Selenium Requirements in Dogs

Drs. Foster & Smith Educational Staff

Selenium is a trace mineral which was recognized as a toxic substance before it was identified as a necessary nutrient. The daily requirement for selenium is less than the requirement for any of the other trace elements. Selenium is also the most toxic of the trace elements. This is definitely a case of 'If a little is good, a lot is NOT better.'

Function of selenium

Selenium is an antioxidant which functions in conjunction with Vitamin E and certain enzymes to protect cells.

Sources of dietary selenium

High-protein plants such as cereals and meat products are good sources of selenium.

Daily selenium requirements

Dogs and cats should receive 0.05 mg of selenium daily for every pound of food they eat (on a dry matter basis).

Selenium deficiency

Selenium deficiencies are extremely rare in dogs and basically unknown in cats. They are much more common in cattle and sheep who graze plants which grow in soil that is deficient in selenium. If a selenium deficiency would occur, we would see poor reproduction, puppy death, muscle weakness, and abnormalities of the heart muscle.

Selenium toxicity

Selenium toxicities in dogs or cats are rare, but can occur if the dietary intake exceeds 0.9 mg of selenium for every pound of food eaten (on a dry matter basis) for prolonged periods of time. Signs of selenium toxicity include hair loss, lameness, anemia, and liver cirrhosis.

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