

**Dog Tips** 

# Love Avocados? Thank Man's Best Friend

Believe it or not, but right now dogs are playing a vital role in saving our avocado supply. Turns out they are the best technology so far for detecting diseased trees before the damage goes too far. Plus: the truth about feeding avocado to your dog.

#### Analysis by Dr. Karen Shaw Becker

### STORY AT-A-GLANCE

- Sniffer dogs are helping to save the avocado industry from a lethal fungus that has devastated Florida avocado crops
- On the topic of dogs and avocados, the myth persists that this superfood is toxic to canine companions
- The myth is based on a single flawed 1994 study; a 2012 study proves the opposite that avocados are a safe and nutritious food for dogs
- As long as you feed him only the parts of the avocado you eat the flesh your dog will reap the same tremendous health benefits from this nutritional powerhouse that you do

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There are few things more delicious than a freshly sliced avocado, and when it comes to healthy nutrition, this fruit is in a class by itself. Avocados are loaded with fiber, and are an excellent source of folate and vitamins K, B5 (pantothenic acid), B6 and C. They also contain more potassium than bananas, plus magnesium, vitamin E, niacin and riboflavin.

In addition, avocado is considered a "good" fat, helping to keep cholesterol levels in the healthy range, and lowering the risk for heart disease. To learn more about the health benefits of this nutritional powerhouse, take a look at Dr. Mercola's article "Anti-Cancer Benefits of Avocado."

# An Asian Beetle Is Destroying Florida's Avocado Crop

If you love avocados (or guacamole), you've probably noticed this delicious food is more expensive than other produce. There are a number of factors that influence the availability and price of avocados, and one of them is a disease carried by a beetle.<sup>1</sup>

The redbay ambrosia beetle was first reported in the U.S. in 2002 in Savannah, Georgia, probably after being "imported" from Asia in wooden shipping materials. The beetle carries a fungus that causes laurel wilt disease — a disease that has killed off over 300 million laurel trees in the U.S. so far.

Avocado trees belong to the laurel tree family, and not long after the beetles were found in Georgia, they were also reported in Florida, which is loaded with avocado orchards. In fact, avocados are the second largest tree crop in Florida after citrus. Laurel wilt disease has devastated Florida's avocado industry in recent years, and even larger growers in California and Mexico are also worried the disease could destroy their crops.

## Can Doggy Noses Save the Avocado Industry?

A huge problem in fighting laurel wilt disease is that by the time it's obvious, it's usually too late to save the tree and trees nearby. One of the keys to containing the infection and saving its victims is early detection, and guess who happens to be really, really good at early detection of the fungus? That's right, humankind's best friend and his very talented sniffer!

According to a report in the journal HortTechnology,<sup>2</sup> published by the American Society for Horticultural Science, a research team trained a Belgian Malinois and two Dutch Shepherd scent dogs to detect the early presence of the fungus that causes laurel wilt disease. The three "agri-dogs," like all good sniffer dogs, were trained to sit by an infected tree to alert their handlers to their find.

The researchers conducted 229 trials, and amazingly, the dogs only had 12 false alerts. The research team believes that with proper training, scent dogs could be the answer to protecting the vulnerable avocado industry.

"It is the best 'technology' so far that can detect a diseased tree before external symptoms are visible," study co-author DeEtta Mills, Ph.D., of Florida International University told Treehugger. "The old saying that 'dogs are man's best friend' reaches far beyond a personal bond with their handler and trainer. It is depicted in their excitement every day as they deploy to the groves. Man's best friend may even help save an industry."

Since dogs are playing a vital role in saving our avocado supply, they should be able to eat the delicious, nutritious fruits right along with us, shouldn't they? If you're thinking, "But they can't! Avocados are toxic to dogs," I have some really good news to share with you!

# How the 'Avocados Are Toxic to Dogs' Myth Was Born

Rodney Habib and I were in Mexico City recently for a TedX talk. As you might know, avocados are a staple in the Mexican diet. We decided to do a **Facebook Live** on the subject of avocados and dogs after our waiter mentioned that he feeds his dog an avocado every day.

Unlike in Mexico, in the U.S. and Canada there's a myth that avocados are toxic to dogs. This misguided urban legend was actually created based on one lonely study from 1994. The study, titled "Putative Avocado Toxicity in Two Dogs," came from South Africa and involved two starving dogs that sadly died from heart and organ failure.<sup>4</sup>

For the record, "putative" means "assumed to be" or "thought to be" versus "definitely is." The two dogs found an avocado orchard, and because the poor things were starving, they consumed all parts of the avocado, including the stems, leaves, skin — even the tree bark.

The dogs' stomach contents weren't analyzed for the study, but the symptoms they displayed prior to death were similar to those seen in a study of 15 goats that ate avocado leaves and died. Now, it's important to note that just like tomato leaves, avocado leaves are toxic to both humans and animals. The flesh of the fruit isn't toxic, but the leaves are.

The poisonous substance found in the skin, stems and leaves of avocados is called persin, which is a fungicidal toxin. There's also a small amount of persin in the flesh and pit of the avocado, which is actually good news, because research has shown that small doses of persin kill cancer cells!

## 2012 Study Showed Definitively That Avocados Are Safe for Dogs

In 2012, Procter & Gamble funded a study to find out once and for all if avocados are toxic to dogs. Researchers took avocado pits, skin and flesh, ground them up, and fed an extract to a group of Beagles for six months. They discovered the avocado-based extract was completely safe.<sup>5</sup>

So it's fine to feed your dog avocados, as long as you don't feed the stems, leaves, pits, skin or even less likely, the tree bark! It's important to use common sense and your own eating habits as a guide. When you buy an avocado at the grocery store or farmer's market and bring it home, you slice it in half, remove the pit and scoop out the flesh to eat. You don't eat the skin or the pit. Follow that same common sense practice with your dog.

Unfortunately, huge organizations like the AKC and the ASPCA continue to perpetuate the myth of avocado toxicity. Even the ASPCA pet insurance provider warns that avocados are toxic. This results in a lot of misguided and unnecessary "fear of real food" among pet parents.

In addition, veterinarians warn clients that higher fat foods can trigger pancreatitis, which is true, but here's what most of them are missing. Thanks to the work of the wonderful pet cancer warriors at the **KetoPet Sanctuary**, we now know it's cooked fat that causes pancreatitis.

We know that raw fat — and avocados have a lot of it — is a "good" fat. And avocados also contain lipase, which is the enzyme necessary to break down fat. So not only do avocados contain healthy fat, they contain the enzyme necessary to break down the fat so the body can easily digest and assimilate it.

## **More Benefits of Avocados**

As I mentioned earlier, avocados are a powerhouse of important vitamins and minerals. And because they're high in fat, they help your dog's body better absorb fat-soluble vitamins (vitamins A, D, E and K).

Many people believe feeding foods high in fat will make their dog fat, but nothing could be further from the truth. **Carbohydrates** are what make mammals (including humans) fat. In addition, some dog breeds are predisposed to high triglyceride levels, for example, the Schnauzer. Higher fat foods like avocados actually decrease triglyceride levels, and in humans, they help lower LDL cholesterol. And still more benefits:

- Avocados are high in oleic acid, which helps reduce inflammation, supports heart health and has anticancer properties
- Avocado oil is more stable than other oils at higher temperatures, so if you gently cook your dog's meals, avocado oil is a good choice

- Avocados are beneficial for gut bacteria (the microbiome)
- Three-quarters of an average sized avocado contains just a few more calories than a tablespoon of coconut oil

   a good reference point for those of you worried about daily calorie intake for either you or your canine companion
- <u>Bananas</u> are the go-to food for potassium at 358 milligrams per banana; however, an avocado contains even more at 485 milligrams of potassium

Take home message: Don't fear the delicious, super nutritious avocado! Don't fear them for yourself, and don't be afraid to feed them to your dog!

#### **Sources and References**

- <sup>1, 3</sup> Treehugger, October 11, 2018
- <sup>2</sup> Hort Technology, April 2018, Volume 28, Number 2, pp 102-108
- <sup>4</sup> The Onderstepoort Journal of Veterinary Research (61)1:107-9 April 1994
- <sup>5</sup> <u>FASEB Journal, April 1, 2012</u>