

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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Vitamin A is another important ingredient in cat foods. All animals need it for normal vision and other metabolic activities, but most have an enzyme in their intestinal lining cells that can convert beta-carotene into vitamin A. Beta-carotene, found widely in green and yellow vegetables, is basically two molecules of vitamin A linked together. The enzyme splits the beta-carotene at the molecule's midpoint and forms vitamin A. Most animals produce significantly more vitamin A in this manner than they need and their bodies store the excess mainly in the liver. Cats lack this splitting enzyme, so they must get vitamin A from their diet. Because vegetables contain beta-carotene but not vitamin A, cats in the wild probably get vitamin A from eating the livers of their prey.

Another essential nutrient for cats is cyanocobalamin (vitamin B-12), formed by bacteria in the intestinal tract of herbivores, such as cattle, and stored in their bodies. Cats in the wild obtain this nutrient from their prey. So can cats survive on a diet lacking animal-source ingredients? Not surprisingly, no. Technology provides ways to provide taurine, arachidonic acid and vitamins A and B-12. They can be synthesized chemically or isolated from other substances, but the sources are still from animals.

Considering your cat's nutritional needs, a solely vegetarian diet for cats can have serious health risks.