegetable protein sources do not have it.

Another consideration: Cats can tolerate much more fat than other species, which suggests their ancestors ate diets high in fat possibly consisting mostly of prey. Many pet food ingredients taken from animal sources have high fat content. Fat is an efficient energy and essential fatty acid (EFA) source. These EFAs are necessary for normal skin and coat and proper immune function.

Most species need three EFAs: linoleic, linolenic and arachidonic acids. Most species that consume sufficient linoleic acid (found in high concentrations in corn oil, for example) can make both linolenic and arachidonic acid from it. The cat, however, cannot convert linoleic acid to arachidonic acid, which is not found in vegetable food sources such as corn oil, but is available to cats in the wild from the prey they capture and eat. The need for a dietary source of arachidonic acid provides more evidence the cat is, by nature, a carnivore.