

Healthy
Eating
Research



Summer Speaker Series for Students 2025

(The contents and findings of this presentation are those of the speakers and do not represent the official views of the Centers for Disease Control & Prevention or Department of Health and Human Services.)

Getting Started!

- Update your name on Zoom, if needed
 - *Right click on your Zoom box, click “rename”*
- Type your name and institution into the chat box!
 - *Question: Which best describes you?*
 - *Ex. Undergraduate Student, Dietetic Intern, Masters Student, Doctoral Student, Post Doc, Public Health Practitioner, Researcher/Professor, Other*
- Remember to keep yourself on mute.
- Type your questions into the chat box.

NOPREN HER Summer Series for Students

- Explore various public health topics related to:
 - Food and nutrition security
 - Federal, state, and local policy
 - Strategies to support young children's health
 - ***And more!***
- This series is a collaborative effort of Healthy Eating Research (HER) and Nutrition and Obesity Policy Research and Evaluation Network (NOPREN).

NOPREN HER Summer Series for Students

Schedule and Topics

- June 11: Policy, Systems, and Environmental (PSE) Strategies to Support Young Children's Diet and Health
- ***June 25: Federal, State, and Local Nutrition Policy Updates***
- July 9: Food Policies in Schools
- July 23: Building Resilient Food Systems
- August 6: Interventions to Improve Food and Nutrition Security
- August 13: Student Presentations

The series will take place on Wednesdays **from 4:00 - 5:00 pm EST**

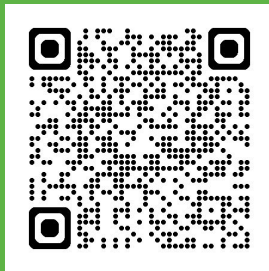
For more information or to register:

<https://nopren.ucsf.edu/her-nopren-summer%C2%A0speaker-series-students-2025>

Student Presentations!

The HER/ NOPREN Summer Speaker Series will end with Student Presentations and Poster Sessions on August 13.

Applications are due **July 18th**. To apply, scan the QR code below:



Selected students will give a presentation on a nutrition-related project or research they worked on over the summer.

Healthy
Eating
Research



Session 2: Federal, State, and Local Nutrition Policy Updates

Nutrition Policy in a New Era: Opportunities and Challenges (with a closer look at the state and local scene)

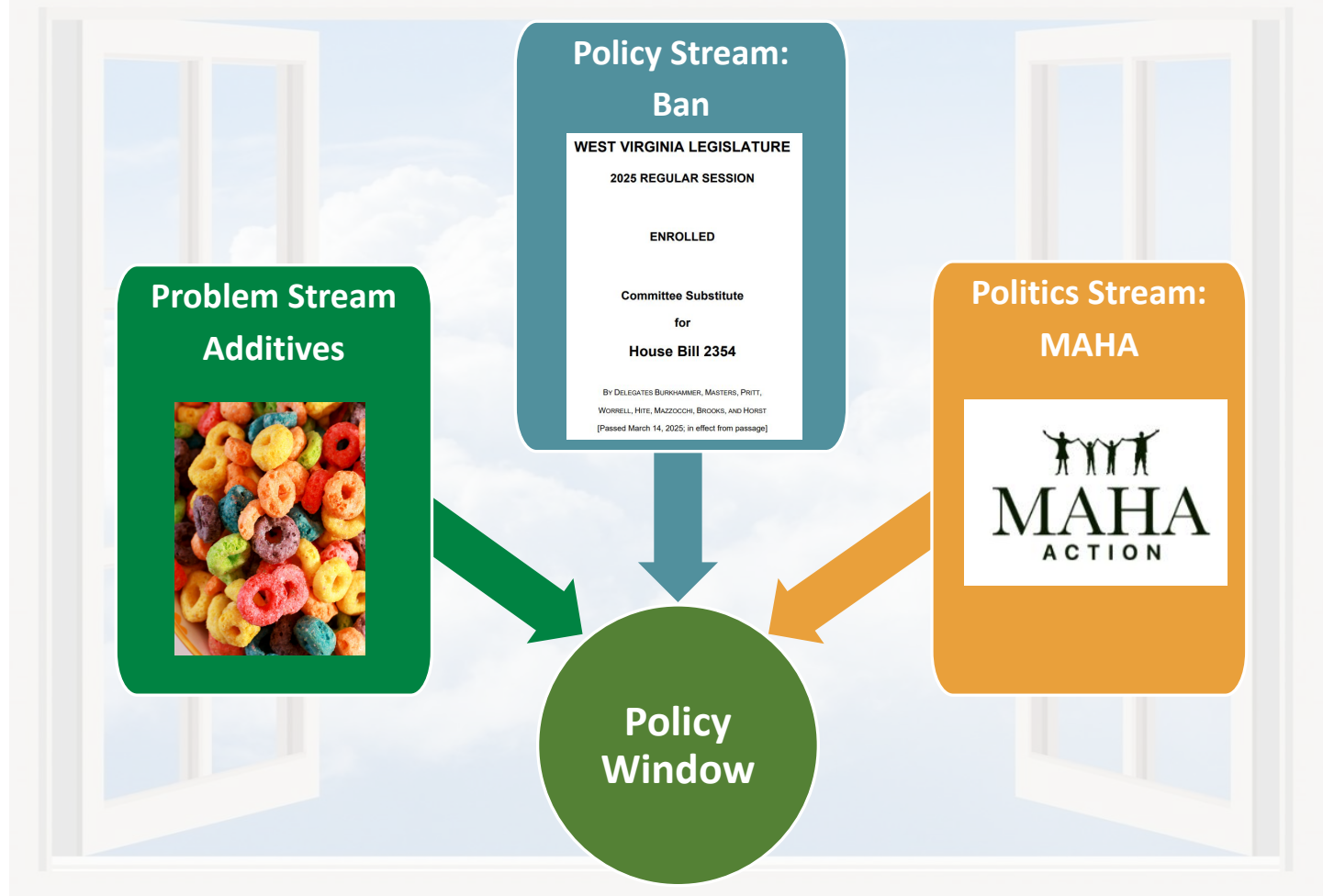


JIM KRIEGER, MD, MPH

June 25, 2025



UNIVERSITY of WASHINGTON



Kingdon's Multiple Streams Policy Model

MAHA Commission

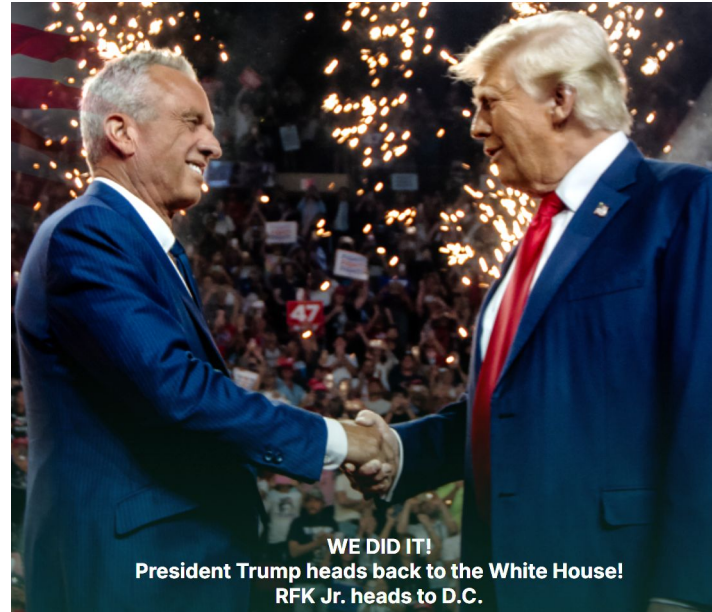
“Study the scope of the childhood chronic disease crisis and any potential contributing causes, including the American diet, absorption of toxic material, medical treatments, lifestyle, environmental factors, Government policies, food production techniques, electromagnetic radiation, and corporate influence or cronyism”

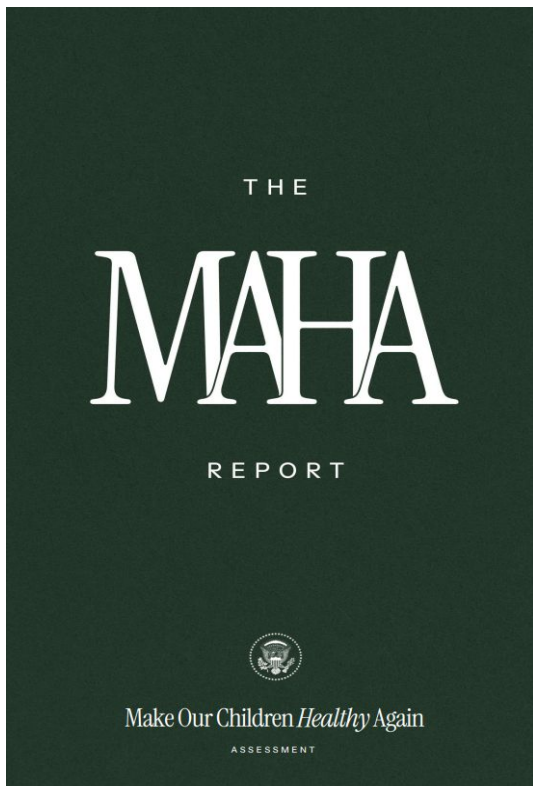


PRESIDENTIAL ACTIONS

ESTABLISHING THE PRESIDENT'S MAKE AMERICA HEALTHY AGAIN COMMISSION

The White House | February 13, 2025





America's children are facing an unprecedented health crisis.

Over 40% have at least one chronic health condition – including obesity, diabetes, neurodevelopmental disorders, cancer, mental health, allergies.

- **Poor Diet:** The American diet has shifted dramatically toward ultra-processed foods (UPFs), leading to nutrient depletion, increased caloric intake, and exposure to harmful additives.
- **Environmental Chemicals:** exposure to an increasing number of synthetic chemicals.
- **Pervasive technology use:** leading to a sedentary, technology-driven lifestyle
- **Overmedicalization:** Overprescribing medications, often driven by conflicts of interest in medical research, regulation, and practice.

Drivers of Shift to Ultraprocessed Food

- **Corporatization** and consolidation in food system
- **Distorted nutrition research and marketing** shaped by food industry
- **Compromised dietary guidelines** (ignore processing and do not explicitly address UPF) unduly influenced by corporate interests
- **Misdirected government programs**, including crop subsidies, use of SNAP for unhealthy products, inadequate standards for school meals

The New York Times

White House Health Report Included Fake Citations

A report on children's health released by the Make America Healthy Again Commission referred to scientific papers that did not exist.

The Washington Post
Democracy Dies in Darkness

The MAHA Report's AI fingerprints, annotated

The Post reviewed the more than 500 citations in the MAHA Report. Here are the patterns of AI use we found.

May 30, 2025

NOTUS

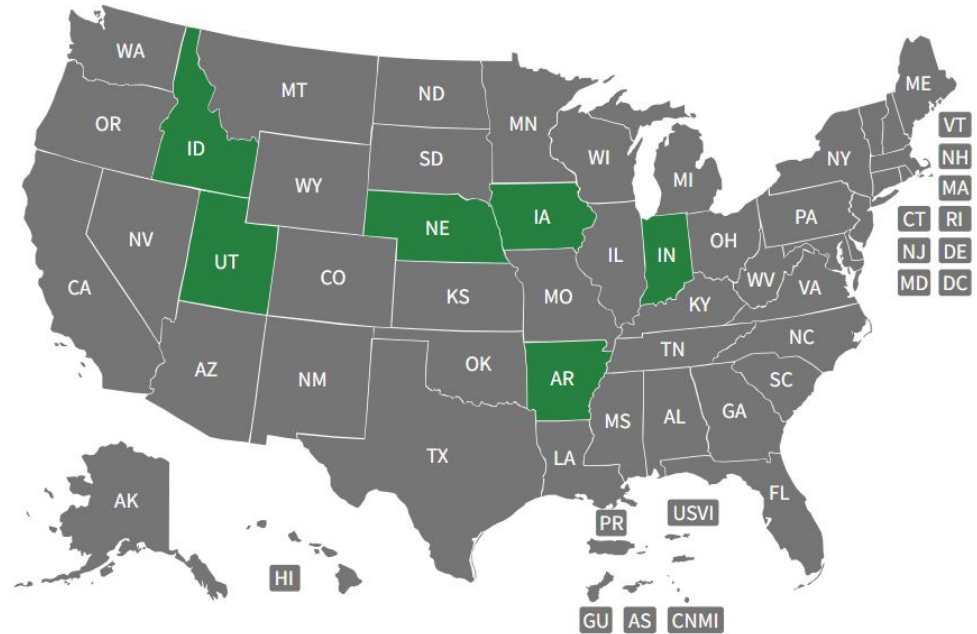
HEALTH & SCIENCE

The MAHA Report Cites Studies That Don't Exist

The Trump administration's "Make America Healthy Again" report misinterprets some studies and cites others that don't exist, according to the listed authors.

SNAP restrictions

- At least 12 states have proposed or introduced waiver bills
- 6 states have approved waivers
- 4 states have submitted waiver requests (CO, LA, TX, West Virginia)



- **Sweetened beverages**
- **Candy**
- All taxable food items (IA)

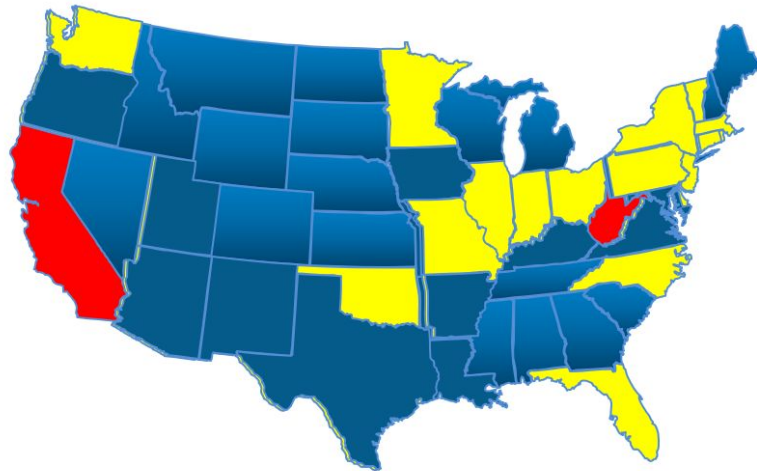
Food additive bans - statewide

Most frequently included chemicals:

- Dyes
- Potassium bromate
- Propylparaben
- BVO
- Titanium dioxide
- BHT
- ADA

ABA: We want to be really clear about the impact of this sweeping ban. It will hurt West Virginians, both consumers and workers, and the overall economy — all over ingredients that have been proven safe. This law will force everyday families to pay more for their groceries.

WV Gov Morrisey: By eliminating harmful chemicals from our food, we're taking steps toward improving the health of our residents and protecting our children from significant long-term health and learning challenges. Thank you ... HHS Secretary Robert Kennedy and the entire Trump administration for helping us launch this movement right here in West Virginia.



Adopted



Introduced

At least 20 bills
introduced

Food additive bans in school meals



Red 40, Yellow 5 and 6



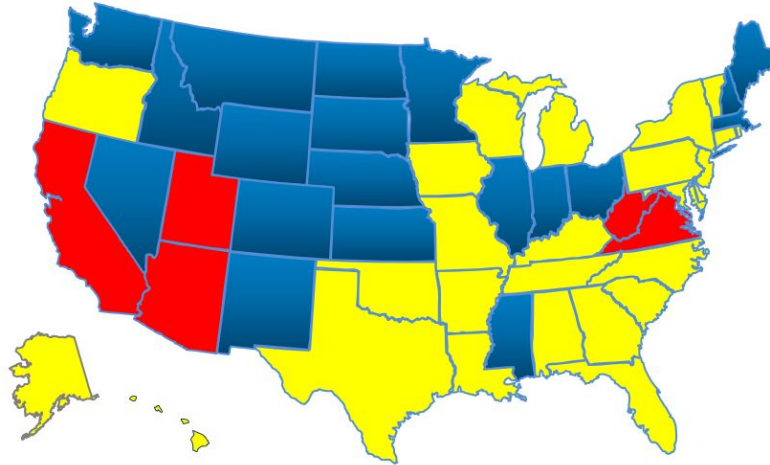
Red 40, Yellow 5 and 6, Blue 1

California School Safety Act (2024)

Prohibits schools K-12 from
offering foods or beverages
containing

- red 40
- yellow 5 and 6
- blue 1 and 2
- green 3

Additive Bans in Schools - 2025



At least 30 bills
introduced

Red Adopted

Yellow Introduced

Red 3, red 40, yellow 5 and 6, blue 1 and 2, green 3,
BVO, potassium bromate propylparaben, titanium dioxide,
(ADA, BHA, BHT, caramel color)

Ban ultraprocessed foods - school meals

- AL
- AR
- AZ
- CA
- FL
- KY
- LA
- MA
- MO
- NC
- PA
- SC
- TX
- US HR2530

Nutrition advisory committee to examine impact of UPF on health and develop guidelines

- TX



Enacted

The legislature finds that:

2. **Ultraprocessed**, industrially manufactured, nutrient-depleted food with synthetic additives is **undernourishing minors at public schools and contributing to childhood obesity**.
3. Any taxpayer-funded meal or snack program offered to minors at public schools in this state should be nutritious and **made primarily of whole, minimally processed plant or animal products**

Schools participating in school meals program **shall not serve or sell ultraprocessed food** on the school campus during the normal school day. "Ultraprocessed food" means a food or beverage that contains one or more of the following ingredients:

1. Potassium bromate
2. Propylparaben
3. Titanium dioxide
4. Brominated vegetable oil
5. Yellow dye 5 and 6
6. Blue dye 1 and 2
7. Green dye 3
8. Red dye 3 and 4

CA AB 1264



It is the intent of the Legislature to reduce the consumption of ultraprocessed foods by the children of California, and to encourage schools and school districts to promote and provide healthier options in school meals

- **UPF** defined as **Nova 4** additives with cosmetic functions or NSS
- **Particularly harmful UPF:** UPF product that is particularly harmful, as determined by regulations adopted by the Office of Environmental Health Hazard Assessment considering:
 - Substance banned in other jurisdictions or product carry warning label
 - Substance linked to health harms based on scientific evidence
 - Substance is hyperpalatable or addictive based on scientific evidence
 - Product is high in fat, sugar or salt
- **January 1, 2028:** Begin to phase out particularly harmful UPF.
- **January 1, 2032,** prohibit a vendor from offering particularly harmful UPF to a school.

California Executive Order N-1-25



- Recommendations to the Governor's Office regarding potential action to **limit the harms** associated with "ultraprocessed foods" and other food ingredients May include warning labels for certain **ultraprocessed foods**.
- Investigate adverse health impacts of **food dyes**
- Explore **evaluation of GRAS food additives** and state-level action if companies fail to notify the FDA of certain food additives through the voluntary GRAS process.
- Reduce **state purchases of soda, candy, other ultra-processed foods** and/or foods with **synthetic food dye or other additives**.
- Require or encourage **Medi-Cal managed care plans and hospitals to fund access to fresh, healthy foods**, mitigate the impacts of "food deserts," and otherwise promote public health at the local level.
- Adopt **higher standards for healthy school meals** than USDA standards'
- School food programs have fresh ingredients and options **grown in California** and shall redouble to support **for farm-to-school** program

State and local healthy food policies



Availability/Quality

Food additives

Kids' meals

School meals

Summer EBT

Healthy checkout policies

Retail marketing

Pouring rights

Procurement & nutrition standards

Early learning food

Healthy Food Financing/Incentives

Healthy corner stores

Stocking requirements

Water access

Tax incentives for food donations

Fast food zoning and permitting

Mobile food vendors

Portion size



Acceptability/Appeal

Warning labels

Menu labels

Meat alternative labels

Marketing restrictions

Countermarketing



Affordability

Sweetened beverage tax

Summer EBT

Universal free school meals

Nutrition incentives/Produce Rx

Food as Medicine

SNAP restrictions and enhancements

Minimum pricing



Food System

Plant-based foods

Food waste and rescue

Food hubs

Urban agriculture

Local/regional food system policy

Food Policy Councils

Right to Food

Farm to Table

Land use and zoning

Farmers markets

Warning labels



Added Sugars

(New York State AB 5305/SB 2087)

Beverage containers

“SAFETY WARNING: This beverage contains 100% or more of the FDA's recommended daily intake of added sugar.”

Vending, dispensers, menu, menu board

SAFETY WARNING: The Food and Drug Administration recommends limiting added sugars to 50 grams per day based on a 2,000 calorie diet

Sodium

(New York State SB 448)

Menus

WARNING: Contains more than total daily recommended limit (2300 mg) 100% of sodium. High sodium intake can increase blood pressure and the risk of heart disease and stroke (with icon)

Additives

(Texas SB25) (similar LA SB14)

Food and beverage packages

WARNING: This product may expose you to [Name of Chemical], which is banned by [EU, UK, or Canada].“

and/or

WARNING: This product contains artificial color or a food additive. Some scientific research suggests artificial colors and food additives may affect individuals with certain health conditions. For more information, visit [insert link to the United States Food and Drug Administration's Internet website]

Synthetic Colors

(Florida S764)

Food and beverage packages

“WARNING: This product contains synthetic colors, which may have an adverse effect on activity and attention in children.”

New York City Added Sugars Warnings

New – MA S1571

Icon

“This item may exceed the total daily recommended limit for added sugars based on a 2,000 calorie diet”

Added Sugars Warning Laws

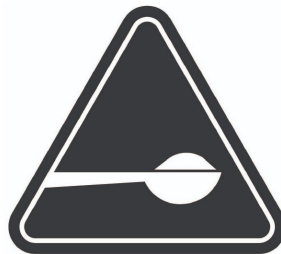
Local Law 33

- City Council legislation (2022)
- NYC restaurant chains with 15+ locations nationwide
- Identify **pre-packaged items** high in added sugars
- Warning statement about high added sugars intake at **point of purchase**


Local Law 150

- City Council legislation (2023)
- NYC restaurant chains with 15+ locations nationwide
- Identify **all menu items** high in added sugars
- Warning statement about high added sugars intake at **point of purchase, on menu boards and at self-service stations where high sugar items are sold**

Added Sugars Warning Policy



- Menu items $\geq 50\text{g}$ added sugars
- Must be 100% the size of the letter height on the menu
- At point of purchase, on menu boards and at self-service stations where high sugar items are sold
- To be enforced by restaurant inspectors

Warning:  indicates that the added sugars content of this item is equal to or higher than the total daily recommended limit of added sugars for a 2,000 calorie diet (50 g). Eating or drinking high amounts of added sugars over time can increase risk of type 2 diabetes, weight gain and tooth decay.

Marketing to kids



Predatory Food Marketing
(NYS397)



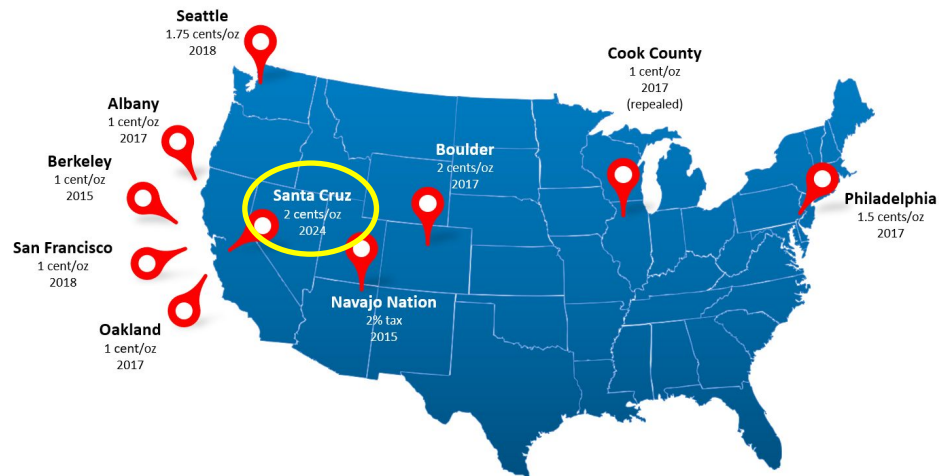
Restrict advertising in schools
(MA SD2536)



Restrict TV advertising from 6AM to 9PM of junk food with HFSS
(NY A5862)

Sweetened Beverage Taxes

- 8 US Cities
- 1 Tribe
- 97 places globally
- 57% of world population



Fiscal policies: sweetened soft drink taxes

Global Food Research Program
UNC-Chapel Hill



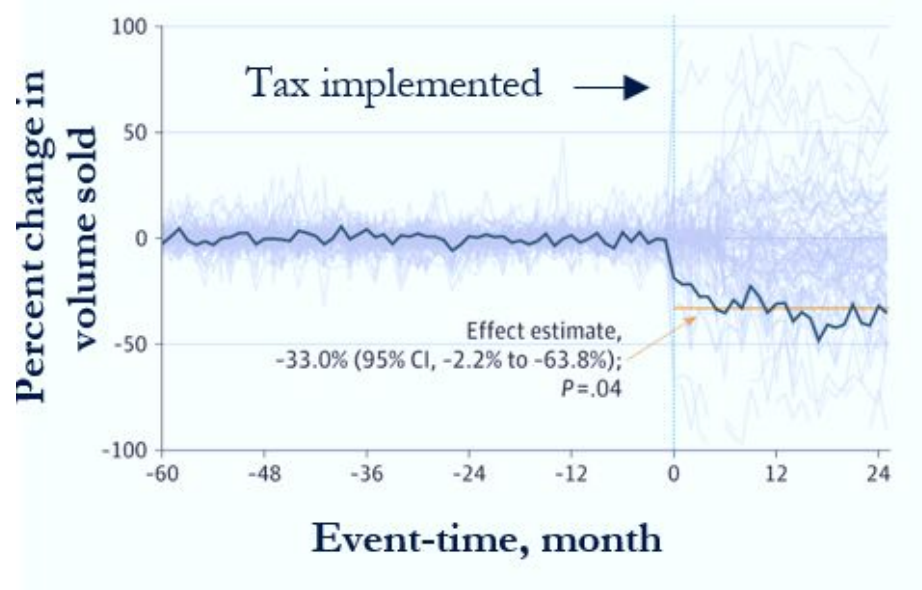
National: 81 | Sub-national: 16 | Total taxes: 97

GLOBAL FOOD RESEARCH PROGRAM | UNC-CHAPEL HILL

Updated October 2024 © Copyright 2024 Global Food Research Program at UNC-Chapel Hill
Base map copyright © 2024 Mapbox © OpenStreetMap

Tax impacts in 5 US cities

Changes in Volume Sales

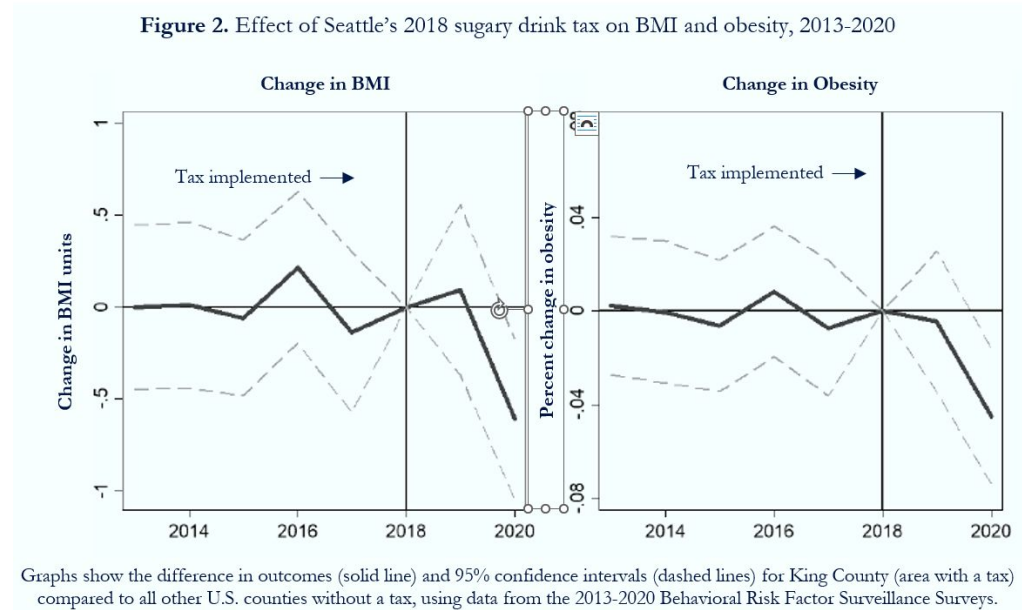


33% increase in price

33% decrease in sales

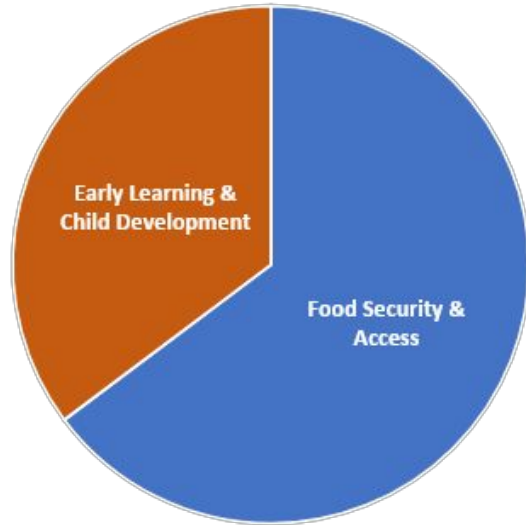
Growing evidence from quasi-experiments: Taxes may improve weight outcomes

- Seattle: 4.5% reduction in adult obesity and 0.61 in BMI
- Seattle: prevented 19% of expected adult BMI gain per year
- Seattle: 1.1% decline in child adiposity
- Four CA cities: 2.8% decline in child and adolescent BMI percentile
- Philadelphia: 1.1% decline in adult BMI
- Philadelphia: no effect on children
- Philadelphia/Oakland/SF: 1.1% decline in high school student BMI
- Pooled national data: 1 cent/oz tax associated with 1.7% decline in adolescent obesity



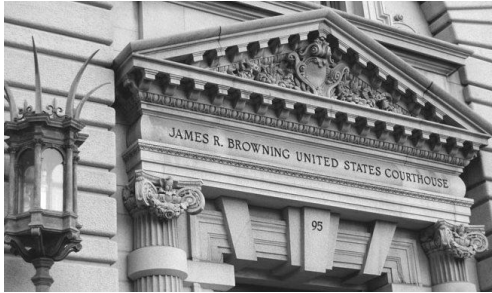
Seattle tax revenue allocations

2023: \$22M



What's next for taxes?

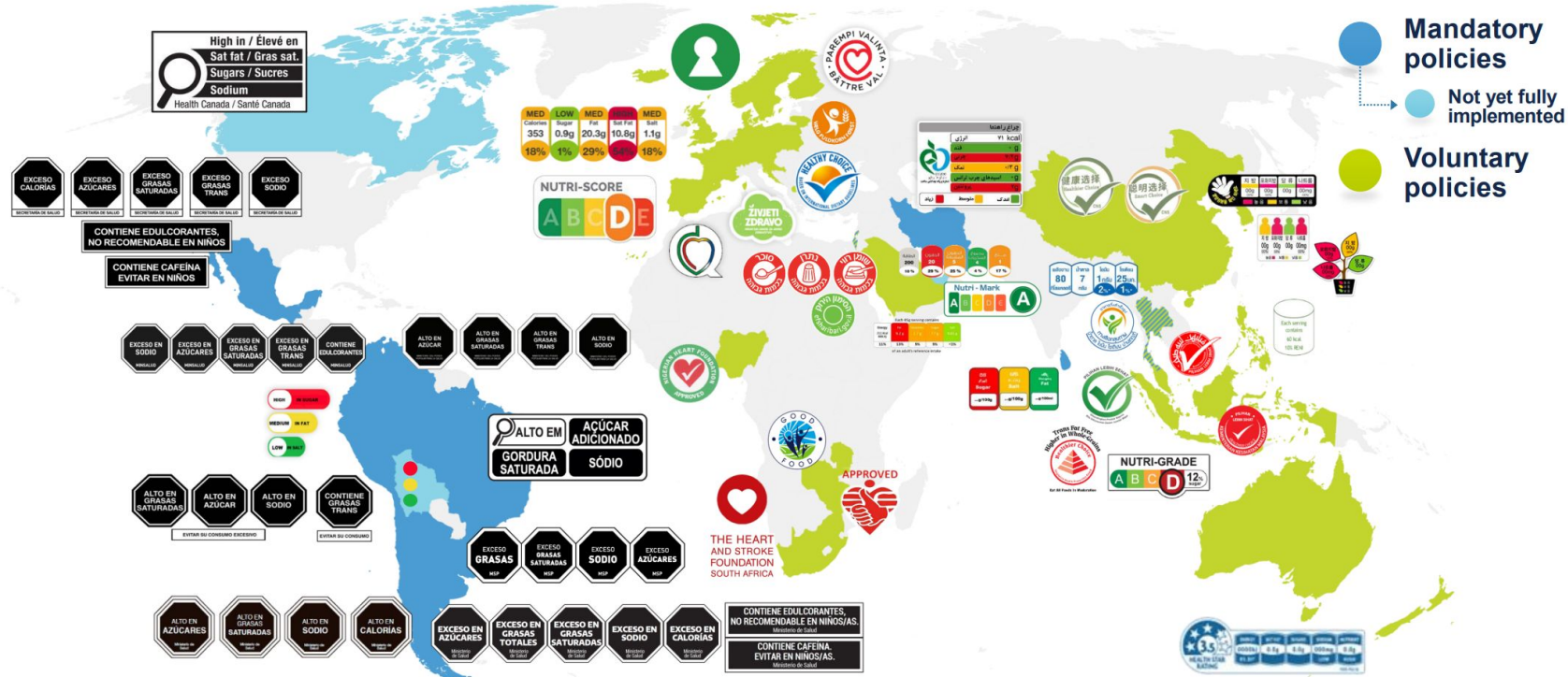
Santa Cruz Preemption goes to court



Non-Sugar Sweetened Beverages



Front-of-Pack Label (FOPL) Policies



Types of interpretive FOPLs

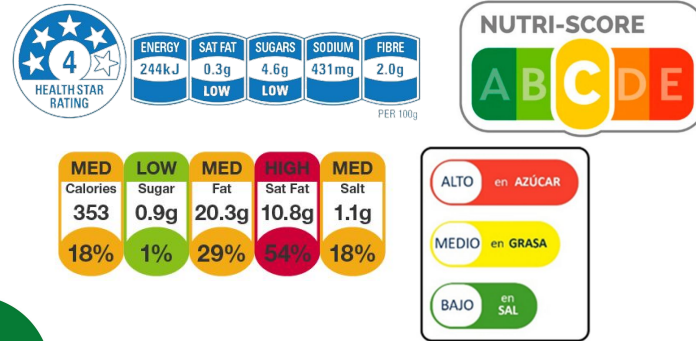
Negative framing only:

- Nutrient warnings
- Health warnings



Negative and positive framing:

- Summary labels/single traffic light
- Multiple traffic lights



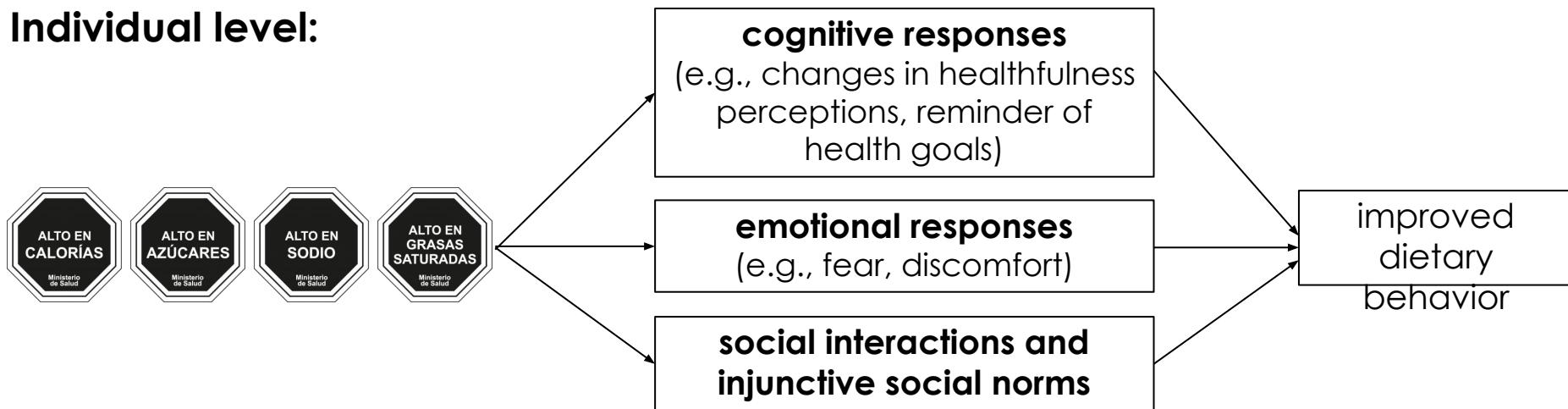
Positive framing only:

- Endorsement labels



How do warning FOPLs work?

Individual level:



Structural level:



2016 Law of Food Labeling and Advertising: front-of-package nutrient warning labels + restrictions to child-directed marketing of labeled foods + prohibited sale of labeled foods in schools



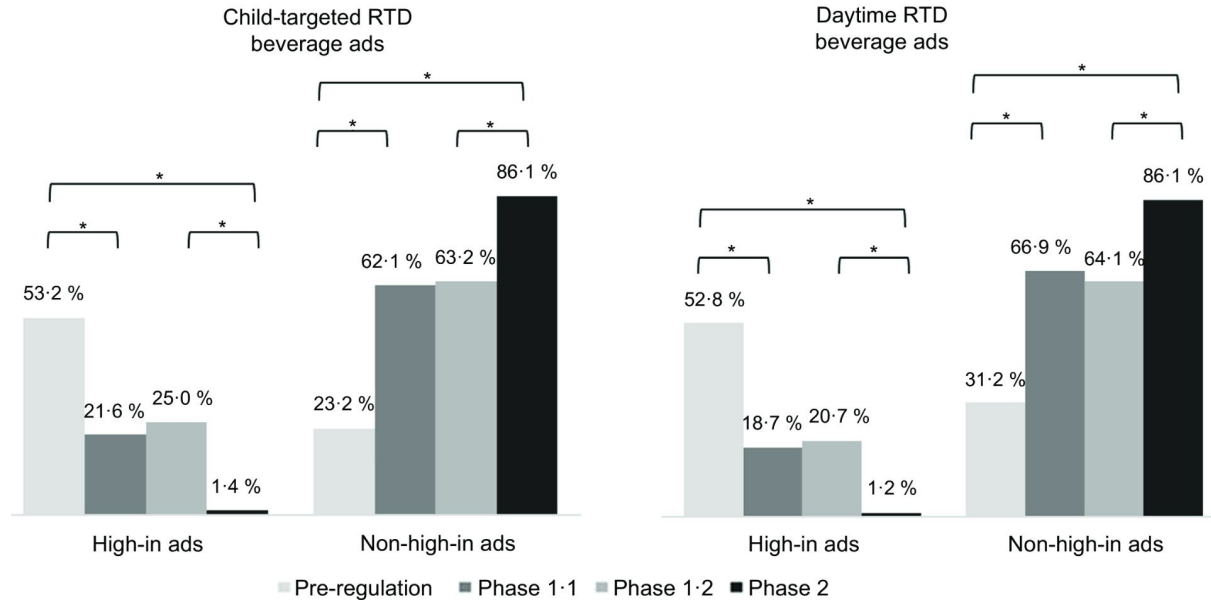
Changes in the packaged food supply:

(from product reformulations and introduction of new products)

	2016 (T ₀)	2020 (T ₃)	Difference (T ₀ vs T ₃)	
			Absolute	p-value*
Overall	N=3864	N=2888		
Any "high in" ^{abcde}	2735 (70.8%)	1517 (52.5%)	-18.3	<0.001
High in energy ^{abcde}	1365 (35.3%)	931 (32.2%)	-3.1	0.008
High in sugars ^{bcde}	1313 (34.0%)	679 (23.5%)	-10.5	<0.001
High in saturated fats ^{bcde}	1071 (27.7%)	664 (23.0%)	-4.7	<0.001
High in sodium ^{abcef}	1300 (33.6%)	665 (23.0%)	-10.6	<0.001

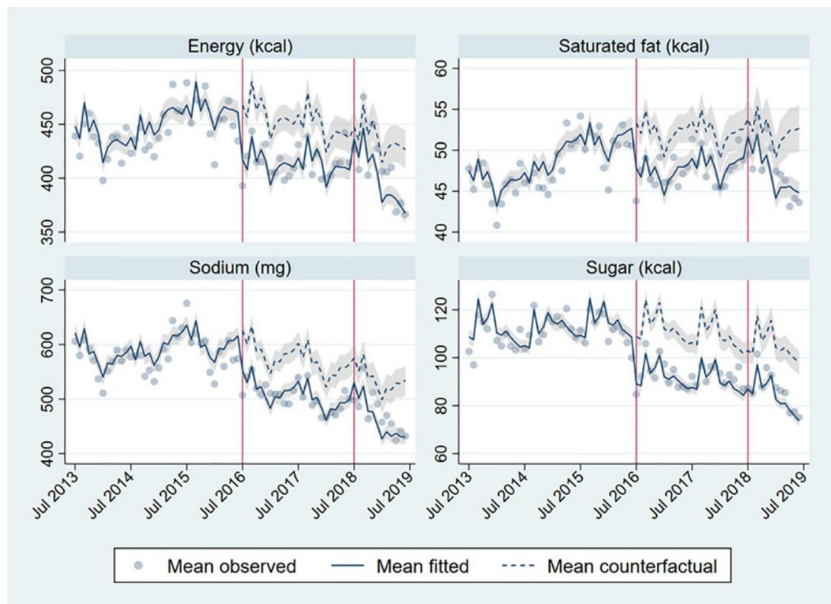
Rebolledo et al.
(2025)

Changes in ready-to-drink beverage marketing on television



Stoltze et al.
(2023)

Changes in intake of nutrients of concern (per person per day)



- 8% reduction in energy intake
- 20% reduction in sugar intake
- 14% reduction in sodium intake
- 10% reduction in saturated fat intake
- Phase 1 results driven by immediate reduction in purchases, phase 2 results driven by declining trends
- Small differences by SES (slightly larger effects for high-SES households)

Tailie et al. (2024)

Qualitative reports from Chilean mothers

- After a while, FOPLs “faded to the background,” but information learned about products has become ingrained
- Mothers started valuing more “natural” foods due to label oversaturation
- Lower-SES mothers report that healthier (unlabeled) foods are still less accessible, price remains an important barrier

Correa et al.
(2024)

Unintended effects and future directions

- 11 p.p. increase in share of products containing non-nutritive sweeteners (NNS) in the food supply
- 12 p.p. increase in share of households purchasing only NNS-only beverages, 5 p.p. increase in NNS+sugar
- NNS intake increased by 15%-84% (depending on type) per person per day
- *15 p.p. increase in share of preschoolers who consume NNS*

CONTIENE EDULCORANTES,
NO RECOMENDABLE EN NIÑOS



Ricardo et al. (2021), Rebolledo et al. (2022, 2023)

Other countries

Peru, changes in the packaged food supply:

- Beverages, high in sugar : 28 p.p. decline
- Foods, any label: 20 p.p. decline

Uruguay

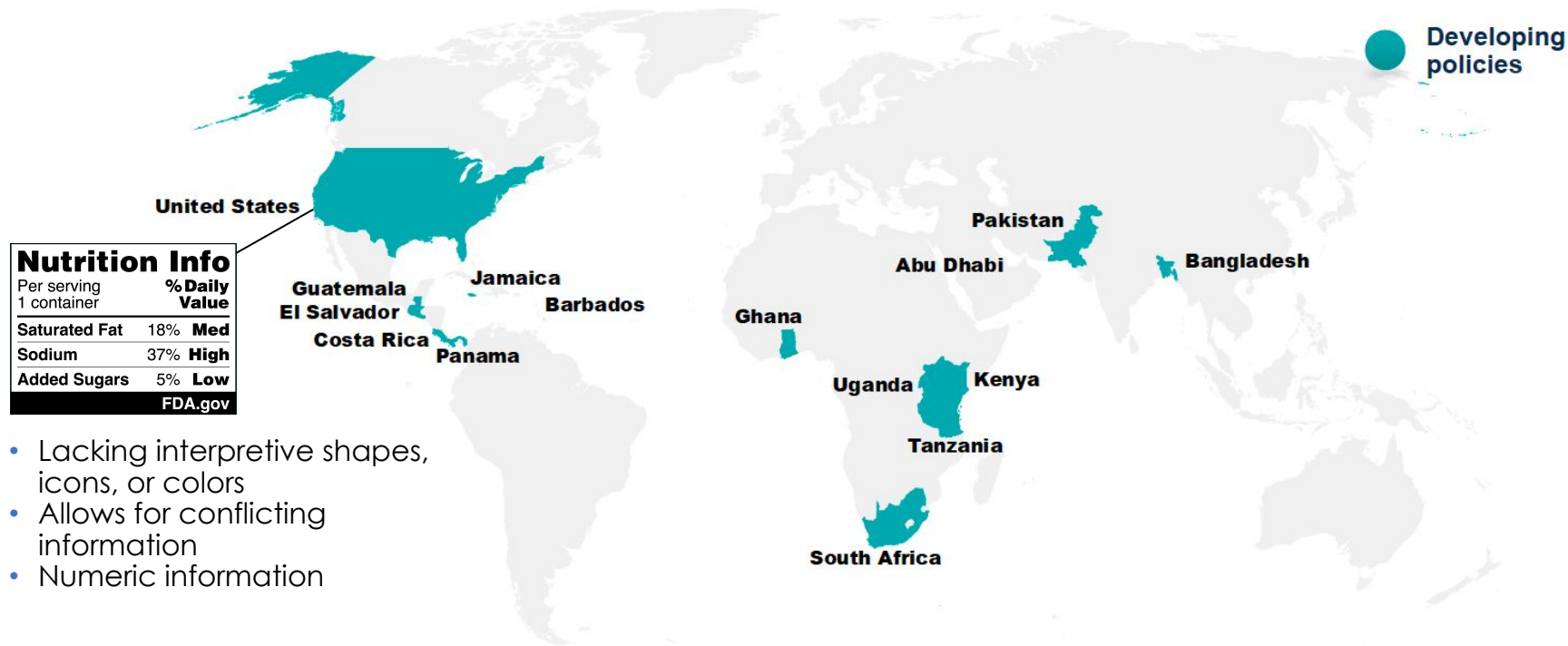
- Eye-tracking technology revealed that consumers used FOPLs more often than back-of-package nutrition info or ingredients lists

Mexico, changes in the packaged food supply:

- Products containing NNS:
 - Desserts: 11 p.p. decline
 - Dairy beverages: 14 p.p. decline
 - Dairy foods: 29 p.p. decline
 - Candies: 6.6 p.p. decline

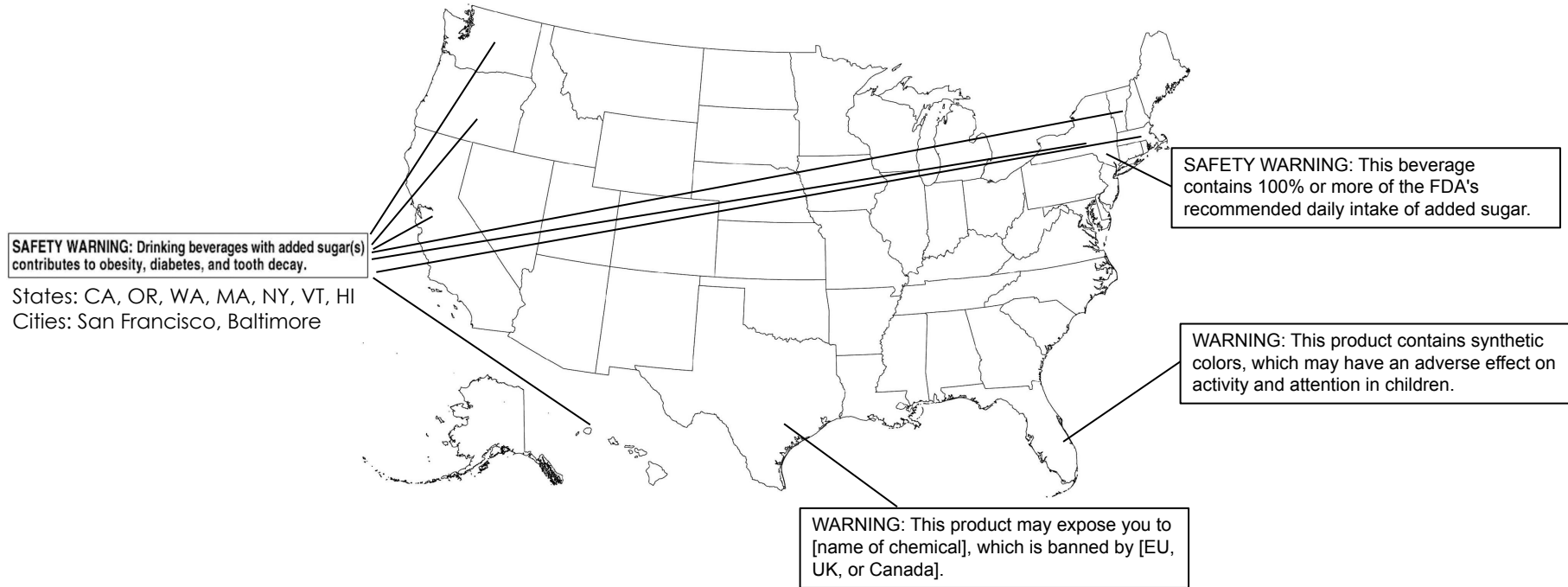
Saavedra-Garcia et al. (2023), Manchín et al. (2023), Salgado et al. (2025)

New FOPL policies under development



- Lacking interpretive shapes, icons, or colors
- Allows for conflicting information
- Numeric information

Subnational FOPLs policies in the US (current and proposed)



References

Correa T, Fierro C, Reyes M, Taillie LS, Carpentier FRD, Corvalán C. Why Don't You [Government] Help Us Make Healthier Foods More Affordable Instead of Bombarding Us with Labels? Maternal Knowledge, Perceptions, and Practices after Full Implementation of the Chilean Food Labelling Law. *International Journal of Environmental Research and Public Health*. 2022;19(8):4547. doi:10.3390/ijerph19084547

Machín L, Alcaire F, Antúnez L, Giménez A, Curutchet MR, Ares G. Use of nutritional warning labels at the point of purchase: An exploratory study using self-reported measures and eye-tracking. *Appetite*. 2023;188:106634. doi:10.1016/j.appet.2023.106634

Rebolledo N, Bercholz M, Adair L, Corvalán C, Ng SW, Taillie LS. Sweetener Purchases in Chile before and after Implementing a Policy for Food Labeling, Marketing, and Sales in Schools. *Current Developments in Nutrition*. 2023;7(2):100016. doi:10.1016/j.cdnut.2022.100016

Rebolledo N, Ferrer-Rosende P, Reyes M, Smith Taillie L, Corvalán C. Changes in the critical nutrient content of packaged foods and beverages after the full implementation of the Chilean Food Labelling and Advertising Law: a repeated cross-sectional study. *BMC Med*. 2025;23(1):1-18. doi:10.1186/s12916-025-03878-6

Rebolledo N, Reyes M, Popkin BM, et al. Changes in nonnutritive sweetener intake in a cohort of preschoolers after the implementation of Chile's Law of Food Labelling and Advertising. *Pediatric Obesity*. 2022;17(7):e12895. doi:10.1111/ijpo.12895

Roberto CA, Ng SW, Ganderats-Fuentes M, et al. The Influence of Front-of-Package Nutrition Labeling on Consumer Behavior and Product Reformulation. *Annu Rev Nutr*. 2021;41(1):529-550. doi:10.1146/annurev-nutr-111120-094932

Saavedra-Garcia L, Meza-Hernández M, Diez-Canseco F, Taillie LS. Reformulation of Top-Selling Processed and Ultra-Processed Foods and Beverages in the Peruvian Food Supply after Front-of-Package Warning Label Policy. *International Journal of Environmental Research and Public Health*. 2023;20(1):424. doi:10.3390/ijerph20010424

Salgado JC, Pedraza LS, Contreras-Manzano A, Aburto TC, Tolentino-Mayo L, Barquera S. Product reformulation in non-alcoholic beverages and foods after the implementation of front-of-pack warning labels in Mexico. *PLOS Medicine*. 2025;22(3):e1004533. doi:10.1371/journal.pmed.1004533

Stoltze FM, Correa T, Aguilar CLC, Taillie LS, Reyes M, Carpentier FRD. Beverage industry TV advertising shifts after a stepwise mandatory food marketing restriction: achievements and challenges with regulating the food marketing environment. *Public Health Nutrition*. 2024;27(1):e26. doi:10.1017/S1368980023002872

Taillie LS, Bercholz M, Popkin B, Rebolledo N, Reyes M, Corvalán C. Decreases in purchases of energy, sodium, sugar, and saturated fat 3 years after implementation of the Chilean food labeling and marketing law: An interrupted time series analysis. *PLOS Medicine*. 2024;21(9):e1004463. doi:10.1371/journal.pmed.1004463

Zancheta Ricardo C, Corvalán C, Smith Taillie L, Quitral V, Reyes M. Changes in the Use of Non-nutritive Sweeteners in the Chilean Food and Beverage Supply After the Implementation of the Food Labeling and Advertising Law. *Front Nutr*. 2021;8. doi:10.3389/fnut.2021.773450

Healthy
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Q & A

Breakout Rooms

1. Discuss current policy research opportunities and/or challenges related to today's topic. What are the opportunities/challenges at the local, state, and federal levels?
2. What are the considerations for practitioners (i.e., healthcare providers, school districts, SNAP or WIC agencies) implementing programs or policies discussed today? What do we still need to know to implement and scale these programs or policies?
3. Discuss how you've interacted with this topic in your professional career (i.e., current coursework, study, grant).
4. What are you currently working on that's exciting you?
5. What advice/questions do you have for people in your breakout?

Join us for the next session of the speaker series!

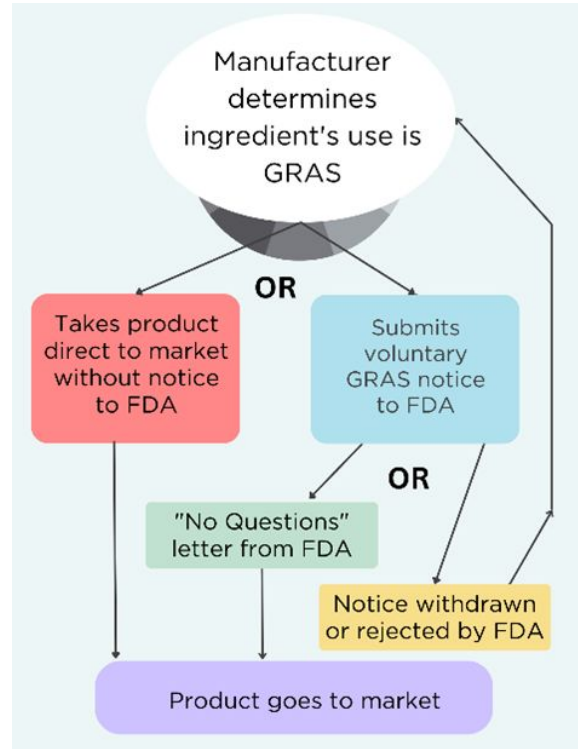
- Wednesday, July 9th from 4:00 - 5:00 PM ET
- Food Policies in Schools

Extra - will not show in initial presentation

NY Food Disclosure A1557



Shining light on
“secret” GRAS



Reporting requirements for substances Generally Recognized as Safe (GRAS):

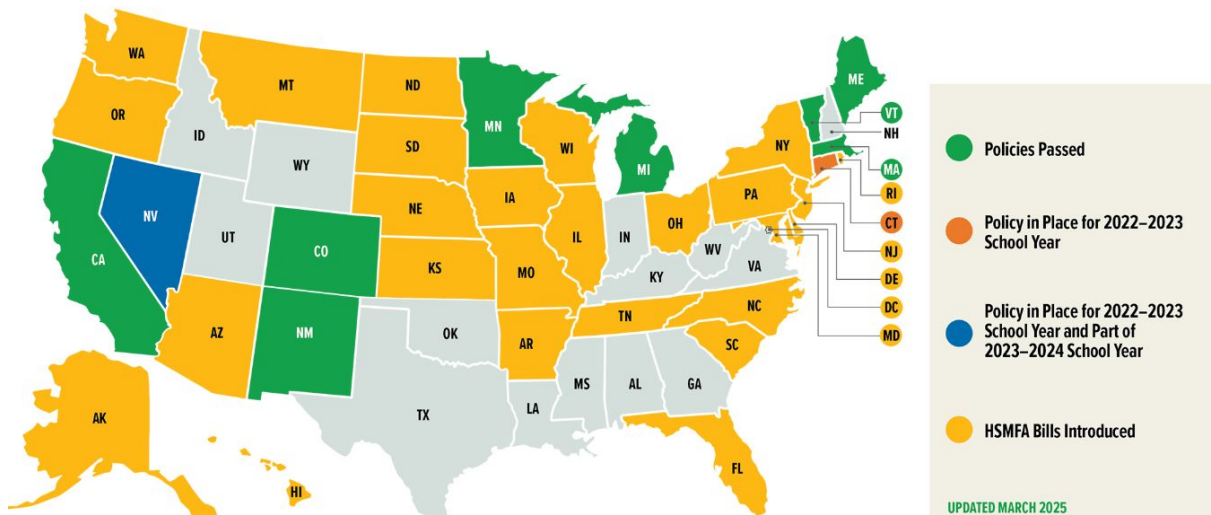
- Companies must submit detailed reports about these substances to the state commissioner, including information about their safety, dietary exposure, and manufacturing methods
- Data made available in public database
- Cannot sell products with GRAS substance if not reported

Healthy School Meals for All

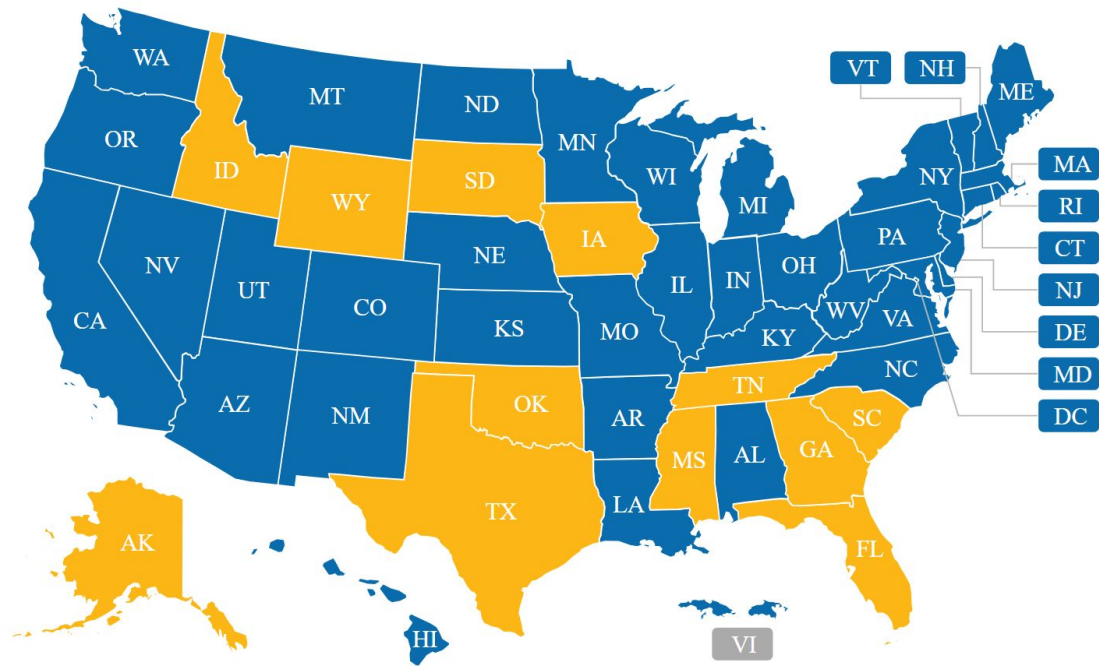
“Healthy School Meals for All has allowed Massachusetts to increase participation, expand Farm to School, address staff shortages, replace aging equipment and enhance scratch cooking. All of this is helping to revolutionize menus and change opinions about the nutritional quality of school meals.”

— Massachusetts Department of
Elementary and Secondary Education

Limited progress – funding in
difficult fiscal times



Summer EBT



Federal Food Policies



- Front of package labels?
- Healthy label?
- Sodium reduction targets?
- UPF warning?
- SNAP restrictions; Healthy SNAP Act, Nutritious SNAP Act?
- Nutrition program funding: SNAP, WIC, Summer EBT
- School meals – CEP reduction, whole milk, cheese
- Changes to DGA process?
- GRAS overhaul and post-market assessment?

Predatory Marketing Prevention Act (NY State S397/A2584 - 2025-2026)

STATE SEN. ZELNOR MYRIE, A CARROT, TARGETS JUNK FOOD ADVERTISING



By Ben Verde

0 comments

Posted on October 29, 2021



State Sen. Zellnor Myrie (left, carrot) wants to regulate how junk food is marketed to kids.

- An advertisement concerning a food or food product shall not be false or misleading
- Defines false or misleading:
 - Targets a consumer who is reasonably unable to protect their interests because of their age (especially children), illiteracy, inability to understand the language
 - Special attention to ads directed at children
 - E.g., animated characters, music, child celebrities, location, etc.