From: Monolaurin: Benefits, Dosage, and Side Effects

What Is Monolaurin?

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Overview

Monolaurin is a chemical derived from lauric acid and glycerin, and is a byproduct of coconut fat. For the past two decades, research scientists have been investigating possible applications for monolaurin in medicine, sanitization, and food preservation. Antibiotic resistance has become a worldwide problem. Most common hospital and foodborne infections have become resistant to the effects of traditional antibiotics, and people are dying of formerly treatable conditions.

Researchers hope that one day monolaurin could be used to create a new antibiotic or antiviral medication that's effective against a broad spectrum of microbes.

Forms and doses

Monolaurin can be taken daily as a dietary supplement. You can find monolaurin at your local health food store or vitamin shop. It's also available online through various sellers, including <u>Amazon</u>.

Coconut oil and certain coconut products contain approximately 50 percent lauric acid. Monolaurin is many times more effective than lauric acid at killing viruses and bacteria; however, researchers aren't sure exactly how it's formed in the human body. Lauric acid can be ingested in coconut oil and your body will convert it into monolaurin, but researchers are unsure of the conversion rates. Because of this, it's impossible to say how much coconut oil you would need to ingest to receive a therapeutic dose of monolaurin.

The primary sources of lauric acid are:

- dietary supplements
- <u>coconut oil</u> the highest natural source of lauric acid
- coconut cream, raw
- coconut cream, canned
- fresh shredded coconut
- coconut cream pudding

- coconut milk
- human breast milk
- cow and goat milk containing small percentages of lauric acid

Monolaurin hasn't been evaluated by the U.S. Food and Drug Administration (FDA) as a treatment for any medical condition, so there are no standard dosing guidelines. Dr. Jon Kabara, who first reported on monolaurin and now markets it under the brand name Lauricidin, suggests that people age 12 and older start with 750 milligrams (mg) of monolaurin two to three times per day. From there, he suggests they work their way up to 3000 mg, two to three times per day.

These recommendations are made from Kabara's clinical experience only and aren't supported by any specific research. The company's <u>website</u> says children ages 3 and older can begin taking Lauricidin at very small doses and work their way up to a larger dose. Coconut oil is an edible, nontoxic oil used around the world as a standard cooking oil. Anyone with a coconut allergy shouldn't ingest coconut oil, but adverse effects are otherwise unlikely.

People take monolaurin supplements to encourage immune health and general wellness, but there's little scientific data to back up these claims. Studies have investigated the antimicrobial effects of coconut oil, lauric acid, and monolaurin, but most of these studies have been conducted in test tubes and petri dishes (*in vitro*).

Its antimicrobial properties have been clearly established, but more research is needed to test the effects of monolaurin on living subjects.

Antibacterial effects

Research shows that monolaurin is an effective killer of bacteria, including antibioticresistant <u>Staphylococcus aureus</u>. A 2013 study published in the Journal of Medicinal Food confirmed the results of other *in vitro* studies that showed the antibacterial power of monolaurin. It also showed that monolaurin at least partially fights off *Staphylococcus aureus* in mice.

<u>A study from 2007</u> in the Journal of Dermatology Drugs compared monolaurin to six common types of antibiotics in the treatment of superficial pediatric skin infections. The study found statistically significant broad spectrum antibiotic effects without any of the resistance of common antibiotics.

Antifungal effects

Several fungi, yeasts, and protozoa are reported to be inactivated or killed by monolaurin, including some species of <u>ringworm</u> and *candida albicans*. <u>*Candida albicans*</u> is a common fungal pathogen that lives in the gut, mouth, genitals, urinary tract, and skin. It can be life-threatening in immunocompromised people.

A <u>recent study</u> found that monolaurin has potential as an antifungal treatment for *candida albicans* —one that can also reduce a pro-inflammatory response.

Antiviral effects

It's <u>reported</u> that some of the viruses that have been inactivated, at least partially, by monolaurin include:

- <u>HIV</u>
- <u>measles</u>
- herpes simplex-1
- vesicular stomatitis
- visna virus
- <u>cytomegalovirus</u>

<u>A 2015 study</u> published in PLOS ONE tested a monolaurin vaginal gel in female primates. Researchers found that daily doses of monolaurin gel could reduce primates' risk of vaginally contracting SIV, the primate version of HIV. The researchers concluded that monolaurin has great potential as a prophylactic.

Side effects and risks

Although the FDA hasn't approved monolaurin for the treatment of any medical condition or disease, it's given it <u>Generally Recognized as Safe (GRAS)</u> status. This means that monolaurin is generally considered safe to use in foods, even in large amounts. But quantity limits in standardized foods with nutritional labeling, like granola bars, may exist.

The only risks associated with monolaurin are those related to the source it's derived from, coconut oil. <u>Food allergies</u> are common, but serious <u>allergic reactions to coconut</u> are rare, even among people who are allergic to tree nuts.

There are no known risks, interactions, or complications with monolaurin as a dietary supplement.

Tips for taking monolaurin | Tips for taking

• Make sure dietary supplements come from a reputable source. Dietary supplements are not regulated, so beware of unfamiliar additives.

- Lauricidin is a pure lipid extract with a naturally bitter, soap-like taste. Wash it down like a pill with juice or water to avoid the bad taste. Taking it with a hot beverage can make the taste worse.
- Increase your use of <u>coconut oil</u>. While coconut oil isn't great for deep-frying, it's perfect for frying over a medium heat. Try using coconut oil in recipes that call for canola or other vegetable oils.
- When coconut oil is applied <u>topically</u> it can be soothing and hydrating, but this has nothing to do with monolaurin.