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Food Facts

# The Only Nut That's Not Safe to Offer Pets

Poor muscle control, weakness and vomiting are just some symptoms that could arise if your pet accidentally ingests this tree nut, so make sure to always keep it out of their reach. Fortunately, consuming it isn't fatal, but prevention is still better than cure.

#### Analysis by <u>Dr. Karen Shaw Becker</u>



# **STORY AT-A-GLANCE**

- The exact mechanism of toxicity of macadamia nuts is still unknown, however, some claim that an unidentified toxin in the nut may be affecting pets' nervous system
- Symptoms can manifest in less than 24 hours after ingesting the macadamia nuts, and include weakness, vomiting, abdominal pain, ataxia and hypothermia
- Most mild cases resolve within 24 to 48 hours with home care, but in severe cases, you may need to bring your pet to the clinic for adequate treatment. If your pet has a high fever, is unable to walk or shakes constantly, bring them to emergency care immediately
- Other nuts are safe alternatives, including Brazil nuts, almonds and cashews, which can be used as training treats, used in treat recipes or added as toppers to meals

A common ingredient used in baked goods, sweets and sometimes even savory recipes, macadamia nuts (Macadamia integrifolia) are loved by many because of their rich, buttery flavor and subtle sweetness. They're a healthy snack you can munch on whenever you need a quick fix.

But don't be so quick to share them with your pets — macadamia nuts are one of the few foods that you should never feed to your cats and dogs, and here's why.

# What Are Macadamia Nuts?

Macadamia refers to a genus of four species of evergreen trees that are valued for their edible seeds. The trees belong to the Proteaceae plant family and originated from the coastal rainforest areas in northeastern Australia, in

Queensland.<sup>1</sup> There are 10 species of macadamia trees, but only two are safe for human consumption.

For humans, macadamia nuts are a wonderful source of nutrients, as they are loaded with healthy fats, B vitamins, calcium, phosphorus and iron.<sup>2</sup> But for pets, consuming macadamia nuts may lead to painful symptoms, which is why you should keep them out of their reach as much as possible.



#### Did You Know?

Macadamias are one of the toughest nuts to crack, having one of the hardest shells in the world. It would take almost 300 pounds per square inch of pressure to crack one macadamia nut!<sup>3</sup>



# Macadamia Nuts Are Toxic to Pets, Especially Dogs

Macadamias are one of the foods that the American Society for the Prevention of Cruelty to Animals (ASPCA) warn about, and pet parents are advised to keep these nuts away from their animal companions.<sup>4</sup> The exact mechanism of toxicity of macadamia nuts is still unknown, however, some claim that an unidentified toxin found in the nut may affect the pets' nervous system.<sup>5</sup>

According to the 2000 study published in the Veterinary and Human Toxicology journal, the ASPCA National Animal Poisoning Center has admitted and treated 29 cases of macadamia nut ingestions during a five-year period. The canines that suffered from toxicosis experienced symptoms in less than 24 hours after ingesting the macadamia nuts. These include:<sup>6</sup>

- Weakness or lameness
- Ataxia (loss of muscle control in legs)
- Abdominal pain
- Tremors
- Nausea or vomiting
- Hyperthermia
- Stiffness
- Pale mucous membranes

A separate study echoes these findings. Published in the journal Australian Veterinary Practitioner, the researchers studied 13 adult dogs who ingested macadamia nuts. The dogs belonged to both sexes, in various ages and belonging to five different breeds. Within six to 24 hours after ingesting between 0.7 and 4.9 grams of nuts per kilogram (around five to 40 whole nuts for a 20-kilogram dog), the dogs experienced muscle weakness and joint pain.<sup>7</sup>

#### Top Macadamia Nut Producers



Although macadamia nuts were first grown in Australia, it is no longer the top exporter of this product today — that title now belongs to South Africa. Australia is still in the top five producers, though, along with Kenya, China and the Netherlands.<sup>8</sup>



# How to Treat Macadamia Poisoning in Pets

The good news is that macadamia nut poisoning isn't fatal. In most cases, macadamia nuts cause mild and manageable symptoms that can be treated at home, with a little veterinary guidance.<sup>9</sup> If your pet accidentally ingests macadamia nuts, call your integrative veterinarian immediately for assistance. Most mild cases resolve within 24 to 48 hours of basic home care.

One solution is to orally administer activated charcoal (around 2 grams per kilogram of bodyweight) along with a 70% sorbitol (around 3 milliliters per kilogram) provided by your veterinarian. This helps the nuts go through the digestive system faster and reduce the chances of absorbing causative compounds.<sup>10</sup>

In severe cases, though, you may need to bring your pet to the clinic for adequate treatment. If your pet has a high fever, is unable to walk or shakes constantly, bring them to emergency care immediately. Sometimes, macadamia nuts are mixed in goods that also contain chocolate, raisins or the artificial sweetener xylitol, which are also toxic to pets.<sup>11</sup> In this case, urgent veterinary care is a must.

Remember that prevention is still better than cure. If you have a macadamia tree growing near your home, keep your pet away from it to avoid accidental ingestion. It's also important to store the nuts in sealed containers, away from their reach.

#### Macadamia Nuts Trivia

Did you know that unlike other nuts, macadamia nuts are not picked from the tree? Instead, you need to wait for them to fall to the ground before harvesting them.<sup>12</sup>



# Are Macadamia Nuts Sustainable?

Despite being harmful to pets, macadamia nuts can be a great sustainable food source for humans. In fact, an article in New Food magazine dubbed the macadamia tree as a "sustainability giant" of the plant world, due to its innate ability to optimize water usage and sequester carbon from the atmosphere.<sup>13</sup>

The article also mentions a scientific analysis wherein the sap flow data taken from macadamia orchards found that the trees utilize their available water more efficiently than previously thought. This is because the tree's internal water management system shuts down the stomatal pores in periods of low moisture, allowing the tree to stay resilient even during periods of drought.<sup>14</sup>

### Instead of Macadamia Nuts, Offer These Safe Alternatives to Your Pets

Apart from macadamias, raw shelled, unsalted nuts can be shared with pets, as they are actually a good source of nutrients like vitamin E and trace minerals like selenium. Try offering them small pieces of plain almonds, pecans, English walnuts, cashews and Brazil nuts instead, used as training treats or as toppings to their meals. Make sure to chop the nuts up into smaller bits, especially if you have a small breed pet.

#### Sources and References

<sup>1</sup> Britannica, Macadamia

<sup>2</sup> USDA Food Data Central, Nuts, macadamia nuts, raw

<sup>3</sup> The Daily Meal, August 17, 2023

<sup>4,9</sup> ASPCA, October 13, 2015

<sup>5</sup> Battersea, May 25, 2023

<sup>6</sup> <u>Vet Hum Toxicol. 2000 Feb;42(1):18-21</u>

<sup>7</sup>Australian Veterinary Practitioner 30(1), January 2011

<sup>8</sup> World's Top Exports, Top Macadamia Nuts Exports & Imports by Country Plus Average Prices

<sup>10</sup> ASPCA, "Macadamia nut toxicosis in dogs," Steven Hansen, DVM, 2002

<sup>11</sup> First Vet, Macadamia Nut Toxicity in Dogs

<sup>12</sup> AgHires, Macadamia Nut Facts

<sup>13</sup> New Food Magazine, May 13, 2020

<sup>14</sup> Australian Macadamias, Water