

Food Facts

This 'Dessert Fruit' May Help Boost Your Pet's Immunity

Often used in pastries and pies, this sweet red fruit offers various antioxidants that may help banish inflammation. A few slices can make a delicious topper for your animal companion's meals, to help give an added boost to their health.

Analysis by Dr. Karen Shaw Becker



STORY AT-A-GLANCE

- Fresh or frozen, raspberries are delicious fruits that can offer myriad benefits for you and your pet, including banishing harmful free radicals, supporting heart health and even ease aging joints
- They offer a wealth of inflammation-busting antioxidants, including vitamin C, lutein, and zeaxanthin, as well as polyphenols like ellagitannins and anthocyanins
- Raspberry polyphenols have a protective effect against arthritis. In a study that used mice models, researchers
 found that the mice group that was given raspberry extract had a lower incidence and severity of arthritis
 compared to the control group
- Pet parents are worried about the natural xylitol content of this fruit. The good news is only trace amounts of this sweetener are found in raspberries, so there's no real danger when you feed your pet a few pieces

Known as a "dessert fruit" for its various uses in sweet pastries and ice cream, raspberries (Rubus idaeus) are small fruits with a sweet, juicy taste and a tart undertone. While you'll often see them red, they can also come in other colors like black, gold and purple. Raspberries are versatile and can be used for various dishes and can also be shared with your pet. Here's what you should know about feeding these berries to your furry friend.

What Are Raspberries and How Can They Benefit Your Pet?

Raspberries are perennials that grow on bushes and thrive best in places with cool summers and mild winters.² Although they're called "berries," technically they are an aggregate of what's called "drupelets" — small fleshy fruits — that are clumped together.³ Fresh raspberries can be bought from June to October, but you can also find frozen varieties in groceries all year-round.⁴

Despite their small size, raspberries pack a lot of punch with nutrients, including vitamins, minerals and antioxidants that may help boost your pet's well-being. Manganese,⁵ calcium and vitamin K,⁶ nutrients that play important roles in bone health, are all present in raspberries.

Whether fresh or frozen, these delicious fruits can offer myriad benefits for you and your pet, including banishing harmful free radicals, ⁷ supporting heart health ⁸ and easing aging joints. ⁹

However, as with many other human foods, some pet parents have been misguided into thinking that raspberries can be dangerous to pets. Many healthy fruits, vegetables, nuts and seeds are safe for pets to consume, despite the misinformation surrounding them on the internet. This is because websites have labeled all risks (such as the risk of overconsumption causing gastrointestinal issues, or choking on too large of pieces or pits) as "toxicities," which isn't true but has nevertheless managed to confuse millions of pet lovers.

In the case of raspberries, pet parents are worried about the natural xylitol content of this fruit. Xylitol is a sugar alcohol that's used in many food products today, and with dogs, consuming it can lead to a sudden release of insulin, followed by a sharp drop in blood sugar (hypoglycemia), which can trigger vomiting, loss of consciousness and seizures.

The good news is only trace amounts of this sweetener are found in raspberries, meaning it's not a high risk for danger if you feed your pet a few pieces.



Did You Know?

To receive a fatal dose of xylitol from raspberries, a 22-pound dog would have to eat 32 cups of raspberries. So as long as you give it in moderate amounts, you have nothing to worry about.¹⁰



Raspberries Are Rich in Antioxidants

"Raspberries offer a wealth of inflammation-busting antioxidants, including vitamin C, lutein and zeaxanthin, as well as polyphenols like ellagitannins and anthocyanins."

Just 10 raspberries can provide as much as 4.98 milligrams of vitamin C, which may help increase the immunomodulating potential in healthy canines.¹¹ While most mammals can actually synthesize vitamin C in their liver,¹² having supplementary support may help improve their well-being.

Phytochemicals found in raspberries include ellagitannins and anthocyanins, polyphenols that have important benefits for pets. Ellagitannins offer some protection against illnesses like heart disease ¹³ and cancer, ^{14,15} while anthocyanins, which are flavonoid compounds responsible for the red and blue color in fruits, are found to cross the blood-brain barrier, and may have neurodegenerative and cognitive effects. ¹⁶

Raspberry polyphenols may also have a protective effect against arthritis. In a study that used mice models, the antiinflammatory properties of ellagitannins and anthocyanins were evaluated. They found that the mice that were given raspberry extract had a lower incidence and severity of arthritis compared to the control group. ¹⁷

The flavonols in raspberries may also help inhibit different stages of tumor development, according to animal studies. A 2015 study published in the Food and Function journal found that red raspberries may help inhibit melanoma among mice subjects.¹⁸

As for lutein and zeaxanthin, they are important for your pet's optimal eyesight. According to a 2015 study in the Journal of Ophthalmology: 19

"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."

Raspberries Also Provide Enough Fiber for Your Pet's Diet

Raspberries are included in the list of whole food sources with high amounts of dietary fiber, ²⁰ with 10 pieces of this fruit offering as much as 1.24 grams. ²¹ While dogs and cats only need minimal amounts of fiber from their diet, getting it from vegetables and fruits like raspberries can help build their microbiome and provide roughage for optimal bowel health.

Soluble fiber in particular helps regulate bowel movements and gastric emptying. Hence, adding small amounts of fiber-rich foods like raspberries to your pet's species-appropriate, nutritionally balanced diet can go a long way to boosting their well-being.²²



Raspberries Fun Fact

According to Greek mythology, raspberries used to be white. When Ida, Zeus's nursemaid, went out to pick the fruits, a thorn pricked her finger and ended up staining the raspberries. They have remained red ever since.²³



How to Safely Feed Raspberries to Your Pets

Raspberries should be washed thoroughly before sharing with pets, making sure to remove the stems and leaves. Depending on your pet's size, you may need to slice the berries into halves or quarters, so as not to pose a choking hazard. Here are some ideas on how to use raspberries:²⁴

- Add a few slices or mash them and put over your pet's meal to make a healthy topper.
- Blend raspberries with other pet-safe fruits and make a smoothie that you can smear all over their lick mat.
- Stuff a few pieces into their favorite training toys for a fun activity.
- Mix with some plain, organic yogurt for a refreshing treat.

When sharing raspberries with your pet by adding them to pet treats, make sure the treats only make up around 10% of your pet's daily caloric intake.

Top Raspberry-Producing Countries in the World



According to 2021 statistics of 44 countries, Russia ranked first in terms of raspberry production, with 197,700 tons of this fruit harvested. Mexico and Serbia follow in second and third place, respectively.²⁵



An Easy but Yummy Way to Let Your Pet Enjoy Raspberries

If you're looking for a simple way to make healthy treats using raspberries, here's a recipe you can try: Frozen Coconut and Berry Treats.²⁶ Aside from fresh raspberries and blueberries, you can use other healthy fruits like blackberries or cranberries. Share this with your pet on hot days!

Frozen Coconut and Berry Treats Recipe

Ingredients:

- Coconut oil
- Berries or fruits of your choice (raspberries, blueberries or blackberries)

Procedure:

- 1. Get the coconut oil to a liquid consistency.
- 2. Wash your berries of choice and place in an ice tray.
- 3. Add the coconut oil and allow to freeze for a few hours.

Let your pet enjoy these cool treats!

Are Raspberries Sustainable?

Compared to other types of food, raspberries have a fairly low carbon footprint, around 0.15 kilograms (0.33 pounds) of CO2e per pound. This is mainly due to their high-growth resources, such as land use, pesticides and irrigation. Overall, they are a carbon-conscious fruit, though some aspects of the production need to be considered, such as transportation and packaging — for example, they are usually wrapped in plastic and kept refrigerated during transport to great distances.²⁷

Although they're not on the EWG's 2023 Dirty Dozen list,²⁸ raspberries are sprayed by pesticides because they're prone to pests and diseases,²⁹ so make sure to buy organic, spray-free raspberries from your local markets.

Sources and References

- ^{1,4} WebMD, September 15, 2022
- ² Wisconsin Department of Public Instruction, Raspberries
- ³ Britannica, May 28, 2023
- ⁵ Natural Product Communications, May 2021, 16(5):1934578X2110166
- ⁶ Journal of Orthopaedic Surgery and Research, volume 16, Article number:592, 2021
- ⁷ Acta Alimentaria, Feb 2006, Volume 35: Issue 1
- ⁸ Food Funct. 2016 Dec 7;7(12):4944-4955
- ^{9,17} J Agric Food Chem. 2012 Jun 13; 60(23): 5755–5762
- ¹⁰ Rover.com, Can Dogs Eat Raspberries?
- ¹¹ J Anim Physiol Anim Nutr (Berl). 2009 Feb;93(1):26-34
- ¹² Can J Vet Res. 2006 Oct; 70(4): 305–307
- ¹³ <u>Journal of Functional Foods, Volume 99, December 2022, 105320</u>
- 14 <u>Nutrition Research, Volume 30, Issue 11, November 2010, Pages 777-782</u>
- ¹⁵ Phytotherapy Research, vol 36, issue 1, January 2022, Pages 1-568
- ¹⁶ <u>J. Agric. Food Chem. 2018, 66, 44, 11531–11543</u>
- ¹⁸ Food Funct. 2015 Sep;6(9):3022-34

- ¹⁹ J Ophthalmol. 2015; 2015: 52302, Abstract
- ²⁰ Mayo Clinic, Chart of High-Fiber Foods
- ²¹ <u>USDA Food Data Central, Raspberries, raw</u>
- ²² Food and Agriculture Organization of the United Nations, Physiological Effects of Dietary Fibre
- ²³ Just Fun Facts, May 25, 2018
- ²⁴ PetMD, December 9, 2022
- ²⁵ <u>HelgiLibrary, Which Country Produces the Most Raspberries?</u>
- ²⁶ <u>Dr. Karen Becker, Frozen Coconut Oil and Berry Treats</u>
- ²⁷ <u>Impactful Ninja, What Is the Carbon Footprint of Raspberries? A Life-Cycle Analysis</u>
- ²⁸ EWG, 2023 Dirty Dozen List
- ²⁹ Environmental Science and Pollution Research volume 25, pages 8057–8068 (2018)