

# How to Help Your Dog Avoid Malignancy

While you can't alter your dog's genetics, there are many things you can do to help him avoid tumors and other malignancies. My No. 1 recommendation not only provides your dog with his best chance of avoiding malignancy, it could also help him live up to two years longer than others.

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## STORY AT-A-GLANCE

- Cancer is far too common in dogs today, especially large and giant breeds/breed mixes, and purebreds
- While it's not possible to alter your dog's genetics, the good news is there are many things you can do to help your furry family member avoid cancer
- Keeping your dog slim and trim, feeding an anti-inflammatory diet, reducing toxin exposure, picking the right time to sterilize, and avoiding unnecessary vaccinations are my top five recommendations
- Additional suggestions include customizing prevention around your dog's unique risks, including protecting your dog from sunburn, neutering a male dog with an undescended testicle(s), and keeping an eye out for classic signs of canine cancer

Cancer is far too common in canine companions, particularly large and purebred dogs, with Boxers, Beagles, and Golden Retrievers at the top off the list. Obviously, you can't change your dog's genetic makeup. But the good news is that there are many things you can do to minimize your furry family member's risk of developing cancer.

Although you can't change our pet's DNA, you can influence the environment around it, which research shows contributes to the suppression or expression of genetic variants. This is the field of epigenetics, which investigates how lifestyle choices and environmental factors powerfully affect our animals' genomes and in turn, their disease resiliency.

## How to Help Your Dog Avoid Cancer

It's encouraging to see pet care recommendations that focus on disease prevention. For example:

According to veterinarian Dr. Lee Pickett, writing in a recent column for the Arkansas Democrat Gazette *"Overweight dogs develop cancer more often than slim ones. Slim dogs also live two years longer than their overweight counterparts, so keep your dog at a healthy weight."*<sup>1</sup>

**My No. 1 recommendation: Keep your dog slim and trim** — Studies show that restricting the number of calories an animal eats prevents and/or delays the progression of tumor development across species. Fewer calories cause the cells of the body to block tumor growth, whereas too many calories can lead to obesity, and obesity is closely linked to

increased cancer risk in humans.

There is a connection between too much glucose, excessive insulin, inflammation, and oxidative stress — all factors in obesity — and cancer. It's important to remember that fat doesn't just sit on your pet's body harmlessly. It produces inflammation that can promote tumor development.

*"While no research has shown that any particular diet prevents cancer, there is some evidence that omega-3 fatty acids may help reduce risk," writes Pickett.*

**My No. 2 recommendation: Feed a low glycemic, anti-inflammatory diet** — Anything that creates or promotes inflammation in the body increases the risk for cancer. Current research (which Pickett may not be aware of) suggests cancer is actually a chronic inflammatory disease, fueled by sugar (aka soluble carbohydrates). The inflammatory process creates an environment in which abnormal cells proliferate.

Cancer cells require the glucose in carbohydrates to grow and multiply, and pets don't have a carb requirement, so do the carb equation with your pet food, and keep starch (sugar) less than 20% of your pet's caloric intake, and ideally under 10%. Most raw food diets are naturally ketogenic (higher in fat, moderate protein and low carb), and are a wise choice to reduce glycemic stress throughout your pet's life.

Keep in mind that all dry pet food (i.e., "fast food") contains some form of potentially carcinogenic, highly processed starch. It may be grain-free, but it can't be starch-free because it's not possible to manufacture kibble without using some type of starch.

The correlation between consuming fast foods and cancer has been established in humans,<sup>2</sup> which is why my advice is to incorporate as much fresh, unprocessed real food into your entire family's diet as you can afford.

Cancer cells generally can't use dietary fats for energy, so high amounts of good quality fats are nutritionally beneficial for dogs fighting cancer, along with minimal carbs. The vast majority of pets are fed biologically inappropriate, starch-heavy ultraprocessed diets (aka "fast pet food"), making inflammation impossible to manage.

Another major contributor to inflammatory conditions is a diet too high in omega-6 fatty acids and too low in omega-3s. Omega-6s increase inflammation while the omega-3s do the reverse.

Ultraprocessed pet food is typically loaded with omega-6 fatty acids and deficient in undamaged DHA and EPA, the delicate omega-3s that aren't included or become toxically damaged during high heat processing. Rancid fats that have been recycled from the human fast-food industry and used as palatability enhancers in kibble are also a problem.

A healthy diet for your pet — one that is anti-inflammatory and anti-cancer — consists of real, whole, fresh foods, preferably raw.

It should include high-quality protein, including muscle meat and organs, along with high amounts of unprocessed animal fat, high levels of EPA and DHA (omega-3 fatty acids), and appropriate amounts of fresh, low glycemic veggies that contain a variety of cancer-fighting polyphenols, antioxidants and bioactive molecules that protect your pet's DNA from oxidative stress. None of these important cofactors are found in kibble.

Immune-enhancing supplements like turmeric, medicinal mushrooms and super green foods can also be very beneficial, if your pet won't eat them in whole-food form or primarily consumes only ultraprocessed food.

*Per Pickett, "Environmental toxins can cause cancer in dogs. If you smoke, do so outdoors away from your dog, or better yet, quit. Dogs with long muzzles are particularly susceptible to nasal cancer from secondhand smoke."*

*Some lawn chemicals increase the risk of cancer, so don't use them, or keep your dog off the grass until the application dries or penetrates into the soil. Paints, solvents and asbestos can also cause cancer, so keep your dog away from them."*

**My No. 3 recommendation: Reduce or eliminate exposure to toxins** — These include chemical pesticides like flea and tick preventives, lawn chemicals (weed killers, herbicides, etc.), tobacco smoke, flame-retardants, household cleaners, and air scenting products like candles and plug-ins. Because we live in a toxic world and avoiding all chemical exposure is nearly impossible, I also suggest offering a periodic detoxification protocol to your pet.

*"Large-breed dogs sterilized before physical maturity are at increased risk of some cancers. So, if you have a large dog, talk with your veterinarian about the timing of spay/neuter surgery,"* advises Pickett.

**My No. 4 recommendation: Carefully consider the timing of sterilization** — Alternative sterilization methods can be done at any age (including very young puppies) because they don't disrupt important hormone balance. Traditional spaying and neutering should be delayed until dogs are skeletally mature to reduce a variety of desexing complications.

**My No. 5 recommendation: Refuse unnecessary vaccinations** — Vaccine protocols should be tailored to minimize risk and maximize protection, taking into account the breed, background, nutritional status, lifestyle, and overall vitality of the pet. We want our pets protected against infectious diseases, but we also know vaccines can cause cancer.<sup>3</sup> Antibody titer testing is a responsible way to ensure your pet has adequate immunity in place of over-vaccinating on an annual basis.

## Additional Cancer Prevention Tips

*"Scottish terriers develop transitional cell carcinoma of the urinary tract more often than other breeds. However, some research suggests that feeding them cruciferous vegetables could diminish their risk,"* writes Pickett.

**I recommend a variety of fresh fruits and veggies for dogs** — The Purdue study Pickett is referring to actually states that a variety of dark green leafy and yellow-orange vegetables fed only three times a week demonstrated a more than 70% reduction in the incidence of bladder cancer in Scotties.<sup>4</sup> This study exemplifies using as food as medicine to positively affect dogs epigenetically, reducing a breed's predisposition to cancer.

Cruciferous vegetables are excellent treats or toppers for pets because they are loaded with vitamins (especially vitamins K, A and C) and antioxidants, but also the anti-cancer compound sulforaphane. Broccoli stems contain high quantities of sulforaphane and are often thrown out so chop them up and add a small amount to your dog's food as a superfood topper.

If your dog won't eat fresh broccoli, try adding a pinch of broccoli sprouts for every 10 pounds of body weight to whatever she's eating. This is a great way to bolster her free radical scavenging abilities and deliver ten times the sulforaphane of regular broccoli. Sprouts can be grown on your kitchen counter in a few days and can easily be hidden in foods or treats for less than a nickel a day.

*"If your dog has a white face or short hair," says Pickett, "you can help prevent skin cancer by applying a pet sunscreen and clothing that blocks the transmission of ultraviolet radiation."*

**Identify your dog's specific weak links and fortify them** — Dogs are all unique individuals with their own set of genetic variants and environmental risks that should be assessed on a case-by-case basis. Working with an integrative veterinarian who can help assess your pet's unique environmental predispositions can be very beneficial at proactively addressing risks before they create disease states.

One of the risks noted by Pickett was animals that are prone to sunburn. In these situations, I recommend a nontoxic, dog-safe sunscreen in certain situations.

It's not always safe to assume that just because your dog wears a fur coat, she's protected from skin cancer, especially if you live in a location that's usually sunny every day. Dogs who shouldn't overdo it include those with:

- White coats
- Short coats
- No coat (hairless)
- Dogs with pink or light-colored noses
- Dedicated sun worshippers (especially if they lay on their backs)

You can protect your dog from the sun's harmful rays with a **nontoxic, dog safe sunscreen**. I recommend a product designed to not only help protect your pet from potentially harmful rays, but also to nourish and moisturize the skin.

Look for a product that contains no dangerous chemical ingredients, parabens, artificial fragrances, nanoparticles, or mineral oil. It should also be non-comedogenic (doesn't irritate or clog pores) and developed using no animal testing or cruelty.

I also recommend products that contain only zinc oxide for active UVA and UVB ray protection. Unlike some chemical sunscreens that may absorb ultraviolet light, zinc oxide helps reflect and scatter away both UVA and UVB rays from your pet's body. Zinc oxide is found naturally in the earth's crust and is a safe ingredient to help prevent excessive sun exposure.

When you put sunscreen on your dog, be sure to avoid the eyes but be sure to get the area around her face and ears covered, as well as her tummy if she likes to sunbathe belly-up. If she'll be outside for an extended period, reapply the sunscreen about every two hours.

*According to Pickett: "A male dog with an undescended testicle should have it removed because it is much more likely to develop cancer than a testicle that has descended into the scrotum normally. An unsterilized female is at greater risk of developing mammary cancer than a spayed female."*

**The scientific term for undescended (retained) testicles is cryptorchidism. I recommend neutering, including removal of the retained testicle(s), in dogs with the condition** — The risk of developing testicular cancer is estimated to be at least 10 times greater in dogs with cryptorchidism. Testicular tumors are usually malignant and have the potential to spread (metastasize), which is why it's important to treat the condition when it's diagnosed.

The surgical approach will depend on the location of the retained testicle. The condition occurs most often in toy breeds and according to the limited research available at this time, neutering small dogs doesn't seem to have the deleterious effects seen in desexed large breeds.

**I'm not convinced intact female dogs are at increased risk for mammary cancer** — It's generally accepted as fact that female dogs spayed at a young age have a reduced risk of developing mammary tumors — the equivalent of breast cancer in humans.

However, it's worth noting that the results of a 2012 study — a systematic review conducted by veterinary researchers in the U.K. — did not validate the theory that early spaying protects female dogs from mammary neoplasia.<sup>5</sup>

Unfortunately, this study, and the questions it raises, has received very little attention. Breast cancer has a variety of environmental and complex genetic contributing factors in both humans and dogs, and removal of all sex hormones does not guarantee your dog will not succumb to mammary cancer.

You can go here for an in-depth discussion of the role of spaying and estrogen levels in dogs who develop mammary tumors.

*"Regularly check your dog's entire body, including inside the mouth, for any lumps or non-healing sores," Pickett advises. "Note any loss of energy or appetite, unintended weight loss, increased drinking or urination, persistent stomach upset or cough, trouble breathing, discharge or offensive odor. Have your veterinarian immediately check any abnormalities you find, because early diagnosis and treatment increase the likelihood of a successful outcome."*

**I recommend keeping an eye out for the following signs of cancer in dogs** — Make an appointment with your veterinarian if your dog displays one or more of the following 10 warning signs of cancer in pets.<sup>6</sup>

**1. Unusual swellings that don't go away or that grow** — The best way to discover lumps, bumps, or swelling on your dog or cat is to pet him.

**2. Sores that won't heal** — Non-healing sores can be a sign of infection or cancer and should be evaluated by your veterinarian.

**3. Weight loss** — Illness could be the reason your pet is losing weight but isn't on a diet.

**4. Loss of appetite** — Reluctance or refusal to eat is another sign of possible illness.

**5. Bleeding or discharge** — Bleeding can occur for a number of reasons, most of which signal a problem. Unexplained vomiting and diarrhea are considered abnormal discharges, as well.

**6. Offensive smell** — An unpleasant odor is a common sign of tumors of the anus, mouth, or nose.

**7. Difficulty eating or swallowing** — This is a common sign of cancers of the mouth or neck (including lymph nodes).

**8. Reluctance to exercise or low energy level** — This is often one of the first signs that a pet is not feeling well.

**9. Persistent lameness** — There can be many causes of lameness, including nerve, muscle, or bone cancer.

**10. Difficulty breathing, urinating, or defecating** — These symptoms should be evaluated by your veterinarian as soon as possible.

Many of these symptoms also occur with other disorders and diseases, but regardless, a pet showing any of these signs needs prompt veterinary attention. As with any disease, the earlier your dog or cat is diagnosed, the better the chances of a positive outcome.

## Sources and References

<sup>1</sup> [Arkansas Democrat Gazette, August 29, 2022](#)

<sup>2</sup> [CNN, September 18, 2018](#)

<sup>3</sup> [Vet Med \(Auckl\), 2017; 8: 13-20. Published online 2017 Jan 12. doi: 10.2147/VMRR.S116556](#)

<sup>4</sup> [Raghavan, M. et al. Journal of the American Veterinary Medical Association, Volume 227: Issue 1, July 1, 2005](#)

<sup>5</sup> [Beauvais, W., Cardwell, J.M. and Brodbelt, D.C. \(2012\), Journal of Small Animal Practice, 53: 314-322](#)

<sup>6</sup> [Phys.org May 15, 2014](#)

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