# **Evaluation of Calcium Content in Tofu Products** and Comparison with **Canadian Nutrient File**

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# **Objectives**



**Evaluate and** compare the calcium content of in-store tofu products with Canadian Nutrient File (CNF) reference values.

# Results

**OUT OF 92** IDENTIFIED TOFU **PRODUCTS**, **65% HAD NO CNF** EQUIVALENT

Of those with a CNF equivalent, 80% (n=24) contained less calcium than the corresponding CNF product (51%) less on average).



yet 80% didn't reach the condition for a 'high in' calcium claim.



Conclusions

THE CALCIUM VALUE OF TOFU **PRODUCTS FOUND IN THE CNF MAY NOT BE REFLECTIVE OF THE TOFU PRODUCTS IN THE CURRENT** MARKETPLACE

and generally indicate higher calcium **contents** than similar products available in-store.

# Introduction

In May 2022, Health Canada released "Applying Canada's **Dietary Guidelines" which aims to provide additional** information to support health professionals and policymakers in the application of the 2019 dietary guidelines. Among suggested foods to support specific nutrient needs across different life stages, tofu (prepared with calcium) is listed as a food with a high calcium content to help achieve increased requirements in several age groups, notably children, adolescents, adult females and older adults.



Validate whether 00 various tofu products in the current marketplace can be considered to have a high calcium content.

TWELVE PRODUCTS (13%) **INDICATED** "AND/OR" CALCIUM CHLORIDE (COAGULANT)

in their ingredient list.



only 33% displayed accurate (±20%) calcium values on their label and only 66% actually qualified for the 'high in' calcium claim.

Text (categories All Extra fi Medium Soft 0 All

All Includes products inc Based on Health Can mount for tofu (85 a







**MOST TOFU PRODUCTS FOUND IN-STORE USE CALCIUM COAGULANTS YET ARE INELIGIBLE FOR A 'HIGH IN'** CALCIUM CLAIM.

Furthermore, the calcium content of tofu may be below label value.

Although Canada's dietary guidelines recommend tofu (prepared with calcium) as a food high in calcium, caution is advised as the calcium content of in-store products varies substantially, and most do not qualify as being "high in" calcium.

# Methods

- Data on tofu were collected using front-and-back label photographs in local and Asian grocery stores/supermarkets in: Quebec, Alberta, the Maritimes, Manitoba. Products were categorized according to firmness/coagulant and compared to corresponding CNF products.
- Information on nutritional labels determined if the item qualified for a "high in" calcium claim nutrition labels (NFT) ( $\geq$ 15% Daily Value/ $\geq$ 195 mg per 85g reference amount [RA]) per Health Canada regulations.
- Products indicating a calcium content >300 mg per RA underwent nutrition analysis by a certified laboratory.

Coagulant use and calcium content of tofu products located in grocery stores in four Canadian provinces			
<b>ture/Firmness</b> s based on those in CNF)	% Using a ca coagula		% Qualifying as source of calciu (≥195 mg calcium per refere
FRIED TOFU			
textures (n=4)	100%		0%
<b>REGULAR TOFU</b>			
irm or firm (n=13)	100%		15.4%
firm or firm (n=15)	100%		20.0%
t or firm (n=12)	100%		0%
ther <sup>‡</sup> (n=35)	94.3%		37.1%
SILKEN TOFU			
textures (n=7)	100%		0%
DESSERT TOFU			
textures (n=6)	100%		0%
ndicating "and/or" a calcium coagulant nada criteria to be considered a good source, i.e., u grams) and based on 1300 mg Daily Value (DV)	using the reference ‡	This category includ	vith missing data for calcium content (n=3) es a variety of tofu products for which a categoriza belling or if the product was in a distinct form c", or sprouted).

### Significance





ying as good calcium<sup>+\*\*</sup> per reference amount)

nt (n=3) lich a categorization by firmness was not



