

RESEARCH  
ROUNDUP

It's our goal here at *Good Health Lifestyles* to bring you the latest in cutting-edge research for a variety of common health issues. Because we believe that knowledge is power—especially when it comes to health—we are digging deeper into the exciting new research from leading medical journals and breaking it down to help you get the most from today's science.

## Curcumin May Curb Radiotherapy Side Effects

### THE STUDY ABSTRACT:

**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.**

**OBJECTIVE:** To determine the role of turmeric extract in reducing mucositis in patients undergoing radiotherapy for head and neck cancer.

**METHODS:** Sixty-one patients who underwent radiotherapy were included in the study and randomized into groups A and B. Patients in group A received 500 mg of turmeric extract (BCM-95) thrice daily, while patients in group B received placebo until radiotherapy completion. All patients were assessed for oral mucositis on a weekly basis during treatment and two months post-treatment using the National Cancer Institute Common Terminology Criteria for Adverse Events and World Health Organization criteria.

**RESULTS:** Both groups had a similar grade of mucositis in first two weeks of treatment. The severity of mucositis was progressive in the control group, with four patients

developing grade 3 mucositis by week four. In group A, however, the majority of patients (73.3 percent) had grade 1 mucositis after four weeks of treatment.

The difference was statistically significant from the third week onwards ( $p < 0.001$ ).

**CONCLUSION:** Turmeric extract reduces the incidence and severity of radiation-induced mucositis, which can benefit patients undergoing radiation for head and neck cancer.

### WHAT IT MEANS TO YOU:

One unfortunate side effect of radiation therapy is a condition known as mucositis. This painful inflammatory disorder can cause swelling, redness, and ulcers in the mouth, interfering with a patient's ability to eat.

Researchers have found that one way to reduce oral mucositis during radiotherapy is with a specialized curcumin extract called BCM-95). In this study, 61 patients received either 500 mg BCM-95 curcumin or a placebo three times daily throughout four weeks of radiation therapy for head and neck cancer.



Symptom severity was measured along a scale from *no complications* (Grade 0) to *severe* (Grade 3). By week four, there were clear differences between the two groups. Additionally, over 73 percent in the curcumin group experienced only minor symptoms.

The curcumin administered in this clinical trial, BCM-95, is a proprietary form of turmeric that combines both curcumin and turmeric essential oil for enhanced absorption. In this study, researchers concluded that the botanical “reduces the incidence and severity of radiation-induced mucositis, which can benefit patients undergoing radiation for head and neck cancer.” Additionally, there was no evidence that curcumin interfered with the efficacy of the therapy. ■

#### Curcumin (BCM-95)

#### Placebo

#### NO COMPLICATIONS

GRADE 0: 6.7%

GRADE 0: 0%

GRADE 1: 73.3%

GRADE 1: 19.3%

GRADE 2: 20%

GRADE 2: 67.7%

#### SEVERE

GRADE 3: 0%

GRADE 3: 12.9%