

Iron Requirements in Dogs

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Function of iron

As its primary function, iron combines with [Copper \(Cu\)](#) and protein to form hemoglobin, the molecule in red blood cells that carries oxygen. Iron also is necessary for certain enzymes in the body to function normally.

Dietary sources of iron

Iron is found in liver, lean meats, fish, whole grains, and legumes. Most commercial pet foods contain a highly available form of supplemental iron to help meet dietary requirements.

Daily iron requirements

Dogs and cats should receive 36.4 mg of iron daily for every pound of food they eat (on a [dry matter basis](#)). The iron should be in a form other than iron oxide or iron carbonate.

Iron absorption

Iron is absorbed primarily from the small intestine. The body needs a constant supply of iron since red blood cells only live about 110 days and then die and need to be replaced.

Iron deficiency

A deficiency in iron results in the development of anemia (lower than normal number of red blood cells). In iron deficiency anemia, the size of each red blood cell and the amount of hemoglobin it contains are also reduced. Symptoms of anemia include decreased growth rate, weakness, and increased susceptibility to stress or disease. Animals with iron deficiency may also develop constipation.

Puppies and kittens can be born with lower than normal stores of iron if their mothers did not receive adequate iron during pregnancy. Feeding supplemental iron to the mother while nursing can not make up for this lack of reserves since this treatment does not increase the iron content of the milk. Puppies and kittens with this condition often develop iron deficiency anemia during the nursing period.

Iron toxicity

Iron toxicity, itself, is extremely rare; however, too much iron in the diet can interfere with the absorption of [phosphorous](#).