







BY DEVA KHALSA VMD

Top superfoods

Want to help prevent cancer in your canine? Look no further than your fridge. Adding these phytochemical-rich foods to his diet will help reduce his risk.

our mother knew what she was talking about when she told you to eat lots of fruits and veggies. Research on cancer and nutrition in people has shown that eating fruits and vegetables – especially "superfoods" containing phytochemicals – significantly decreases the risk of cancer. Since phytochemicals work at a cellular level, and canine cells function exactly the same way as human cells, these foods can also help prevent cancer in your dog.

What phytochemicals do

Phytochemicals are organic compounds found in plants. They both prevent and fight disease and have been used as medicines for millennia. When Hippocrates said "Let food be thy medicine" he probably never imagined his words would be proven in scientific laboratories 2,000 years later!

The potential for cancer begins when carcinogens damage and alter the DNA in cells. This modification remains

latent until conditions promote the creation of a cancer cell. The tumor-suppressor gene p53 then plays a vital role in the body's struggle to stave off cancer. This gene monitors the biochemical signals in cells that indicate a DNA mutation in progress. It creates proteins that instruct the cell to either halt the growth cycle or self-destruct. If this fails, the immune system has an opportunity to eliminate cancer growth. Research has proven that proper nutritional support with phytochemicals helps prevent a cell from developing into a malignant cancerous growth.

How does eating superfoods with phytochemicals change the course of this dreaded disease? Certain phytochemicals help cells dump carcinogens and toxins much more quickly, thus decreasing the potential for permanent DNA damage. Other phytochemicals support more general cell functions while some give the immune system a super boost.

Four for your fridge

- 1. Kale: The dark vibrant greens in kale leaves are rich in cartenoids, which travel throughout your dog's body (and yours!) to scavenge free radicals and clean up "after the party". Kale is also rich in elements that reduce the risk of cancer. Scientists have found that certain specific compounds found in kale glucosinolates, cysteine sulfoxides and sulforaphane clear carcinogenic substances more quickly. One study found that when dogs with cancerous tumors were fed kale, their tumors were smaller and grew more slowly than those in dogs not fed kale.
- **2. Broccoli**: Compounds found in broccoli act as modulators to the immune response system with antiviral, antibacterial and anti-cancer activity. Broccoli has a sizable quantity of sulforaphane that boosts your dog's protective cellular enzymes and flushes out the toxins that cause cancer. A recent study at the University of Michigan found that sulforaphane targets specific cancer cells that aid in tumor growth.
- **3.** Berries: All berries are packed with phytochemicals that work to prevent cancer. Red raspberries, blueberries and strawberries contain ellagic acid, found to slow and sometimes stop tumor growth. Black raspberries contain very high concentrations of phytochemicals called anthocyanins; these slow malignant cell growth and curtail the blood supply to cancerous tumors.
- **4. Garlic:** A host of studies provides evidence that compounds in garlic work to effectively inhibit the cancer process. These studies reveal that the benefits of garlic are not limited to a specific carcinogen, tissue or species. Peeling and dicing garlic releases an enzyme called allinase and starts a chemical reaction that creates a cancer-fighting compound called diallyl disulfide. It takes about 15 minutes for this reaction to occur.

We're told that people can decrease their cancer risk by 30% if they eat several servings of brightly colored fruits and vegetables a day. It's no different for our dogs. Then again, while some dogs eat anything and everything, others are so picky it's difficult to get them to try anything new. The simple recipes accompanying this article help you sneak better health into your best friend's diet, and have him enjoy it!





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Starting your dog on healthy foods and snacks when he's young will increase the likelihood that he'll learn to enjoy and even beg for them. But if he's old and set in his ways, and you can't sneak one by him, a supplement can help. For example, Vital Vities by Deserving Pets was especially formulated to be chemoprotective. It contains pure powdered raw kale, beet, carrot, broccoli, cranberry, blueberry extract and alfalfa extract along with immune boosting vitamins D3, C and E, and selenium. Bon appétit!



Simple but powerful

These easy recipes and snack ideas contain a punch of cancer fighting goodness.

Healthy omelette

Beat 3 or 4 eggs. Mix in ¼ cup of finely chopped kale and ¼ cup of finely chopped broccoli. Place 2 tablespoons of olive oil in a pan and scramble the mix over medium heat. Cool and serve.

Broccoli bones

Remove the stems from broccoli and cut them into bonesized pieces as snacks. You may be surprised to find that your dog will enjoy his broccoli this way.

Berries and yogurt

Mix ¼ cup fresh or frozen and defrosted berries into ½ cup of plain yogurt.

Garlic topping

Let one clove of garlic sit on the cutting board for 15 minutes after dicing. Prepare your dog's meal and add the diced garlic as a topping. Garlic has excellent chemoprotective effects. Chemoprotective foods protect the body from diseases like cancer through antioxidant or immune boosting properties.

