



## TECHNOLOGY

# A Novel Method for Production of Rare Carotenoids from Commercially Available Lutein

## OVERVIEW

Anhydrolutein, a-cryptoxanthin, b-cryptoxanthin and zeaxanthin are among the 12 major dietary carotenoids which are found in human serum, milk, major organs, and tissues. Industrial production of a wide range of purified carotenoids is of great importance in view of the role of carotenoids in the prevention of chronic diseases like cancer, age-related macular degeneration, and cardiovascular disease. Several dietary carotenoids like b-carotene, lutein, and lycopene are commercially available in various formulations. a-cryptoxanthin, b-cryptoxanthin and zeaxanthin are among rare carotenoids in nature and as a result extraction and isolation of these carotenoids from industrial scale is not commercially viable.

A researcher in the Department of Chemistry and Biochemistry has developed a novel method that converts commercially available lutein to a mixture of a-cryptoxanthin and b-cryptoxanthin and minor quantities of anhydrolutein in one synthetic steps.

## CONTACT INFO

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## Additional Information

### INSTITUTION

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### CATEGORIES

- Natural Compounds

### EXTERNAL RESOURCES

- [US Patent 6,911,564](#)

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