Review of Virgin Coconut Oil: Is It Helpful for Dogs?

Melissa Eisenschenk, DVM, DACVD

Pet Dermatology Clinic, Maple Grove, MN

June 30, 2015

There are many reported uses for coconut oil, both applied topically and given orally. Coconut oil is used as a cooking oil, a skin moisturizer, hair protectant,¹ and is a source of food energy. There are many theoretical benefits to coconut oil, including topical and oral antibacterial or antifungal properties, aid in wound healing,² and anti-inflammatory effects.³ Coconut oil may provide a benefit for pets with certain types of gastrointestinal disease and improve function of aging brains as well. Minimal research has been done specifically looking at health benefits to dogs, so at this point benefits are mainly testimonial. The following article outlines why your clients may be excited to try it.

The main benefits from coconut oil come from its high medium chain triglyceride (MCT) content. Coconut oil consists of 91% saturated fats, most of which are medium chain triglycerides, which are resistant to peroxidation (and so are slow to become rancid). The main fatty acid of coconut oil is lauric (43-53%), followed by myristic (16-21%) and palmitic (7.5-10.2%) in addition to several others in smaller amounts.⁴

**Topical Antimicrobial Uses:** Lauric fatty acid has been shown to have antibacterial⁵-⁹ and anti-fungal¹⁰ properties in multiple studies. No studies have been performed in dogs, most were in petri dishes, and none of these were with coconut oil itself. One study showed great effectiveness of topical virgin coconut oil in decreasing staphylococcal colonization in humans with atopic dermatitis.¹¹ There is at least some research-based evidence to support coconut oil’s use as a topical antimicrobial.

**Oral Antimicrobial Use:** Monolaurin, the monoglyceride of lauric acid from virgin coconut oil, is FDA-approved as an emulsifying food additive most popularly used in margarine. It was not approved as an antimicrobial food additive because although it is a very good anti-fungal and anti-bacterial chemical, its antimicrobial effectiveness is inactivated by starches or proteins.¹² Serum proteins inactivate the antimicrobial effects of lauric acid as well,⁸ preventing oral use as an antibiotic for systemic infections. There is some evidence coconut oil is useful for oral bacterial infections in humans, using a technique called “oil-pulling”.¹³

**Gastrointestinal:** Coconut oil is rich in medium chain fatty acids, which are better absorbed by the intestinal tract than longer chain fatty acids, so they are helpful in some forms of GI disease associated with fat malabsorption in humans.¹⁴ Because coconut oil is so well absorbed by the intestinal tract, it is not helpful as a laxative.

**Brain Health:** Insulin resistance and altered glucose metabolism in the brain appears to play a large role in Alzheimer’s disease.¹⁵,¹⁶ There is some evidence MCTs may be of benefit in treating Alzheimer’s disease in humans.¹⁷ MCTs help perhaps because they take the place of carbohydrates to help reverse metabolic disease and provide an alternate fuel source (ketones) for an insulin-resistant, energy-starved brain. There is minimal support for this in dogs other than testimonials, these can be found on the website of Purina® Pro Plan® Bright Mind™ dog food.¹⁸
My Observations:

I try to keep in mind that funding for most studies (sad but true) is provided by companies that stand to benefit from the sale of patented chemicals or mixtures. Because of this, cheap natural products perhaps do not get as much scientific research as they deserve. What we do know is that it is unlikely for coconut oil to cause harm other than weight gain. I try to keep an open mind and allow owners to try things that I don’t see as harmful to see if there is any benefit. Coconut oil seems helpful to moisturize the skin and add shine to the hair. Pets who don’t instantly lick the oil off do smell nice for a short time. I can say (based on experience only) that coconut oil certainly does not seem to help very much with itching, allergies, or infections in my patients. Coconut oil may be a useful alternative in pets that do not tolerate fish oil, who smell bad with fish oil use, or whose owners would like a nice smelling “natural” topical therapy.

Doses:

Although there is at least some research supportive of coconut oil, it should not be used in place of proven disease treatments and veterinary recommendations. Owners considering coconut oil should consult their primary veterinarian to make sure coconut oil is not contraindicated with their pet due to any medical condition.

For topical use, apply a pea-sized amount to your palm for every 10# body weight and rub into the skin and roots of the hair. This is very difficult in dogs with a thick coat, so use may be limited to spot treatment or oral use in these dogs. Keep the dog busy after application so it can sit on the skin for 20-30 minutes at least. Clients do report with topical application, dogs and their housemates enjoy licking the coconut oil off, probably because it smells and tastes so good. If all other caloric intake is held constant, you will likely see weight gain, so monitor closely and decrease other foods given.

Most dose for oral use are for 1/4 teaspoon virgin coconut oil for every 10 pounds of body weight given orally twice daily, work up slowly to this dose over a couple weeks to avoid diarrhea, pancreatitis, or other GI upset. Do not use in patients with hyperlipidemia or who are prone to pancreatitis. Improved hair coat with oral use often takes at least a month to become apparent. If all other caloric intake is held constant, you will likely see weight gain, so monitor closely and decrease other foods given.

References:


