

**Dog Tips** 

**Cat Tips** 

# Does Your Pet Drink Tap Water? Please Heed This New Warning

Combined with the high amounts found in 8 out of 10 pet food brands, a 10-pound puppy would be exposed to 3.5 times the EPA's standard for this mineral. Larger pets would get even more. And more is not good as excessive exposure may be linked to bone cancer and 16 other serious conditions.

#### Reviewed by Dr. Becker

### **STORY AT-A-GLANCE**

- A 2009 Environmental Working Group (EWG) study found that 8 out of 10 dog food brands contained fluoride 2.5 times higher than the EPA national drinking water standard
- According to the study, "When fluoride in drinking water is taken into consideration, a 10-pound puppy would be exposed to 3.5 times more fluoride than EPA allows in drinking water. Large breed puppies may be exposed to even more fluoride."
- Excessive fluoride exposure has been linked to the development of osteosarcoma in young boys; dogs —
  especially large breeds have a significantly higher risk for osteosarcoma than humans
- Tips to minimize fluoride exposure in your dog include offering commercial dog food that doesn't contain either bone meal or animal byproducts and offering fluoride-free drinking water
- Raw feeders and people who prepare pet meals at home should try to avoid ground bone from longer-lived food animals, and either insure commercially available bone meal is fluoride-free, or choose an alternative calcium source

#### Editor's Note: This article is a reprint. It was originally published January 25, 2017.

In 2009, an Environmental Working Group (EWG) study found that 8 out of 10 major national dog food brands contained fluoride in amounts up to 2.5 times higher than the Environmental Protection Agency's (EPA) national drinking water standard.<sup>1</sup>

In all eight cases, the suspected ingredients containing excess fluoride were bone meal and animal byproducts. According to the lead researcher of the EWB-sponsored study, Olga Naidenko, Ph.D.:

"Due to a failed regulatory system and suspect practices by some in the pet food industry, countless dogs may be ingesting excessive fluoride that could put them at risk."

The eight dog foods containing high levels of fluoride contained chicken byproduct meal, poultry byproduct meal, chicken meal, beef and bone meal.

We can conclude from the study results that the primary culprits are animal byproducts and bone meal. (Not all chicken meals contain internal organs and bones — some are made exclusively from muscle meat.)

However, all byproduct meals contain internal organs and bones. In addition, a certain amount of fluoride from the tap water used to manufacture pet food also gets into the finished product.

Fluoride occurs naturally in rocks, soil and the earth's crust, as well as in some water supplies. But according to the EWG, two-thirds of people living in the U.S., along with their pets and farm animals, are exposed to artificially fluoridated tap water (the fluoride is added to help prevent tooth decay).

Fluoride is also found in certain foods, either as a result of the manufacturing process, or from plants grown in high-fluoride soils or treated with fluoride-based pesticides. Ingested fluoride accumulates in bones and can damage teeth and the musculoskeletal system.

## **Fluoride Dangers in Humans**

While fluoride exposure hasn't been studied in dogs or cats, according to Dr. Mercola, there's a great deal of research that points to the dangers of fluoride to human health, including:

- Increases lead absorption
- Dementia
- Genetic damage and cell death
- Disrupts synthesis of collagen
- Bone fractures
- Increases tumor and cancer rate
- Hyperactivity and/or lethargy
- Lowers thyroid function
- Disrupts immune system
- Muscle disorders
- Bone cancer (osteosarcoma)
- Damages sperm and increases infertility
- Brain damage and lowered IQ
- Inactivates 62 enzymes
- Impairs sleep (inhibits melatonin production by the pineal gland)
- Arthritis
- Inhibits formation of antibodies

# **Excessive Fluoride Exposure and Bone Cancer**

The EWG cites three studies showing that boys between 6 and 8 years of age who drink fluoridated tap water have a higher risk for osteosarcoma, which is a deadly form of bone cancer. Researchers suspect that boys' rapid growth rate may increase their risk.

Dogs are at significantly higher risk for osteosarcoma than humans, with over 8,000 cases diagnosed in dogs each year in the U.S., compared with about 900 cases in humans.

Dogs are also at substantial risk for exposure to unacceptably high levels of fluoride on a long-term basis. According to the EWG:

"A dog drinking adequate water would be exposed to 0.05 [to] 0.1 [milligram (mg) fluoride per [kilogram (kg)] of body weight daily, depending on the dog's water consumption.

A 10-pound puppy that eats about a cup of dog food a day would ingest approximately 0.25 mg fluoride/kg body weight/day based on average fluoride content in the [eight] contaminated brands tested by EWG.

At that rate, the puppy would consume 2.5 times more fluoride than EPA's legal limit in drinking water.

When fluoride in drinking water is taken into consideration, a 10-pound puppy would be exposed to 3.5 times more fluoride than EPA allows in drinking water. Large breed puppies may be exposed to even more fluoride.

Whatever the size and the appetite of a dog, combined fluoride exposure from food and water can easily range into unsafe territory.

And, unlike children, who enjoy a variety of foods as they grow up, puppies and adult dogs eat the same food from the same bag every day, constantly consuming more fluoride than is healthy for normal growth.

Routine exposure to excessive fluoride can predispose dogs to health problems, along with high veterinary bills, later in life."<sup>2</sup>

## How to Prevent Your Dog from Ingesting Too Much Fluoride

To prevent excessive fluoride exposure, the EWG recommends dog owners purchase pet foods that don't contain bone meal and other animal byproducts. It also suggests that the government should set fluoride limits in pet food that protect both puppies and large breeds most at risk for bone cancer.

Dr. Michael W. Fox, an internationally recognized veterinarian and former vice-president of both the Humane Society of the United States and Humane Society International, also suggests providing pets with fluoride-free water.<sup>3</sup>

An example is reverse-osmosis treated water. Brita-type water filters don't remove fluoride, so it's important to look for a filter that does.

Most spring and bottled waters contain only small amounts of fluoride, but it's best to call the bottler and ask how much fluoride is in their water to insure a low intake. Distilled water is fluoride-free.

If you prepare a homemade diet for your pet and add bone meal, it's important that it not contain fluoride (or lead). Ethical bone meal producers will test for contaminants, including fluoride, so if you're using bone meal in recipes, contact your source and ask to see their quality control documents for fluoride.

Dr. Fox suggests substituting with fossilized oyster shell, dolomite or a chelated or non-chelated synthesized or refined calcium supplement like calcium citrate, ascorbate, stearate or gluconate. There's excellent purity with tri and dicalcium phosphate blended with magnesium (basically a bone meal equivalent).

Dr. Fox also makes the point that bones from longer-lived food animals such as dairy cows, laying hens and breeding stock probably contain higher levels of fluoride than shorter-lived animals like chickens, calves and lambs. In his article "Fluoride in Pet Food — A Serious Health Risk for Both Dogs and Cats?" Dr. Fox writes:

"Fluorides accumulate in the body of farmed animals over time from such sources as phosphate fertilizers, phosphate supplements, bone meal and fish meal supplements and pesticide and industrial-pollution-contaminated pastures and animal feed. The bones, fins, gills and scales of fish are often high in fluoride."

Dr. Fox recommends raw feeders avoid ground bone from older animals like beef cattle and adult sheep.

## **Additional Tips**

- If you cook your pet's food, avoid Teflon-coated pans as they may increase the fluoride levels in the food.
- Avoid cooking with fluoridated water, as it simply concentrates fluoride in the food.
- Don't use toothpaste or oral rinses intended for humans to brush your dog's teeth. Dental health products made for pets are fluoride-free.

#### **Sources and References**

Feline Nutrition Foundation

Dogs Naturally

<sup>1, 2</sup> EWG, June 26, 2009, Dog Food Comparison Shows High Fluoride Levels

<sup>3, 4</sup> DrFoxVet