# bark&whiskers

Food Facts

## The Fruit With an Ace Up Its Sleeve

A beloved fruit enjoyed everywhere, its unique composition of healthy fats may help promote optimal wellness for your pet, too.

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

- Feeding your pets avocado may actually benefit their health, as long as they eat only the flesh of the fruit. Serving avocado as treats or as an addition to their nutritionally adequate, species-appropriate diet can be good for your pet
- Avocados contain plenty of healthy fats, with 2.75 grams in every two-tablespoon serving. They also contain antioxidants, particularly lutein and zeaxanthin, which are crucial for optimal eyesight
- Avocados' reputation for being poisonous for pets is due to a toxin named persin. However, it's the seed, skin and leaves that contain high amounts of persin. The flesh only contains very minimal amounts that shouldn't be a cause for concern

Avocados are one of the trendiest fruits these days. More and more studies are coming out showing that they can benefit human health.<sup>1,2</sup> But what about your four-legged pal? Can they benefit from avocados, too? It turns out, they can — and you shouldn't be worried about the claims that these fruits are "poisonous" to pets, with some caveats.

What's more, the majority of avocados sold in the supermarket are free from pesticides, according to a report from the Environmental Working Group (EWG). In fact, avocados are at the top of EWG's "Clean Fifteen" list for 2024.<sup>3</sup> However, it's still better to purchase organic avocados from certified producers whenever possible. This will help lower your and your pet's exposure to agricultural chemicals whenever avocados are consumed.



### Avocado Fun Fact

The Hass avocado is one of the most popular varieties sold around the world, but it originally came about by coincidence. According to Smithsonian Magazine, Rudolph Hass took home some seedlings to graft with other avocado varieties.



One seedling didn't mesh well with his grafts, so he left it to grow on its own. After some time, Rudolph's children noticed that the tree produced "a rich, nutty slightly oily taste." Surprisingly, this variety tasted better than his other experiments — and the Hass avocado was born.<sup>4</sup>

## The Ace Up Avocado's Sleeve: Healthy Fats

Avocado contains plenty of healthy fats, with 2.75 grams in every two-tablespoon serving.<sup>5</sup> One of the most notable benefits of this fruit is helping boost the bioavailability of fat-soluble vitamins (A, D, E and K) found in other foods.<sup>6,7</sup> Avocados may also benefit your pet's gut bacteria.<sup>8</sup>

According to research published in Agronomia Colombiana, around 70% of the total fat found in a Hass avocado is oleic acid, a type of monounsaturated fatty acid.<sup>9</sup> Numerous studies have been conducted regarding the potential of oleic acid for improving well-being and the results are promising.

In one study, researchers experimented on the possible effects of oleic acid in test rats for 14 days. By the end of the study, they noted that oleic acid had hypotensive effects that helped lower blood pressure. Moreover, stability in blood pressure was observed to last for around three to four days.<sup>10</sup> Another study found that oleic acid had neuroprotective effects in rats. Researchers attributed this effect to the fatty acid's anti-inflammatory properties.<sup>11</sup>

## **Avocados Can Also Give Your Pet Antioxidants**

Avocados contain antioxidants, particularly lutein and zeaxanthin, which are crucial for optimal eyesight.<sup>12</sup> Research has shown that both lutein and zeaxanthin are concentrated in the retina and their importance for eye health cannot be ignored, as noted in this study in the Journal of Ophthalmology:<sup>13</sup>

"In these animal models, lutein and zeaxanthin have been reported to have beneficial effects in protecting ocular tissues and cells (especially the retinal neurons) against damage caused by different etiological factors. The mechanisms responsible for these effects of lutein and zeaxanthin include prevention of phototoxic damage by absorption of blue light, reduction of oxidative stress through antioxidant activity and free radical scavenging, and their anti-inflammatory and antiangiogenic properties."

## The Phytochemicals in Avocado Can Be a Boon to Pets

When it comes to nutrition, people normally look at the vitamins and minerals, however, there's a second tier of substances called phytochemicals that can also contribute to wellness. Examples of phytochemicals include phenolic acids and flavonoids.<sup>14</sup>

In the case of avocado, it is inherently rich in carotenoids,<sup>15</sup> which are pigments that contribute to a plant's particular color.<sup>16</sup> Carotenoids such as lutein and zeaxanthin, which have already been discussed, fall under this category. If you want to make the most out of the carotenoids in your avocado, the dark green flesh closest to the peel contains the highest amounts — just make sure you do not mix any pieces of the peel itself when you share it with your pet.<sup>17</sup>

Avocado also contains moderate amounts of phenolics and generous amounts of phytosterols that can contribute to your pet's well-being.<sup>18</sup> Research has shown that fruit phenolics may help lower the risk of cardiovascular disease by improving blood flow, platelet function and blood pressure.<sup>19</sup>

On the other hand, phytosterols are biologically active substances that have a similar structure to cholesterol.<sup>20</sup> According to a study published in Frontiers in Pharmacology, phytosterols have been shown to possess "chemopreventive, anti-inflammatory, antioxidant, antidiabetic and antiatherosclerotic" properties.<sup>21</sup>

## **Other Beneficial Nutrients in Avocados**

Aside from healthy fats, a two-tablespoon serving of avocado also offers 1.25 grams of dietary fiber. Other vitamins and minerals found in this fruit are:<sup>22</sup>

- **Magnesium** (5.43 milligrams) It acts as a cofactor for various cellular enzymes needed in energy metabolism.
- **Potassium** (91 milligrams) Did you know that avocados contain more potassium than bananas? In humans, potassium is known for promoting healthy blood pressure levels.
- **Vitamin C** (1.8 milligrams) This acts an as antioxidant that helps scavenge harmful free radicals, reduce inflammation and slow down cognitive aging.<sup>23</sup>
- **Vitamin E** (0.38 milligrams) This fat-soluble vitamin is essential for protecting your dog against oxidative damage, as well as for promoting cellular function and fat metabolism.<sup>24</sup>

#### **Did You Know?**

The Hass avocado wasn't always the most popular variety. Back in the 1950s, that recognition belonged to the Fuerte avocado, which accounted for two-thirds of total production in California. As time went on, the Hass variety surpassed the Fuerte to become the top choice for large-scale cultivation.



## Where Did the Myth About Avocado's Toxicity Come From?

Avocado has a reputation for being poisonous to dogs, a belief that some organizations, such as the American Kennel Club, agree with.<sup>25</sup> Misinformation about many healthy fruits, vegetables, nuts and seeds abounds on the internet. This is because websites have labeled all risks (such as the risk of over-consumption causing gastrointestinal issues, or choking on too large of pieces or pits) as "toxicities," which isn't true, but has managed to confuse millions of pet lovers, nonetheless.

Avocados are not bad for dogs. In fact, it's the opposite — serving them as treats or as an addition to their nutritionally adequate, species-appropriate diet can benefit your dog's health. A 2012 study finally debunked the idea that they are bad, after showing that beagles fed avocado extract did not have any adverse health effects.<sup>26</sup>

So where did the myth about avocados being bad for your dog begin? This belief may have originated from a 1994 study published in The Onderstepoort Journal of Veterinary Research titled "Putative Avocado Toxicity in Two Dogs."<sup>27</sup> Note that putative means "supposed,"<sup>28</sup> which means that avocados may cause health complications but there is also a chance that they may not.

Avocados contain persin, a poisonous substance found in all parts of the plant (skin, stems and leaves), and this could actually be a good thing, because there's research showing that small amounts of persin may eliminate cancer cells.<sup>29</sup>

Going back to the study mentioned earlier — the dogs wandered into an avocado orchard and proceeded to eat the plants (not the fruit) because they were starving. Note that their stomach contents weren't analyzed. The researchers only provided a visual comparison to 15 goats that displayed similar symptoms before dying. It's surmised the goats primarily consumed avocado leaves, which are very high in persin.

This study contributed to the reputation that avocados are bad for dogs, a myth that is thankfully resolving due to the benefits dog owners are seeing by feeding avocado oil and the flesh of the fruit to their animals. Later in this article, I will share with you tips on how to prepare avocado for your pets to keep them safe.

#### Where Do Avocados Grow?



Avocados are said to have originated from Mexico, and in Northern and Central America. In the U.S., 90% of avocados come from California.<sup>30,31</sup>



## Should You Be Worried About Feeding Avocados to Your Cats?

While there's a study published in Interdisciplinary Toxicology that says avocados should not be fed to cats due to the possibility of persin ingestion,<sup>32</sup> there's not enough evidence to fully support this claim.

There's also a study that notes that of 1,616 phone calls made to the Kansas State Veterinary Diagnostic Laboratory over a period of three years, avocados comprised 4.1% of all the plant-based toxic substances reported.<sup>33</sup> But the main problem with this study is that the pet owners didn't specify what part of the avocado was eaten, so it's possible the cats consumed other parts of the avocado plant aside from the flesh.

There are many people who feed small amounts of avocado fruit to their dogs and cats. In higher amounts, the natural fats found in this fruit may upset your pet's stomach, so offering only tiny pieces is recommended. Most cats, being carnivores, will not choose to eat this fruit.

## The Way You Feed Avocados to Your Pet Is Key

"When feeding avocados to your pet, only give them the fleshy part (the same part you eat), and in small quantities at a time."

Take care to remove the skin and the pit to ensure that you're not inadvertently poisoning your dog with the high amounts of persin in those parts of the avocado.<sup>34</sup>

The quality of the avocado is also important. Try purchasing organic avocados from certified producers whenever possible. While avocados belong to EWG's Clean Fifteen list, organically grown varieties can help lower your pet's exposure to chemicals compared to conventionally grown ones, even if they're "clean."

### **Exercise Caution With Avocado Stems, Leaves and Pits**

While there may not be sufficient evidence to concretely prove that avocados are bad for your pets, this doesn't mean you should stuff them with the fruit every day — you still need to practice common sense. You can feed them avocado, but you also need to exercise caution with the stems, leaves and pits, which contain the highest levels of persin. If you have avocado plants growing in your garden, make sure your pets do not ingest the stems, leaves or the tree bark (though this is very unlikely to happen).

On the off chance that your pet consumes the inedible parts of the fruit, you need to be aware of the signs of persin toxicity so that you can get your pet help right away:<sup>35</sup>

- Vomiting
- Diarrhea
- Respiratory distress
- Congestion

It's also important to remember that whether avocados are given only as treats or as a part of their nutritionally adequate, species-appropriate diet, they should be given in moderation. Treats should comprise less than 10% of your pet's daily caloric intake. If you feed your pet homemade meals, make sure you follow a recipe that's been formulated to meet your pet's minimum nutrient requirements.

Work with your integrative veterinarian to compute your pet's total daily calorie intake to decide how you can incorporate avocados into it. With the correct serving size, avocados can be a scrumptious, refreshing treat for your four-legged friend.

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