

Progress in Food Environments

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STAY AHEAD OF THE GAME

GATORADE

U.S. Bolt
USAIN BOLT
WORLD'S FASTEST MAN

NO ARTIFICIAL COLOURS SWEETENERS FLAVOURS

GATORADE



Doritos BRAND

FOR THE BOLD™

#choosehappiness




Coca-Cola

COLLECTION
exklusiv nur für kurze Zeit

BURGER KING

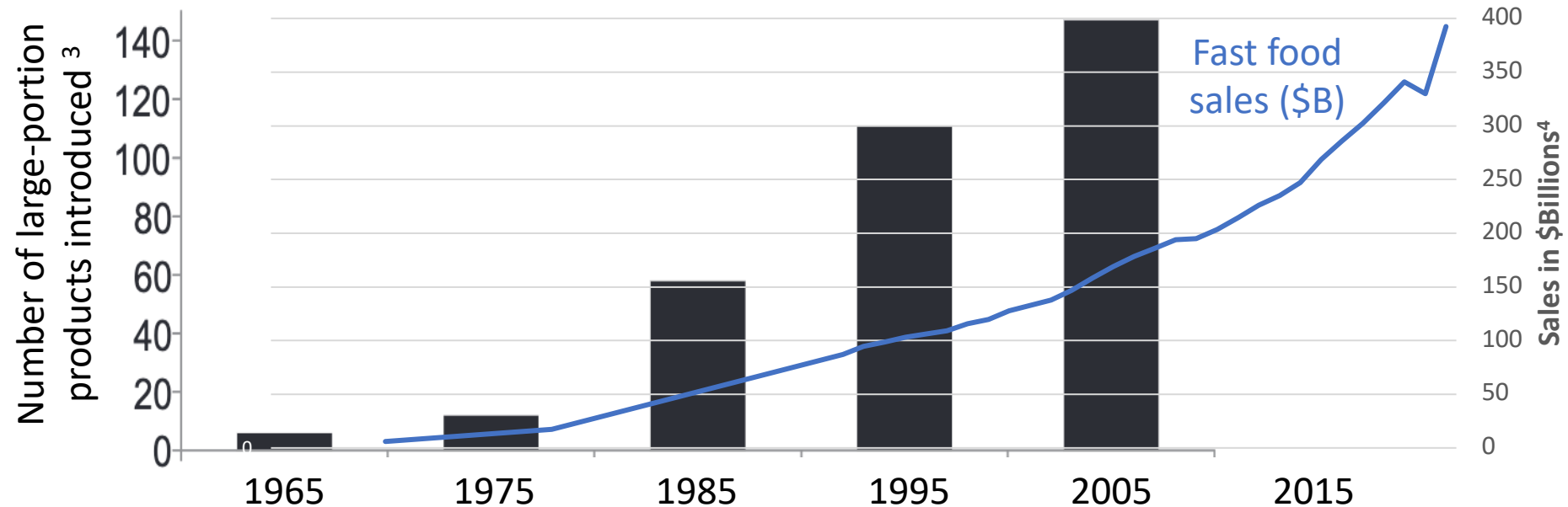
GESCHMACK IST KING



Model: Anna Harnel
photographed by Manfred Baumann

Other shifts in the food environment: availability, portion size, ubiquity

- >5x as many items in grocery stores now as in 1990's¹
- 20,000 new packaged foods and beverages introduced each year²



Sources: 1. Michael Ruhlman. "Grocery: The Buying and Selling of Food in America" (2017). 2. USDA, Economic Research Service, using data from Mintel, Global New Product Database. 3. : Young LR and Nestle M, *American Journal of Public Health* (2012). 4. US Census Bureau.



6 Ways to Increase Impulse Buying Online



Jay Leonard

Last updated: 4 May 2019



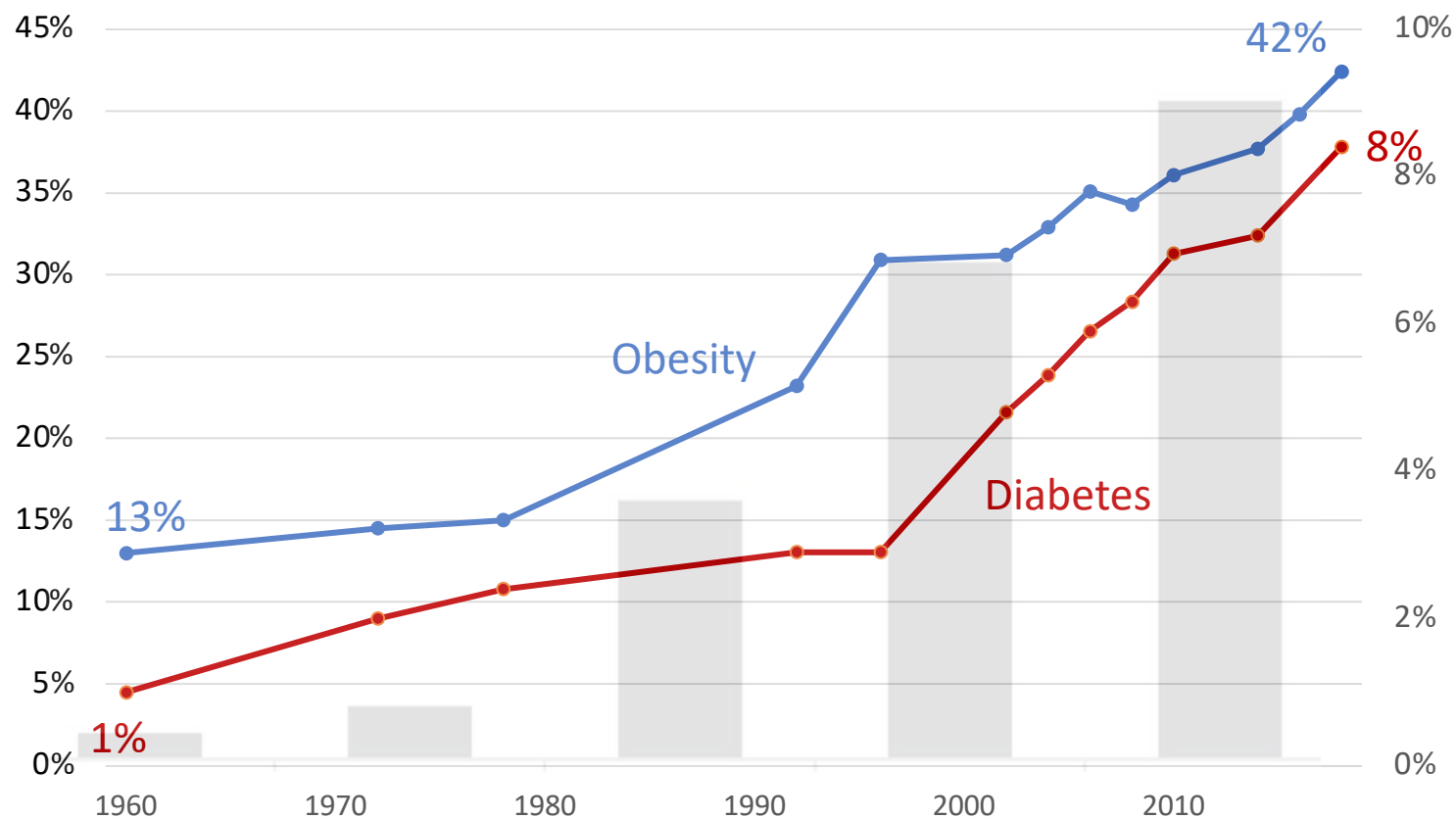
On top of these cues, there's the price environment

- Healthier diets cost about \$1.50 more per day than unhealthy diets

In the U.S., these powerful environmental cues are “balanced” by...

Nutrition Facts	
8 servings per container	
Serving size	8 fl oz (240mL)
Amount per serving	
Calories	110
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 5mg	0%
Total Carbohydrate 27g	10%
Dietary Fiber 0g	0%
Total Sugars 25g	
Includes 23g Added Sugars	46%
Protein 0g	
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 40mg	0%
<small>* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.</small>	

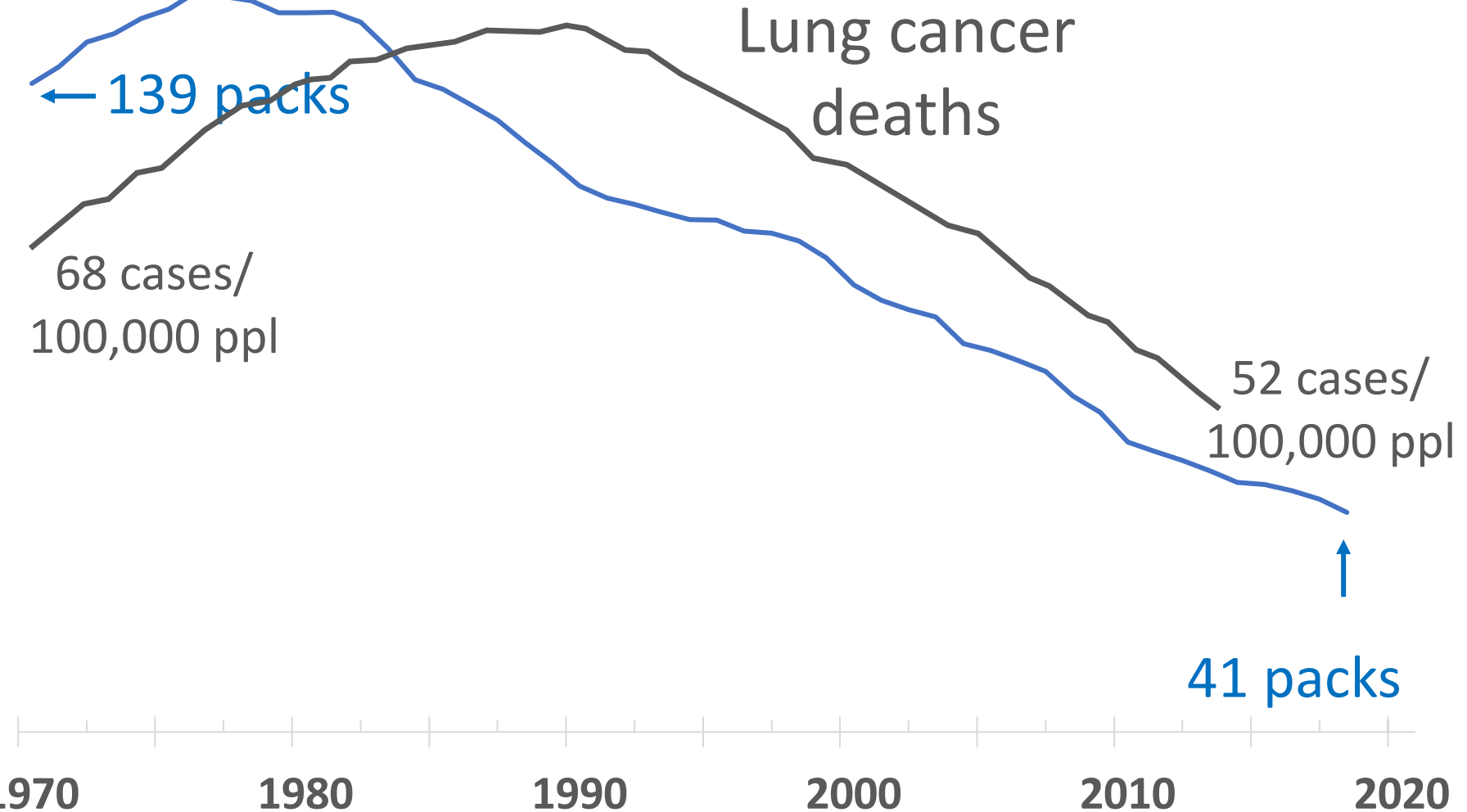
Trends in prevalence of obesity and diabetes



Source: CDC

Tobacco taxes
&
Smoke-free
restaurants and
workplaces
&
Warning labels
&
Advertising
bans

Cigarette packs
per person per year



Data from the CDC: Orzechowski and Walker. Tax Burden on Tobacco, 1970-2018.
American Cancer Society: Cancer Facts & Figures 2017.

Progress in the food environment

Sugar-Sweetened Beverage Taxes

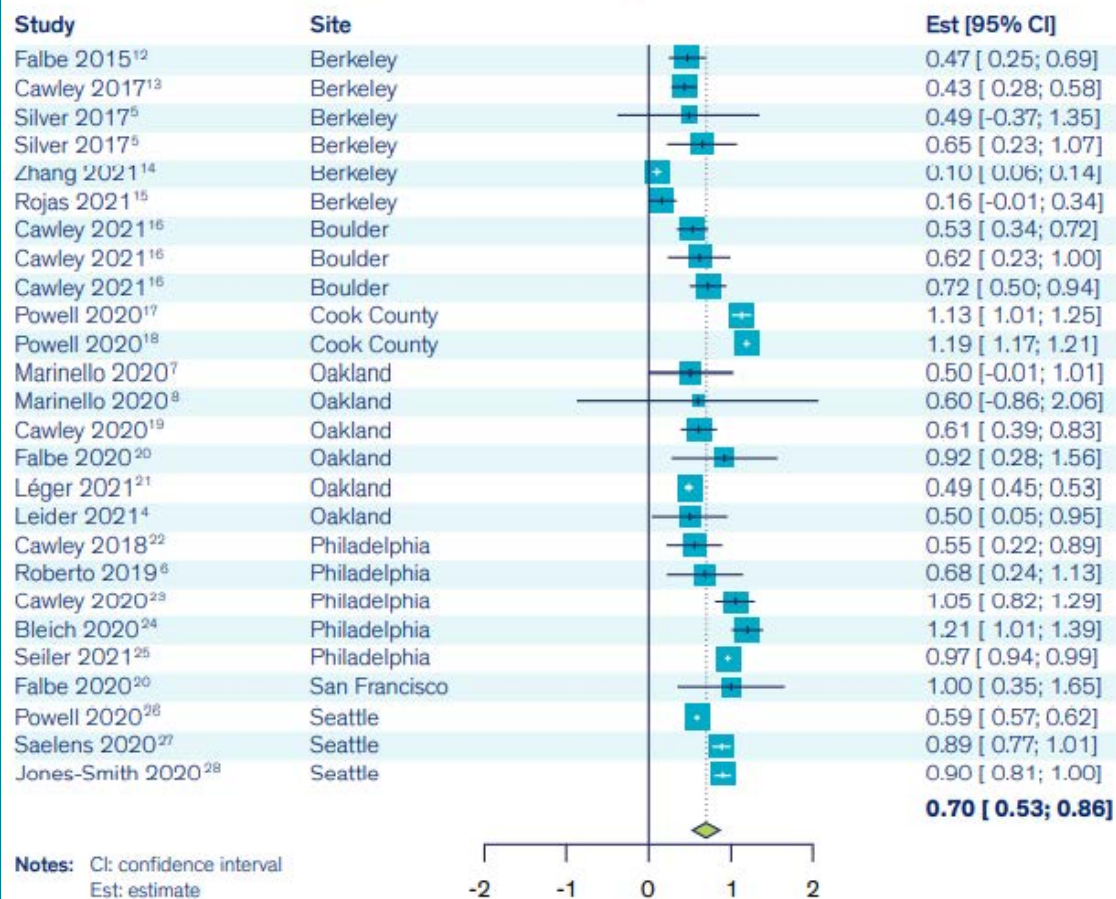


Key Measures

- Price
- Demand
 - Change in volume
 - Change in calories/grams of sugar
- Product availability/reformulation

Impact of SSB Tax on prices in the U.S.

FIGURE 1 Tax Pass-through Estimates and Meta-analysis Results



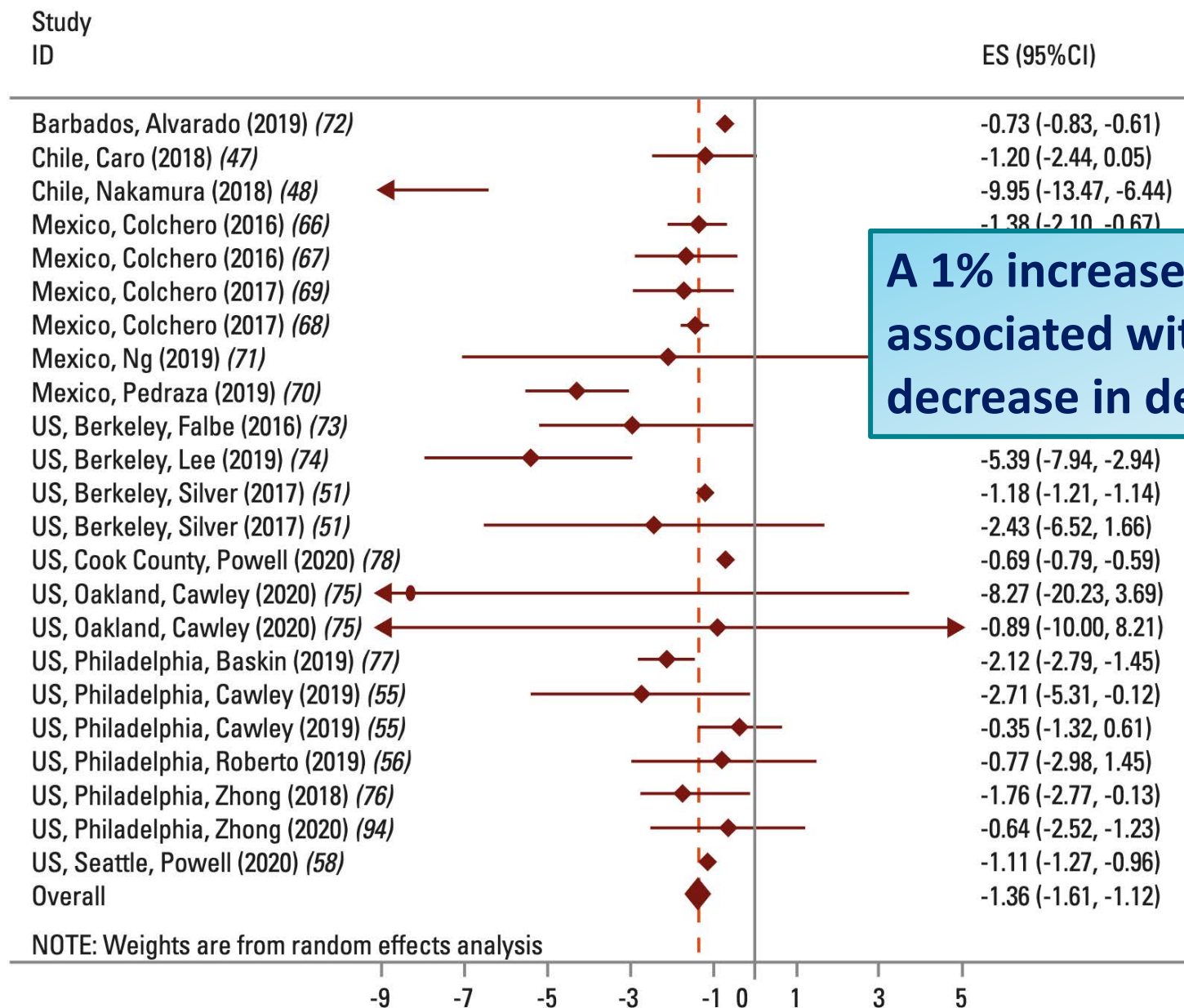
70% of SSB taxes are passed through to consumers

Source: Powell LM, Marinello S, Leider J. [A Review and Meta-analysis of Tax Pass-through of Local Sugar-Sweetened Beverage Taxes in the United States](#). Research Brief No. 120.

Impact of SSB Taxes on Demand in the Americas

Source: Sugar-sweetened beverage taxation in the Region of the Americas. Pan American Health Organization (2020).

Price Elasticity of Demand for SSBs



A 1% increase in price is associated with a 1.4% decrease in demand.

Impact of SSB Taxes on Demand in the U.S.

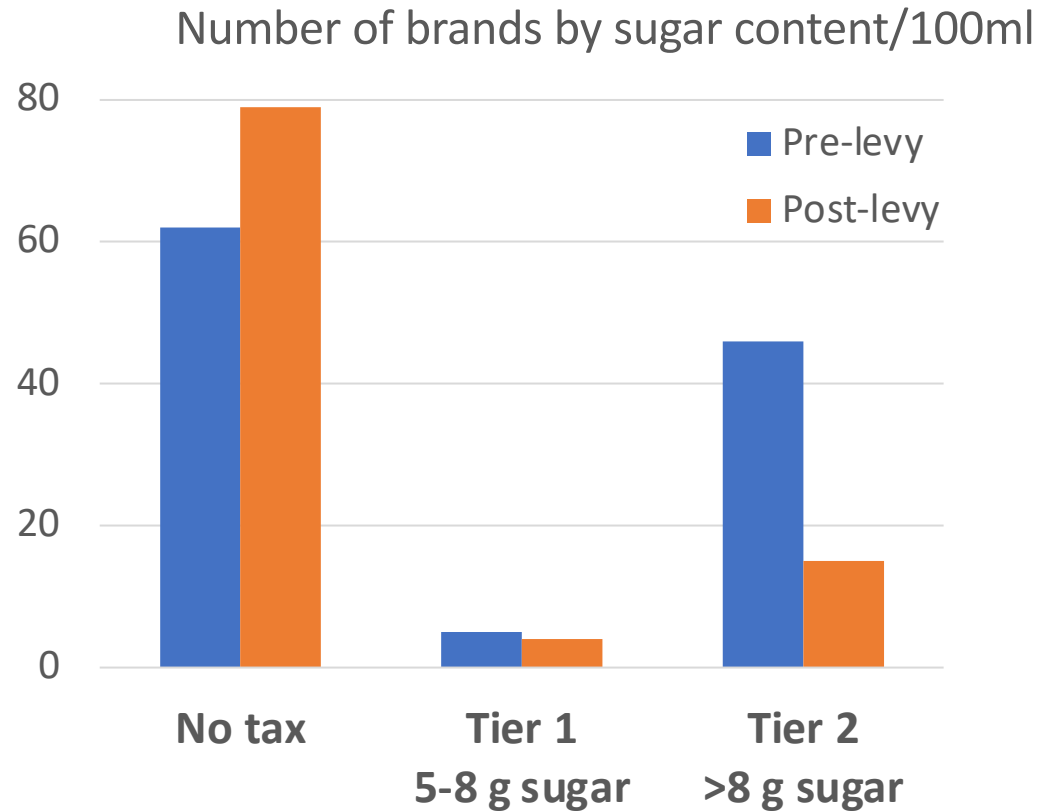
FIGURE 1 Change in Demand Estimates and Meta-analysis Results



U.S. SSB taxes reduce demand by 20%

Source: Powell LM, Marinello S, Leider J, Andreyeva T. [A Review and Meta-analysis of the Impact of Local U.S. Sugar-sweetened Beverage Taxes on Demand](#). Research Brief No. 121.

Tax structure matters: UK's tiered tax on SSBs encouraged reformulation



Source: Dixon A et al. Does a Spoonful of Sugar Levy Help the Calories Go Down? An Analysis of the UK Soft Drinks Industry Levy. <https://docs.iza.org/dp14528.pdf>

Evidence suggests no or only modest substitution of other sweet products

Untaxed beverages

- Mostly null studies; modest substitution with 100% juice drinks and flavored milk

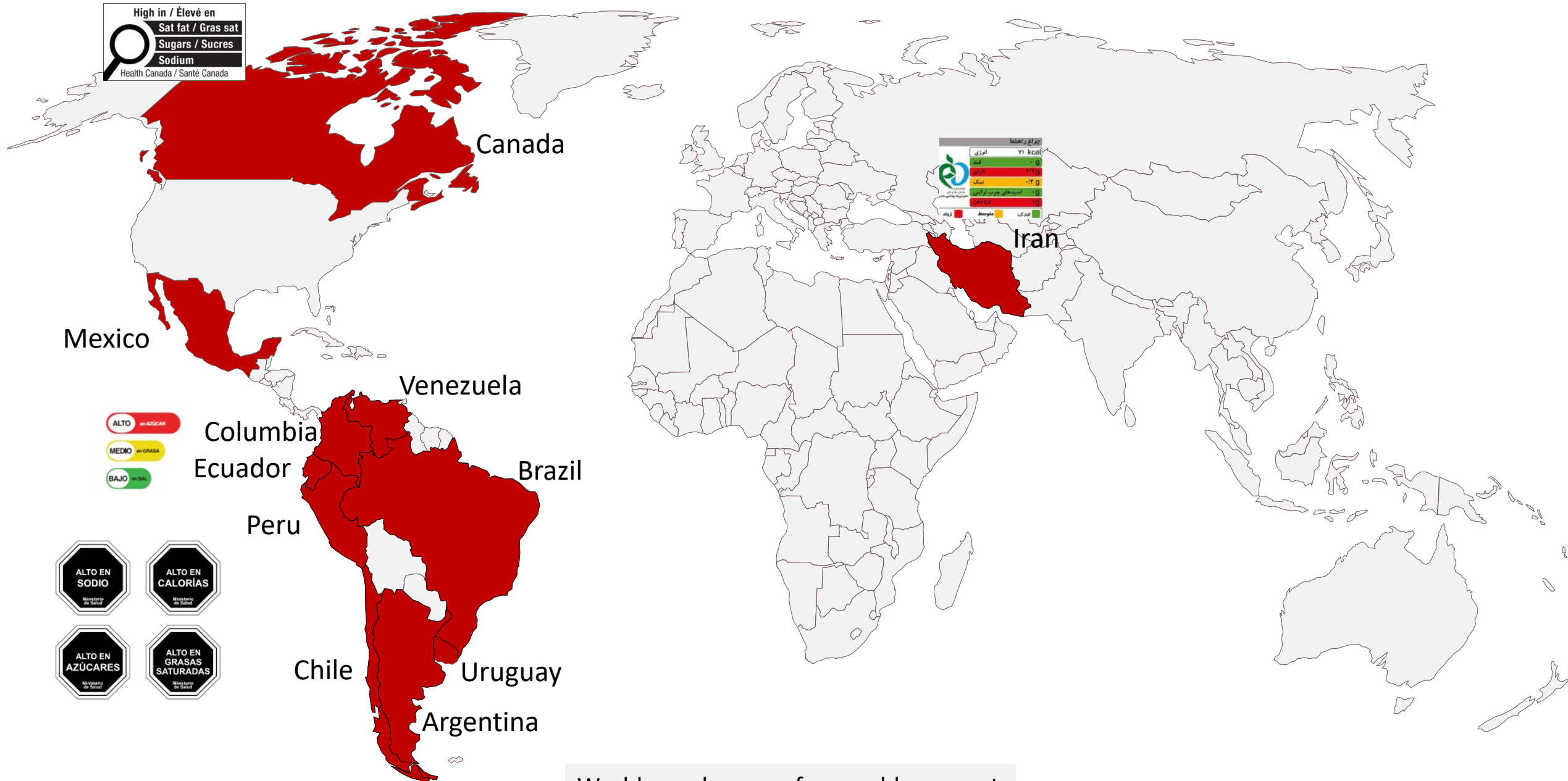
Substitution to foods with sugar

- 3 null studies including UK
- 2 US studies show substitution: 17%-19% offset of tax effect on total sugars sold

Sources: Lozano-Rojas F and Carlin P, *Health Economics* (2022). Pell D et al. *BMJ* (2021). Leider J, et al., [A Review of the Effects of U.S. Local Sugar-Sweetened Beverage Taxes on Substitution to Untaxed Beverages and Food Items](#). Research Brief No. 123.

Front-of-Package Labels

Countries with Mandatory Front-of-Package Labels



Key Measures

- Demand
 - Calories
 - Specific nutrients
- Product availability/reformulation

Evidence on front-of-package labels

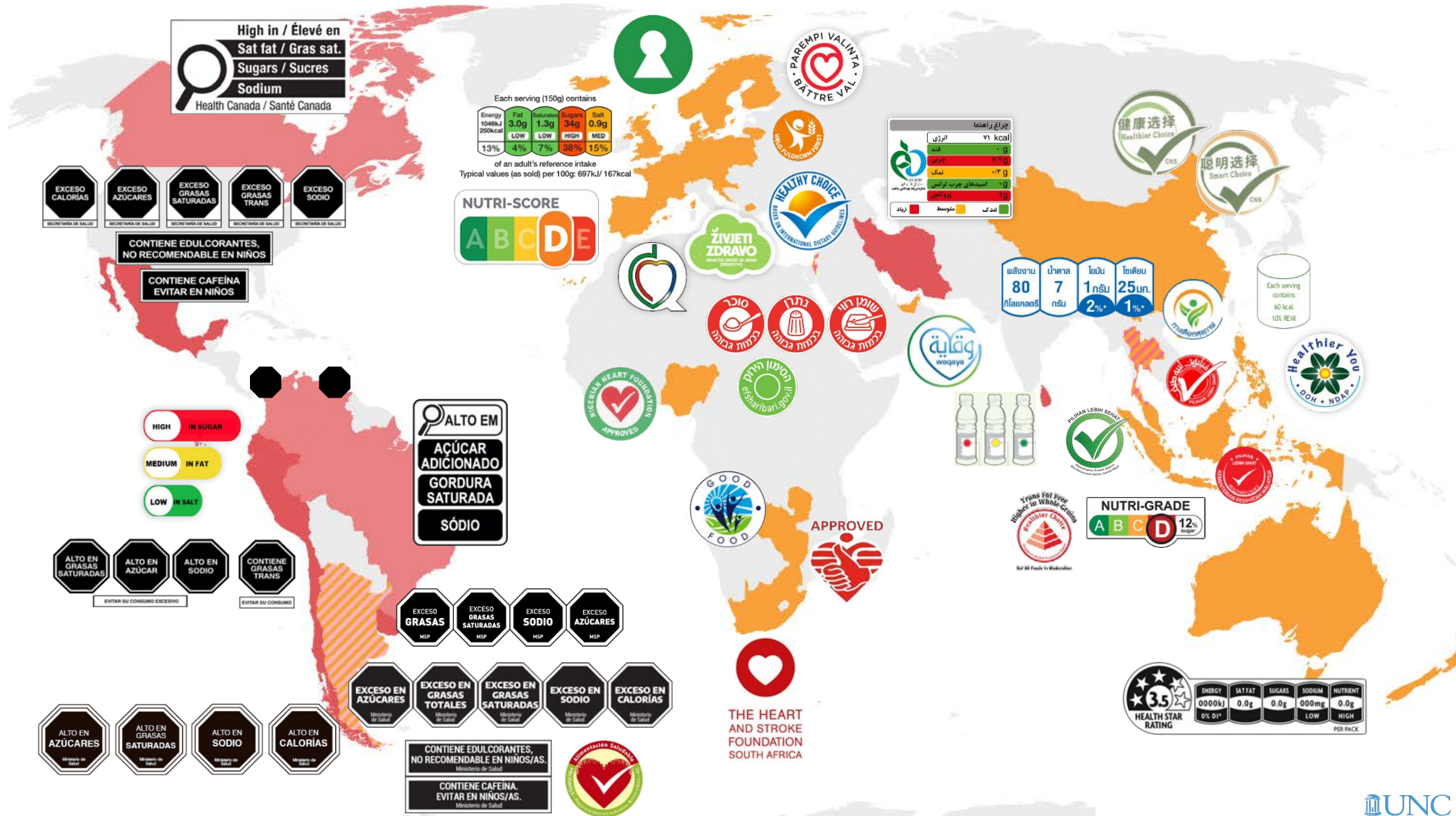
- Numerous studies
 - Wide range of impacts

Source: Roberto CA, et al. *Annual Reviews Nutrition* (2021).

MANDATORY

VOLUNTARY

Countries with **mandatory** or **voluntary** interpretive labels on packaged foods and drinks



What do consumers have to know to interpret these labels?

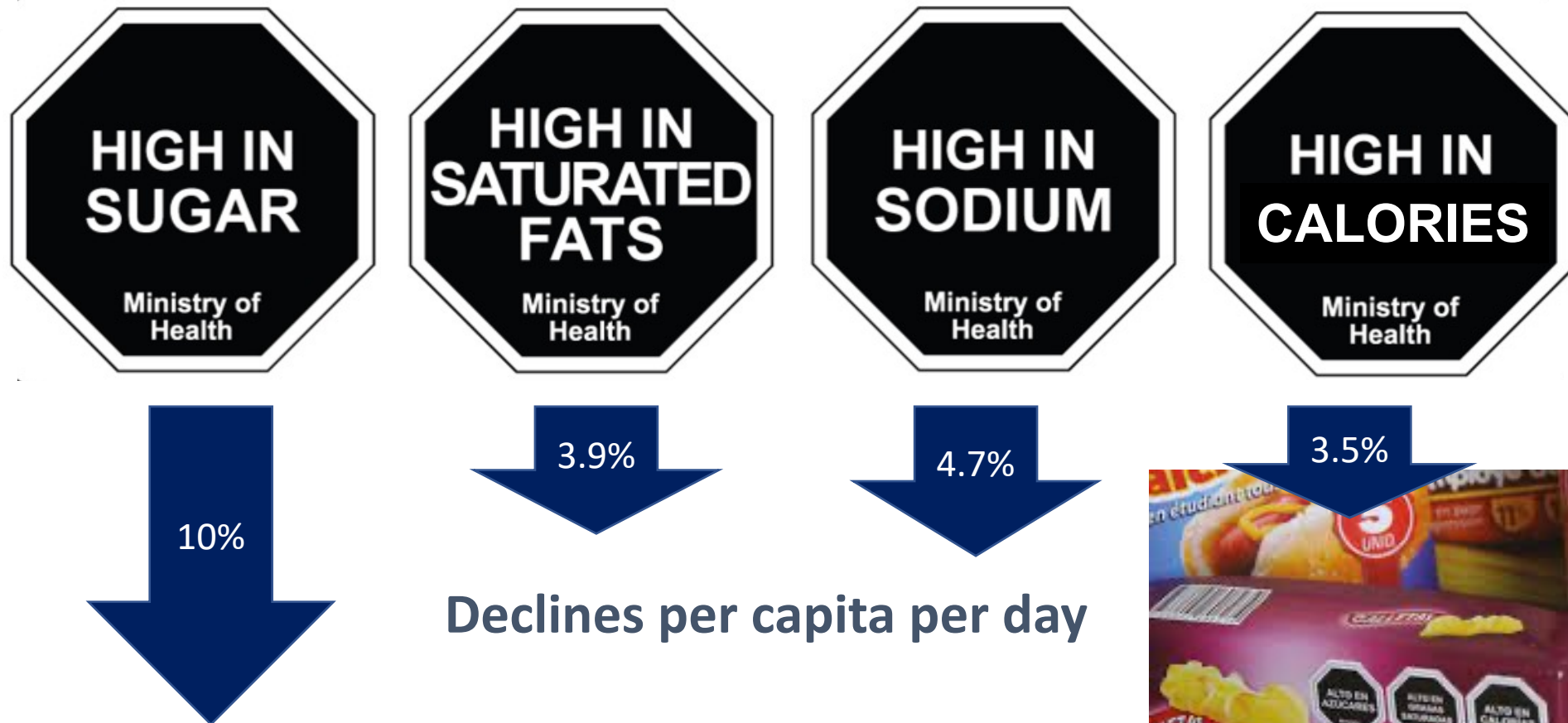
Each serving contains				
Calories	Sugars	Fat	Sats	Salt
338	7.1g	9.4g	4.1g	1.9g
17%	8%	13%	21%	33%
of an adult's guideline daily amount				



- How likely are they to catch someone's eye?



Chile's front-of-package labels



Front-of-package labels lead to re-formulation

- Re-formulation after labelling drove majority of reduction in:
 - Sodium
 - Trans-fats

Source: Roberto CA, et al. *Annual Reviews Nutrition* (2021).

Other approaches to the food environment

- Limiting advertising to children
- Warning labels on advertisements for unhealthy foods
- Healthy checkout ordinances

Takeaways

- Focus on environmental change
- SSB taxes are effective, but geographic scale matters
- Well-designed front-of-package labels are effective
- No single approach will be enough on its own

Thank you

