

**Miniature schnauzers with calcium oxalate stones**

We are looking for Miniature schnauzers that have had calcium oxalate stones in order to better characterize the disease. The study does not involve any cost, but does involve feeding several diets and allowing collection of 24-hour urine samples.

**Objectives of study:**

The objectives of this study are to further characterize calcium oxalate urinary stone formation in Miniature schnauzers and to evaluate the influence of various diet on risk of calcium oxalate stone formation.

**Study summary:**

Male and female Miniature schnauzers will be included. They must have a history of proven calcium oxalate urinary stone disease, but be otherwise healthy. This study is a preliminary study evaluating several diets on risk of calcium oxalate formation in Miniature schnauzers. Diets evaluated include an "ultra-low protein" diet, a high fiber diet with supplemental potassium citrate, an "oxalate" preventative diet, and a protein hydrolysate diet. Diets will be fed for 8 weeks at which time 24-hour urine samples and blood samples will be collected for determination of urinary risk of calcium oxalate formation. Additionally, 24-hour urine sample may be collected while dogs are fed and fasted on these diets necessitating a 48-hour stay in the hospital.

**Inclusion criteria:**

- Male and female Miniature schnauzers with a history of calcium oxalate stones, but otherwise healthy

**Exclusion criteria:**

- Dogs will be excluded from the study if they received glucocorticoids, diuretics, or supplements containing calcium or vitamin D within the past 2 years, if they have other diseases that preclude feeding these diets, and if they have hypercalcemia
- Dogs receiving medication for other diseases (e.g. antibiotics for skin disease or levothyroxine supplementation for hypothyroidism) may be included if the treatment is approved by the principal investigator.

**Owners receive:**

- Free examination
- Free follow-up examinations including blood work, urinalysis, and imaging
- Free diets
- Free advice as to which diet may be best for their cat based on results of the study