

The Many Benefits of Curcumin

by Channing Dallstream



Curcumin is the most active component (curcuminoid) of the perennial herb turmeric, extracted from the roots. It's responsible for the spicy flavor in Indian fare and lends its bright yellow color to curries. Early studies on curcuminoids reveal their ability to help reduce the chronic inflammation involved in osteoarthritis and other conditions. **But as research progresses, many other side benefits emerge that suggest curcumin holds promise for treating tendonitis, obesity, liver health, and maybe even some types of cancer.**



How does curcumin work?

Curcumin is rich in polyphenols (antioxidants) and improves apoptosis – the natural process of old or damaged cells dying and rejuvenating. It also inhibits the COX-2 enzymes that provoke inflammation. A national magazine listed curcumin in its 'Hot Antioxidants of 2013' although it's been utilized in Ayurvedic medicine since 1900 B.C. for overall wellness, to purify the blood, treat chronic illness, stomach problems and inflammatory skin conditions like eczema.¹

Can you give me an example?

Tendonitis causes pain and tenderness due to inflammation in the tendons of shoulders, elbows, knees and other joints. Curcumin targets and blocks specific neuroreceptors to inhibit the COX-2 enzymes and stop the inflammatory response. In an in vitro cell trial, researchers treated human tendon tissue cultures with curcumin. They observed that curcumin 1) inhibited nuclear factor kappa beta (NF-kB) and 2) prevented it from turning on and prolonging inflammation.² Inflammation also underlies metabolic disease such as obesity and type 2 diabetes.



Can curcumin help me lose weight?

Curcumin is not a diet pill but it appears to help with weight loss. The hard belly fat Dr. Mehmet Oz warns about is living, toxin-retaining tissue, the type which can lead to metabolic dysfunction and even insulin resistance. Curcumin reduces the formation of fat tissue by suppressing the blood vessels it needs to form. Also noteworthy is how obesity significantly slows the body's response to quell inflammation, perpetuating a faulty metabolic cycle.³ Curcumin also supports macrophage activity, white cells that remove cellular debris from fat tissue, helping it become less toxic and inflamed. Thus, curcumin "may have a potential to improve chronic inflammatory conditions in obesity."⁴



Does curcumin have liver benefits?



Studies show that curcumin improves liver function. Bile is made in the liver, circulates in the bloodstream and breaks down fat. Primary sclerosing cholangitis is the swelling (inflammation), scarring (fibrosis) and destruction of the bile ducts inside and outside of the liver. The reduced bile circulation causes chronic liver inflammation. Current treatments are scant, expensive and without significant results. A four-week mouse study tested the anti-inflammatory and anti-fibrotic benefits of curcumin. At study's end, "liver damage, cholestasis and fibrosis were reduced" for the mice fed curcumin vs. control group. Specifically the curcumin group exhibited reduced enzyme ALT (a marker of liver damage) by 55% and the inflammatory protein CD11B was 70% lower, leading researchers to show that curcumin may have multiple targets in the liver. "Targeting these pathways may be a promising therapeutic approach" for liver treatment.⁵

What's the curcumin news on cancer?

The pro-apoptotic effects of curcumin may help prevent or reduce tumor growth. Damaged cells linger, fester and become problematic. Curcumin reduces or reverses old cell waste build up (just as it does in fat tissue). It has been found to support immunity by being cytotoxic to a wide variety of tumor cells. Many studies indicate that curcumin acts at various stages of tumor growth by inhibiting tumor cell progression. Global research finds curcumin's apoptotic benefits in treating both prostate and breast cancer promising as it is helpful in shrinking and slowing tumor growth in mouse studies.⁶



Is there a suggested dose?

Curcumin is considered safe; the majority of studies, even those using up to 8 grams, were without significant side effects (some had mild stomach upset). The FDA has curcumin on its generally recognized as safe (GRAS) list. However even at lower doses its overall effects are still remarkable. Go by the label's directions and increase slowly to find your right dose.

Continued

The Many Benefits of Curcumin

continued

And look for a product that lists curcumin as standardized to provide a minimum of 95% curcuminoids for efficacy and a blend of curcuminoids as naturally found in turmeric root.

Any other benefits I should know?

 Curcumin's anti-inflammatory property makes it a candidate to help treat most inflammatory disease conditions. That's why it is also being investigated for its role in anti-aging (particularly the brain), raising immunity, lowering triglycerides, and reducing inflammation markers in heart disease and GI disorders (irritable bowel disease, colitis, Crohn's). While this article touches only on some of the many benefits of curcumin – anti-inflammatory, antioxidant and anticancer – you may want to consider curcumin as part of any multi-targeted disease therapy.

References

1. Aggarwal, B.B. et al. Curcumin: the Indian solid gold *Adv Exp Med Biol* 2007;595:1-75.
2. Buhrmann, C. et al. Curcumin Modulates Nuclear Factor κ B(NF- κ B)-mediated inflammation in Human Tenocytes in *Vitro J Bio Chem* doi:10.1074.
3. Woo, H.M. et al. Active spice-derived components can inhibit inflammatory responses of adipose tissue in obesity by suppressing inflammatory actions of macrophages and release of monocyte chemo attractant protein-1 from adipocytes *Life Sci* 2007 Feb 13;80-(10):926-31.

4. Goran, M.I., Aloderete, T.L. Targeting adipose tissue inflammation to treat the underlying basis of the metabolic complications of obesity *Nestle Nutr Inst Workshop Ser* 2012;73:49-60.
5. Curcumin improves sclerosing cholangitis in Mdr2-/- mice by inhibition of cholangiocyte inflammatory response and portal myofibroblast proliferation. *Gut* 2010; 59:521-30.
6. Kuttan, G. et al. Anti-tumor, anti-invasion, and antimetastatic effects of curcumin. *Adv Exp Med Biol* 2007;595:173-84.

©TyH Publications (M. Squires)

For informational purposes only; not intended to treat, cure, diagnose or prevent any disease, nor substitute for professional medical advice.

In the TyH Health Library, read about some of the disorders Curcumin targets:

- ◆ *Brain function, I think therefore I am*
- ◆ *Cholesterol 101*
- ◆ *Crohn's, A Look at Crohn's*
- ◆ *Diabetes type 2, A Runaway Train*
- ◆ *Glucosamine Still the One*
- ◆ *Magnesium & Metabolic Syndrome*
- ◆ *Prostate 101*
- ◆ *Quercetin for Your Health*

Health
POINTS

Published in *Health Points*. This article is protected by copyright and may not be reproduced without written permission. For information on a subscription, please call TyH Publications, 1-800-801-1406 or write TyH Publications, 12005 N. Saguaro Blvd., Ste. 102, Fountain Hills, AZ 85268. E-mail editor@e-tyh.com. For information on TyH products, visit our website at www.e-tyh.com.