

Fluoride use was consequence of flawed nutritional guidelines, researcher says

November 5 2022



Credit: CC0 Public Domain

Prominent organizations including the World Health Organization and U.S. Department of Agriculture (USDA) have dismissed low-carbohydrate diets that prevent tooth decay in favor of recommending high-carbohydrate diets which rely on fluoride and food fortification to mitigate dental damage and nutritional shortcomings, a University of Washington researcher says.

In a recent article published in MDPI's [Nutrients journal](#), Dr. Philippe Hujoel of the UW School of Dentistry says that not only these organizations but other major professional and health associations reversed earlier positions and began recommending high-carbohydrate diets over the course of decades in the last century. Specifically, he cites the American Heart Association, the American Diabetes Association, and the American Dental Association (ADA).

These groups, he says, ignored [scientific evidence](#) weakening their claim that the only adverse health effect to a high-carbohydrate diet was dental cavities. Organizations such as the World Health Organization and the USDA then recommended increased use of fluoride to combat the risk of [tooth decay](#).

In the meantime, Dr. Hujoel says, some scientists provided compelling evidence that [low-carbohydrate diets](#) were at least as beneficial to health as high-carbohydrate diets. Low-carbohydrate diets help prevent tooth decay and make fluoride—which has no tangible health benefits other than preventing cavities—largely unnecessary, he says.

Dr. Hujoel's study traces this development toward fluoride-supplemented high-carbohydrate [dietary guidelines](#) back to the mid-

twentieth century, when leaders like Emory W. Morris, a dentist and president of the Kellogg Foundation—an arm of a major cereal maker—became the first chairman of the ADA's Council on Dental Health in 1942.

Morris suggested that the issue of dental decay be solved with fluoride rather than sticking to the existing recommendation of a low-carbohydrate diet. He had a conflict of interest in this decision, as cereals are carbohydrates and do increase tooth decay risk.

Furthermore, to make its recommendations, the ADA's council had to reverse its position on several key points, Dr. Hujoel says:

- The safety of topically applied fluoride
- The role of deficiencies in bone health nutrients as a cause of tooth decay, changed from "established fact" to an explicit dismissal
- The need to teach dental patients "that a reduction in the carbohydrate intake is necessary," changing to a recommendation of a "well-balanced" diet, which became increasingly associated with high-carbohydrate nutritional guidelines

Dr. Hujoel's study also explores the private interests involved when the ADA took the first significant steps toward endorsing the current [fluoride](#)-supplemented high-carbohydrate nutritional guidelines, most of which have been maintained for decades.

High-carbohydrate diets undermine dental health because these foods' residue in the mouth break down into sugars, which feed the *Streptococcus mutans* bacteria which are also present. In turn, the bacteria produce [lactic acid](#), which attacks tooth enamel, leading to decay. Fluoride fortifies the enamel.

More information: Philippe P. Hujoel, Private Interests and the Start of Fluoride-Supplemented High-Carbohydrate Nutritional Guidelines, *Nutrients* (2022). [DOI: 10.3390/nu14204263](https://doi.org/10.3390/nu14204263)

Provided by University of Washington

Citation: Fluoride use was consequence of flawed nutritional guidelines, researcher says (2022, November 5) retrieved 5 May 2024 from <https://medicalxpress.com/news/2022-11-fluoride-consequence-flawed-nutritional-guidelines.html>

<p>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.</p>
--