



## TECHNOLOGY

# Synthesis Method for Curcumin

## OVERVIEW

Turmeric or "yellow root" is a general term for plants and plant materials having a high content of curcuminoids, compounds that have a strong coloring effect and which are used extensively in the coloring of e.g. food products. The term "curcuminoids" includes curcumin (C), reddish orange; demethoxy curcumin (DMC), orange-yellow and bis-demethoxy curcumin (BDMC), yellow.

Turmeric plants belong to rhizomatous *Curcuma* species and have been known for centuries for their flavoring and coloring properties. The plants are grown commercially, particularly in India, but also in Bangladesh, China, Sri Lanka, Indonesia, Taiwan, Haiti, Jamaica and Peru.

In addition to the coloring applications, curcuminoids have been found to have anti-oxidant, anti-inflammatory and cholesterol lowering properties.

The curcuminoids are either isolated in painstaking extraction processes from plant sources or made synthetically requiring expensive starting materials and extensive removal of impurities requiring special treatment for disposal.

Inventors at Salisbury University located on the Eastern Shore of Maryland, have produced new synthesis methods for generating the curcuminoids (Curcumin and Bis-demethoxy curcumin) in high yields (58%) without generating the impurities of the prior art processes. In addition, the inventors have found a new therapeutic use for the compounds.

For licensing information please contact the University of Maryland Office of Technology Commercialization; 301-405-3947 or by e-mail [otc@umd.edu](mailto:otc@umd.edu)

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## Additional Information

### INSTITUTION

University of Maryland, College Park

### PATENT STATUS

US Patent 7,507,864

## LICENSE STATUS

Contact OTC for licensing information

## CATEGORIES

- Chemical
- Natural Compounds

## EXTERNAL RESOURCES

- [US Patent 7,507,864](#)

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