

Does Having a Diabetic Pet Raise Your Risk for Diabetes?

Research shows that owners of dogs with diabetes are more likely to develop Type 2 diabetes than owners of dogs without diabetes. Why is that? Many dogs and their owners share certain behavioral, health and other lifestyle factors, but could the 'sharing' of gut health play a role, too?

Analysis by [Dr. Karen Shaw Becker](#)

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STORY AT-A-GLANCE

- Did you know that if your dog has diabetes, your own risk for the disease jumps to 38%?
- Many of the risk factors for Type 2 diabetes — including diet, obesity, and physical activity — are the same for both humans, and dogs and cats
- Exposure to environmental risk factors, like pollutants and endocrine-disrupting chemicals, is also likely to be shared among both humans and their pets
- Shared microbial communities among dogs and their owners could also be involved in diabetes risk
- If your dog is diagnosed with diabetes, it's not a guarantee that you're next, but hopefully it will serve as motivation to make healthier changes in the household — for the sake of both human and furry family members

Furry family members and their humans can have similar health problems, and one shared risk is Type 2 diabetes, a serious condition that is increasing in humans as well as dogs and cats.¹

Many of the risk factors for diabetes in humans — including diet, obesity, and level of physical activity — are the same for dogs and cats, while exposure to environmental risk factors, like pollutants and endocrine-disrupting chemicals, is also likely to be shared among both humans and their pets.

This led a team of Swedish researchers to investigate whether pets and their owners share a risk of developing diabetes, with the results showing a significant association does exist — but only for dogs, not cats.²

If Your Dog Has Diabetes, Your Risk Increases by 38%

The Swedish study evaluated data from 208,980 owner-dog pairs and 123,566 owner-cat pairs. While there was no association between incidence of diabetes in cats and development of diabetes in their owners, people with a diabetic dog had a 38% increased risk of diabetes.³

"It is possible that dogs with diabetes could serve as a sentinel for shared diabetogenic health behaviours and environmental exposures," the researchers suggested.⁴

It's already known, for instance, that dogs and their owners often share certain behavioral, health and other lifestyle factors, like physical activity levels. Obesity is a risk factor for diabetes in both dogs and people, and past studies have also linked obesity in pets with obesity in their owners.

In one 2017 study, 78% of overweight/obese owners had overweight/obese dogs, including all dogs in the study diagnosed with obesity-related metabolic dysfunction.⁵ An earlier 2010 study also found a link, suggesting that the degree to which dogs are overweight is related to the body mass index (BMI) of their owners.⁶

Another 2010 study found that owners of obese dogs were often obese themselves. The researchers noted that these owners also talked to their dogs about a greater variety of subjects and were less concerned with contracting diseases from their pets, which they interpreted as "over humanizing" their dogs.⁷

Further, overweight or obese dogs are twice as likely to have an owner who's overweight or obese as well, according to researchers at the University of Copenhagen.⁸

"Given the previous research on the shared risk of [being overweight] between dog owners and their animals, we believe that shared dietary habits and also physical activity levels might be involved," Beatrice Kennedy, of Uppsala University in Sweden, a researcher on the diabetes study, told The Guardian.⁹

However, it's likely that other factors are also contributing.

Is Shared Gut Health a Factor?

Owning a pet leads to changes in humans' microbiota, and such changes could also be involved in disease risk.¹⁰ Dogs have even been called "the new probiotic" because they give us exposure to a diverse array of dog-borne microbes.¹¹ In fact, one study found having a dog significantly elevated 56 classes of bacterial species while having a cat increased 24.¹²

It's also known that infants exposed to cats and dogs in early life have greater diversity in their gut microbiome, including increased levels of Ruminococcus and Oscillospira, which are linked to a reduced risk of childhood atopy and obesity.¹³

The gut-diabetes link is certainly plausible, especially considering a study confirmed that like humans with Type 2 diabetes, cats with diabetes also have decreased gut microbial diversity.¹⁴ The researchers involved in the current study explained:

"It is thus possible that shared microbial communities could influence both owner and dog health, and also that shared dietary and physical activity patterns could affect gut microbiota in dog owners and their pets in a similar fashion."¹⁵

Improving Pets' Health Is a Strong Motivator

If your dog is diagnosed with diabetes, it's not a guarantee that you're next, but it may serve as motivation for everyone in the household to make healthier lifestyle choices. Often, pet parents are willing to make changes for their pet's health that they might not even make for themselves, so this can serve as a motivating factor to improve health and wellness all around.

One of the best ways to avoid Type 2 diabetes in pets is by feeding a portion-controlled, low glycemic, species-specific diet consisting of a variety of unadulterated protein sources, healthy fats, low starch veggies and fruit in moderation. The most important thing you can do is keep your dog's carb intake less than 20% of his diet. In addition, an absolute minimum of 20 minutes of daily aerobic exercise is required for both dogs and cats.

These steps, along with avoiding over-vaccination, can help keep your four-legged family member in great overall health. If you'd like to keep closer tabs on your pet's metabolic health in particular, ask your veterinarian for a test called A1CARE, which can detect not only clinical but also subclinical/transitional diabetes.

Sources and References

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