



Taurine Deficiency Induced Dilated Cardiomyopathy in Golden Retrievers

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Dilated Cardiomyopathy (DCM) is becoming more prevalent in golden retrievers. Dr. Joshua Stern, DVM, PhD, DACVIM (Cardiology) at UC Davis, starting seeing a pattern and recognized that many cases were due to dietary taurine deficiency in golden retrievers fed grain free diets. Here is what we know so far:

Background

Taurine is an amino acid that is found in high concentrations in heart and muscle. Among its many functions, it aids in normal contractile function. Evidence shows that taurine helps mediate calcium channel transports and modulates calcium sensitivity of the myofibrils.

Taurine deficiency as a cause of dilated cardiomyopathy (DCM) is not a new issue. Taurine deficiency in cats was characterized by Pion et al in the late 1980s. Taurine deficiency has since been characterized as a cause of acquired DCM in dogs as well.

Currently identified diets of concern in these golden retrievers

According to Dr. Stern, the majority of cases they are seeing at UC Davis are from grain free diets that are high in legumes, like acana pork and squash singles.

What can we do? Some Guidelines.

- **ASK:** Make sure to ask your clients (whether they own golden retrievers or not) what diets they are currently or previously have fed their dogs
- **INFORM:** Inform your clients of his issue
- **ACT:** If they are currently on, or have been on grain free diets in the past, submit baseline **WHOLE** blood taurine levels and **AFTER** submitting the **WHOLE** blood taurine levels, switch diets if indicated. Temporary taurine supplementation may be necessary. If levels are low, take baseline chest films, if cardiomegaly noted on the radiographs, an echocardiogram is indicated to complete your baseline evaluation. Additional therapy may be indicated.
- **GET MORE INFORMATION:** Dr. Stern has compiled many of the studies in the following links: <https://www.dropbox.com/.../AAB1sDvLZe6gE3httPskz9-0a...>
[Taurine Deficient DCM in Dogs](#)

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