

Golden retriever study sniffs for cancer clues

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Researchers enrolling 3,000 dogs to learn about risk factors for canine disease.

(HealthDay)—Michael Court is a scientist and a dog lover, so he jumped at the chance to enroll his golden retriever in a nationwide study aimed at fighting cancer and other ills in canines.

The study, known as the Golden Retriever Lifetime Study, hopes to ultimately enroll 3,000 purebred goldens. The plan is to observe the dogs in their normal lives—noting what they eat, drink and breathe, among other things—with the goal of pinpointing exposures that raise the risk of cancer, diabetes and other illnesses that strike dogs and humans alike.

"This is a chance to help," said Court, a veterinary scientist at Washington State University. "The findings from this study will be translatable to other breeds of dog, too."

Court said he knows firsthand the pain of losing a dog to cancer. Four years ago, he and his family lost their first golden to bone cancer. About



a year later, they bought a new golden puppy—Matilda—now enrolled in the Lifetime study.

The study is being run by the nonprofit Morris Animal Foundation in Denver. But people who enroll their dogs don't have to leave home. They just have an annual visit with their own vet, and complete a yearly online questionnaire about their canine's diet, living environment, exercise and behavior.

"We're not asking you to do anything to your dog," stressed veterinarian Dr. Michael Guy, the study's director. "We won't tell your vet what to do. This is an observational study."

According to Guy, the project is like the "Framingham Heart Study for dogs."

Framingham is the famous U.S. government study, begun in 1948, that originally recruited about 5,200 adults from Framingham, Mass. Those men and women had periodic exams and completed questionnaires about diet and lifestyle.

The findings ultimately identified major modifiable <u>risk factors</u> for heart disease, including high cholesterol, high blood pressure, smoking, lack of exercise and obesity.

"In the same way, we hope we'll learn about the risk factors for cancer and other diseases in dogs," Guy said.

The study is focusing on golden retrievers, in part, because they have a higher rate of cancer than other breeds—most often developing bone cancer or lymphoma, a cancer of the immune system. Guy said they are also prone to diabetes, arthritis and hypothyroidism—a deficiency in thyroid hormone that often causes hair loss and dry, scaly or thickened



skin.

To try to uncover any modifiable risk factors for those diseases, the golden study is asking dog owners for fairly detailed information. "We're asking a lot of questions about diet," Guy said. "Do they eat commercial or homemade dog food? How often do they feed? Do they get any supplements?"

Another, less appetizing, diet-related question: Does your dog eat feces, and if so, what kind? "Because if you have a dog," Guy said, "you know they do that."

The researchers are also looking at the dogs' exposure to insecticides, their water sources and the type of bowls they use.

"A lot of people are concerned about their own use of plastics," Guy noted. "And some dog owners are starting to move away from plastic containers."

The online questionnaires take one to two hours to complete, Guy said.

As the study progresses and dogs inevitably die, Guy said owners will be asked to consider allowing a necropsy (the animal version of an autopsy). But that's voluntary.

Ultimately, Guy said he expects to find that dogs' risks of cancer and other diseases depend on a mix of genetics and environment—as in humans. The researchers will also analyze the dogs' blood, urine, hair and nail samples to see if they can discover any chemical signals that could eventually allow vets to detect early signs of <u>cancer</u> or other ills.

The study is still looking for more good goldens. "We have just over 1,900 dogs enrolled," Guy said. "We'd like to reach 3,000."



Court encouraged other golden owners to consider joining the project. The findings, he noted, could end up being relevant to human health as well.

"We share the same environment with our <u>dogs</u>," Court said. "So what affects them could potentially affect us, too."

More information: Dog owners can learn more about the <u>Golden</u> <u>Retriever Lifetime Study</u>.

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