

Vitamin D-fortified yogurt drink may lower risk of heart disease in type 2 diabetics

March 29 2012

Daily intake of vitamin D-fortified doogh (Persian yogurt drink) improved inflammatory markers in type 2 diabetics and extra calcium conferred additional anti-inflammatory benefits, according to a recent study accepted for publication in The Endocrine Society's *Journal of Clinical Endocrinology and Metabolism (JCEM*).

Inflammation is known to have a central role in the development of type 2 diabetes and its further complications like <u>coronary heart disease</u> and stroke. Vitamin D carries benefits for skeletal health but evidence of an anti-inflammatory effect from clinical studies in humans remains scarce.

"Our previous research showed that improvement of vitamin D status by regular daily intake of a fortified yogurt drink resulted in lowered <u>blood glucose levels</u> in diabetic patients," said Tirang Neyestani, PhD, of Shahid Beheshti University of Medical Sciences in Tehran, Iran and lead author of the study. "The current study found that consuming a vitamin D-fortified yogurt drink also decreased serum substances like highly sensitive C-reactive protein (hsCRP) which are known to have an inflammatory role."

In this study, researchers conducted a double-blind, randomized, controlled trial over 12 weeks in 90 patients with type 2 diabetes. Study participants were randomly allocated to one of three groups to receive two 250mL bottles a day of either plain doogh, vitamin D-fortified doogh or calcium plus vitamin D-fortified doogh. Vitamin D levels, insulin resistance, and inflammatory markers such as hsCRP, fibrinogen



and adiponectin were measured in blood samples taken from study participants.

"Our study showed for the first time that adiponectin, a substance secreted by fat tissue that has an anti-inflammatory effect, increased when calcium and vitamin D-fortified doogh was consumed," said Neyestani. "Our findings may offer interesting therapeutic options for diabetic patients."

More information: The article, "Improvement of vitamin D status via daily intake of fortified yogurt drink either with or without extra calcium ameliorates systemic inflammatory biomarkers, including adipokines, in the subjects with type 2 diabetes," appears in the June 2012 issue of *JCEM*.

Provided by The Endocrine Society

Citation: Vitamin D-fortified yogurt drink may lower risk of heart disease in type 2 diabetics (2012, March 29) retrieved 18 May 2024 from https://medicalxpress.com/news/2012-03-vitamin-d-fortified-yogurt-heart-disease.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.