

What Are The Health Benefits Of Monolaurin?

Monolaurin is a chemical derived from lauric acid that is found naturally in coconut oil. Monolaurin is revered for its natural medicine potential and its ability to support the functions of the immune system.

The use of monolaurin is highly recommended for preventing infections, including bacterial, viral, and fungal infections, and protecting the body against a range of acute and chronic diseases.

It is commonly used for the treatment and prevention of common cold, influenza, herpes zoster (shingles), and other infections. Monolaurin is also used in the food manufacturing industry for the production of ice cream, spaghetti, and margarine.

Here is a detailed discussion about what Monolaurin is, its therapeutic benefits, and how this compound would help you stay healthy and avoid diseases, especially infections.

What is monolaurin?

Monolaurin is a chemical compound derived from a medium-chain triglyceride like lauric acid. It is a by-product released in the body during the metabolism of coconut fat.

Recent research studies have revealed the immense therapeutic and preventive potential of this compound. It has been found to be beneficial in the management of common health conditions including infections and those linked to the weak or abnormal functions of the immune system. [\[1\]](#)

Scientists have also found possible applications of monolaurin in the field of sanitization, and food preservation most of which could be attributed to the ability of this compound to destroy infectious pathogens.

What are the best sources of monolaurin?

Monolaurin can be obtained through dietary sources or foods having lauric acid or as a dietary supplement.

Coconut oil is one of the best natural sources of Monolaurin. Coconut and some coconut products contain nearly 50% lauric acid, which is a precursor of Monolaurin.

However, it should be noted that monolaurin is more effective at destroying bacteria and viruses than lauric acid. Hence, the intake of Monolaurin through the use of supplements is

considered more beneficial for protecting yourself against the risk of infections than relying on dietary sources of lauric acid.

The natural dietary sources of lauric acid and monolaurin include:

- Coconut oil
- Coconut cream, raw or canned
- Coconut milk
- Fresh shredded coconut
- Human breast milk
- Cow and goat milk

Let us have a look at the health benefits of monolaurin and the mechanism of action of this compound aimed at protecting the body against disease-causing agents.

How does monolaurin affect you and why should you take it

Monolaurin can encourage the functions of the immune system and improve your general wellness.

Research studies that investigated the antimicrobial properties of monolaurin and lauric acid derived from coconut oil have shown encouraging results. The findings of these studies have revealed that the regular use of monolaurin could play a significant role in reducing the risk of infections, allergies, and other immunological disorders. It may also help improve digestive and skin health and improve the quality of your life.

The natural health benefits of monolaurin as revealed by research studies are discussed below.

Antibacterial properties

Research has shown that monolaurin possesses strong antibacterial properties that could be beneficial for the prevention and treatment of infections caused due to a wide range of bacteria.

It can be highly effective in the treatment of antibiotic-resistant infections caused due to *Staphylococcus aureus*. Monolaurin would support the functions of the immune system and destroy the colonies of *Staphylococcus aureus* thereby clearing the infection in a shorter duration. [\[2\]](#) [\[3\]](#)

Improves gut health

Monolaurin can inhibit the activities of a broad range of bacteria including *Escherichia coli* and *Bacillus subtilis* that are known to cause severe gastrointestinal infections.

What makes Monolaurin a safer and more efficient antimicrobial agent for treating these infections is its ability to destroy the pathogens without causing any adverse side effects or antibiotics resistance. [4]

Supports skin health

The use of monolaurin is recommended for patients who have a tendency to develop recurrent skin infections and related consequences such as acne, boils, pustules, and abscesses.

The antibacterial properties of monolaurin are comparable to those of some antibiotics commonly used in the management of superficial skin infections, especially in children.

Research studies have revealed that a significant broad-spectrum antibiotic effect could be achieved through the use of monolaurin, without the risk of developing resistance that is common with those antibiotics. [5]

Seasonal threats

Monolaurin is found to be effective against common seasonal threats such as influenza. It has been reported to inhibit the risk of viral infections, specifically those caused due to the lipid-coated viruses such as influenza virus, Pneumovirus, and the Herpes simplex virus. [6]

Patients with a weak or compromised immune system or those with a history of recurrent viral infections should include Monolaurin-rich foods in their diet. Monolaurin would strengthen their immune system and produce an antiviral effect thereby reducing their risk of seasonal infections.

Antiviral benefits

Monolaurin is effective against infections caused due to other viruses including Cytomegalovirus, HIV, and Epstein-Barr virus. It would restore the healthy functions of the immune cells, and enable the body to fight these infections more efficiently thereby preventing the long-term consequences caused due to the same.

Antifungal properties

Monolaurin is one of the best-known natural antifungal agents. It is particularly effective against *Candida albicans*, a common fungus that can affect the skin, throat, and oral cavity and cause symptoms like itching, white patches, irritation, and rashes.

The findings of research studies have suggested that the use of Monolaurin could help clear the infection caused due to *C. Albicans* in a shorter duration while also providing relief from the symptoms of these conditions.

It would control the inflammatory response of the immune system to the fungi and restore the healthy functions and appearance of the affected tissues. [7]

Monolaurin can also destroy or deactivate some other fungi including the species of ringworm and parasites like Giardia lamblia. [8]

Tick-borne diseases

The recovery of patients diagnosed with tick-borne diseases could be faster and smoother when monolaurin is added to the treatment protocol. One research study has shown that monolaurin can produce a strong antimicrobial effect against the bacteria known to cause tick-borne diseases like Borrelia garinii, and Borrelia burgdorferi. [9]

Improves immune health

Monolaurin is revered for its ability to promote the functions of the immune system. It is being explored as a natural immunity-booster for its antimicrobial, antibacterial, antiviral, and immunomodulatory properties.

The immunomodulatory properties of Monolaurin are expected to be beneficial for reducing the severity of the infections caused due to coronavirus SARS-CoV-2 responsible for the COVID-19 pandemic.

Clinical studies have shown that Monolaurin could offer protection against the coronavirus in several ways. It would facilitate the disintegration of the membrane of the viruses rendering them unable to survive. It would also inhibit the ability of the viruses to mature, as a result of which their potency to attack and destroy healthy tissues would be reduced.

Monolaurin would also prevent the binding of the viral proteins to the cell membrane in the host. As a result, the inflammatory response triggered by the viruses on the healthy tissues at the cellular level would be prevented.

The immature viruses would be eventually eliminated from the body without creating any severe symptoms or complications.

This study has provided insights into the mechanism of action of Monolaurin and how it could help in the prevention and treatment of viral infections. [10]

Increases energy levels

Monolaurin, being derived from lauric acid, would provide the body with an efficient source of energy. Lauric acid is one of the MCTs (medium-chain triglycerides) that are metabolized in the body resulting in the release of ketone bodies.

These ketone bodies can provide an alternative source of energy to the body, especially when the primary source of fuel, which is carbohydrates, is unavailable.

Hence, the use of Monolaurin is considered effective for patients who are following a low-carb diet for weight loss or other purposes.

It would help them avoid symptoms like fatigue, tiredness, body aches, headaches, and confusion that commonly occur due to the deprivation of the primary source of fuel in the

form of carbohydrates. Monolaurin, by providing an alternative source of fuel to the body, would help improve energy levels, support bodily functions, and prevent the symptoms caused due to a low-carb diet.

This would enable the person to stick to their healthy dietary habits for longer allowing them to achieve their fitness goals more easily.

What are the different ways monolaurin can help your body and health?

The use of supplements enriched with monolaurin is one of the most effective ways to derive the benefits associated with this compound.

It is possible to obtain monolaurin from foods rich in lauric acid like coconut. However, it might be difficult to ensure your body is able to receive the optimum dosage of this compound through diet.

Lauric acid in your dietary sources such as coconut oil is broken down and converted into monolaurin through the action of certain enzymes. However, it should be noted that the exact mechanisms involved in the conversion of lauric acid to monolaurin in the body are not known. Also, researchers are not sure of the conversion rate of lauric acid to monolaurin in the human body.

This means it is difficult to know how much of dietary lauric acid is actually converted to monolaurin. This makes it difficult to find the amount of coconut oil you would need to include in your daily diet in order to receive the optimum therapeutic dosage of monolaurin.

This marks the need to use monolaurin supplements that would ensure your body receives the therapeutic doses of monolaurin on a regular basis allowing you to derive the benefits of this compound in a safe and the most efficient manner.

The use of monolaurin supplements is also recommended as a safer and more effective way to protect yourself against infections. Recent decades have witnessed a marked rise in the inefficient treatment of infections due to antibiotic resistance.

Most common foodborne, seasonal, and hospital infections have become resistant to the effect of traditional antibiotics due to which the incidence of mortality linked to infectious disorders is rising.

Monolaurin offers a safer way to manage infections, as it is effective against a broad spectrum of microbes including bacteria, viruses, and fungi. It can provide an effective solution against the risk of mortality and morbidity arising due to the lack of efficient

antibiotics and antibiotic resistance and help patients overcome the symptoms in a shorter duration. [11]

Unlike antibiotics, Monolaurin is not known to cause serious side effects making it a safer choice for treating infections.

It is advisable to choose a supplement that is enriched with Monolaurin in the form of glycerol monolaurate. Supplements that contain other beneficial herbs and compounds that complement the medicinal properties of Monolaurin such as astragalus, beta-glucan, Cat's claw, and Olive leaf extract would help you derive better benefits.

Conclusion

Modern scientific research has revealed monolaurin to be a promising therapeutic agent that can be used in the management of infections and several other diseases. The wide range of medicinal properties of Monolaurin would also improve your immune health, increase your energy levels, and provide protection against seasonal attacks.

Regular use of Monolaurin in the form of diet or supplements needs to be encouraged to help curb the rising incidence of infections, including those linked to antibiotic resistance.

References:

1. <https://www.webmd.com/vitamins/ai/ingredientmono-1149/>
2. <https://www.ncbi.nlm.nih.gov/pubmed/23767861>
3. <https://www.ncbi.nlm.nih.gov/pubmed/23767861>
4. <https://pubmed.ncbi.nlm.nih.gov/19895490/>
5. <https://www.ncbi.nlm.nih.gov/pubmed/17966176>
6. <http://online.liebertpub.com/doi/abs/10.1089/act.2006.12.310>
7. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4924139/>
8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4924139/>
9. <https://www.doi.org/10.1111/jam.12970>
10. <https://bmcrenotes.biomedcentral.com/articles/10.1186/s13104-020-05379-6>
11. <https://pubmed.ncbi.nlm.nih.gov/17966176/>

1. [Monolaurin - Uses, Side Effects, and More](#)

2. [Vijaya Manohar, Bobby Echard, Nicholas Perricone, Cass Ingram, Mary Enig, Debasis Bagchi, Harry G Preuss, In vitro and in vivo effects of two coconut oils in comparison to monolaurin on Staphylococcus aureus: rodent studies, 2013 June, PMID: 23767861 DOI: 10.1089/jmf.2012.0066](#)

3. [Vijaya Manohar, Bobby Echard, Nicholas Perricone, Cass Ingram, Mary Enig, Debasis Bagchi, Harry G Preuss, In vitro and in vivo effects of two coconut oils in comparison to monolaurin on Staphylococcus aureus: rodent studies, 2013 June, PMID: 23767861 DOI: 10.1089/jmf.2012.0066](#)

4. [Hui Zhang, Hewen Wei, Yinan Cui, Guoqun Zhao, Fengqin Feng, Antibacterial interactions of monolaurin with commonly used antimicrobials and food components, 2009 September, PMID: 19895490 DOI: 10.1111/j.1750-3841.2009.01300.x](#)

5. [Beatriz G Carpo, Vermén M Verallo-Rowell, Jon Kabara, Novel antibacterial activity of monolaurin compared with conventional antibiotics against organisms from skin infections: an in vitro study, 2007 October, PMID: 17966176](#)

6. [Shari Lieberman, Mary G. Enig and Professor Harry G. Preuss, A Review of Monolaurin and Lauric Acid: Natural Virucidal and Bactericidal Agents, 2006 December](#)

7. [Dalia Seleem, Emily Chen, Bruna Benso, Vanessa Pardi, and Ramiro M. Murata, In vitro evaluation of antifungal activity of monolaurin against *Candida albicans* biofilms, 2016 June, PMCID: PMC4924139 PMID: 27366648 doi: 10.7717/peerj.2148](#)

8. [Dalia Seleem, Emily Chen, Bruna Benso, Vanessa Pardi, and Ramiro M. Murata, In vitro evaluation of antifungal activity of monolaurin against *Candida albicans* biofilms, 2016 June, PMCID: PMC4924139 PMID: 27366648 doi: 10.7717/peerj.2148](#)

9. [A. Goc, A. Niedzwiecki, M. Rath, In vitro evaluation of antibacterial activity of phytochemicals and micronutrients against Borrelia burgdorferi and Borrelia garinii, 2015 October, DOI/10.1111/jam.12970](#)
10. [Woon Yi Law, Mohd Razip Asaruddi, Showkat Ahamd Bhawani & Samsur Mohamad, Pharmacophore modelling of vanillin derivatives, favipiravir, chloroquine, hydroxychloroquine, monolaurin and tetrodotoxin as M^{Pro} inhibitors of severe acute respiratory syndrome coronavirus-2 \(SARS-CoV-2\), 2020 November, DOI/10.1186/s13104-020-05379-6](#)
11. [Beatriz G Carpo, Vermén M Verallo-Rowell, Jon Kabara, Novel antibacterial activity of monolaurin compared with conventional antibiotics against organisms from skin infections: an in vitro study, 2007 October, 6\(10\):991-8, PMID: 17966176](#)