Zinc Requirements in Cats

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Zinc is one of the essential minerals that are supplemented in today's commercial diets for cats and dogs. There are several different factors that effect the absorption of zinc from the diet.
Zinc requirements

The Association of Feed Control Officials (AAFCO) sets guidelines for the minimum daily requirements of all nutrients for cats cats; those for zinc are shown in the table below.

Growth stage	Minimum recommended daily amount of zinc in mg/kg of food consumed	Maximum mg that should be fed
Adult Cats	75	2000
Kittens	75	2000

Absorption and sources of zinc

Zinc is not considered to be highly absorbable. Studies show that between 5% and 40% of ingested zinc is actually absorbed. There are several factors that influence the absorption of zinc. One of them is genetics. Another is plant material. Plants contain a product called phytate, which binds zinc and reduces its absorption. Fiber has a similar effect. Therefore, animals that are fed a diet high in plant material may have an increased risk of developing zinc deficiencies. Calcium also binds zinc, and zinc deficiencies can be produced when excess amounts of calcium are fed. Cats with inflammatory bowel disease may develop zinc deficiency because of lack of absorption. Zinc is found in higher concentrations in meat and bone than it is in plant sources.

Ingredient	Zinc in mg/kg
Barley	44.4
Corn	13
Oats	39.2
Rice	24.4
Wheat	20
Soybean meal	57.9
Fish meal	157
Meat and bone meal	101

Zinc toxicity

Toxicities to zinc due to oversupplementation are very rare. If animals are fed large amounts of zinc supplements, they may be prone to developing copper and iron deficiencies. However, this condition can usually only be created experimentally. Zinc toxicities can occur, however, if an animal would swallow pennies minted since 1982, zinc hardware on transport cages, zinc ointment, or eat or drink from galvanized containers.

Zinc supplementation

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Many products that are used to help improve the quality of the skin coat and hair contain supplemental zinc. It is found in all good vitamin supplements and many fatty acid supplements also contain extra zinc. There is no evidence to show that increased zinc levels improve the immune system or athletic performance, but the benefits to the skin and coat are well-documented. Most healthy animals do just fine on the zinc that is supplied in a balanced commercial pet food. If your cat suffers from a skin disorder such as hair loss and excessive shedding, a supplement containing extra zinc may be very beneficial, especially if combined with a fatty acid supplement.

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