



HERBAL MEDICINE

Recommending Curcumin for Much More Than Pain Relief

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WHAT YOU NEED TO KNOW

- Curcumin from turmeric can be incredibly effective in stopping pain, but your patients may also benefit from curcumin for other reasons.
- In addition to relieving pain, curcumin can protect the cardiovascular system, reduce gastrointestinal inflammation, alleviate symptoms of depression, and defend against tumor formation.
- A clinically studied curcumin blended with turmeric essential oil helps it absorb more efficiently and remain in the bloodstream at meaningful levels longer than standard extracts.

There's no doubt that many of your patients visit your practice because they are in pain. And there's certainly no doubt that curcumin from turmeric (*Curcuma longa*) can be incredibly effective in stopping that pain, whether due to chronic conditions like arthritis or acute pain from intensive workouts. But your patients may also benefit from curcumin for other reasons.

In addition to relieving pain, curcumin can protect the cardiovascular system, reduce gastrointestinal inflammation, alleviate symptoms of depression, and defend against tumor formation - to name just a few of its applications.¹⁻²

Promotes High HDL, Reduces Inflammation That Leads to Heart Disease

Because of its anti-inflammatory actions, curcumin could easily be in a patient's cardiovascular protocol. In an experimental model of heart disease, curcumin protected against the effects of a high-cholesterol diet, preventing the inflammatory changes that lead to plaque buildup, reducing

triglycerides, and increasing protective HDL cholesterol levels.³ In a clinical study with volunteers receiving 500 mg of curcumin daily, HDL levels increased by a remarkable 29%.⁴

Inhibits GI Inflammation and Associated Symptoms

If your patients complain of bloating, frequent diarrhea or constipation, gas, abdominal pain, or acid reflux, curcumin may help. One clinical study of over 200 participants with IBS found the use of a standardized extract of curcumin was associated with up to a 25% reduction in abdominal pain, and two-thirds of participants reported an improvement in overall symptoms.⁵

Additionally, in a small pilot study of patients with Crohn's disease or ulcerative proctitis (a type of IBD) who received curcumin along with the standard anti-inflammatory drugs (including steroids), many of the patients were able to actually reduce or stop their medications altogether, thanks to the addition of curcumin.⁶

Along with reducing inflammatory compounds in the intestines, curcumin can strengthen the intestinal wall to prevent harmful bacteria from leaching out of the intestines and damaging the liver and kidneys.⁷

Alleviates Symptoms of Depression

Patients in physical pain can be more prone to depression, and curcumin can address that as well.⁸ A clinical study published in the journal *Phytotherapy Research* focused on individuals with major depressive disorder (MDD). It compared the efficacy and safety of high-absorption curcumin blended with turmeric essential oil, the prescription anti-depressive fluoxetine, and a combination of both.⁹

The curcumin dosage was 1,000 mg daily and the fluoxetine dose was 20 mg - whether combined or taken individually. The best response, measured by the Hamilton Depression Rating Scale (HAMD-17), was in the combination group, at 77.8%.⁹ Interestingly, the single-therapy groups scored almost exactly the same, with fluoxetine at 64.7% and curcumin at 62.5%.⁹

So, curcumin worked as well as the prescription drug fluoxetine in terms of the measurable changes in HAMD-17 score from baseline to six weeks of treatment, indicating that it can be used as an effective and safe treatment for patients with MDD.⁹

Other research has found that curcumin promotes the generation of brain-derived neurotrophic factor (BDNF), a key protein for brain plasticity and overall mental well-being.¹⁰

Promotes Wound Healing and Improves Skin Conditions

You may have patients with damaged skin or abrasions from physical work, or patients who deal with issues that make wounds and skin conditions more likely. Curcumin not only protects skin with its ability to quench damaging free radicals and reduce inflammation, but it has also been shown to improve collagen deposition and vascular density in a wound to ensure adequate blood flow and carry in the nutrients needed for repair of damaged tissue.¹¹

Many people who experience problems with slow healing of wounds also have type 2 diabetes, which interferes with wound healing by reducing blood flow, and by extension, the nutrients

needed for tissue repair. High blood sugar also interferes with the ability of the body to clear away damaged cells and build new skin cells. In an experimental model of diabetes, both oral and topical curcumin were able to speed wound repair and healing.¹²

Reduces Tumors and Enhances Cancer Treatment

While not necessarily a focus of your practice, it's encouraging to know that curcumin works along many pathways to inhibit cancer. It reawakens the sleeping genes in our bodies that naturally inhibit cancer cells, increases the activity of cancer drugs, and decreases drug resistance in cancer cells to help drugs kill tumors more efficiently.¹³⁻¹⁴

Additionally, curcumin protects normal cells from the toxic effects of chemotherapy drugs and radiation treatments.¹⁵ One clinical trial showed that curcumin decreased the severity of adverse effects of radiation therapy on the urinary tract in men with prostate cancer.¹⁶

In another study, 61 patients undergoing radiation therapy for head and neck cancer and experiencing mucositis symptoms (swelling, redness, and ulcers in the mouth) as a result of the treatment received either 500 mg of curcumin three times daily or a placebo.¹⁷ By the end of the study, a majority of those in the curcumin group (73.3%) experienced the least severe symptoms for the entire four-week study.¹⁷

Effective and Consistent Curcumin Absorption Delivers the Best Results

As impressive as curcumin can be, it needs to be absorbed in order to be effective. The curcumin my colleagues and I have used in cancer-related and other research, and the one used in many of the examples cited in this article, is a clinically studied curcumin that is blended with turmeric essential oil. This crucial difference helps it absorb more efficiently - at up to seven times that of standard curcumin - and remain in the bloodstream at meaningful levels longer than standard extracts.

In fact, this form of curcumin is the most clinically studied enhanced absorption curcumin available. It simply works that well.¹⁸⁻¹⁹ Ultimately, this intensification of curcumin's delivery and benefits makes for smaller, more convenient dosages in patient protocols and a truly viable treatment option for many conditions far beyond pain relief.

References

1. Goel A, Kunnumakkara AB, Aggarwal BB. Curcumin as "curecumin": from kitchen to clinic. *Biochem Pharmacol*, 2008 Feb 15;75(4):787-809.
2. Hatcher H, Planalp R, Cho J, et al. Curcumin: from ancient medicine to current clinical trials. *Cell Mol Life Sci*, 2008;65:1631-1652.
3. Shin SK, HA TY, McGregor RA, Choi MS. Long-term curcumin administration protects against atherosclerosis via hepatic regulation of lipoprotein cholesterol metabolism. *Mol Nutr Food Res*, 2011 Dec;55(12):1829-40.
4. Soni KB, Kuttan R. Effect of oral curcumin administration on serum peroxides and cholesterol levels in human volunteers. *Indian J Physiol Pharmacol*, 1992 Oct;36(4):273-5.
5. Bundy R, Walker AF, Middleton RW, Booth J. Turmeric extract may improve irritable bowel syndrome symptomology in otherwise healthy adults: a pilot study. *J Altern Complement Med*, 2004 Dec;10(6):1015-8.
6. Holt PR, Katz S, Kirshoff R. Curcumin therapy in inflammatory bowel disease: a pilot study. *Dig Dis Sci*, 2005;50(11):2191-3.

7. Bereswill S, Muñoz M, Fischer A, et al. Anti-inflammatory effects of resveratrol, curcumin and simvastatin in acute small intestinal inflammation. *PLoS One*, 2010;5(12):e15099.
8. Kulkarni S, Dhir A, Akula KK. Potentials of curcumin as an antidepressant. *Sci World J*, 2009;9:1233-41.
9. Sanmukhani J, Satodia V, Trivedi J, et al. Efficacy and safety of curcumin in major depressive disorder: a randomized controlled trial. *Phytother Res*, 2013 Jul 6;28(4):579-585.
10. Xu Y, Ku B, Tie L, et al. Curcumin reverses the effects of chronic stress on behavior, the HPA axis, BDNF expression and phosphorylation of CREB. *Brain Res*, 2006 Nov 29;1122(1):56-64
11. Thangapazham RL, Sharma A, Maheshwari RK. Beneficial role of curcumin in skin diseases. *Adv Exp Med Biol*, 2007;595:343-57.
12. Sidhu GS, Mani H, Gaddipati JP, et al. Curcumin enhances wound healing in streptozotocin induced diabetic rats and genetically diabetic mice. *Wound Repair Regen*, 1999 Sep-Oct;7(5):362-74.
13. Link A, Balaguer F, Shen Y, et al. Curcumin modulates DNA methylation in colorectal cancer cells. *PLoS One*, 2013;8(2):e57709.
14. Link A, Balaguer F, Shen Y, et al. Novel evidence for curcumin-induced DNA methylation changes in colon cancer cells. *Gastroenterol*, May 2010;138(5, Suppl 1):S-349.
15. Goel A, Aggarwal BB. Curcumin, the golden spice from Indian saffron, is a chemosensitizer and radiosensitizer for tumors and chemoprotector and radioprotector for normal organs. *Nutr Cancer*, 2010;62(7):919-30.
16. Hejazi J, Rstmanesh R, Taleban F, et al. A pilot clinical trial of radioprotective effects of curcumin supplementation in patients with prostate cancer. *J Cancer Sci Ther*, 2013;5(10).
17. Arun P, Sagayaraj A, Azeem Mohiyuddin SM, Santosh D. Role of turmeric extract in minimizing mucositis in patients receiving radiotherapy for head and neck squamous cell cancer: a randomized, placebo-controlled trial. *J Laryngol Otol*, 2020 Feb 7:1-6.
18. Antony B, Merina B, Iyer VS, et al. A pilot cross-over study to evaluate human oral bioavailability of BCM-95 CG (Biocurcumax™) a novel bioenhanced preparation of curcumin. *Ind J Pharm Sci*, 2008:445-449.
19. Benny B, Antony B. Bioavailability of Biocurcumax (BCM-95). *Spice India*, September 2006:11-15.

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