

How to Maximize the Seven Most Impressive Health Benefits of Curcumin

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STORY AT-A-GLANCE

- › Turmeric is derived from the rhizome of a plant in the ginger family and is native to Southeast Asia. It has been renowned for its healing properties for 4,000 years
- › Curcumin is the primary active compound in turmeric, which also contains antioxidants, polyphenols and vitamin C
- › Curcumin is by far the most studied compound, showing safety and non-toxicity, even at high doses. Curcumin has low bioavailability in its raw form, which means your body struggles to absorb it effectively
- › Improved delivery methods have been shown to improve absorption of curcumin. This can have a direct impact on your health as it is nearly impossible to raise serum concentrations with supplements alone. Consuming high-quality curcumin extracts has shown great potential
- › When consumed efficiently, curcumin has unique health promoting properties which make it a uniquely valuable supplement with many benefits

Turmeric, revered for centuries in traditional medicine and cuisine, boasts a rich history steeped in cultural and medicinal significance. Originating from the *Curcuma longa* plant native to South Asia, its golden hue and distinct flavor have adorned dishes and ceremonies for millennia.¹

It's likely you've savored the vibrant taste of turmeric in curries, rice and soups. However, it's the active ingredient, curcumin, that has captured interest for its therapeutic properties. Major advances have been made in harnessing the power of curcumin and the [countless health benefits of curcumin](#) may surprise you.

Turmeric – A Spice Superstar but Curcumin Shines Brightest

Eating foods and spices, such as turmeric, may increase cognitive and mitochondrial function and mood, while decreasing depression caused by brain inflammation.²

Turmeric contains essential oils, eugenol, carotene, vitamin C and powerful antioxidants.

Yet it is the curcuminoids, with curcumin being the most extensively researched, that show the widest array of potential benefits. Unfortunately, therapeutic use is quite difficult due to poor water solubility, poor bioavailability and rapid metabolism.

Only about 1% of the curcumin you ingest is absorbed by your body.³ This has prompted solutions, both ancient and modern, to help you tap into the bioactive properties of curcumin by enhancing its solubility.⁴

Golden Milk

Golden milk is one potential solution to the curcumin's lack of absorption but it stands on its own as delightful beverage. Also known as "Haldi ka Doodh" in Hindi, it has been part of Indian culture for centuries. It can be enjoyed hot or cold and has multiple health benefits. Dairy is not strictly necessary to make golden milk. I recommend coconut milk if you go the nondairy route, but definitely seek out organic, grass fed raw milk in you choose cow's dairy.

Recipes vary but turmeric is the source of both the gold color and golden reputation of this ayurvedic beverage. It is easy to make and can stored for several days. Other golden milk ingredients include ginger, cinnamon, honey and nutmeg. It may resemble a curry but the ginger-infused flavor profile has an almost citrusy mouthfeel.

The mix of spices offers powerful antioxidant properties that help prevent cell damage and reduce oxidative stress. This contributes to the anti-inflammatory properties on which many of the health claims are founded.

Ginger, widely added to food and used as a supplement, has antioxidant and anti-inflammatory properties. Nutmeg has long been used for its antimicrobial and antioxidant properties, but more recent research show potential for pain relief and reducing inflammation activities as well.⁵

Black Pepper Supercharges Curcumin Absorption

If you want to up the bioavailability of the curcumin, black pepper is a crucial addition. Piperine, the primary active component in black pepper, has been shown to increase the bioavailability by 2,000%.⁶ It can be added to golden milk recipes, with the dried turmeric spice and with high-quality curcumin supplements.

Adding **black pepper** to golden milk is also a practice supported research which showed the "curcuminoid-piperine combination" addressed the symptoms of metabolic syndrome in 117 study subjects who exhibited both oxidative stress and inflammation.⁷ According to the randomized, controlled trial and updated meta-analysis, oxidative and inflammatory status showed significant improvement, even with short-term **curcumin supplementation**.

The combination of curcumin and piperine enhances the myriad benefits of curcumin and works synergistically to reduce oxidative stress and inflammation in individuals with metabolic syndrome.⁸ Black pepper is not a one-size-fits-all solution though, as piperine does interact with the enzymes that metabolize some drugs, creating the potential for adverse side effects.⁹

Black pepper is an effective bioavailability enhancer but the number the number of food and drug interactions has prompted researchers to seek other methods of improving curcumins bioavailability.

Alternatives to the Curcumin Piperine Combo

If you are unable to use black pepper to increase the absorption of curcumin, there are now improved methods. The best solution is a high-quality curcumin extract. A World Journal of Gastroenterology Report¹⁰ found:

"Recent progress in the formulation of curcumin complexes with other substances, in particular with phospholipids, has remarkably increased the bioavailability of this compound, leading to greater absorption and a higher concentration in human tissues."

The use of adjuvants in novel liquid and solid curcumin formulas have shown promise, as have phospholipid encased supplements. Each method seeks to counteract the poor absorption and rapid elimination of curcumin from the body without the use of piperine.

Similar to golden milk, dietary lipids may effect curcumin solubility. Turmeric should be consumed with lecithin rich cuisine like eggs and healthy oils if you want to effectively increase curcumin intake without the use of black pepper.¹¹

Seven Most Impressive Health Benefits of Curcumin

Whether it is through golden milk, high-quality supplementation or a combination of turmeric and black pepper, there are plenty of reasons to incorporate curcumin into a healthier lifestyle. We have just scratched the surface of its potential and here are seven of its most impressive health benefits.

Benefit No. 1: Improve your immune health with curcumin – As a component of turmeric, curcumin works in tandem with vitamin C and other plant compounds to enhance your immune health. Curcumin inhibits inflammatory responses by reducing the production of inflammatory cytokines while enhancing the production of anti-inflammatory cytokines.¹² But cutting off the hyperinflammatory cytokine storm, it diminishes cellular damage.¹³

Patients administered curcumin benefited from decreased inflammation, allergies, enhanced immunity against tumor cells and pathogens.¹⁴ The anti-infective properties of curcumin have shown potential against both viral and bacterial infections.¹⁵

Benefit No. 2: Take curcumin for a healthier heart – Curcumin has shown cardiovascular protective effects in several studies. Investigations have indicated it modulates the signaling pathways responsible for oxidative stress, inflammation, apoptosis and proliferation.¹⁶

Curcumin also can address risk factors for cardiovascular disease and the outcomes of the disease itself. The primary limiting factor found in several studies was the poor bioavailability of curcumin and the use of improved formulations show promise.¹⁷

Benefit No. 3: Metabolic health – Metabolic syndrome is a group of conditions that together raise your risk of serious. A diet rich in polyphenols may be beneficial in the treatment of metabolic disorders. Curcumin is a polyphenol, which is a micronutrient found in plants.

One area of particular interest is using curcumin as a treatment for polycystic ovary syndrome (POS), an endocrine disorder associated with insulin resistance, obesity and hypertension. A systemic review found qualitative improvements in fasting glucose, fasting insulin, total cholesterol and high-density lipoprotein levels compared to the control group.¹⁸

Nonalcoholic fatty liver disease¹⁹ and atherosclerosis²⁰ are two additional metabolic disorders where curcumin showed major promise.

Benefit No. 4: Curcumin addresses brain, mood and mental health – Studies²¹ focusing curcumin's utility as a treatment for major depressive disorders generated impressive results. A meta-analysis conducted in 2016 found that curcumin had its highest anti-depressive effects when administered to middle aged adults over long treatment periods at high doses.

It also has shown mood-enhancing effects in healthy seniors, overweight and obese adults, women with premenstrual syndrome, adults with Type 2 diabetes, self-reported digestive issues and hypertension.²²

There are several proposed mechanisms for such a versatile umbrella of benefits. These include improving mitochondrial activity and restoring serotonin, dopamine, noradrenaline and glutamate levels. It is also believed to work at the gut level, normalizing intestinal permeability.

Benefit No. 5: Enhanced joint health and mobility – We have already discussed the many ways the anti-inflammatory properties of curcumin can benefit your health. Joint health and mobility can be added to this list. The impact of curcumin goes far beyond most other spices.

A study²³ of 367 patients with osteoarthritis found that taking turmeric extract three times daily was comparable to a 1,200-milligram dose of ibuprofen.²⁴ In this case, 95% of the patients were satisfied with the treatment outcome.²⁵

As curcumin does not have great bioavailability to begin with and only makes up 1% to 6% of the dry weight of turmeric, consuming a high-quality curcumin with fat or black pepper would be increase your serum levels of this powerful nutrient.²⁶

Benefit No. 6: Promote healthy skin with curcumin – Due to its bold yellow color, the potential benefits of topical turmeric and curcumin have been somewhat overlooked. There are skin related conditions where its anti-inflammatory show promise, such as psoriasis,²⁷ where it was found much more effective than the placebo gel.

While the topical use of curcumin is low compared to studies on its pharmacological properties on a molecular level, a review of 19 clinical studies showed its great potential as a topical agent.²⁸ Until topical treatments are more widely available, curcumins ability to reduce cellular damage can reduce wrinkles, dark spots and other signs of aging.²⁹

Benefit No. 7: Curcumin promotes gut health – Curcumin can also aid digestion and works with our gut microbiome to improve immune function. The Journal of Evidence Based Integrative Medicine³⁰ found curcumin increased the diversity of beneficial bacteria strains more so than whole turmeric, while reducing pathogens.

The microbial diversity in the turmeric group increased 7%, whereas this number spiked to 69% in the curcumin group and decreased in the placebo group – a great reminder that there is a world of difference between curcumin and turmeric.

Curcumin also may benefit your gut by increasing the permeability of the intestinal barrier. This directly addresses such issues as IBS, celiac and Crohn's disease. There are many ways to [fix gut health](#) and curcumins ability to enhance the health of your gut lining can be a valuable ally.

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