# bark & whiskers

Dog Tips

# Groundbreaking Study: How to Add Years to Your Dog's Life

The 24 Labs in this study lived an average of two years longer than the control group of dogs when their owners followed this straightforward protocol. Try it with your canine to give him his best chance of living a long, healthy life. If your dog needs to slim down, this is the strategy for you.

### Analysis by Dr. Karen Shaw Becker

## STORY AT-A-GLANCE

- In the U.S. today, we have an epidemic of overweight/obese dogs; we also have dogs with diseases that cause weight loss, but what we don't have are many healthy "skinny" dogs
- A groundbreaking 2002 study of 48 Labrador Retrievers from birth to death revealed that the dogs fed a ٠ calorie-restricted diet lived an average 2 years longer than the control group of dogs, with delayed onset of many age-related degenerative diseases
- Intermittent fasting can help you keep your canine companion lean; it can also help heavy dogs lose weight ۲ and improve the health, wellness, and longevity of almost any dog
- There are a variety of approaches to intermittent fasting (time restricted feeding) that can accommodate ۲ almost any busy person's daily/weekly schedule

### Editor's Note: This article is a reprint. It was originally published April 05, 2021.

According to Colorado veterinarian Dr. Stephen Sheldon in an opinion piece he wrote recently for online news source VailDaily, he's often asked by pet parents if their dog is too skinny. The question is typically prompted by a friend, neighbor or relative who tells the pet owner their furry family member is too thin. Most of the time, the person offering the critique has developed something akin to canine fat blindness.

"With over 50% of American dogs classified as overweight or obese" writes Sheldon, "my answer is almost always an emphatic 'no' followed by me citing studies showing that skinny dogs live longer. A lot longer in fact."<sup>1</sup>

## Lean Dogs Live Longer, Healthier, Higher Quality Lives

Sheldon cites a groundbreaking 2002 study I've also mentioned in several articles here at Healthy Pets that followed 48 Labrador Retrievers from the age of 8 weeks until death. Half the dogs were fed a 25% calorie restricted diet (CRD); the other 24, the control group, were not. The results were stunning:

"Compared with control dogs, food-restricted dogs weighed less, had lower body fat content and lower serum triglycerides, triiodothyronine, insulin, and glucose concentrations. Median life span was significantly longer for dogs in which food was restricted. The onset of clinical signs of chronic disease generally was delayed for foodrestricted dogs."<sup>2</sup>

The CRD-fed dogs also had a lower rate and severity of arthritis and lived an average of 2 years longer than the control dogs (11.3 vs. 13 years, per Sheldon). In addition, the "skinny group" died a more natural death, while almost 90% of the control group dogs were euthanized due to medical problems, primarily arthritis.

Think about that for a second: Not only did the families of the 24 CRD-fed dogs have them around significantly longer, but their dogs also had a higher quality of life because they weren't debilitated by the degenerative joint disease (arthritis) that plagues the vast majority of large breed dogs in their senior years (or earlier).

"Since this original study numerous groups have repeated it and achieved almost identical results," Sheldon writes. "What they have also found is that being skinny delays the onset of many age-related degenerative diseases like cancer, diabetes, organ failure and arthritis."

You can find much more information on the pet obesity epidemic, including how to determine your dog's body condition score, as well as guidance on tackling the problem if he or she needs to lose weight, <u>here</u>.

With all that said, too-skinny dogs do exist, and sudden or significant weight loss in a non-dieting dog should always prompt a visit to your veterinarian (more about that shortly). On the other hand, there are also perfectly healthy "too-skinny" dogs running around.

"I have had a few cases over the years," says Sheldon, "where I was certain there was underlying disease; these dogs were just too skinny. 'Every veterinarian has told me Basil is too skinny' said his owner; this being one of my favorite stories. 'Go ahead and run whatever test you want.' So I did, and found Basil completely disease-free. He lived skinny to the ripe old age of 17."

## How to Help Your Dog 'Live Skinny'

Intermittent fasting (also called time restricted feeding or eating) is a great approach for weight loss, weight maintenance and improved overall health in dogs (cats should never be fasted more than 16 hours due to the risk of hepatic lipidosis).

In fact, with a few notable exceptions (growing puppies, lactating females, dogs with health conditions for which timerestricted eating is contraindicated, and toy breeds under 3 pounds that might be prone to hypoglycemia), I believe creating an "eating window" (and fasting dogs the rest of the day) is the most underutilized strategy not only for weight loss, but also for improving health, wellness, and longevity in dogs.

Intentional intermittent fasting involves consuming sufficient nutrients in a 24 hour period to maintain vital tissues,

organs and muscle, along with liver enzyme co-factors to help with fat breakdown and the release of toxins, while providing the body with an opportunity to rest, rebuild and restore itself (which can only happen when it isn't actively digesting food).

Dr. Satchin Panda from the Salk Institute told me it's not just what our pets eat, it's when they eat that's equally important. When I interviewed him about dog circadian rhythms, he was quick to point out dogs were never meant to have a steady stream of calories coming in from morning until just before bed.

Between meals, treats and snacks, many well-loved dogs are in a constant state of processing calories, something science has proved is least optimal for achieving long-term health and wellbeing.

Giving the body a break from constantly digesting and processing food not only restricts calories, which is linked to long-term health benefits,<sup>3</sup> it also improves mitochondrial function<sup>4</sup> and allows organs time to repair and regenerate.

In addition, providing the body adequate time to rest in between periods of digestion sparks a process called autophagy, which allows the body to recycle and clean up cellular debris and waste that builds up over time. All of your dog's innate anti-aging strategies are evoked when digestion isn't taking place, or when they are fasting.

Many pet owners are extremely uncomfortable with the thought of "denying their dog food," but I'd like to propose reframing the idea of intermittent fasting as a daily opportunity to intentionally create health while providing all the nourishment your dog needs in a set period of time that achieves optimal health.

When you think of it this way, you realize you aren't denying them anything, you're actually helping your animal achieve improved wellbeing, not to mention extending their lifespan.

Fasting for part of the day triggers a dog's body to metabolize fat. Waste products stored in fat are released so detoxification can occur. This waste not only includes breakdown products of natural substances the liver couldn't process, but also toxins absorbed from the environment, for example, chemical pest repellents.

Robert Mueller, co-developer of BARF brand diets and an advocate of fasting lists several other benefits, including:<sup>5</sup>

- "Elevating macrophage activity, which will engulf and destroy bacteria, viruses, and other foreign material."
- "Allowing the digestive system to relax and let the body focus on other important bodily functions."
- "Allowing the body to regenerate briefly. 'It is amazing to watch a complete reversal of digestive symptoms such as upset stomach and diarrhea, as well as allergy relief."

The same health benefits that occur in people who therapeutically fast also occur in dogs who are fasted. One of the most notable, system-wide benefits is a reduction in the amount of insulin, a pro-inflammatory hormone that circulates in the body. This not only reduces systemic inflammation, but also helps to maintain insulin sensitivity.

Research shows that dogs enter into the profoundly health-enhancing metabolic state of nutritional ketosis when a period of fasting is implemented, and preliminary research demonstrates that the same immunologic and metabolic improvements seen in calorie-restricted humans are most likely happening in canines as well.<sup>6</sup>

## **Approaches to Intermittent Fasting for Dogs**

There is more than one way to fast a healthy dog, but for purposes of weight loss, the first thing you must do is calculate how many calories to feed each day. Let's say your Golden Retriever is 80 pounds and should be 65 pounds:

Daily calories = Body weight (kg)  $\times$  30 + 70

First, convert your dog's weight from pounds to kilograms. One kilogram = 2.2 pounds, so divide her ideal weight (not her current weight) in pounds by 2.2. 65/2.2 means your dog's ideal weight in kilograms is 29.5.

Now the formula looks like this:

And finally, it looks like this:

Daily calories to maintain a 65-pound dog = 955

The 955 calories per day number (including treats) is what an average 65 pound dog needs to maintain that weight. If your 80-pound dog isn't exhibiting signs of profound hunger you can begin feeding this amount of food in a 24-hour period and she should drop steadily to her ideal weight of 65 pounds and maintain it.

If your dog immediately notices the smaller portion size you can calculate the calories needed for a 75-pound dog as a first weight loss goal, and once she's achieved that weight, recalculate calories for a 70 pound weight goal. Once that is reached, reduce her to 955 calories to help her drop to her ideal weight of 65 pounds.

Once she's achieved her ideal body weight you can (and should) continue to harness the long-term health benefits of maintaining a defined "eating window" of time every day; I'm a believer in intermittent fasting as a way of life for pets.

If your dog doesn't need to lose weight or if you're looking to help her gain weight, you can plug in whatever ideal weight you'd like her to achieve in the above equation to determine the calories needed per day to reach the goal.

Creating your dog's eating window can be completely customized around your lifestyle. Ideally, for overweight dogs, consuming all of their daily calorie requirements in a less than an 8-hour eating window is ideal. The clock starts ticking with your dog's first bite of food (or treats) and ends, ideally, at least 2 hours before bed.

Intermittent fasting can involve, for example, feeding two regular meals within a 6-to-8-hour period for a total of 955 calories. You might feed the first meal at noon and the second at 6 pm, creating an 18 hour fast (from 6 pm to noon the next day). If you work late, you can feed the first meal at 7 am and the last meal at 1 pm.

Some pet parents, including me, feed their dogs only once a day, so they actually fast the majority of every day for maximum longevity benefits. As a side note, I feed all of my kitties their daily calories in a window of 10 hours, leaving 14 hours for their rest-repair-restore cycle to healthfully occur.

If you can't create an 8-hour eating window for your dog due to your work schedule, consider feeding her just before you leave for work, and again immediately upon arriving home, with a healthy exercise period later in the evening,

prior to bedtime.

Always keep in mind that dogs aren't evolutionarily adapted to three meals a day. There are numerous studies that point to increased longevity and decreased disease potential when non-grazing animals consume the same number of calories over time but distributed in a more natural "feast or famine" evolutionary pattern. Intermittent fasting mimics the health benefits of traditional fasting (withholding all calories, never water) while minimizing any risks.

An alternative to intermittent fasting is a once a week true fast, which for healthy adult dogs means six days of regular meals, followed by a 24-hour period of water only. Some people choose to offer a big meaty bone on fast day, which really isn't a true fast, but still results in substantially fewer calories ingested in a 24-hour period and positive metabolic

changes.

I encourage you to consult with an integrative veterinarian if you're considering traditionally fasting your dog. And needless to say, all fasts involve restriction of food only, never pure drinking water.

#### **Sources and References**

- <sup>1</sup> <u>VailDaily, January 27, 2021</u>
- <sup>2</sup> JAVMA, Vol 220, No. 9, May 1, 2002
- <sup>3</sup> Journal of the American Veterinary Medical Association, May 1, 2002, Vol. 220, No. 9, Pages 1315-1320
- <sup>4</sup> Brain Research, Volume 1226, 21 August 2008, Pages 209-217
- <sup>5</sup> BARF Blog, July 25, 2013
- <sup>6</sup> Journal of Proteome Research, July 5, 2013, 12(7):3117-27