



Title Evaluation of the relationship between cobalamin and folate deficiencies and anemia in dogs

Purpose In people it is well documented that blood abnormalities such as anemia can result from B-vitamin deficiencies, especially cobalamin and folate deficiencies. The purpose of this study is to evaluate the prevalence of B vitamin deficiencies in anemic dogs and characterize related changes in red blood cells. Blood vitamin levels for B12, folate, and methylmalonic acid will be measured. Study results will help indicate when these vitamins should be measured, and help guide therapies to treat non-regenerative anemia.

Eligibility To be eligible for this study, dogs must meet several criteria, including:

- Anemia (PCV \leq 35%)
- No prior history of vitamin B12 or folate supplementation within the preceding 12 months
- No history of chronic kidney disease or documented acute kidney injury at the time of study enrolment
- If a dog is enrolled in the study and meets these criteria, a **CBC with pathology review and serum B12, folate, and MMA levels** will be performed at no charge.

For more information about this study and to inquire about eligibility and potential study benefits, please contact Dr. Emma Stanley at 212-329-8710 or emma.stanley@amcny.org or Dr. Elizabeth Appleman at 212-329-8882 or elizabeth.appleman@amcny.org.