

Curcumin for Body and Mind Vitality

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For overall patient well-being, curcumin from turmeric (*Curcuma longa*) may be one of the best natural medicines available. This one compound eases pain, reduces systemic inflammation, stops free-radical damage, alleviates depression, and protects cellular processes throughout the body.¹⁻²

No doubt that treatment in the past with curcumin has been challenging. Curcuminoids can be difficult for the body to absorb. Outside of a daily regimen of dietary curcumin from an early age, it can be especially tough for any patient who may have consumed a standard American diet over their lifetime to get therapeutic benefits from plain turmeric extracts or even standardized 95 percent curcumin extracts.

That is why some important research has focused on a clinically studied curcumin that is blended with turmeric essential oil (also a source of *ar-turmerone*). This crucial difference helps it absorb more efficiently and remain in the bloodstream at meaningful levels for a longer period than standard extracts, making it a viable option for many conditions, including rheumatoid arthritis and osteoarthritis.³⁻⁴

Research Support

One study using this curcumin blended with turmeric essential oil followed 45 individuals with rheumatoid arthritis, randomized to three groups. Group one received diclofenac sodium, 50 mg, twice daily; group two received 500 mg of the curcumin, twice daily; and group three received both diclofenac sodium and the curcumin.

Curcumin was more effective than diclofenac sodium at reducing joint pain and swelling. Combining it with the drug was no more effective than using the botanical alone, and taking the drug alone was *less* effective.⁵

Another study compared this same curcumin to diclofenac for osteoarthritis, and found similar results: curcumin was comparatively effective and didn't cause the gastrointestinal side effects of the prescription drug.⁶ In this case, the dosage of the curcumin was 500 mg, taken three times daily. But in each study, the amount of curcumin is a convenient level for patient compliance.

Patients in physical pain can be more prone to depression, and curcumin can address that as well.⁷ 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.⁸

The curcumin dosage was a total of 1,000 mg daily and fluoxetine was 20 mg - whether combined or individually. The best response, measured by the Hamilton Depression Rating Scale (HAM-D-17),

was in the combination group, at 77.8 percent.⁸ But interestingly, the single-therapy groups – curcumin alone and fluoxetine alone – scored almost exactly the same, with curcumin at 62.5 percent and fluoxetine at 64.7 percent.⁸

In my view, there are two important takeaways from this study. First, curcumin worked virtually as well as the prescription drug fluoxetine in terms of measurable changes in the HAMD-17 score from baseline to six weeks of treatment. Second, curcumin may be used – alone – as an effective and safe treatment for patients with MDD, with no psychological side effects.⁸

Wide-Ranging Health Benefits

In related work, studies have found that curcumin promotes the generation of brain-derived neurotrophic factor (BDNF), a key protein for brain plasticity – a key factor for learning, social interaction and mental well-being.⁹

In addition to pain relief and mental well-being, curcumin also inhibits cancer in a multitude of ways. It reawakens the sleeping genes in the body 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.¹⁰⁻¹¹

Additionally, curcumin protects normal cells from the toxic effects of chemotherapy drugs and radiation treatments.¹² In fact, a clinical trial showed that curcumin decreased the severity of adverse effects of radiation therapy on the urinary tract in men with prostate cancer.¹³

Aside from working well with conventional drugs, curcumin is an excellent partner to other botanicals. In my role as a professor and chair of the Department of Translational Genomics and Oncology at the Beckman Research Institute City of Hope Comprehensive Cancer Center, as well as director of Biotech Innovations at the City of Hope Medical Center, my work has explored many ways that curcumin awakens cancer-fighting genes in our bodies. Additionally, I have been fortunate to be on a team of researchers who investigated the workings of curcumin in a combination with a tannin-free, oligomeric proanthocyanidins from a fractionated grape seed extract (VX1). Results showed that the two botanicals working together were more powerful together in fighting tumor growth than either of the ingredients were on their own; each appeared to bolster the other.¹⁴ (Any practitioner wanting to know more about this research can email me at ajgoel@coh.org.)

Clinical Takeaway

Curcumin has astounding potential. We know well-being is holistic – inflammation, oxidative damage and chronic mental stress are interrelated in ways we are still trying to understand. For promoting mind and body vitality, curcumin has much to recommend it: Curcumin is well-tolerated, it works through virtually every pathway, it supports (and sometimes outperforms) conventional medications, and – provided it is blended with turmeric essential oil for safe and effective absorption – it is easily incorporated into your patients' regimens.

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