

## Could This Crunchy Treat Be the Key to Your Pet's Health?

Summer salads wouldn't be complete without this crispy green veggie. Although it's 90% water, it still offers nutrients that may help support your pet's well-being.

Reviewed by [Dr. Becker](#)



### STORY AT-A-GLANCE

- Romaine lettuce contains polyphenols that may support pet's health in different ways, such as helping manage inflammation and immune system health
- Research has shown that polyphenols in lettuce also help to regulate genes related to obesity and liver fat accumulation
- Romaine lettuce also contains dietary fiber that may help keep your pet's digestive health in top shape
- Don't feed too much romaine lettuce to your pet, as it may cause gastrointestinal upset due to excess fiber
- While romaine lettuce can be a beneficial treat, it should be part of a rotation of fresh food treats within a species-appropriate diet

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When you think of salad, one of the first images that comes to mind is most likely romaine lettuce. It's such a crucial component to this dish that it's hard to imagine any salad bowl without romaine lettuce. That being said, you may be wondering if this crunchy vegetable can be an effective pet treat. It's common to feed pets other vegetables for a midday snack, so why not romaine lettuce? Can the same benefits translate to them as well?

The answer is yes — your pet can enjoy the nutritional benefits of fresh, crunchy romaine lettuce, too. Read on to learn what experts have to say about the nutrients inherent in this vegetable.



#### Did You Know?

The word "lettuce" most likely comes from the Old French word "laitues,"<sup>1</sup> which means milky. This refers to the milky sap coming out of the lettuce.<sup>2</sup>



### Bioactive Compounds in Romaine Lettuce: Polyphenols

Around 90% of most lettuce varieties are made up of water, but that doesn't mean there are no nutritional benefits. In fact, research has shown that lettuce is rich in polyphenols that may support animal health.<sup>3</sup> One study published in 2009 found that increased polyphenol intake may help improve immune response in dogs. The researchers noted that canines that received polyphenols had altered gene expression related to leukocyte proliferation and signaling.<sup>4</sup>

Polyphenols may help better manage inflammation, according to research published in BMC Veterinary Research. The researchers also noted that polyphenols may help downregulate genes related to obesity and liver fat buildup.<sup>5</sup>

Regarding polyphenols' potential to manage inflammation, the benefit may be especially pronounced in the digestive tract. Researchers suggest that increasing polyphenol intake may have a protective effect against gastrointestinal disease by controlling inflammation-related processes in the intestine. Polyphenols may also modulate the gut microbiome to lower the risk of digestive problems, most notably diarrhea.<sup>6</sup>

## Romaine Lettuce Can Boost Your Pet's Fiber Intake

Being a leafy vegetable, romaine lettuce contains ample amounts of fiber that may help promote better digestive health for your pet. The importance of fiber cannot be stressed enough, as it helps maintain a diversified microbiome and proper digestive functions, such as regular bowel movements. In a 2021 study, researchers noted that police dogs affected with diarrhea experienced lowered frequency of excrement, as well as better stool consistency, thanks to increased fiber intake. Furthermore, the dogs had an increase in mean body weight.<sup>7</sup>

Aside from keeping your pet on a regular pooping schedule, fiber may help keep more nutrients in your pet's system. Research published in the Journal of Animal Science noted that an increase in fiber consumption led to a positive shift in fecal fermentative end-products, as well as a reduction of phenols and indoles in the feces itself.<sup>8</sup>



### Romaine Lettuce Fun Fact

Ancient cultures have cultivated lettuce for thousands of years. Greeks, Romans and Egyptians all used and enjoyed lettuce to varying degrees in their cultures.<sup>9</sup>



## How to Serve Romaine Lettuce to Your Pet

The best way to serve romaine lettuce to your pet is raw so they can get all of its benefits. Raw lettuce adds a unique texture to your pet's meals. Another advantage to the raw approach is that it may help pets reach a healthy safe weight by keeping them satiated. In fact, the American Kennel Club recommends raw lettuce as a training treat for dogs that may need to lose weight.<sup>10</sup> Shredded raw lettuce can be used as a topper for whatever food you're currently feeding your pet.

When feeding lettuce to pets, it's best to not feed excessive amounts, but you can easily add 1 to 2 tablespoons per cup of pet food, and some dogs enjoy a leaf by itself, as a snack. If you go overboard, your pet can experience loose stools, as too much fiber can cause stomach problems, including gas and bloating.<sup>11</sup> You'll know if your pet has the right amount of fiber if they're producing small, firm stools.

### Top Lettuce Growers in the World



China is the world's top producer of lettuce, harvesting 14.32 million tons during 2020. The U.S. comes in second with 4.4 million tons. India takes the third spot with 1.12 million tons.<sup>12</sup>



## A Look Into the Environmental Sustainability of Lettuce

While romaine lettuce may seem like an enticing snack for your pup, caution is advised whenever you purchase it from the grocery store. It's highly likely that conventionally grown lettuce is contaminated with pesticides that may inadvertently affect your pet's health. In fact, lettuce ranks 17th in the Environmental Working Group's 2024 Shopper's Guide to Pesticides in Produce.<sup>13</sup>

In other news, the Food and Drug Administration (FDA) also reported an E. coli outbreak in 2018 involving romaine lettuce, which affected consumers residing in multiple U.S. states. FDA investigators noted that the outbreak lasted for more than two months, causing people who consumed this lettuce to be hospitalized. It is believed that multiple environmental and processing factors caused the growth of the pathogens on the lettuce.<sup>14</sup>

With this information in mind, try to look for certified organic sources of lettuce. If it's not possible to find spray-free lettuce, make sure to wash your vegetables thoroughly to remove as much pesticides as possible. Fresh snacks, even when grown conventionally, are still superior to feeding your pet entirely ultraprocessed snacks (made from conventional ingredients that most likely also have chemical residues).

For the best sustainability, grow your own lettuce. Lettuce can be easily grown throughout the year, even indoors.<sup>15</sup> Done right, people living in urban areas with their pets can still get a steady supply of leafy greens and dedicate the saved money to other needs. Your local farmers market is also a great place to find fresh lettuce.

## Romaine Lettuce Can Be a Crunchy Treat

Studies have shown that the bioactive compounds and fiber in romaine lettuce may contribute to better pet health. Romaine lettuce is a great crunchy treat for your pet, understanding that the bulk of their nutrition should still come from a species-appropriate, nutritionally complete diet. Rotate lettuce with other nutritious fresh food treats, remembering to wash your lettuce and other fresh fruits and veggies thoroughly to remove as many contaminants as possible.

### Sources and References

<sup>1</sup> [Texas A&M, "Universal Boon to the Salad Bowl!" \(Archived\)](#)

<sup>2</sup> [The Kitchn, "What's That White Sap in Romaine Lettuce?" August 2, 2016](#)

<sup>3</sup> [Comprehensive Reviews in Food Science and Food Safety, Jan 2022, Volume 21, Issue 1, 4-45, 2.2 Polyphenols in Lettuce](#)

<sup>4</sup> [J Nutrigenet Nutrigenomics, 2009;2\(1\):43-52, Abstract](#)

<sup>5</sup> [BMC Veterinary Research volume 16, Article number: 234, \(2020\), Abstract](#)

<sup>6</sup> [Antioxidants \(Basel\), 2020 Aug; 9\(8\):725, Introduction](#)

<sup>7</sup> [BMC Vet Res, 2021; 17: 100](#)

<sup>8</sup> [J Anim Sci, 2019 Nov; 97\(11\): 4519-4531, Implications](#)

<sup>9</sup> [Wisconsin Department of Public Instruction, "Lettuce"](#)

<sup>10</sup> [AKC, "Can Dogs Eat Lettuce?" August 24, 2022](#)

<sup>11</sup> [Mom.com, "Comparison of High-Fiber Dog Food Brands" September 26, 2017](#)

<sup>12</sup> [Tridge, "Fresh Lettuce Production and Top Producing Countries"](#)

<sup>13</sup> [EWG, "EWG's 2024 Shopper's Guide to Pesticides in Produce™"](#)

<sup>14</sup> [FDA, "Environmental Assessment of Factors Potentially Contributing to the Contamination of Romaine Lettuce Implicated in a Multi-State Outbreak of E. coli O157:H7" November 1, 2018](#)

<sup>15</sup> [Gardener's Supply, "How to Grow Lettuce Indoors"](#)