Prevention and Evidence-based Interventions for Children and Adolescents in LMICs:

Food Environment Regulations

Camila Corvalán

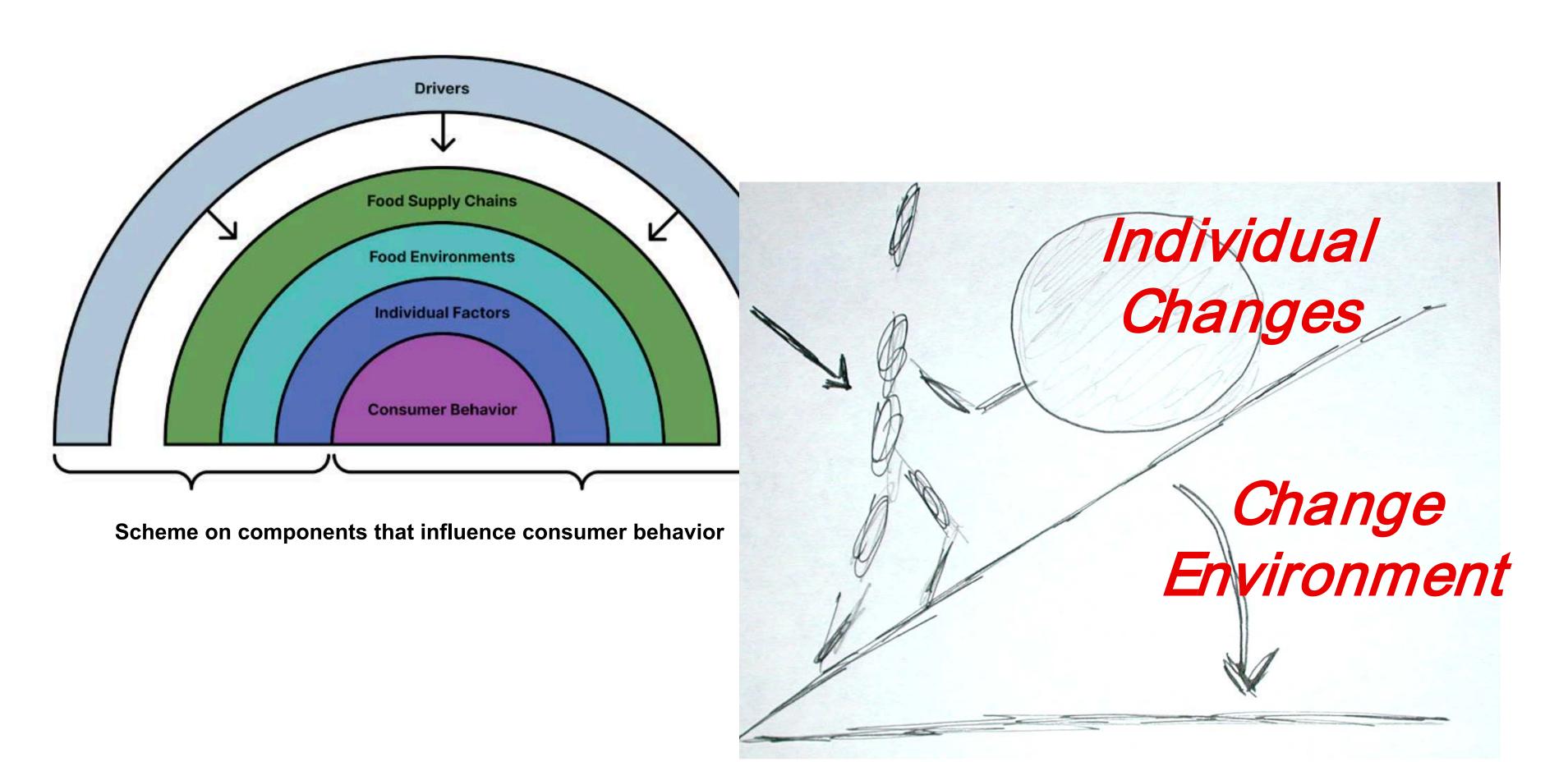


Center for Food Environment and Chronic Disease Prevention Research

University of Chile

Institute of Nutrition and Food Technology

Socio-ecological Factors and the Double Burden of Malnutrition Among Children and Adolescents in Low- and Middle-Income Countries, NICDH



A drawing about Individual changes and environment changes

FOOD ENVIRONMENT IS WHERE CONSUMERS INTERACT WITH THE FOOD SYSTEM





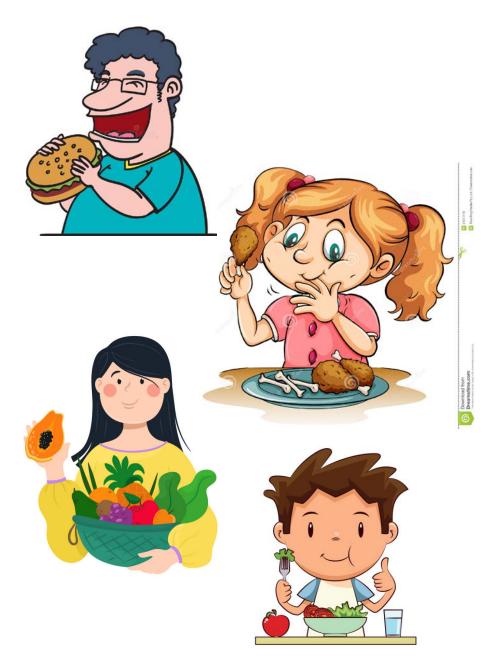


Fisheries



Cattle raising











FOOD ENVIRONMENTS

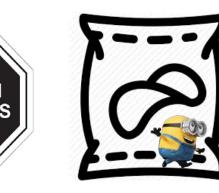






















Positive FOPL







QUALITY



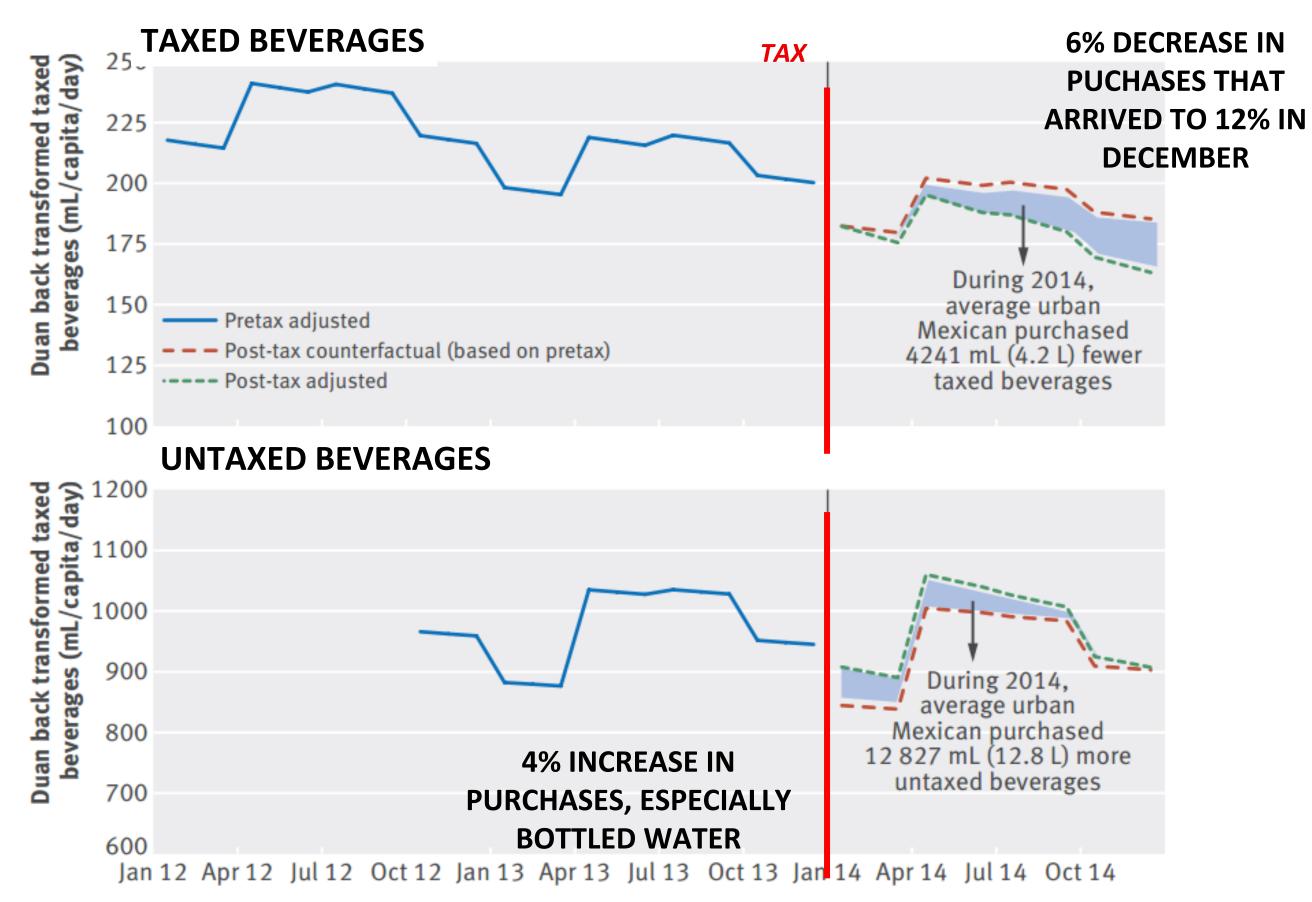




MARKETING



MEXICO: 10% TAX TO SUGARED BEVERAGES

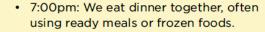


WE NEED TO TARGET ALL THE DIFFERENT ASPECTS OF THE FOOD ENVIRONMENT



AT HOME (PM)

 5:30pm: After I get home, I watch my favourite shows on TV – mostly online, while Mum does cooking and cleaning. Between videos I often see adverts showing sweets that Mum and I can get in the shops.



- Mum and I eat at the dining room table in the TV room. Sometimes, if Dad finishes his shift on time, he will join us.
- 8:30pm: I go to bed after having a bath.



AT HOME (AM)6.00am: I wake up. • 6:45

6:30am: Mum and Dad have to leave early for work, so one of them drops me off at Grandma's house on route

 6:45-7:45am: While Grandma gets ready, I watch TV for an hour before breakfast, which is often a bowl of sugary cereal.



IN PARKS AND LEISURE

- 5:00pm: Sometimes I get to go to the playground in the park, but if I need the toilet we have to drive home as there are none close to the children's playground.
- I would love to go to dance lessons and sports after school - especially dance
 but Mum says I have to wait till we have more money saved.



I'm Hannah. I'm five and a half.

- I live with Mum and Dad in outer South East London.
- We live in a flat and have a small porch but no garden to play.
- My parents do long hours at work, so I spend a lot of time with my grandma, who lives 20 minutes away..
- My grandma has a health problem that affects her walking so she often drives, or I have to slow down and wait for her.



TRAVELLING THROUGH THE STREETS

8:00am: We usually drive to school.

I would prefer to walk, but it's hard
for Grandma with her ill health.





AT SCHOOL

- 12.30pm: I eat lunch in the school cafeteria with my friends. I don't always like the food they give us.
- 1:30pm: In the afternoon I like PE but sometimes this gets cancelled if it's raining and we have to play board games instead.
- 3:00pm: At the end of the day I often get a treat from the school tuckshop.

WEEKENDS

- Some weekends we use the local swimming pool. I would love to go more often but Mum says it is expensive.
- I usually go with Mum to the high street. She will buy a snack from a takeaway at the end of all her errands.
- As a treat, we go to the cinemas to see a movie. Mum buys me popcorn and a drink, since it is cheap with the entrance ticket.
 I love it!



ON THE HIGH STREET

- 3:30pm: My mum or grandma pick me up from school.
- 4:00 pm: We go to the high street on route home. I go with my mum to the local discount supermarkets for

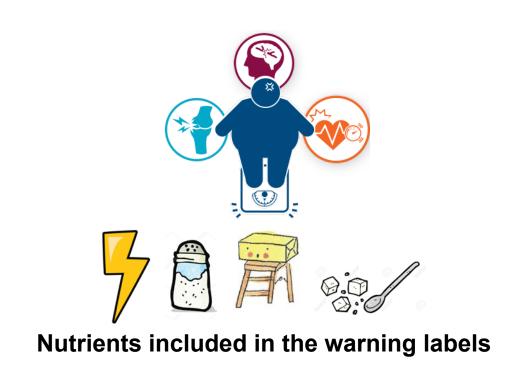
groceries. We often go to all three, as Mum looks to see what is on promotion and buys lots to freeze for another time. I like to go shopping as I see the cartoons I know on snacks and can ask Mum to buy them for me.

 We often go to the cornershop for a drink. My Mum looked for a water fountain but there aren't any around, so we buy juice instead.

THE CHILEAN FOOD LABELLING LAW













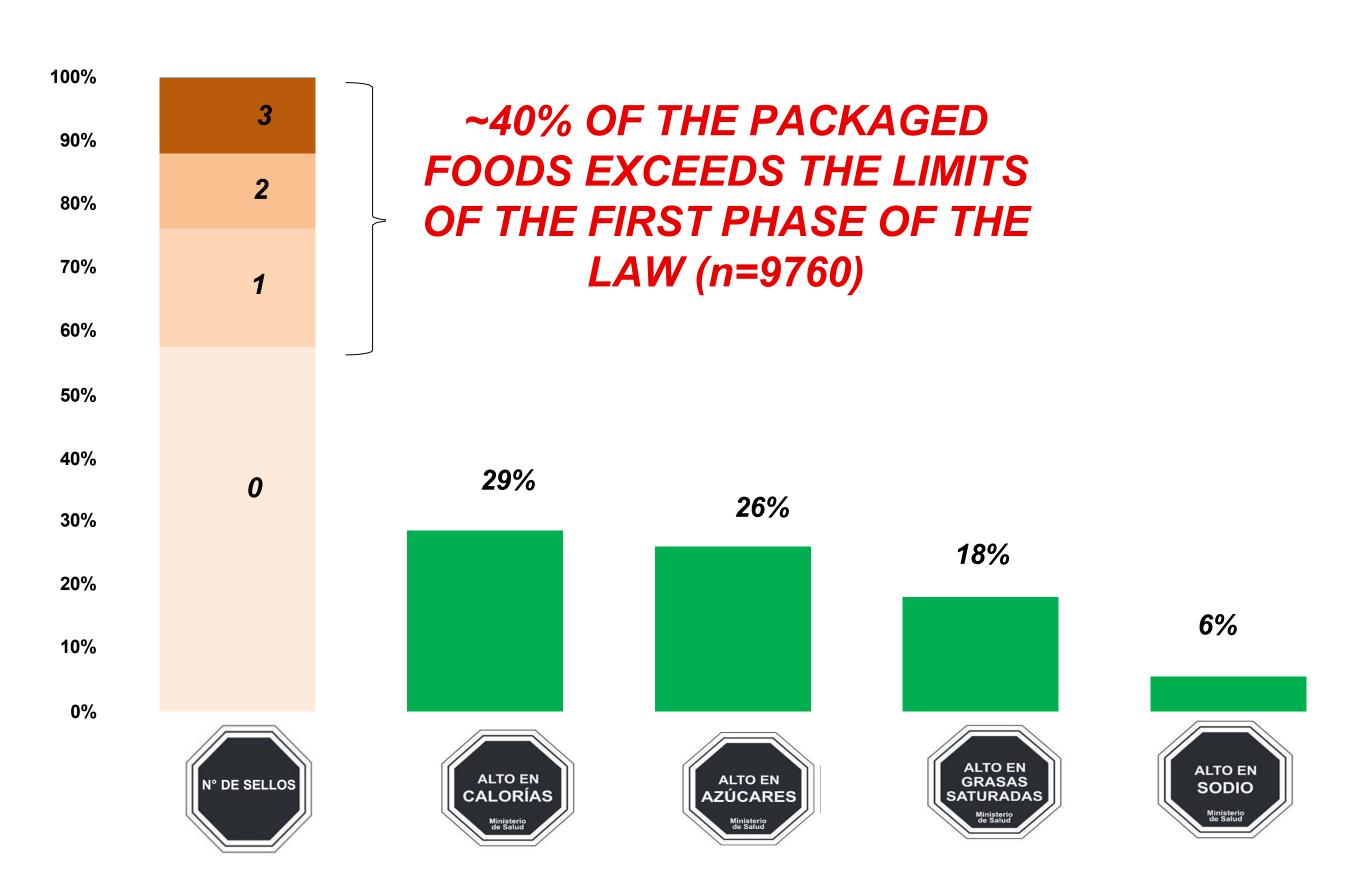


MARKETING RESTRICTIONS



HEALTHIER SCHOOLS ENVIRONMENTS

ENVIRONMENTS Corvalán Obesity Reviews 2019







MARKETING RESTRICTIONS TO CHILDREN





Santa Claus



PRE LAW



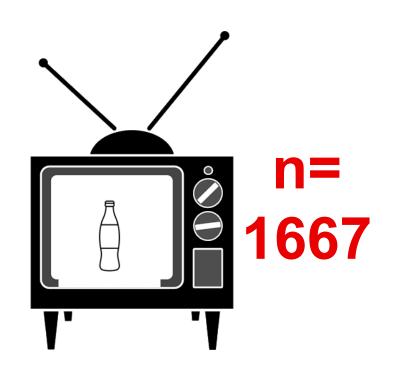
43%

POST LAW



15%

Unhealthy Breakfast Cereals with >1 strategy directed to children)



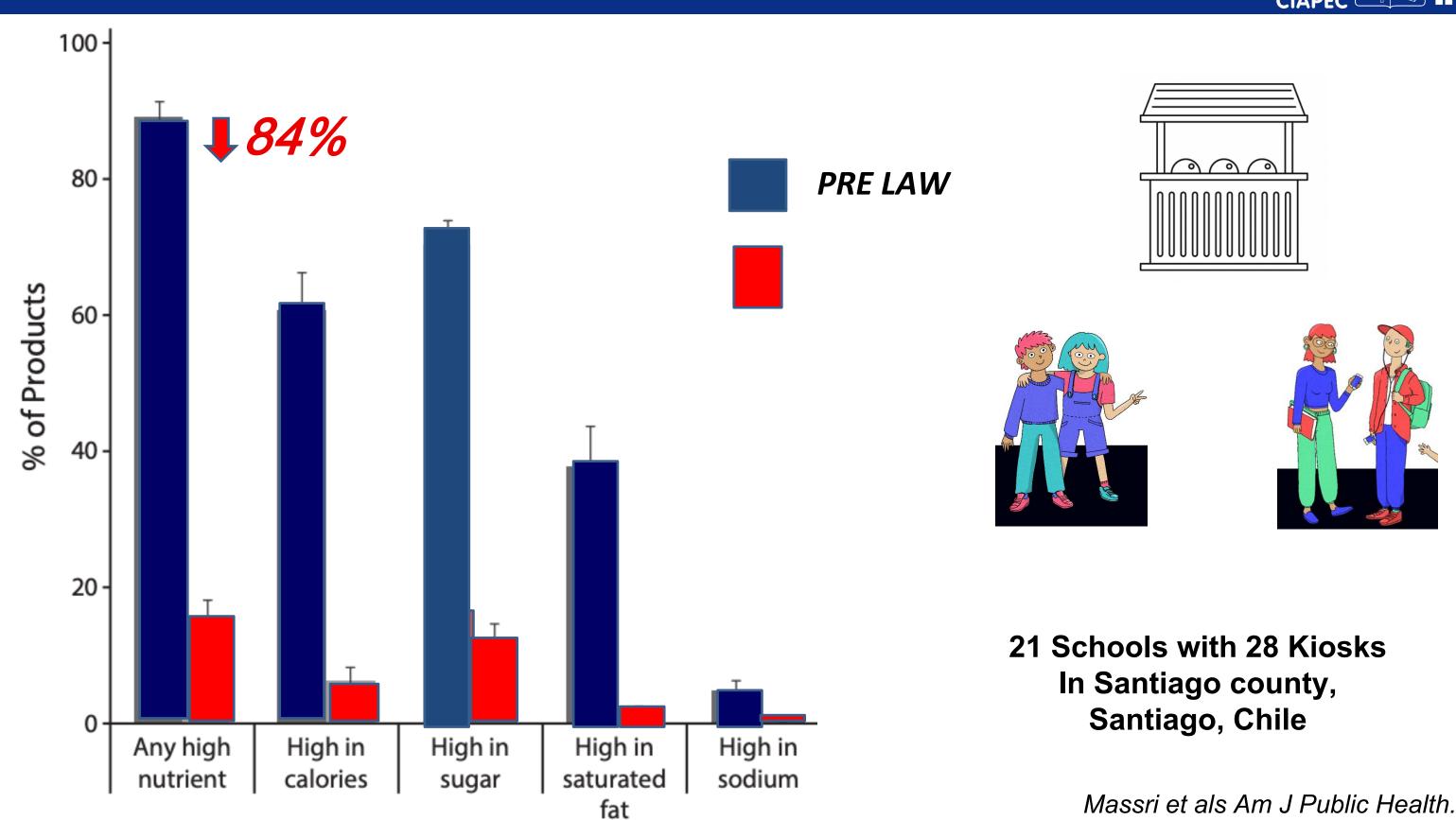


TV food advertisement of unhealthy foods with >1 strategy directed to children)

Correa y cols 2020, AJPH Mediano y cols 2019. Int J Environ Res Public Health

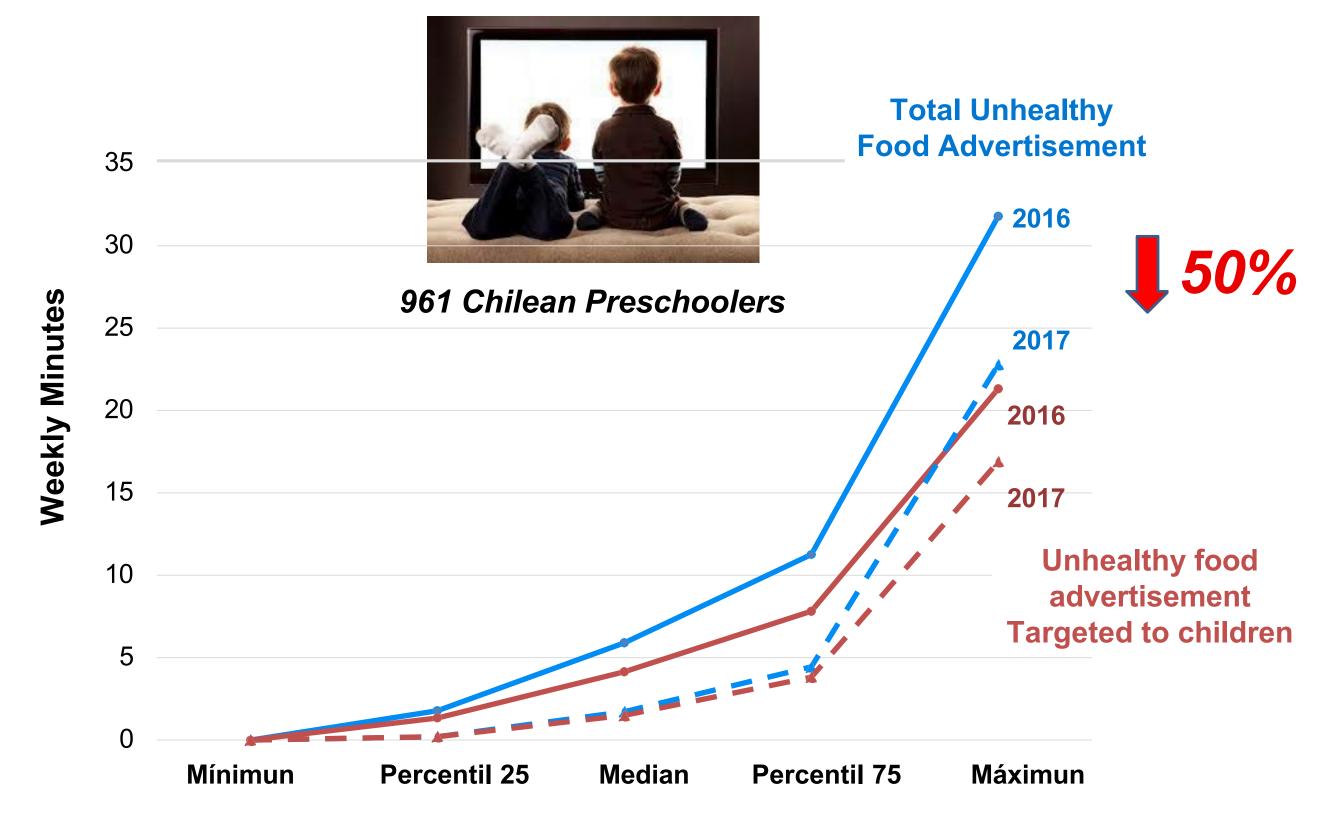
SCHOOL ENVIRONMENTS





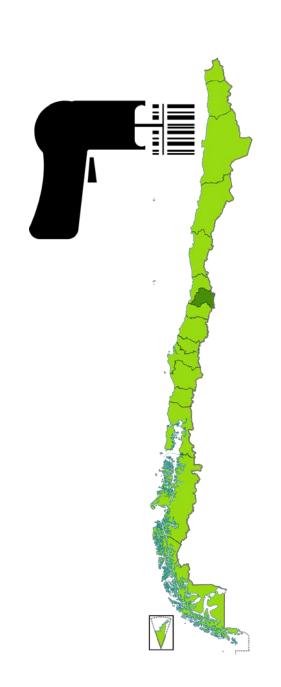
MARKETING RESTRICTIONS TO CHILDREN

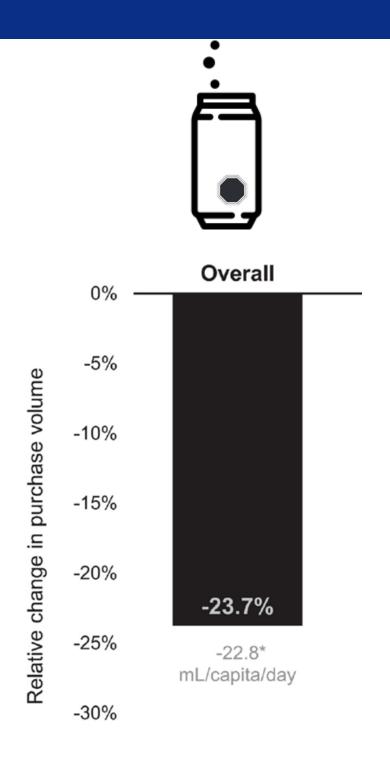




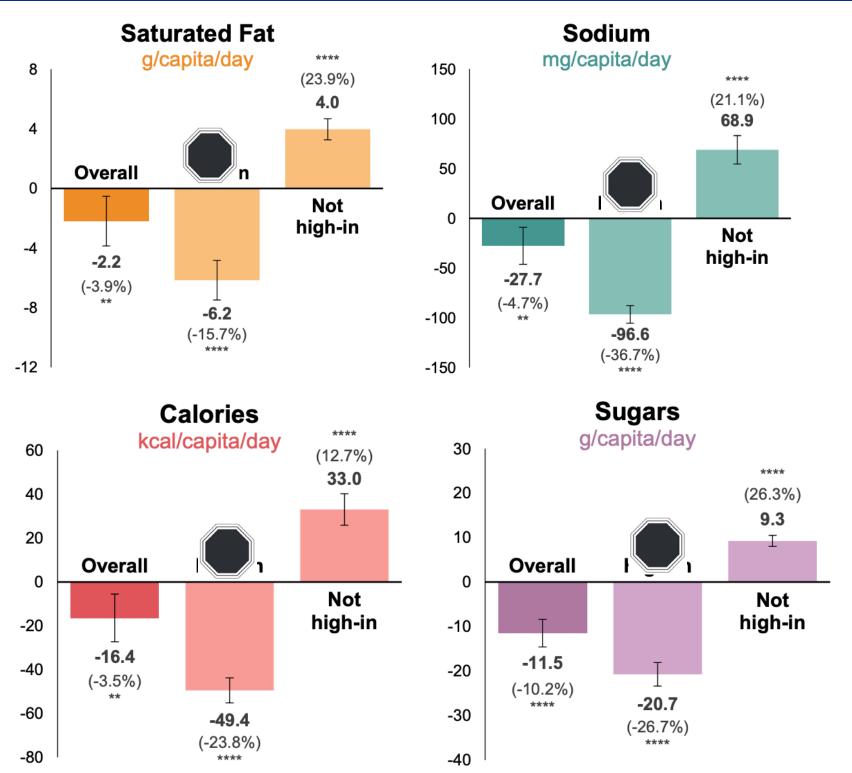
FOOD PURCHASES





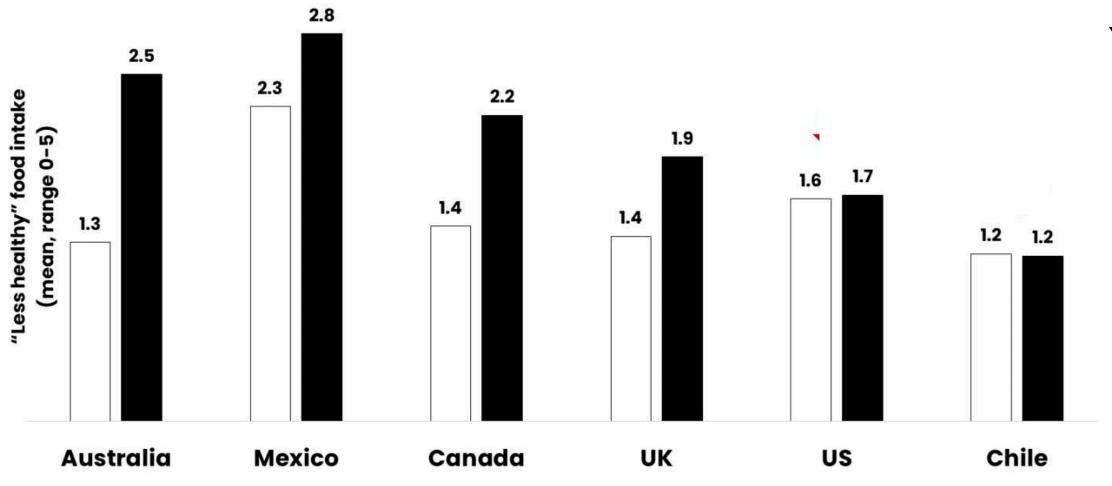


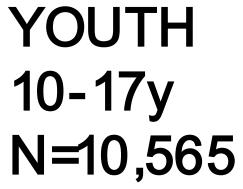
Relative change in purchase volume of "high-in" beverages under the Chilean Labeling Law was -23.7%



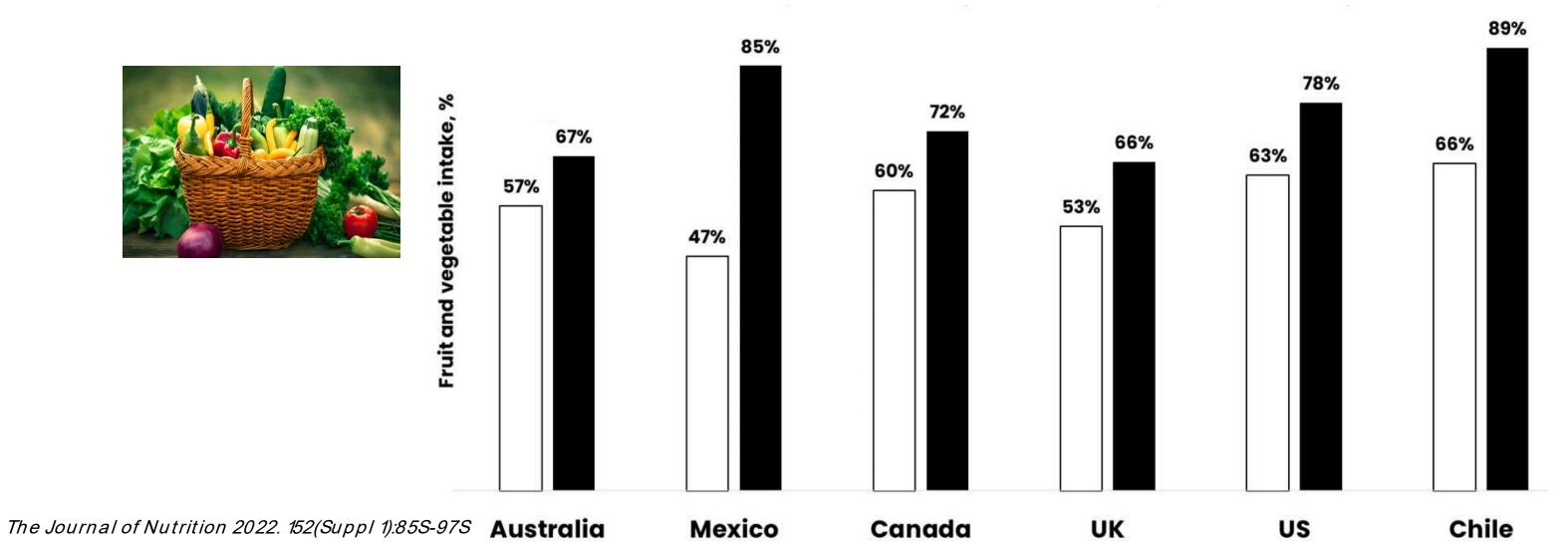
Mean differences in nutrient content between estimated adjusted post-policy purchases and estimated adjusted counterfactual scenario post-policy total food and beverage purchases











WE NEED TO LEARN MORE OF: FOOD ENVIRONMENT OF THOSE WHO HAVE THE HIGHER BURDEN



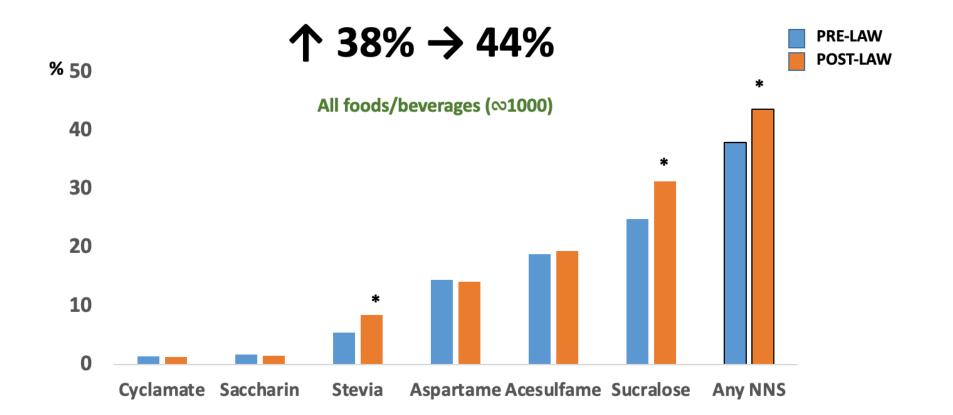


WE NEED TO LEARN MORE OF: BIG INDUSTRY RESPONSES





Reyes et al (2020). PLoS Med



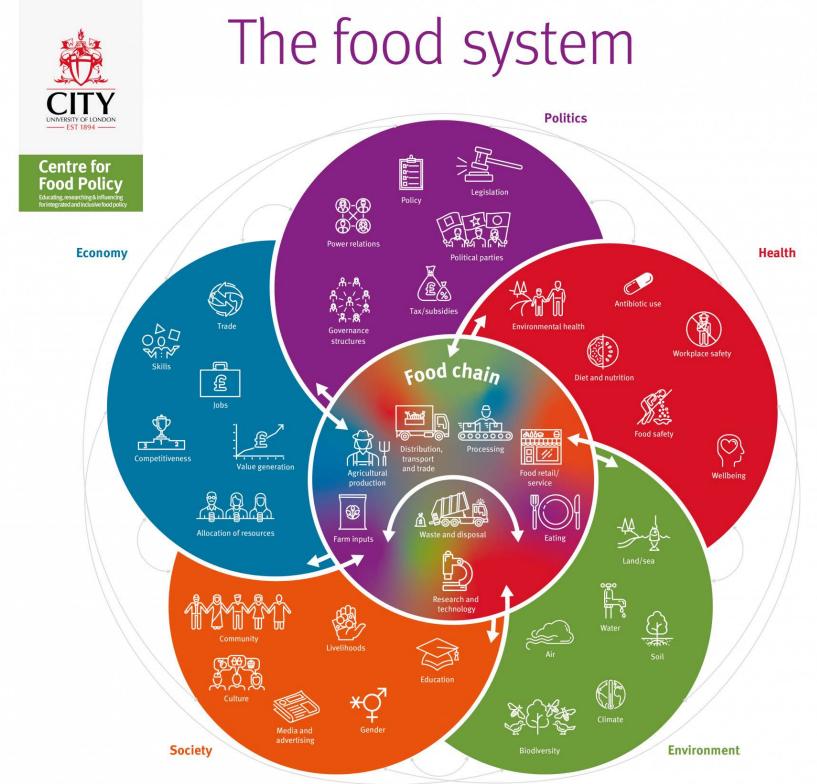


Paraje y cols 2022, manuscito en revisión



WE NEED TO LEARN MORE: HOW TO ALIGN POLICIES

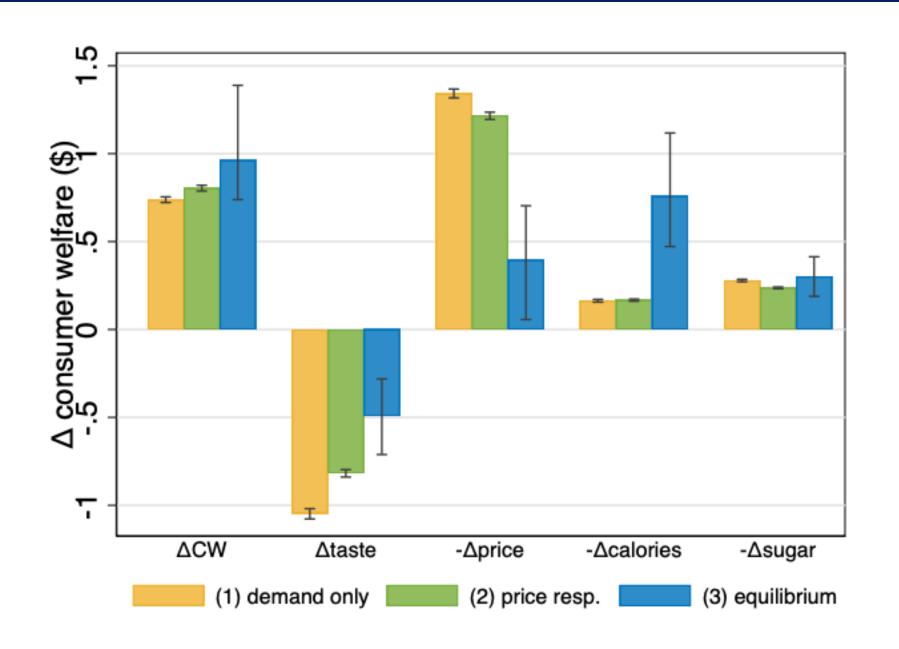




Parsons K, Hawkes C, Wells R.

WE NEED TO LEARN MORE: HOW TO EVALUATE COMPLEX INTERVENTIONS





Welfare is maximized when changes consumer behavior and when industry changes prices and formulation.

THE WAY FORWARD: ACTIONS











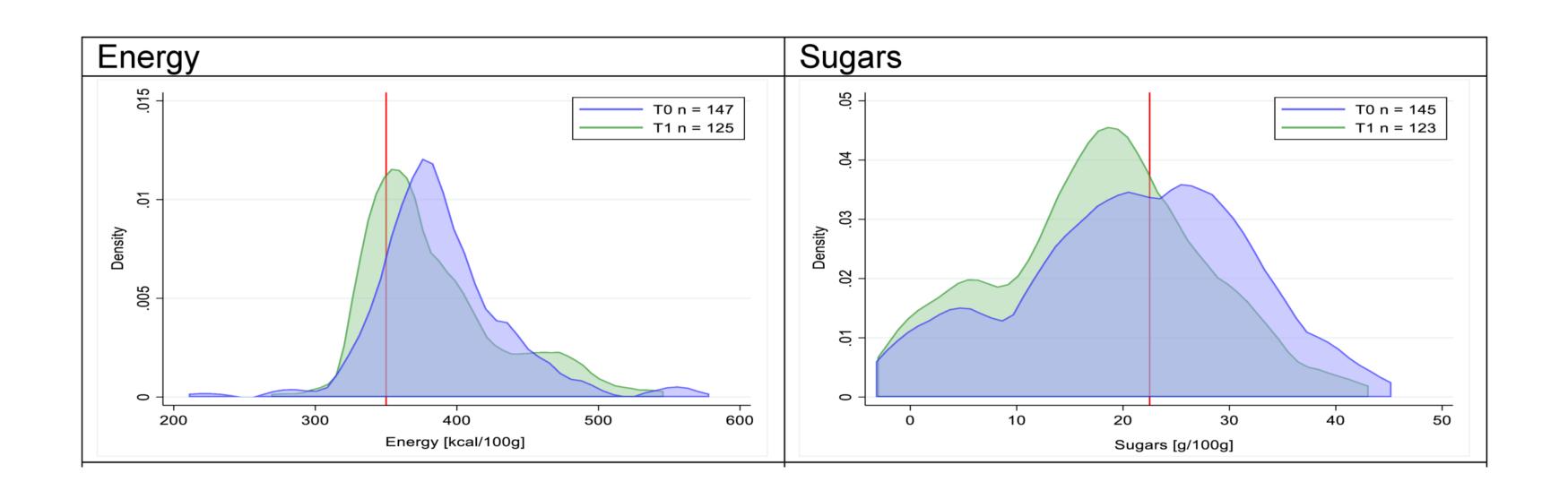
42 policies and actions to orient food systems towards healthier diets for all

Corinna Hawkes¹ Stephanie Walton¹ Lawrence Haddad² Jessica Fanzo³

	Financial actions							
(£%)	Action	What impact could the action have?						
	Public institution actions							
	Action	What impact could the action have?						
	Business incentives							
1	Action	What impact could the action have?						
	Regulations and laws							
	Action	What impact could the action have?						

THE WAY FORWARD: STATUTORY POLICIES





THE WAY FORWARD: ENVIRONMENT MONITORING











INFORMAS module structure

R	PROCESSES	Public sector policies and actions				Private sector policies and actions					
ORGANISATIONS		How much progress have (international, national, state and local) governments made towards good practice in improving food environments and implementing obesity/NCDs prevention policies and actions? (University of Auckland)					How are private sector organisations affecting food environments and influencing obesity/NCDs prevention efforts? (Deakin University)				
FOOD ENVIRONMENTS		Food composition	Food labelling	m	Food arketing	Food provision		Food retail		Food prices	Food trade & investment
	IMPACTS	What is the nutrient composition of foods and non-alcoholic beverages? (The George Institute)	What health- related labelling is present on foods and non- alcoholic beverages? (University of Oxford)	exp pro un food a bev d po	hat is the cosure and cower of cower of components and non-classing to different copulation groups?	quality of and alcol bever provid diffe setting school workpl	tional of foods non- nolic rages ded in rent gs (eg. tools, itals, laces)?	What is the availability of healthy and unhealthy foods and nonalcoholic beverages in communities and within retail outlets? (University of Auckland)		What is the relative price and affordability of 'less healthy' compared with 'healthy' diets, meals & foods? (University of Queensland)	What are the impacts of trade and investment agreements on the healthiness of food environments? (Australian National University)
POPULATIONS	OUTCOMES	Population diet			Physiological & metabolic risk factors		Health outcomes				
		What is the quality of the diet of different population groups? (University of Sao Paulo)			What are the burdens of obesity and other risk factors? (WHO)		What are burdens of NCD morbidity and mortality? (WHO)				

THE WAY FORWARD: COLLABORATION







Colansa (Latin American and Caribbean Nutrition and Health Community of Practice) is a group of professionals, of civil society organizations and universities that work in a collaborative environment to contribute to the development of healthy, sustainable, equitable and inclusive food systems and promoting improvements in the nutrition and health of the populations from Latin America and the Caribbean. www.colansa.org

Thank you!









ccorvalan@inta.uchile.cl

