Debunking Medical Myths: MSG Safety

Meyer Gershater
Wayne State University School of Medicine, gi7180@wayne.edu

Gabriella Shab
Wayne State University School of Medicine, hi3600@wayne.edu

Amanda Rodriguez
Wayne State University School of Medicine, hj0414@wayne.edu

Ahmad Chouman
Wayne State University School of Medicine, hh5211@wayne.edu

Anthony Mrocko
Wayne State University School of Medicine, hj5752@wayne.edu

Follow this and additional works at: https://digitalcommons.wayne.edu/pat_edu_proj

Part of the Curriculum and Instruction Commons, Medical Education Commons, and the Public Health Commons

Recommended Citation
Gershater, Meyer; Shab, Gabriella; Rodriguez, Amanda; Chouman, Ahmad; and Mrocko, Anthony, "Debunking Medical Myths: MSG Safety" (2022). Patient Education Projects. 294.
https://digitalcommons.wayne.edu/pat_edu_proj/294

This Infographic is brought to you for free and open access by the Patient Education at DigitalCommons@WayneState. It has been accepted for inclusion in Patient Education Projects by an authorized administrator of DigitalCommons@WayneState.
MSG SAFETY

How did this all start?

Starting in 1968, symptoms like headache, flushing, and dizziness were grouped under the term Chinese Restaurant Syndrome and associated with MSG ingestion. However, there have been multiple studies done that have failed to find significant correlations between MSG and adverse reactions (1).

The United States Food and Drug Administration and the Federation of American Societies for Experimental Biology classified MSG as a Generally Recognized as Safe (GRAS) substance (2).

What the studies really show

The ingestion of MSG in the diet does not produce appreciable increases in glutamate concentrations in blood, except when given experimentally in amounts vastly in excess of normal intake levels. The blood-brain barrier effectively restricts the passage of glutamate from the blood into the brain, such that brain glutamate levels only rise when blood glutamate concentrations are raised experimentally via non-physiologic means (3).

Why trust us?

We performed a defined literature search using the terms “sodium glutamate AND safety” with the filters: Meta-Analysis, Randomized Controlled Trial, Review, Systematic Review. In the last 10 years in order to generate a list of potential peer-reviewed original articles and reviews to utilize in our study. Abstracts were selected based on their strength with regard to a concise introduction, thorough materials and methods, clear results, and a straightforward conclusion. Using this approach we selected 5 references for our study.

Purpose of this infographic

MSG has been commonly thought to be an unsafe substance and has been even described as Chinese restaurant syndrome. Despite classification as a safe substance by the FDA, there is still much controversy about its safety. However, this just is not a medical myth!

Common Foods with MSG

Countsless studies have concluded that there are no definitive correlations between dietary MSG intake levels and "Chinese Restaurant Syndrome" symptoms.

REFERENCES


(5) Roger de MD. Monosodium glutamate is not likely to be genotoxic. Food Chem Toxicol. 2016;94:260-261. doi:10.1016/j.fct.2016.03.001

THE BIG TAKEAWAY

A study looked at two groups of mice—one control group with a standard diet and one group with added MSG—over a 26 week period. There were no significant differences found between these two groups (2).