

Study shows cardamom increases appetite, burns fat

August 11 2023, by Adam Russell



Credit: Pixabay/CC0 Public Domain

A new study by Texas A&M AgriLife revealed a range of health and dietary benefits of consuming cardamom, including increased appetite, fat loss and inflammation reduction, making the spice a "superfood."



The study's principal investigator, Luis Cisneros-Zevallos, Ph.D., horticulture and food science professor, Department of Horticultural Sciences in the Texas A&M College of Agriculture and Life Sciences, and affiliate scientist with the Institute for Advancing Health Through Agriculture at Texas A&M AgriLife, said the Texas A&M AgriLife Research study shows cardamom could be a healthy dietary choice, and that its consumption can help maintain lean body weight and reduce fat.

"Professor Cisneros-Zevallos's research program is discovering the fundamental basis of how various horticulture crops impact <u>human</u> <u>health</u>," said Amit Dhingra, Ph.D., head of the Department of Horticultural Sciences. "This work directly aligns with the sustainability, wellness and food security focus of our department."

The study, "Cardamom Seeds Intake Increases Energy Expenditure and Reduces Fat Mass in Mice by Modulating Neural Circuits That Regulate Adipose Tissue Lipolysis and Mitochondrial Oxidative Metabolism in Liver and Skeletal Muscle," was published in *International Journal of Molecular Sciences*.

Cardamom is a popular spice in many parts of the world and the study findings should expand its popularity. The spice has a warm herbal flavor and an aroma that blends eucalyptus, mint and pepper.

"Cardamom is a spice little known in the U.S. but very common in other parts of the world," Cisneros-Zevallos said. "What we found is that this small spice can burn calories and maintain body weight while increasing appetite and food consumption."

Cardamom study shows health benefits

The studies were conducted using live animal specimens and applied various doses of cardamom seeds in a regular diet. Researchers found



that cardamom increases appetite but also increases <u>energy expenditure</u> and fat mass reduction, Cisneros-Zevallos said.

The study also provided estimated dosages for humans—at least 77 milligrams of cardamom bioactives for an adult around 132 pounds. It stated this beneficial dose may be obtained from consuming at least eight to 10 cardamom pods every day.

The study confirmed cardamom modulates <u>neural circuits</u> that regulate adipose tissue lipolysis and mitochondrial oxidative metabolism in liver and skeletal muscle.

Cisneros-Zevallos said <u>other related studies</u> have shown cardamom has anti-inflammatory properties. His research indicates that cardamom may reduce low-grade inflammation that can lead to chronic inflammation and the development of a range of diseases.

"Our team has discovered an amazing opportunity to utilize cardamom as a promoter of overall health," he said. "Cardamom seeds, with this new functionality, can be used in different industries, including the sports industry, functional foods and dietary supplements to favor the production of healthier foods."

Cisneros-Zevallos said the research also included collaborative work with the National Institute of Medical Sciences and Nutrition Salvador Zubiran, INCMNSZ, in Mexico City, Mexico. The interdisciplinary research team included Claudia Delgadillo-Puga, Ph.D., and Ivan Torre-Villalvazo, Ph.D., both with the national institute.

Creating economic opportunities

Cisneros-Zevallos said the research showed cardamom consumption helped appetite and weight loss. He believes this new functionality



discovered in cardamom can be used in the growing market of sports nutrition or as an aid to increase appetite in convalescent people.

"There is a wide range of potential health products for cardamom and its naturally occurring compounds," he said.

The discovery is a win for both health-conscious consumers and Guatemalan farmers. Currently, there are more than 350,000 families in Guatemala practicing sustainable and environmental cardamom shadefarming in the tropical forest.

"Cardamom is of great importance economically for Guatemala," he said. "Expanding its use in the U.S. and globally could provide stability to farmers and aid in the immigration crisis observed in recent years."

More information: Claudia Delgadillo-Puga et al, Cardamom (Elettaria cardamomum (L.) Maton) Seeds Intake Increases Energy Expenditure and Reduces Fat Mass in Mice by Modulating Neural Circuits That Regulate Adipose Tissue Lipolysis and Mitochondrial Oxidative Metabolism in Liver and Skeletal Muscle, *International Journal of Molecular Sciences* (2023). DOI: 10.3390/ijms24043909

Provided by Texas A&M University

Citation: Study shows cardamom increases appetite, burns fat (2023, August 11) retrieved 27 April 2024 from <u>https://medicalxpress.com/news/2023-08-cardamom-appetite-fat.html</u>

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.