

**Dog Tips** 

# One Simple Way to Prevent Dementia in You and Your Dog

Because doggy dementia looks a lot like dementia in humans, you both benefit when you do this on a regular basis. In fact, among dogs of the same age, those who were deprived of this were 6.47 times more likely to suffer from canine cognitive dysfunction, compared to those who weren't.

#### Analysis by <u>Dr. Karen Shaw Becker</u>

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### STORY AT-A-GLANCE

- Dementia in dogs shares many similarities with dementia in humans, including routes to prevention
- In both dogs and their owners, staying active helps reduce the risk of cognitive dysfunction
- This is good news for both species, since it means going for a daily walk together may help protect brain health for both of you, well into old age
- Among dogs of the same age, those that were not active were 6.47 times more likely to suffer from canine cognitive dysfunction compared to those that were very active
- It's possible that physical activity could reduce pro-inflammatory cytokines in the brain; exercise may also increase neural plasticity

Dementia in dogs shares many similarities with dementia in humans, including routes to prevention. In both dogs and their owners, it appears that staying active helps reduce the risk of cognitive dysfunction. This is good news for both species, since it means going for a daily walk together may help protect brain health well into old age.

The risk of dementia in dogs, otherwise known as canine cognitive dysfunction (CCD), increases with age. In fact, data involving companion dogs taking part in the Dog Aging Project found that odds of CCD increased 52% with each additional year of age.<sup>1</sup>

However, among dogs of the same age, those that were not active were 6.47 times more likely to suffer from CCD compared to those that were very active — a trend seen in humans as well.

## **Inactivity Tied to Dementia in Dogs**

When evaluating dogs of the same age, numerous factors were considered for their role in dementia risk — sterilization status, breed and health status among them. But aside from age and history of an eye, ear or neurological disorder, only **activity level** had an effect.

"An inverse association was seen in dogs whose owners indicated higher dog activity levels over the past year.

Previous studies with rodent models have demonstrated that exercise can have protective effects against the development of biological markers and subsequent behavioral deficits characteristic of AD [Alzheimer's disease], and numerous observational human studies have consistently shown inverse associations between exercise and AD," the researchers noted.<sup>2</sup>

It's possible that physical activity could reduce pro-inflammatory cytokines in the brain, compounds that contribute to neural damage and death. Exercise may also increase neural plasticity.<sup>3</sup>

Speaking with The Washington Post, study author Matt Kaeberlein, co-director of the Dog Aging Project, stated that "taking your dog for a walk" or really any type of physical activity "is likely to be beneficial" for its brain.<sup>4</sup> It turns out, the same holds true for humans.

## **Walks Also Benefit Human Brains**

A human study published in JAMA Neurology found that a higher number of daily steps was linked to lower risk of all-cause dementia. Taking just under 10,000 steps per day appeared to be "optimally associated with a lower risk of dementia," while performing steps at higher intensity was even more strongly associated with reduced dementia risk.

However, even lower amounts of physical activity — 3,826 steps per day — was associated with a lower risk. While those walking about 9,800 steps daily cut their risk of developing dementia by 50%, those taking about 3,800 steps daily had a 25% lower risk — more if the steps were done briskly.

The findings have implications for pet owners, since previous research found dog owners are four times more likely to meet physical activity guidelines than people without a dog.<sup>6</sup> "Our findings provide support for the role of pet dogs in promoting and maintaining positive health behaviors such as walking. Without dogs, it is likely that population physical activity levels would be much lower," the researchers explained.<sup>7</sup>

Not only do dogs provide motivation for people to get moving, but dogs enjoy benefits from having active owners. In a survey of 3,298 people that included dog owners from France, Germany, the United Kingdom, Canada and the U.S., it was found that active pet owners were more likely to have active pets, which translated to healthier dogs.<sup>8</sup>

# What Else Lowers Dementia Risk in Dogs?

Doggy dementia, a neurodegenerative condition, is often characterized by memory deficits, loss of spatial awareness, altered social interactions and sleep disruption. Estimates of CCD rates range from 28% in 11- to 12-year-old dogs up to 68% in 15- to 16-year-old dogs.<sup>9</sup>

Aside from physical activity, a species-specific (low carb), minimally processed nutritionally balanced diet rich in healthy fats, including omega-3 fatty acids (DHA and EPA) and healthy functional fats that nourish the brain, such as MCT oil, is very important for cognitive health.

If your dog is showing signs of CCD, such as staring at walls or floors or getting stuck in odd places, like behind furniture, nutraceutical support can also be beneficial. I recommend 1/4 teaspoon of coconut oil for every 10 pounds of body weight, added daily to food, along with a source of methyl donors, such as SAMe (S-adenosylmethionine), which can assist in detoxification and reduce inflammation.

I also recommend working with an integrative or functional medicine veterinarian early on in the disease process, so you can address issues as soon as symptoms became noticeable. Before that point, though, it's possible you can stave off dementia altogether just by staying active together.

## **Tips for Getting Active With Your Dog**

Looking for exercises you can do with your dog? The best activities for you and your pooch depend on your interests, age and fitness levels. Running, biking, hiking and walking are all options to consider.

For something different, consider a dog-centric activity that can get you up and moving as their trainer and coach, such as flying disc, dock jumping, flyball, flygility, herding, hunt and field trials, musical freestyle and heel work. The good news is, dogs are almost always ready for a new adventure. So if your motivation has been lacking to get up, out and moving, your canine companion may be the perfect workout partner.

#### **Sources and References**

- 1,2,3 Scientific Reports August 25, 2022
- <sup>4</sup> The Washington Post November 16, 2022
- <sup>5</sup> JAMA Neurology September 6, 2022
- 6,7 Scientific Reports April 18, 2019
- <sup>8</sup> PLOS One August 24, 2022
- <sup>9</sup> EurekAlert! News Release, August 25, 2022