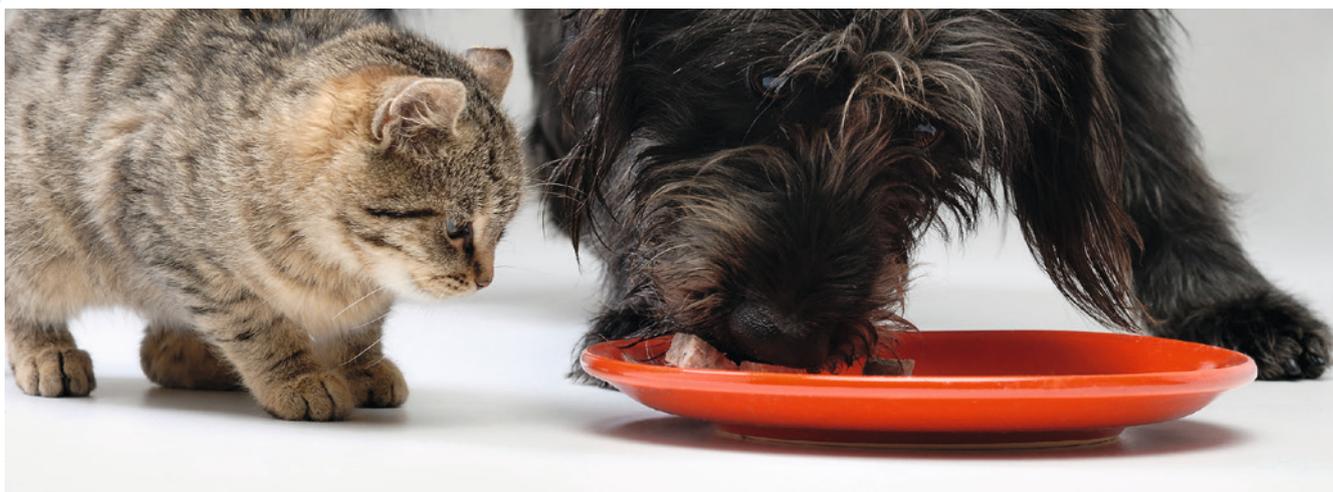


Can I feed dog food to my cat?



Cats and dogs are different!

Dog and cat food are formulated differently because dogs and cats have different nutritional needs. Complete and balanced pet food provides all the nutrients required in the correct ratios for the pet.

Dog food provides all the nutrients a dog needs to stay healthy, but they are not formulated to provide the additional nutrients that cats need in their diet. Although cats and dogs belong to the same order Carnivora together with species like bears or Giant panda, the dog's feeding behavior is omnivorous, while the cat is a true carnivore. This means that cats must have certain nutrients in their diet that are only found in animal based ingredients.

Dogs developed various metabolic traits which allow them to utilize carbohydrates and to synthesize certain nutrients found in animal based ingredients from plant sources (e.g. vitamin A from beta-carotene). Cats have specific nutritional needs that dogs do not have. A complete and balanced diet designed for dogs may not provide the same nutrients at sufficient levels for cats.

Protein

Dietary Protein is required by both dogs and cats for energy, growth and repair. Cats require a higher amount than dogs during both growth and adult maintenance, due to

increased enzyme activity. In addition, cats are less able to down-regulate their rate of protein breakdown when presented with a diet low in protein. For this reason, most cat food tends to contain more protein than dog food.

Arginine is an amino acid, one of the building blocks of proteins. The cat is very sensitive to even a single meal free of arginine. In the absence of arginine in the diet, nitrogen cannot be efficiently metabolized through the urea cycle and can lead to death from ammonia intoxication in cats. Dogs are less sensitive to arginine free diet and can at least partially use an alternative amino acid, ornithine, to complete the urea cycle.

Taurine

Taurine is another amino acid that is distributed throughout most body tissues. Taurine is important for healthy functioning of the heart, retina, bile fluid and certain aspects of reproduction.

Cats must eat preformed taurine and since taurine is not found in plants, cats must consume animal-based ingredients to obtain it. Unlike cats, in the absence of dietary taurine, dogs are able to manufacture enough taurine from other amino acids to meet their needs.

Vitamins A and B3 (niacin)

Vitamin A is required at the cellular level by both cats and dogs, and is essential for healthy vision and a healthy skin. Cats lack the enzymes to break down plant-produced carotenoids and must eat preformed Vitamin A that can only be found in food of animal origin. Dogs have enzymes in the lining of the intestine that can break down plant carotenoids and convert these into active Vitamin A.

Niacin is an essential B vitamin required by the cat and dog for skin and coat health, and for healthy metabolism. However, the cat can only obtain niacin by eating the preformed vitamin, and unlike the dog, cannot convert tryptophan, a dietary amino acid, to niacin. Meat and fish are great sources of niacin. The dog obtains niacin in two ways, either by converting tryptophan into niacin or by eating preformed niacin.

Cats need animal fat

Arachidonic acid is an essential fatty acid that plays a vital role in fat utilisation and energy production. The cat cannot convert sufficient levels of other fatty acids such as linoleic acid from plants to arachidonic acid even when the diet is rich in linoleic acid, because the cat liver does not have the sufficient enzyme activity.

Dogs can make their own arachidonic acid from other essential fatty acids and therefore in the dog, unlike the cat, arachidonic acid is not considered an essential nutrient.

What does it all mean?

It is important that the cat is fed cat food that is complete and balanced for their particular nutritional needs. The requirements and often the taste preferences of the dog and cat are different. This is why pet food manufacturers offer both dog food and cat food.

By choosing to feed your cat a nutritionally complete and balanced cat food (and water!), all the nutrition is taken care of and you can be confident that your cat is getting everything it needs in its food for a healthy and active life.



More advice can be found at www.fediaf.org

Status: December 2018