

## Nutritional journal highlights research on micronutrient's disease-fighting role

March 26 2021, by Jeff Muhollem

---



The researchers said ergothioneine, nicknamed the “longevity vitamin,” is found in low amounts in some foods and in high amounts in mushrooms. Credit: Patrick Mansell

The *Journal of Nutritional Science* designated a Penn State research paper on how a dietary antioxidant may fight chronic disease and aging as its "Paper of the Month" in February. The article suggested that incorporating more of the dietary amino acid ergothioneine into one's diet may help stave off long-term health problems.

The study was led by Robert Beelman, professor emeritus of food science in the College of Agricultural Sciences. John Richie, professor in the Department of Public Health Sciences, Penn State Cancer Institute, and Allen Phillips, professor emeritus of biochemistry in the Department of Biochemistry and Molecular Biology, contributed to the research.

The researchers said [ergothioneine](#), nicknamed the "longevity vitamin," is found in low amounts in some foods and in high amounts in mushrooms. They further described it as an effective antioxidant that also has anti-inflammatory properties that have been shown to reduce certain [chronic diseases](#) in humans.

Comparing data from different countries, the group analyzed certain diseases to see whether there was a correlation between ergothioneine consumption and mortality rates. They found that Americans consume less ergothioneine than Europeans and have a higher risk of dying from certain age-related chronic diseases. According to the researchers, increasing daily intake of ergothioneine-rich foods could lead to more Americans living longer, healthier lives.

In addition to exploring dietary impacts, the group examined [agricultural practices](#) that impact ergothioneine-producing fungi in the soil. They proposed that excessive tilling disrupts soil-borne fungi that are the primary source of the amino acid that gets passed on to plants. Therefore, this practice could negatively affect the amount of ergothioneine in the [food supply](#).

To help boost the amount of this amino acid in foods, the researchers said farmers should consider regenerative farming methods, such as minimal tillage, use of cover crops and [crop rotation](#), which all could contribute toward maintaining healthier fungal populations in soil.

**More information:** Robert B. Beelman et al. Is ergothioneine a 'longevity vitamin' limited in the American diet?, *Journal of Nutritional Science* (2020). [DOI: 10.1017/jns.2020.44](https://doi.org/10.1017/jns.2020.44)

Provided by Pennsylvania State University

Citation: Nutritional journal highlights research on micronutrient's disease-fighting role (2021, March 26) retrieved 29 June 2024 from <https://medicalxpress.com/news/2021-03-nutritional-journal-highlights-micronutrient-disease-fighting.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.