bark & whiskers

Dog Tips Cat Tips

A Way of Life for Wild Canines, This Could Be a Godsend for Your Dog

You rarely hear about this approach to total body regeneration, but it can offer significant health benefits for the right type of dog. It triggers your dog's body to metabolize flab and release stored toxins and waste products, reducing your pet's toxic load.

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

STORY AT-A-GLANCE

- Therapeutic fasting offers significant health benefits for companion animals, primarily healthy adult dogs; canines in the wild fast on a regular basis
- Therapeutic fasting, or better termed "intermittent eating," is not starvation because it involves sufficient nutrient intake to maintain vital tissues, organs and muscle, along with liver enzyme cofactors
- Benefits of fasting for dogs include elevating macrophage activity, giving the digestive system a rest and allowing the body to regenerate
- Research shows healthy dogs can fast for long periods; it's important to consult with your veterinarian if you're considering fasting your dog

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The thought of skipping a meal for many people is unfathomable, and the thought of intentionally not feeding your healthy dog for a day might be considered cruelty to animals by some. But the truth is, most people and pets in North America overconsume food on a regular basis, resulting in a host of metabolic disease epidemics (obesity, cancer and diabetes, to name a few) we could all avoid by just putting down the fork or picking up the bowl once in a while.

Therapeutic fasting can offer significant health benefits for companion animals, but we don't hear much about it, perhaps because not every pet can be fasted, and the results can be catastrophic if food is withheld from the wrong animal. For example, I've had personal experience with clients who arbitrarily decided to fast animals for which it wasn't cafe, including:

wasn't safe, including:

- A 4-month-old puppy who developed hypoglycemia
- A diabetic dog, fasted after a dose of insulin, who also developed hypoglycemia
- An **overweight cat** who developed hepatic lipidosis (fatty liver disease)
- A very elderly, ill Schnauzer who was already cachexic (wasting away)

Fasting more than 12 hours is never a good idea for cats, especially if they're overweight, due to the risk of hepatic lipidosis. As a general rule, it's only safe for healthy adult dogs, and should be avoided for growing puppies, lactating females, old dogs, dogs with health conditions for which fasting is contraindicated and small toy breeds prone to

hyperglycemia.

However, aside from these specific cases, I believe fasting is the cheapest, most underutilized strategy for improving health, wellness and longevity in dogs. And because most people in the U.S. are food-addicted, many pet parents are guilty of constantly feeding their dogs as they feed themselves, resulting in a host of chronic, degenerative diseases that are avoidable through eating appropriate food, and following an appropriate feeding schedule.

Wild Canines Fast as a Way of Life

Complete or modified fasting is a normal occurrence in the lives of wild dogs, and is beneficial to their health, in part because it puts them into **ketosis**. In an article for Veterinary Practice News, my friend and fellow veterinarian Dr. Nancy Scanlan writes:

"Wolves, the dog's closest living relative, are a window into normal dog physiology (before modification by kibbled dog food, dog sweaters and doggie beds). An ongoing study of wolves reintroduced to Yellowstone National Park confirms that they 'are adapted to ... feast-or-famine foraging.'¹

When hunting is easy, packs make a kill every two to three days. An elk is consumed in this order: first, organ meats, then major muscle masses, and finally bone and hide. In this case, at the end of the two or three day period, lower caloric value is consumed, and bones are eaten at the same time as hide, including the fur.

This mimics to a certain extent the alternate [high-calorie/low-calorie] day diet used in one type of CRD [calorierestricted diet]. In leaner times Yellowstone wolves have scavenged mostly bone and hide for several weeks at a time. This is more like a prolonged modified fast."²

Additionally, as wild dogs age, their ability to catch prey consistently diminishes; they are not successful in catching food every day. Nature built into their system a means of sustaining health through periods of no food consumption by allowing their bodies to burn two fuel sources: glucose (during "feasts") or ketones (during "famine").

Ketone bodies (or ketones) are naturally produced energy molecules which occur from the breakdown of stored fat. Ketones are efficiently used by muscle tissue, the heart, eyes and other organs as an awesome fuel source when glucose is in short supply. Research shows ketones readily cross the blood/brain barrier to fuel the brain and in fact, may be the brain's preferred fuel source.

Like humans, all dogs (wild and domestic) have the ability to utilize either glucose or ketones as a fuel source; think of

their bodies as being a hybrid engine, able to use either glucose or ketones for energy.

The year I spent making the Dog Cancer Series documentary, talking to top veterinary oncologists, metabolic doctors and cancer researchers, convinced me that one of the healthiest things we can do for our own bodies (and for our pets) is to occasionally but consistently fire up this innate, healing, metabolic pathway.

Allowing our dogs' bodies to naturally create and burn ketones has proven to not only be a profound healing strategy for disease recovery (as documented by the astounding success of KetoPet Sanctuary) but is a commonsense approach to intentionally creating wellness through wise lifestyle choices, including fasting.

Intermittent Eating (Therapeutic Fasting) Is Not Starvation

It's important to understand that therapeutic fasting is not starvation. Intentional fasting for health and wellness involves sufficient nutrient intake on non-fasting days to maintain vital tissues, organs and muscle, along with liver enzyme cofactors to help with fat breakdown and the release of toxins. On fasting days, water is always available.

Starvation, on the other hand, involves no nutrient intake and depletes all reserves in the body, at which point vital tissues begin to break down.

Fasting triggers a dog's body to metabolize fat. Waste products stored in fat are released. 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**.

Because the body isn't being asked to digest and absorb large meals during a fast, the liver can more efficiently process the released waste products, which decreases the body's toxic load.

Benefits of Fasting

Robert Mueller, co-developer of BARF brand diets and an advocate of fasting, believes it offers several benefits, including:³

- "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.""

"In a nutshell," Mueller writes on the BARF Blog, "a domesticated dog is able to reap benefits by fasting. It can boost their metabolism, maintain a healthy appetite and weight, and optimize their overall health. For best results you should start out slow by fasting once a month, and then increasing the fast eventually to once a week.

The fast will give the digestive system a break and allow the body to regenerate and preserve the essential digestive enzymes from depletion. When a dog's body is allowed to focus on other metabolic activities, it conserves energy, detoxifies, and builds resistance to disease."

The same myriad of health benefits that occur in people who therapeutically fast also occur in dogs that fast. 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 helps to maintain insulin sensitivity. Every treat, nibble and bite of food your dog eats requires insulin, and giving him a break from chronic insulin production is not only wise, it can be lifesaving.

We know now that dogs and cats enter into the profoundly health-enhancing metabolic state of nutritional ketosis when fasting is implemented and preliminary research demonstrates that, at least for dogs (no one is studying it in cats yet) the same immunologic and metabolic improvements seen in calorie-restricted humans are most likely happening in canines as well.⁴

Giving the body a break from constantly digesting and processing food not only restricts calories, which is linked to long-term health benefits,⁵ it improves mitochondrial function⁶ and allows organs a chance to repair and restore function, and it sparks a process called autophagy, which allows the body to recycle and clean up cellular debris and waste that builds up over time.

How Long Can Dogs Fast?

In the Dog Cancer Series documentary I co-produced with Rodney Habib of Planet Paws, we interviewed Dr. Thomas Seyfried, one of the leading pioneer academic researchers in treating cancer as a metabolic disease. He's been teaching neurogenetics and neurochemistry as it relates to cancer treatment at Yale University and Boston College for 30 years.

The biggest fear of fasting for many pet parents is the idea that their dog might starve in a short period of time. But in the Dog Cancer Series, Dr. Seyfried tells the story of Oscar the dog. Oscar lived on a farm, and was brought into a laboratory because scientists wanted to test how long a dog could go without eating.

They gave Oscar only water and measured chemicals from his muscles (creatinine kinase and blood urea nitrogen). When the dog's urea began to rise, the researchers knew he was starting to starve. They stopped the experiment at day 45, and Oscar returned to the farm.

A year later, the scientists brought him back into the lab to repeat the experiment. They expected to see a rise in urea earlier than 45 days this time around. However, Oscar's urea didn't even start to rise until day 103. At 100+ days without food, the dog was still able to jump over the 3-foot fence to get into his kennel. Oscar had adapted to his state of starvation.

Dr. Seyfried points out these experiments would never ethically be conducted today, however, it proves a clear point, which is the incredible ability of the body to survive without food. Bottom line: "Your animal is not going to die if you don't feed him for a few hours or even for a day," says Rodney.

"The converse is even more important," adds Dr. Mercola. "Not only will they not die, if you fail to implement a fasting protocol, you will prematurely cut short their life. Guaranteed. No question about it. They were designed to fast and if you deny them that because you think somehow they're hungry, you are going to prematurely kill them."

How Long Should You Fast Your Own Dog?

There are many ways to fast a healthy dog. One of the most common ways to reap the benefits of rest from food is intermittent fasting, which involves intentionally not feeding your dog for part of the day.

Many people incorrectly assume their carnivorous pet should be nibbling or grazing all day like vegan ruminants such as cows and horses. This is a recipe for metabolic dysfunction over time, in my opinion, especially if pets are nibbling on starchy kibble or snacks throughout the day.

Intermittent fasting means you feed your dog one or two square meals a day, but both meals within a six- to eighthour period. For example, the first meal at noon and the second meal at 6:00 pm, effectively creating an 18-hour fast. At my house, I only feed my dogs once a day, so my babies fast the majority of the day (and are healthier for it!). You can also feed your pet just before you leave for work, and again immediately upon arriving home, effectively creating a 10-to 12-hour fast.

Paws For Change Director Daniel Orrego points to the fact many dogs already choose to naturally fast throughout the day, yet owners panic when this happens. For example, many dogs don't want to eat breakfast, but their owners force caloric intake when the dog's body is doing what it naturally should, which is to fast.

What we know to be true is that dogs were not wired (or evolutionarily adapted) to eat three meals a day. There are numerous lab animal studies that point to increased longevity and decreased disease potential when animals consume the same number of calories over time, but distributed in a more natural evolutionary pattern.

For instance, if a dog requires 3500 calories a week to maintain a healthy body weight, is there a difference (metabolically) if they consume 500 calories once a day for a week or 250 calories twice a day for a week, versus 1000 calories every other day?

Research shows there is a huge difference, in terms of health outcomes, longevity and overall wellness. In essence, it matters not only what we feed, in terms of macronutrient ratios and form of food (high heat-processed versus minimally processed or raw), but how much we feed and how often we feed that ultimately creates health or disease. The more closely we mimic nature, the healthier we all are.

An alternative to intermittent fasting that many people have utilized for years is a once-a-week 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 being ingested in a 24 hour period, which results in increased autophagy, less insulin secretion, less organ stress and less inflammation generated for that day, which is incredibly beneficial over a lifetime.

I strongly encourage you to consult with your holistic or integrative veterinarian if you're considering fasting your dog for optimal health, wellness and longevity. Of course, all fasts only involve restriction of food, never pure drinking water.

Sources and References

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