Do Small Dogs Live Longer?

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Dr. Ernie Ward *explains why small dogs tend to live longer than big dogs. For more from Dr. Ward, find him on* Facebook *or at* www.drernieward.com.

As a practicing veterinarian of over twenty years, I've been nagged by an obvious and seemingly unanswerable question: why do small dogs live longer than large dogs? For years it's been widely accepted and understood in the pet world that tiny teacup poodles will live ten or more years longer than a Great Dane. They're both dogs, share the same basic DNA, eat the same types of foods, and live in similar homes. Yet one breed lives up to three times longer. Why? New research sheds some light on this issue.

In the April issue of the scientific journal "The American Naturalist," biologists at Germany's University of Göttingen explored the relationship between size of dog breeds and life expectancy. Researchers analyzed data on over 56,000 dogs representing 74 breeds that visited North American veterinary teaching hospitals. The scientists found that larger dogs appeared to age at a faster rate than smaller dogs. Interestingly, the research concluded that every increase in 4.4 pounds (2 kg) reduces life expectancy by approximately one month.

Okay, so my observations on small dogs living longer than big dogs were correct. But why?

That has yet to be definitively determined. Lead researcher Cornelia Kraus has been quoted saying that larger dogs' lives "seem to unwind in fast motion." Her research found that bigger breeds died more often from cancer than their tinier canine cousins. Kraus speculates that because large breeds grow faster and age quicker than small breeds, that abnormal cell growth found in cancers would be more likely. Another possibility is that larger dogs start aging at an earlier age, thus developing age-related diseases earlier. Kraus also postulated that larger dogs may simply live riskier or more dangerous lifestyles than dogs carried in handbags, thus leading to earlier mortality.

When Kraus and her colleagues plotted each of these three possibilities with the data, she found that the "faster aging" hypothesis was most consistent with her findings.

My own suspicion is that in addition to accelerated cell division and growth, researchers will also discover more genetic abnormalities in large breeds due to fewer breeding pairs and smaller geographic distributions. I also think they'll find differences in key hormones such as IGF-1 or insulin-like growth factor 1, something scientists have previously suggested. After all, we've created these breeds to suit our particular working needs and tastes without regard to their individual longevity. In addition, many giant breed dogs aren't as popular as more compact canines, especially in the United States. For example, the top three largest breeds in this year's top 10 American Kennel Club (AKC) breeds list are Labrador and Golden retrievers and German shepherd dogs. Not exactly Great Dane and mastiff-sized canines. In fact, of the large breeds Rottweilers ranked ninth in 2012, Dobermans peaked at 12, Great Danes reached 17, and Mastiffs topped out at 26. All the rest of the most popular breeds are smaller.

So this particular research didn't exactly answer my question. Yet. Kraus and her colleagues are now pursuing why the death rates are younger in large breeds since they've established that it does, in fact, occur.

If you have any questions or concerns, you should always visit or call your veterinarian – they are your best resource to ensure the health and well-being of your pets.

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