



PATIENT NAME: Suzy Wall
SPECIMEN ID #: 700251
SPECIES / SEX: Canine / FS
BREED: Chihuahua
AGE: 10.0
WEIGHT: 8 lb

MRN: 1101934
COLLECTION DATE: 13-Feb-23
RECEIVED DATE: 28-Feb-23
REPORT DATE: 9-Mar-23
SAMPLE TYPE: Fur

VETERINARIAN: Dr. Kaufman
FACILITY: Startz Veterinary
 10179 Startz Road
 Canyon Lake, TX 78133
PH: 830-899-4900
FAX: info@startzvet.com

Fur/hair is the only matrix suitable for studying a long period of exposure to pollutants. The pollutants circulating in the blood are automatically captured by the weft of the fur when it grows and stays intact. Blood analysis is useful, but contrary to fur/hair analysis, blood is a snapshot and not the culmination of weeks of exposure.

Test	Range	Flag	Previous	Notable	Results	High Values	Comments
			8/22/2022	Change*	PPM		
Ca	700-3000				784.69	▲	Patient values outside of the normal ranges for nutritional minerals may be the result of inadequate diet, environmental exposure, poor metabolism, or other conditions. Evaluate patient and retest in 2 months after correcting for any irregularities. Refer to Mineral Supplementation page for guidance.
Co	0.02-1	low			0.00	▲	
Cr	0.1-5	low			0.09	▲	
Cu	8-30				10.43	▲	
Fe	25-400	low			13.37	▲	
K	100-2500				314.95	▲	
Mg	100-450				148.79	▲	
Mn	1-15	low			0.95	▲	
Na	700-10000				3221.47	▲	
P	220-500				297.82	▲	
Se	0.4-2.5				0.93	▲	
Si	20-600				39.23	▲	
Sr	0-6				1.24	▲	
V	0-1.2				0.02	▲	
Zn	100-300				100.66	▲	
Ag	0-2				0.28	▲	Patient values are all within the normal limits indicating no historical or ongoing issues with environmental minerals. Retest if major diet or health change occurs, or animal's environment substantially changes.
Al	0-250				11.25	▲	
Au	0-2				0.02	▲	
B	0-5				4.74	▲	
Ba	0-5				0.22	▲	
Be	0-1				0.00	▲	
Li	0-1				0.09	▲	
Mo	0-3				0.01	▲	
Ni	0-5				0.55	▲	
Sn	0-5				0.05	▲	
As	0-3				0.03	▲	Patient has no significant elevation of toxic metals
Cd	0-1				0.00	▲	
Hg	0-0.4				0.07	▲	
Pb	0-10				0.06	▲	

KEY:
 Orange Flag = within 15% of normal range
 Red Flag = outside of 15% of normal range
 Monitoring arrows represent a 20% change from previous test

Reference intervals should be considered as guidelines for comparison with reported test values. These reference ranges were established from a large population of "healthy" animals. They should not be considered as absolute limits for determining deficiency, toxicity or acceptance until fully validated element-specific studies are completed.



PATIENT NAME: Suzy Wall

MRN: 1101934

VETERINARIAN: Dr. Kaufman

The following minerals have been identified as being outside of the reference interval.

For a description of all minerals, visit our website at: www.vdilab.com

Symbol	Name	Description
Co	Cobalt	Cobalt is a dietary mineral which is essential for cell reproduction, growth, and vital organs. Lack of cobalamin can lead to GI and even neurological issues. Good dietary sources of cobalt include organ meats, beef, and eggs. Cobalt in excessive amounts may be highly toxic and would reflect exposure to high levels or ongoing exposure. Elevated Cobalt should be treated right away.
Cr	Chromium	Chromium is an essential dietary mineral. It can be found from the consumption of products such as yeast, wheat, egg yolk and green pepper. A deficiency of chromium can cause insulin resistance and diabetes, however elevated Chromium may be toxic especially if found in fur- indicating long term exposure or mineral imbalances, specifically high iron levels.
Fe	Iron	Iron in fur suggest the digestion of iron rich foods or consuming certain items such as prenatal vitamins, fertilizer, oxygen absorbers and handwarmers. Iron deficiency may be an indication of nutrient deficiencies or underlying conditions. Too much iron may cause a range of cardiac and GI-related symptoms, however this is typically associated with sudden ingestion of large amounts of Iron.
Mn	Manganese	Manganese is dietary derived and is involved in cellular energy production, development of tendons ligaments and connective tissue, and adrenal/thyroid gland function. It can be absorbed by digesting items that have high concentration of manganese such as Whole grains, eggs, nuts and leafy vegetables contain a good amount of manganese.

PATIENT NAME: Suzy Wall

MRN: 1101934

VETERINARIAN: Dr. Kaufman

Below are patient-specific dosing guidelines that may help your pet obtain the proper minerals that may have been low as indicated in this fur analysis, or remove accumulated minerals that are elevated. All products should be evaluated in consultation with your veterinarian or nutritionist to ensure safe and adequate supplementation as part of a full health and diet program.

Product Supplement Guidelines for Suzy Wall

For more information, contact Rx Vitamins (800-792-2222) or VDI Laboratory (805-577-6742)

Applicable

Rx Zyme, Rx Vitamins for Pets



Rx Zyme comes as a high potency, highly palatable powder containing a proprietary mixture of digestive enzymes designed to promote physiologically effective digestive function in dogs and cats.

Intended use: Aid in digestion of food to improve mineral absorption

DAILY DOSE

1 scoop
Per meal

Rx Zyme should always be given with food to promote enzymatic digestion.

Not Applicable

Rx Clay, Rx Vitamins for Pets



The clay in Rx Clay has been clinically shown to bind heavy metals in the gastrointestinal tract (GIT) of mammals. While the clay is not absorbed into the body, the presence of RxClay in the GIT will bind heavy metals and toxins present in the diet and/or heavy metals and toxins excreted by the liver via the bile duct(s) and lymphatics into the GIT.

Intended use: Aid in removal of metals present in the diet or being accumulated from environment, and regulate bowel function

DAILY DOSE

Applicable

Canine/Feline Minerals, Rx Vitamins for Pets



Canine Minerals provides macro- and micro-mineral supplementation, specifically calcium for dogs to help balance home-prepared meals and as a general mineral supplement when required.

Intended use: Canine Minerals is designed to provide
 - Calcium - Magnesium - Iron - Sodium - Phosphorus
 - Manganese - Strontium - Potassium - Chromium

DAILY DOSE

1 scoop
Split among meals

This dose is a total dose for the day. Do not give more than recommended.

Supplementing with Canine Minerals:

- Supplementation listed above is a total daily dose and should be split among meals to avoid any GI discomfort. If your dog is showing signs of discomfort, excessive thirst, panting, or other abnormal signs, stop use of the product and consult a veterinarian.
- The dosage of the individual minerals is very important. Seemingly small variations in mineral content in a diet can have significant impact on animal health. Anytime dietary changes are made, it's important to watch for changes in health and behavior, and retest any labwork to ensure proper balance is achieved.
- This product contains calcium and magnesium, both of which are tightly regulated in the body. If your dog's recent blood work shows abnormal calcium or magnesium levels, consult your veterinarian before starting Canine Minerals. Conversely, if your dog is experience issues with this supplement, blood work may be warranted to check blood levels.