



Turmeric in products studied for digestive disorders: what the 2024 review shows

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1. ABSTRACT

This systematic review evaluated whether turmeric or curcumin-based preparations may be useful for digestive disorders. The core message is practical: the studies examined specific products, dosages, and individuals with defined diagnoses, not the common spice added to meals. The authors' synthesis included controlled clinical trials and comparative observational studies on inflammatory bowel disease, irritable bowel syndrome, dyspepsia, gastroesophageal reflux, and ulcers. Out of 1,173 references screened, 26 studies were found to be eligible. A single statistical analysis was not performed because the research varied too much in terms of diagnoses, products used, dosages, duration, and the criteria used to define improvement. In inflammatory bowel disease, some studies reported favorable outcomes, especially with oral products or formulations designed to increase absorption. In irritable bowel syndrome, the results appeared variable: some combinations improved symptom scores, while other preparations did not outperform the placebo. For dyspepsia, ulcers, and reflux, the evidence was even less consistent. The reported adverse events were generally few, but only nine studies collected data on non-intestinal effects. More than half of the included studies had a high risk of bias, meaning they possessed characteristics capable of distorting the effect estimate. Consequently, the review suggests possible benefits in specific contexts, but it does not demonstrate a uniform effect of turmeric, nor does it allow the results to be applied to the culinary spice.

VIDEO ARTICLE



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2. WHAT THIS RESEARCH ANALYZED

The 2024 study by Thavorn and colleagues exclusively examined human research with a control group. It considered curcumin, derivatives, and products containing turmeric used for inflammatory bowel disease, irritable bowel syndrome, dyspepsia, gastroesophageal reflux, and ulcers. In simple terms, it asked whether a specific preparation could modify symptoms, remission, relapses, quality of life, or adverse events compared to a placebo, no treatment, or other therapy. The research did not evaluate the culinary use of the spice. The products were not equivalent: some were oral extracts, others were plant-based combinations, formulations with higher absorption, or topical preparations. The dosage and duration also varied. This diversity is important because it prevents treating the word “turmeric” as if it identified a single intervention.

3. WHAT RESULTS EMERGE FROM THE STUDY

The overall result is a non-uniform picture. In inflammatory bowel diseases, several studies have reported improvements, but with different response measures. In irritable bowel syndrome, some mixed formulas have yielded favorable results, while other extracts have shown no clear differences compared to placebo. For other digestive disorders, the evidence was even more inconsistent. The authors did not calculate a single average effect, because combining such diverse data could have produced a misleading synthesis. Regarding safety, the reported adverse events were generally limited, but their collection was not comprehensive. This allows for a description of the tolerability observed in the studies, rather than defining the safety of each product or of prolonged use.

4. WHY THIS STUDY IS RELEVANT

The main value of the review is to clarify an essential distinction: a culinary spice and a clinically studied formula are not interchangeable. In the included studies, the amount of active substances, the formulation technology, and the therapeutic context were defined by the protocol. Therefore, any result cannot be automatically attributed to the turmeric used in cooking. The review also helps to avoid a

second simplification: a favorable outcome in ulcerative colitis does not demonstrate a benefit in irritable bowel syndrome, reflux, or dyspepsia. Each condition has different mechanisms and clinical criteria. Therefore, specific data for each product and diagnosis are needed.

5. STUDY LIMITATIONS AND WHAT IT DOES NOT DEMONSTRATE

The 2024 study by Thavorn and colleagues depends on the quality of the available research. Fourteen of the 26 included studies were judged to be at high risk of bias; the others had methodological uncertainties. Often small sample sizes, incomplete blinding, missing data, and varying criteria for improvement reduce the certainty of the estimates. The review does not prove that turmeric cures digestive disorders, nor that all extracts have the same effect. It also does not demonstrate that a preparation effective as an adjunct to conventional therapy can replace it. Finally, because the formulas were very different, it does not establish a universal dose or an appropriate duration for the general public.

6. INDEPENDENT CONFIRMATORY EVIDENCE

The most consistent part of the narrative concerns certain formulations used as an add-on for ulcerative colitis. A review with a meta-analysis of six randomized trials, involving 385 participants, found a higher probability of clinical remission with curcumin added to standard therapy: relative risk, or RR, 2.10; 95% confidence interval from 1.13 to 3.89. However, the result was not conclusive for endoscopic remission or improvement, i.e., observed directly in the intestinal mucosa [1]. This moderately confirms that the potential signal depends on the clinical context and the formulation. In a randomized trial of 50 people with active ulcerative colitis already treated with mesalazine, Lang and colleagues compared 3 g of curcumin per day with a placebo for one month. Clinical remission was observed in 53.8% of the curcumin group and in none of the placebo group; however, the very wide confidence interval indicates an imprecise estimate [2]. A further trial on 121 people with irritable bowel syndrome found fewer symptoms with a combination of curcumin and fennel essential oil, but not with curcumin alone [3]. These findings



support the need to refer to the exact formula, not the spice in general.

7. CONFLICTING EVIDENCE

Contradictory results show why it is incorrect to speak of a consistent digestive effect. In a randomized trial following surgery for Crohn's disease, 62 people received oral curcumin or a placebo for six months. Endoscopic recurrence occurred in 58% and 68% of the groups, respectively, with no statistically significant difference; furthermore, severe endoscopic recurrence was more frequent with curcumin [4]. This data concerns a specific clinical scenario and does not

prove general harm, but it reduces the generalizability of positive results seen in ulcerative colitis. Another trial on 106 people with irritable bowel syndrome found no benefits compared to a placebo with *Curcuma xanthorrhiza*, a different species from *Curcuma longa*, taken for 18 weeks [5]. The botanical difference limits direct comparison, but reinforces a point: species, composition, dose, and disease model can change the outcome. No directly conflicting evidence sufficiently relevant beyond these studies has been identified; this does not prove the absence of contradictory results.

8. QUADRO COMPARATIVO E SINTESI DELLE EVIDENZE

Comparison between independent publications and the core message of the 2024 review.

Quadro comparativo

Publication	Model and main result	Relation to the study	Main limitation
Yin et al., 2022 [1]	Meta-analysis of 6 trials, 385 people: signal for clinical remission in ulcerative colitis.	Direct confirmation of possible effects as an add-on therapy.	High heterogeneity and wide confidence intervals for some outcomes.
Lang et al., 2015 [2]	Trial on 50 people: greater remission with curcumin plus mesalazine.	Direct confirmation for a specific formula and context.	Small sample size and one-month treatment.
Portincasa et al., 2016 [3]	Trial on 121 people: lower symptom severity with curcumin plus fennel.	Indirect confirmation of dependence on the formulation.	Combined product; effect not attributable to curcumin alone.
Bommelaer et al., 2020 [4]	Trial on 62 people after Crohn's surgery: no significant prevention of recurrence.	Discordant data in a different inflammatory bowel disease.	Specific postoperative scenario and limited sample size.
Brinkhaus et al., 2005 [5]	Trial on 106 people: no advantage over placebo in irritable bowel syndrome.	Discordant data on variability between herbal products.	Botanical species other than <i>Curcuma longa</i> .

Sintesi delle evidenze scientifiche

Publication year	Area studied	What the studies indicate	Main limitation	Level of evidence
2005	Irritable bowel syndrome	A product based on <i>Curcuma xanthorrhiza</i> showed no advantages over placebo	The species used was different from <i>Curcuma longa</i> , so the comparison is limited	Randomized trial [5]
2015	Active ulcerative colitis	A specific curcumin formulation, in addition to mesalazine, showed a favorable clinical signal	Study on a limited number of patients and with imprecise estimation	Randomized trial [2]

2016	Irritable bowel syndrome	A combination of curcumin and fennel essential oil improved symptoms and quality of life	The benefit concerns a mixed formula and not isolated curcumin	Randomized trial [3]
2020	Crohn's disease after surgery	Oral curcumin did not significantly prevent recurrence	Results from a single study in a specific clinical scenario	Randomized trial [4]
2022	Ulcerative colitis	Curcumin added to standard therapy may increase clinical remission	The included studies were few and of variable quality	Meta-analysis [1]

9. SINTESI EDITORIALE E CONCLUSIONI

EDITORIAL CONCLUSION

The 2024 review by Thavorn and colleagues compiles human studies on turmeric or curcumin preparations for digestive disorders and provides a cautious message. There are signs of potential utility, especially in ulcerative colitis and, with certain combination formulas, in irritable bowel syndrome. However, the results are not uniform across diagnoses, products, doses, and clinical criteria. Methodological quality further limits certainty: more than half of the included studies had a high risk of bias, and it was not possible to derive a reliable average effect. Independent evidence confirms a possible role for specific formulas as an adjunct to standard therapy in ulcerative colitis, but also shows null outcomes in postoperative Crohn's disease and with other products for irritable bowel syndrome. The most accurate conclusion is therefore to always distinguish between spice, extract, and the studied formulation. A clinical result observed with a defined preparation does not automatically describe the turmeric used in a normal diet and does not replace medical evaluation of digestive symptoms.

Aggiornato al 25/10/2026. Questo contenuto riflette una sintesi divulgativa delle evidenze scientifiche al momento della pubblicazione e non sostituisce il parere medico.

10. TRANSPARENCY AND SCIENTIFIC RESPONSIBILITY

Artificial Intelligence was used solely as a tool for editorial and documentary support. All content, interpretations, bibliographic citations and conclusions have been verified, reviewed and approved by the author, who assumes full scientific responsibility for them.

The manuscript was also subjected to independent peer review prior to publication.

To ensure the greatest transparency, the complete history of the article, including the dates of submission, revision, acceptance and publication, as well as information on the peer review process, is available on the dedicated Article History page.

11. RIFERIMENTI BIBLIOGRAFICI

- [1] **Efficacy and safety of adjuvant curcumin therapy in ulcerative colitis: A systematic review and meta-analysis**

Yin et al., 2022

Journal of Ethnopharmacology

DOI: <https://doi.org/10.1016/j.jep.2022.115041>

- [2] **Curcumin in Combination With Mesalamine Induces Remission in Patients With Mild-to-Moderate Ulcerative Colitis in a Randomized Controlled Trial**

Lang et al., 2015

Clinical Gastroenterology and Hepatology

DOI: <https://doi.org/10.1016/j.cgh.2015.02.019>



- [3] **Curcumin and Fennel Essential Oil Improve Symptoms and Quality of Life in Patients with Irritable Bowel Syndrome**

Portincasa et al., 2016

Journal of Gastrointestinal and Liver Diseases

DOI: <https://doi.org/10.15403/jgld.2014.1121.252.ccm>

- [4] **Oral Curcumin No More Effective Than Placebo in Preventing Recurrence of Crohn's Disease After Surgery in a Randomized Controlled Trial**

Bommelaer et al., 2020

Clinical Gastroenterology and Hepatology

DOI: <https://doi.org/10.1016/j.cgh.2019.08.041>

- [5] **Herbal medicine with curcuma and fumitory in the treatment of irritable bowel syndrome: A randomized, placebo-controlled, double-blind clinical trial**

Brinkhaus et al., 2005

Scandinavian Journal of Gastroenterology

DOI: <https://doi.org/10.1080/00365520510023134>