



Front-of-Package Nutrition Labeling

November 16, 2023

2:30-5pm (eastern)

The public meeting will begin shortly

This meeting is part of the Foundation's Nutrition Partnership project underwritten by Kellogg and Nestlé





Welcome

Susan C. Winckler, RPh, Esq.

CEO, Reagan-Udall Foundation for the FDA



Housekeeping



Your microphone and video will remain off during the meeting. Those who registered to present public comment will be unmuted and asked to use the 'Raise Hand' function when it is their time to speak.



This public meeting is being recorded. The video recording, slides and transcript will be posted on the Foundation website soon after the meeting at www.ReaganUdall.org.



Please share your questions and comments for the speakers using the Zoom chat function.

Agenda



- 2:30 pm** Welcome & Opening Remarks
- 2:40 pm** Commissioner Remarks
- 2:45 pm** Deputy Commissioner Remarks
- 2:50 pm** FDA's Front-of-Package Nutrition Labeling Initiative
- 3:05 pm** Why Nutrition Labeling Matters Panel Discussion
- 3:35 pm** Public Comment
- 5:00 pm** Closing Remarks & Adjournment



Commissioner Remarks

Robert M. Califf, MD, MACC
Commissioner of Food and Drugs
U.S. Food and Drug Administration



Deputy Commissioner Remarks

James “Jim” Jones, MS

*Deputy Commissioner for Human Foods
U.S. Food and Drug Administration*



FDA's Front-of-Package Nutrition Labeling Initiative

Robin McKinnon, PhD, MPA

*Senior Advisor for Nutrition Policy, Center
for Food Safety and Applied Nutrition
U.S. Food and Drug Administration*



Front-of-Package Nutrition Labeling

**Reagan-Udall Foundation for the FDA
Virtual Public Meeting**
November 16, 2023



Introduction & Background

- White House National Strategy on Hunger, Nutrition, and Health
- Wide adoption of front-of package (FOP) schemes around the world
- Institute of Medicine reports
- FDA research activities
 - Literature review
 - 2022 Focus group research
 - 2023 Experimental study
 - 2023 Focus group research
- Engagement & Next Steps



Front-of-Package Nutrition Labeling



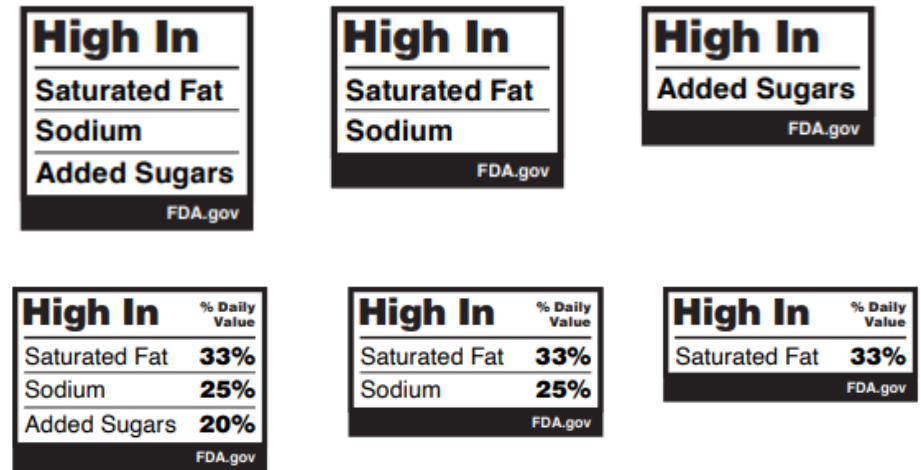
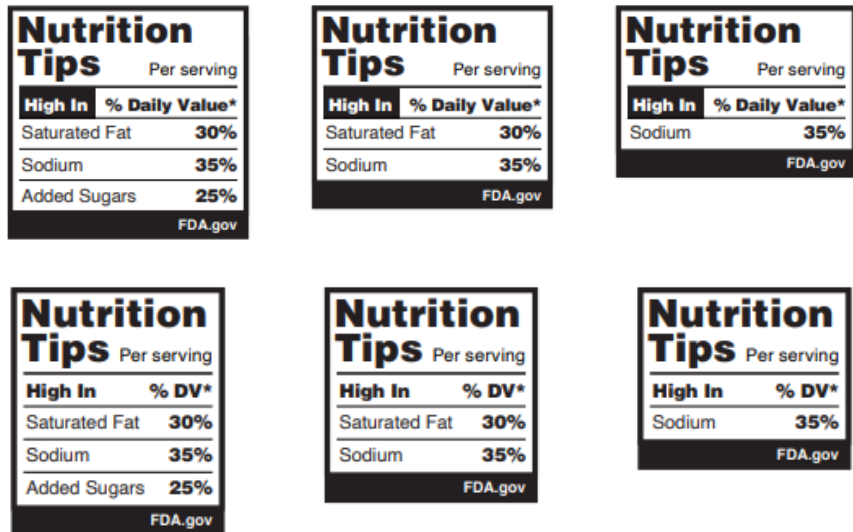
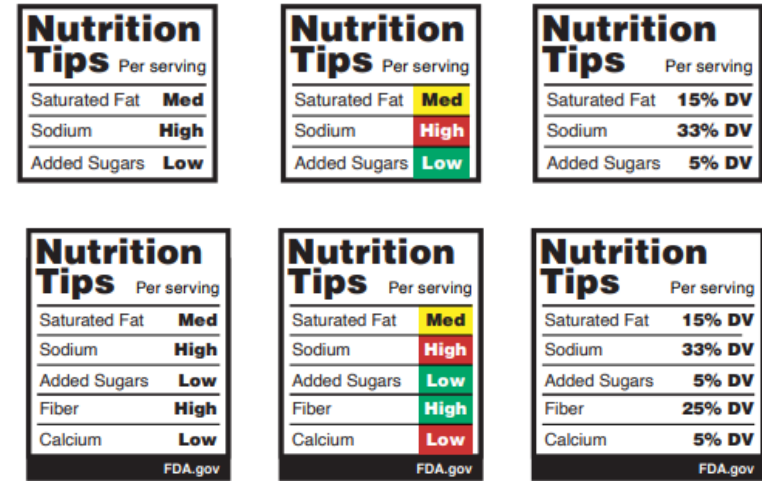
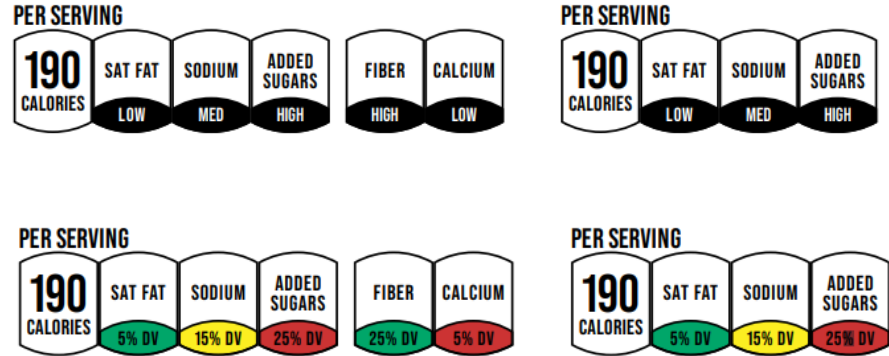
Front-of-Package Nutrition Labeling

FDA Research Activities

- Literature review
- 2022 Focus group research
- 2023 Experimental study
- 2023 Focus group research



2022 Focus Group Research: Selected Schemes



Themes From 2022 Focus Groups

- Mixed findings on how much information participants preferred to be provided in FOP schemes.
- Strong finding that participants believed that the products bearing schemes reflecting “High-In” were not healthy
- Participants were confused by the use of red, yellow, and green when schemes contained both nutrients to limit and nutrients to get enough of; for example, participants could not easily reconcile using red to convey high sodium and red to convey low fiber
- Mixed reactions to the inclusion of FDA.gov on the schemes

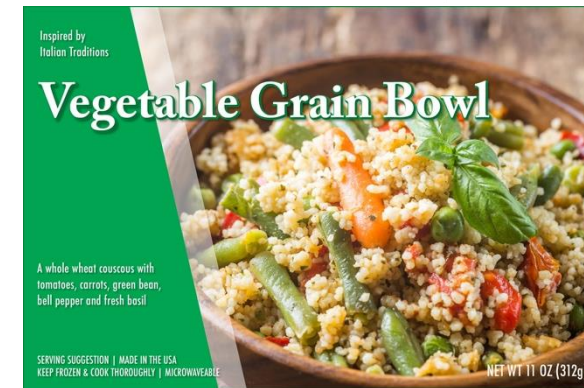
2023 Experimental Study

Purpose

- Assess participants' ability to use schemes to evaluate the healthfulness of a food product

Methods

- 15-minute online questionnaire
- Web panel, U.S. Adults (18+)
- Number of participants = 9,200
- *Part 1 Design*: Repeated Measure
 - Identify "healthiest" and "least healthy" nutrient profile within a scheme
- *Part 2 Design*: Single Product Evaluation



2023 Experimental Study

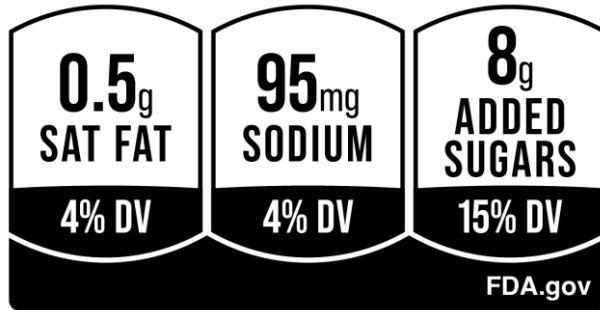
FOP Schemes Tested

Healthiest

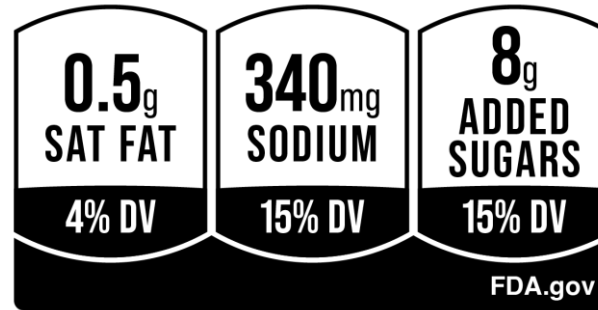
Middle

Least Healthy

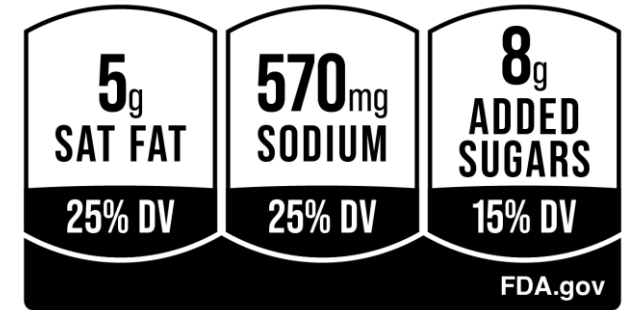
PER SERVING



PER SERVING



PER SERVING



2023 Experimental Study

FOP Schemes Tested

Healthiest

Nutrition Info	Per serving
Saturated Fat	Low
Sodium	Low
Added Sugars	Med
FDA.gov	

Nutrition Info	Per serving
Saturated Fat	Low
Sodium	Low
Added Sugars	Med
FDA.gov	

Nutrition Info	Per serving
Saturated Fat	Low
Sodium	Low
Added Sugars	Med
FDA.gov	

Middle

Nutrition Info	Per serving
Saturated Fat	Low
Sodium	Med
Added Sugars	Med
FDA.gov	

Nutrition Info	Per serving
Saturated Fat	Low
Sodium	Med
Added Sugars	Med
FDA.gov	

Nutrition Info	Per serving
Saturated Fat	Low
Sodium	Med
Added Sugars	Med
FDA.gov	

Least Healthy

Nutrition Info	Per serving
Saturated Fat	High
Sodium	High
Added Sugars	Med
FDA.gov	

Nutrition Info	Per serving
Saturated Fat	High
Sodium	High
Added Sugars	Med
FDA.gov	

Nutrition Info	Per serving
Saturated Fat	High
Sodium	High
Added Sugars	Med
FDA.gov	

2023 Experimental Study

FOP Schemes Tested

Healthiest

Nutrition Info		
Per serving	%	Daily Value
Saturated Fat	4%	Low
Sodium	4%	Low
Added Sugars	15%	Med

FDA.gov

Nutrition Info		
Per serving	%	Daily Value
Saturated Fat	4%	Low
Sodium	4%	Low
Added Sugars	15%	Med

FDA.gov

Middle

Nutrition Info		
Per serving	%	Daily Value
Saturated Fat	4%	Low
Sodium	15%	Med
Added Sugars	15%	Med

FDA.gov

Nutrition Info		
Per serving	%	Daily Value
Saturated Fat	4%	Low
Sodium	15%	Med
Added Sugars	15%	Med

FDA.gov

Least Healthy

Nutrition Info		
Per serving	%	Daily Value
Saturated Fat	25%	High
Sodium	25%	High
Added Sugars	15%	Med

FDA.gov

Nutrition Info		
Per serving	%	Daily Value
Saturated Fat	25%	High
Sodium	25%	High
Added Sugars	15%	Med

FDA.gov

2023 Experimental Study

FOP Schemes Tested

Healthiest

High In
 Added Sugars
 FDA.gov

High In	% Daily Value
Added Sugars	22%

FDA.gov

Middle

High In
 Sodium
 Added Sugars
 FDA.gov

High In	% Daily Value
Sodium	21%
Added Sugars	22%

FDA.gov

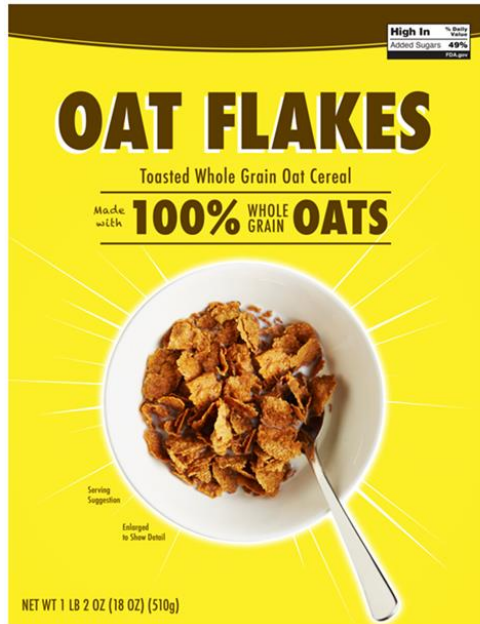
Least Healthy

High In
 Saturated Fat
 Sodium
 Added Sugars
 FDA.gov

High In	% Daily Value
Saturated Fat	25%
Sodium	25%
Added Sugars	22%

FDA.gov

2023 Focus Group Research Schemes and Mock Products



Themes – Overall



Findings from scientific literature and the consumer research we have conducted to date indicate that:

- An FOP scheme can help consumers identify healthy foods.
- Consumers prefer simple, interpretive FOP labeling schemes
- FOP labels appear helpful for those with lower nutrition knowledge and busy shoppers
- FOP complements the Nutrition Facts label

Engagement & Next Steps





Why Nutrition Labeling Matters



Lauren Fiechtner, MD, MPH
Director of Nutrition, Division of
Gastroenterology and General
Academic Pediatrics
MassGeneral for Children



Nancy Glick
Director, Food and Nutrition Policy
National Consumers League



Jeffery Lee, MD
Past President
**Los Angeles County
Medical Association**



Lilian Tsi Stielstra
Stroke Survivor

Public Comment

Design considerations

Potential intersection with other nutrition-related policies

International experiences with front-of-package labeling



Speaker Reminders

- Once introduced, use the “Raise Hand” function to identify yourself. You will then be promoted to panelist. Click “accept” to become a panelist so you can move forward with unmuting your mic/video.
- You will have 10 seconds to begin speaking. If you do not begin speaking within that time frame, we will move to the next commenter.
- The timer will start as you begin to speak and will count down from 2 minutes. Once time runs out, you will be muted, and we will introduce the next commenter.

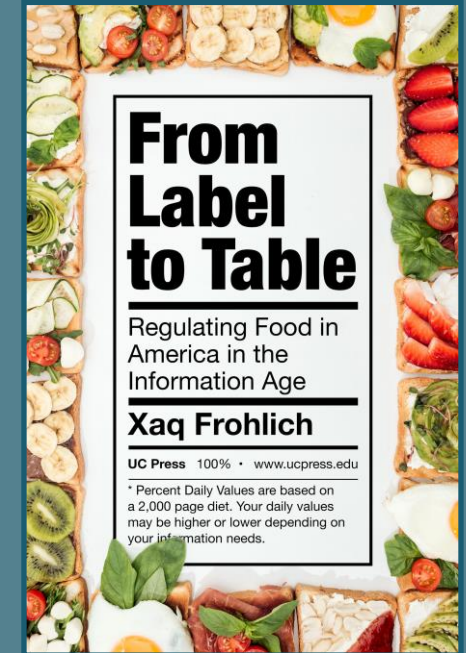
Front-of-Package Nutrition Labeling

AHA supports the development of an FDA FOP system that is:

1. Mandatory
2. Nutrient-specific
3. Includes calories
4. Interpretive
5. Uses a simple design
6. Attention grabbing
7. Uses icon or imagery
8. Uses multi-color (red, yellow, green) or black-and-white color scheme
9. Consistent placement on all product packages (e.g., upper, right corner)

FOP extending “a government brand”

- BNW sets government objectivity apart from colorful marketing
- Nutrition labeling’s impact supersedes literacy:
 - iconographic (emotional) power of FDA nutrition facts
 - companies reformulate foods even if consumers don’t read them
- Consumers don’t read nutrition facts independently from ingredients, because “health” is more holistic than nutrients
- No technical (design) fix to “bad faith” gaming of labeling system
 - only effective solution is a dedicated FDA staff policing the market



Xaq Frohlich, Ph.D.

Auburn University

frohlich@auburn.edu

“Convention improves comprehension. In other words, something that you see over and over and over and over again, across all media or all packaging and the like, gradually becomes iconic and gradually seeps itself in the mind so that you start to, by seeing it over again, understand it and absorb it in ways that supersede reading.”

— Burkey Belser, interview with author October 14, 2009

Sarah Brandmeier

Consumer Brands Association



Consumer Federation of America

FOP Design Recommendations



- FOP labels should be mandatory
- Should be highly visible and easily understood:
- Should indicate unhealthfulness to best support nutritious choices
 - “Healthy” icon pushes consumers towards packaged goods
- Should include non-sugar sweeteners disclosure
 - Reformulated foods that replace added sugars with other sweeteners may not provide health advantage

One potential variation: High In with yellow background



Christina A. Roberto, PhD

Robert Wood Johnson Foundation Healthy Eating
Research National Program

Mandatory, clear, single nutrient disclosures avoid confusion and help consumers

Key design considerations:

- Mandatory
- Black and white
- Standardized size
- Contains a symbol
- Focuses only on nutrients of concern
- Developed based on science
- FDA endorsement

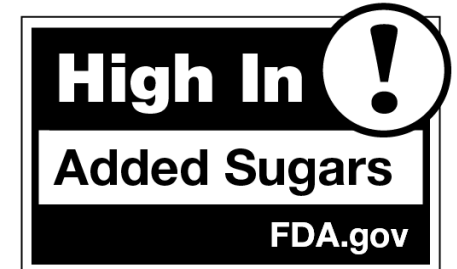
Comparing potential FOPL for Lucky Charms cereal



Nutrition Info	
Per serving	
Saturated Fat	Low
Sodium	Med
Added Sugars	High

FDA.gov

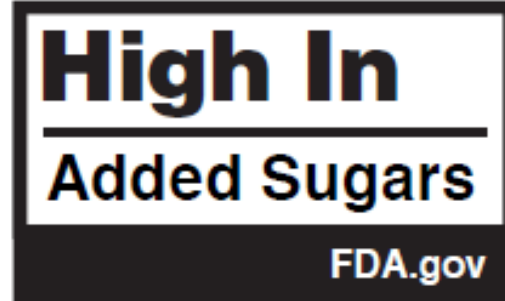
Recommended



**Developed for research purposes by CSPI*

Effective labels

- Graphic
- Simple
- Mandatory
- Nutrients of concern only



Michelle Matto, MPH

International Dairy Foods Association

Kris Sollid, RD

International Food Information Council

Caitlin Boon, PhD

Mars, Inc.

Farida Mohamedshah, MS, CNS

National Confectioners Association

Evidence-based label design recommendations

1. Interpretative labels > numeric labels

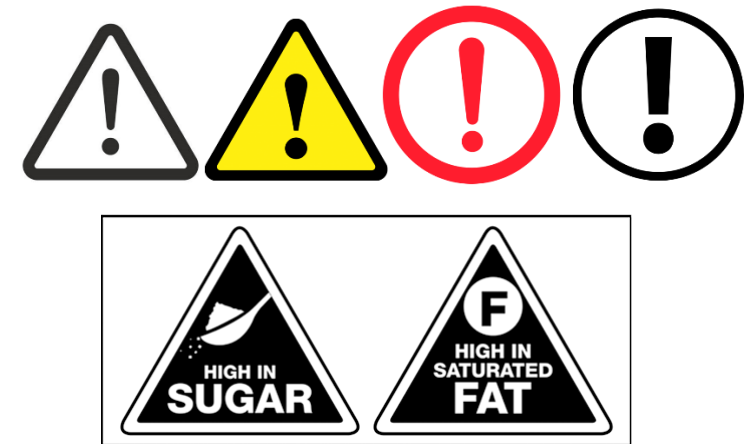
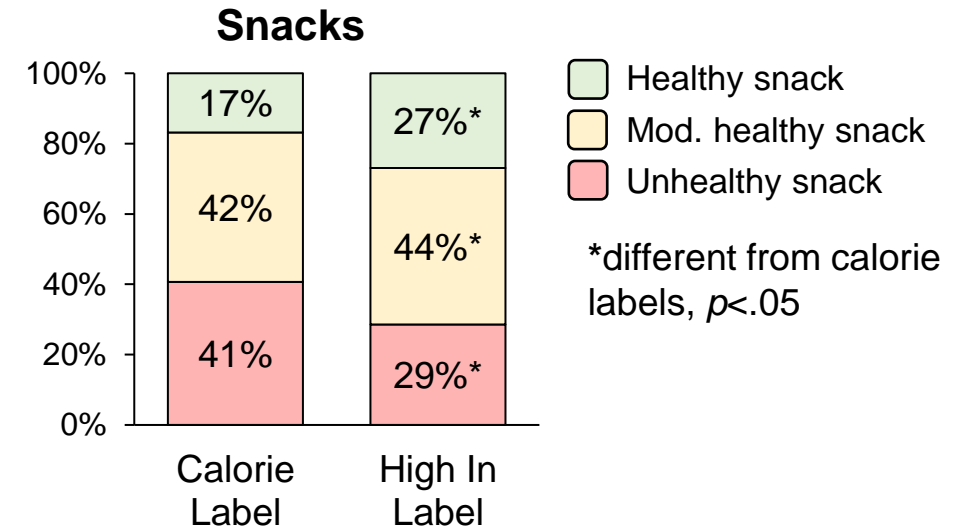
- Study: Interpretative “High In” labels increase selection of healthy beverages & snacks by 30%–59% vs. numeric calorie labels^a

2. Negative labels > positive labels

- Study: Negative labels increased purchase healthfulness by 2x and consumer understanding by 1.5x as much as positive labels^b

3. Labels with icons > labels without icons

- Study: Labels with icons are perceived as more effective than labels with only text^c
 - This effect is 2x as strong for people with limited English use^c
- Consumers like icons^d and there are many effective designs^{e,f}





Front-of-package Nutrition Labeling: Design Considerations

- **Front-of-package labels should be mandatory**
 - Inconsistent use on products could lead to customer confusion and decrease potential public health impact
- **Front-of-package labels should include an attention-grabbing and easy to understand symbol**
 - Increasing understanding for people with lower literacy rates and limited English proficiency advances health equity
- **Front-of-package labels should only feature top nutrients of concern**
 - To maximize public health impact, only nutrients of concern – sugar, sodium, and fat – should be featured

<https://www.tfah.org/report-details/state-of-obesity-2023/>

Front-of-package label

- ✓ Nutrients of concern
- ✓ Standardized
- ✓ Mandatory
- ✓ Graphic component

Future considerations



Non-nutritive sweeteners (NNS)



6 flavors
Added sugar plus NNS



10 flavors
Added sugar plus NNS



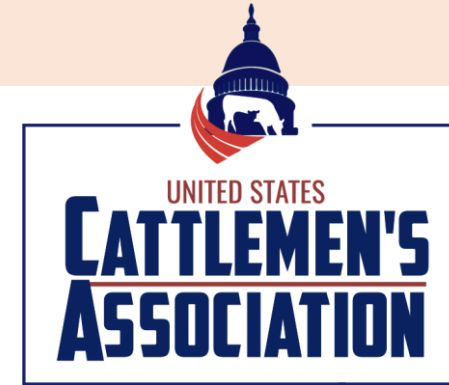
5 flavors
No added sweeteners



Fran Fleming- Milici, PhD



Lake Mead East Walmart Henderson Nevada



Front of Package Nutrition Labeling

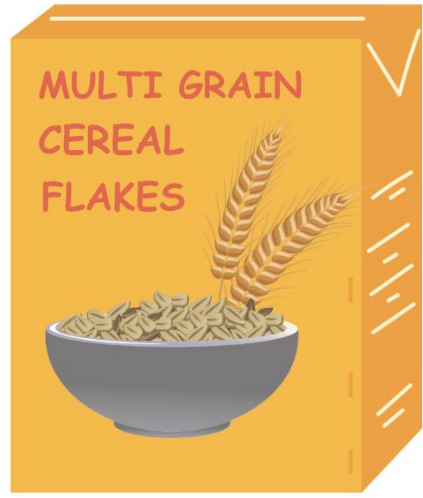
- Differentiate production and processing methods on FDA-regulated products.
- Require prominent and common language labeling.
- Invest greater resources into more staff and enforcement activities.

Schematic Key
Based on FDA
consumer research

Low (per serving):
≤5% Daily Value

Medium (per serving): 6-19%
Daily Value

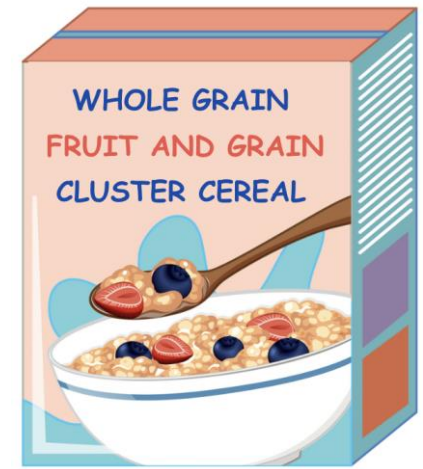
High (per serving): ≥20%
Daily Value



Nutrition Info Per serving	
Saturated Fat	Low
Sodium	Med
Added Sugars	Med

FDA.gov

Lighter cereals: Toasted grain flakes, crisped/extruded grains
40g RACC (1 cup serving)
Added Sugar: 9g, 18% DV
Dietary Fiber: 3g, 10% DV



Nutrition Info Per serving	
Saturated Fat	Low
Sodium	Low
Added Sugars	High

FDA.gov

Heavier cereals: Shredded wheat biscuits, oat bran with or without additions (e.g., fruits)
60g RACC (1 cup serving)
Added Sugar: 11g, 22% DV
Dietary Fiber: 6g, 20% DV
USDA whole-grain rich, WIC-eligible



Nutrition Info Per serving	
Saturated Fat	Low
Sodium	Med
Added Sugars	High

FDA.gov

Lighter cereals: Toasted grain flakes, crisped/extruded grains
1 container (70g approx. 2 cups)
Added Sugar: 16g, 32% DV
Dietary Fiber: 5g, 18% DV

It is critical that FOP visuals and the underlying nutrition criteria address variance in RACC sizes and nutrient density to prevent consumer confusion and the unintentional discouragement of nutrient-dense foods.

FMI – The Food Industry Association

FMI is the trade association that represents grocers, wholesalers, and food manufacturers.



Example of Facts up Front Labeling Scheme

Designed to allow consumers to easily understand and use key product information “at a glance”



Proposed FDA
"Healthy"

NO
GUIDANCE*

High In

Saturated Fat

Sodium

Added Sugars

FDA.gov



Could align with
FDA "Healthy"

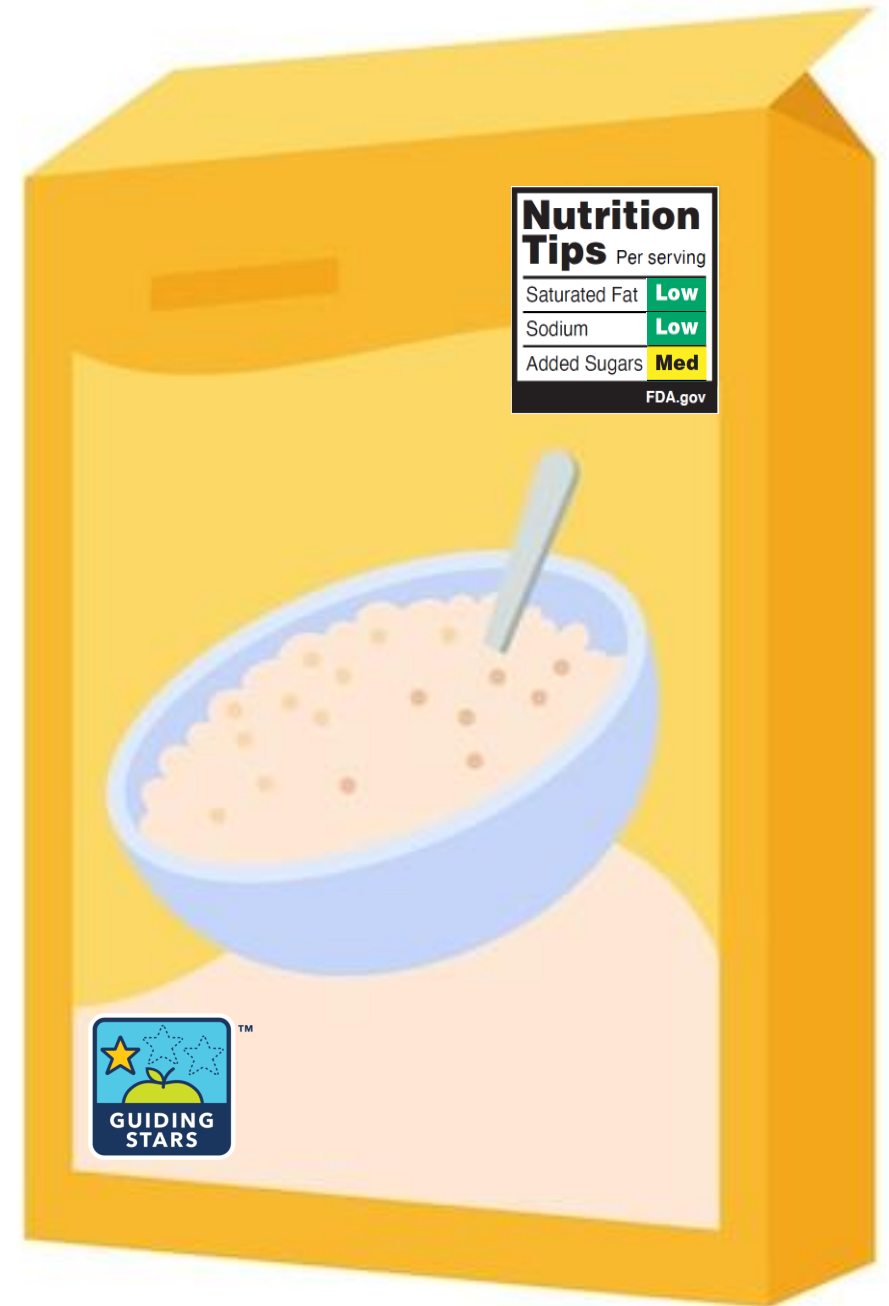


Rewards
reformulation to get
closer to "Healthy"



Encourages
Incremental
Improvement

* While FDA may allow certain packaged foods to use a voluntary Dietary Guidance Statement (DGS), we do not believe the DGS will address the lack of guidance on a significant number of foods



Nutrition Tips	
Per serving	
Saturated Fat	Low
Sodium	Low
Added Sugars	Med

FDA.gov



Lisa Sanders, PhD, RD

Institute of Food Technologists

Mollie Van Lieu

International Fresh Produce Association

Consumer Perceptions of Dietary Guidance Statements- Funded by the National Pork Board



Which message is most motivating for people to buy **Pork Tenderloin**? (Choose up to 2 messages)

To enlarge the image below, hover your mouse over the image (if on a computer) or expand the image with your fingers on your smartphone or tablet. When you have completed evaluating the question, place your tokens and have answered your "why," please click the **Orange Submit Box** under the text box where you detailed your response. To return to the main Prediction screen, click "Predictions" on the upper left side of the screen. (Browser "back" button will also work.)

Vary your protein routine with lean meats, like Pork Tenderloin
Current Prediction: 18%

Why this message?

Eat a variety of protein foods, including lean meat like Pork Tenderloin
Current Prediction: 14%

Focus on eating lean meats, including Pork Tenderloin
Current Prediction: 12%

The Dietary Guidelines for Americans recommends eating 5 1/2 ounces of protein food per day as part of a nutritious dietary pattern. Pork Tenderloin is a lean meat that provides 3 ounces of protein food per serving. *Based on a 2,000 calorie diet.
Current Prediction: 12%

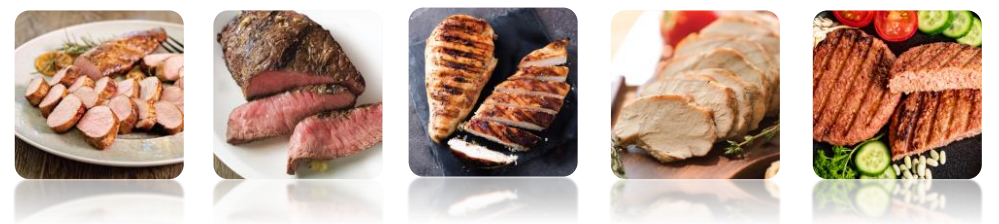
Eat lean meats, like Pork Tenderloin, as a part of a nutritious dietary pattern
Current Prediction: 12%

Lean meats, including Pork Tenderloin, are part of a nutritious dietary pattern
Current Prediction: 13%

For Pork Tenderloin	Motivating	Believable	Willing to Pay 5%+ More
The Dietary Guidelines for Americans recommends eating 5½ ounces of protein food per day as part of a nutritious dietary pattern. [protein type] is a lean meat that provides 3 ounces of protein food per serving. *Based on a 2,000 calorie diet	37%	40%	57%
Eat a variety of protein foods, including lean meat like [protein type]	14%	11%	60%
Lean meats, including [protein type], are part of a nutritious dietary pattern	13%	13%	55%
Vary your protein routine with lean meats, like [protein type]	13%	11%	60%
Eat lean meats, like [protein type], as a part of a nutritious dietary pattern	12%	14%	63%
Focus on eating lean meats, including [protein type]	12%	9%	74%

The most motivating and believable message is consistent across all protein types:
"The Dietary Guidelines for Americans recommends eating 5½ ounces of protein food per day as part of a nutritious dietary pattern. [protein type] is a lean meat that provides 3 ounces of protein food per serving. *Based on a 2,000 calorie diet" scores significantly higher than all other messages across all protein types and consumer segments (ethnicity and generation).

- This message is **motivating** because *it is informative, tells consumers that the protein type is healthy and good for them, mentions dietary guidelines, and contains stats / facts / numbers. This sentiment is true across all protein types.*
- It is **believable** for the same reasons: *it is informative, makes consumers feel that it is healthy, discusses the dietary guidelines, and contains stats / facts / numbers.*



Jenny Hopkinson

Sustainable Food Policy Alliance

Reduced sugar does not mean reduced calories.

Nutrition Facts

About 13 servings per container
Serving size 2 tbsp (32g)

Amount Per Serving	
Calories	190
<small>% Daily Value*</small>	
Total Fat 16g	21%
Saturated Fat 3.5g	18%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 150mg	7%
Total Carbohydrate 6g	2%
Dietary Fiber 2g	7%
Total Sugars 3g	
Includes 3g Added Sugars	6%
Protein 7g	
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0.4mg	2%
Potassium 94mg	2%
Vitamin A 0mcg	0%
Vitamin C 0mg	0%
Vitamin E 1.5mg	10%
Niacin 3.2mg	20%
Copper 0mg	

*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.

Original Peanut Butter



Reduced Sugar Peanut Butter



Despite the "1/3 Less Sugar" claim,
Calories have increased by 20

Nutrition Facts

About 13 servings per container
Serving size 2 tbsp (32g)

Amount Per Serving	
Calories	210
<small>% Daily Value*</small>	
Total Fat 17g	22%
Saturated Fat 4g	20%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 100mg	4%
Total Carbohydrate 6g	2%
Dietary Fiber 2g	7%
Total Sugars 2g	
Includes 2g Added Sugars	4%
Protein 7g	7%
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0.4mg	2%
Potassium 94mg	2%
Vitamin E 3mg	20%
Niacin 3.2mg	20%
Copper 0mg	

*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.

Yet, 70% of consumers believe a product labeled "Reduced Sugar" contains less calories than the original version.*

Umailla Fatima

UnidosUS

Eva Greenthal, MS, MPH

Center for Science in the Public Interest

Front-of-Package Nutrition Labeling - Colombia's Experience in FOPL

FOPL is a public health measure necessary to regulate package food and beverage products ultra-processed

Legislation

- **Law 2120 of 2021.**

Goal: to Promote Healthy Food Environments and prevent NCDs.

Article 5. FOPL: edible or drinkable products classified according to level of processing.

Using scientific evidence free of conflict of interest.

- **Resolution No. 2492 of 2022. FOPL Regulation**

- "Excess in" warning labels for products that have nutrients of concern above the thresholds.

- It includes the PAHO Nutrient Profile Model on which the NOVA classification is based to define which products should have the seal.

- Ultra-processed product definition Health claims are prohibited for products with labeling.

Advocacy and mobilization strategy

- Coalition of civil society organization and academia without conflict of interest
- Arguments based on scientific evidence free of conflict of interest: positioning the difference between food and ultra-processed product, ultraprocessing concept.
- Participation in public debate spaces and with wide diffusion
- Mobilization of civil society around the need for FOPL
- Incidence spaces with decision makers policy



Nutrient	Solid	Liquid
Sodium	>= 1mg/kcal Limit 300 mg/ 100 gr	>= 1mg/kcal Limit ≥ 40 mg sodium per 100 ml
Sugars	>= 10% of the total energy from free sugars	>= 10% of the total energy from free sugars
Saturated fats	>= 10% of the total energy from saturated fats	>= 10% of the total energy from saturated fats
Trans fat	>= 1% of the total energy from trans fats	>= 1% of the total energy from trans fats
Sweeteners	any amount	any amount



FIAN
COLOMBIA

Brazil



2014 - 2016

- Anvisa's Working Group (WG) beginning

2017

- WG conclusion and submission of Idec's proposal



2018

- Anvisa's Preliminary Report: warning model as the most appropriate to inform Brazilian population
- Technical public consultation (TPS)
- Idec's campaign "You have the right to know what you eat"

2019

- Anvisa's TPs report
- Anvisa's final text of the regulation
- Public consultation for Brazilian population

23 thousand contributions



2020

- Anvisa approves a magnifying glass as a new FoPNL, in a remodeled version



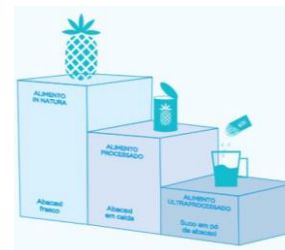
- **Great improvement for Consumers**, even with some **limitations**

- Corporate political activities of F&B industry led the approval of the **magnifying glass**

Resolution of Collegiate Board (Resolução da Diretoria Colegiada – RDC) no. 429/2020 and Normative Instruction (Instrução Normativa – IN) no. 75/2020

High in	Solid and semi-solid	Liquid
Added sugar	≥ 15 g/100 g	≥ 7.5 g/100 ml
Saturated fat	≥ 6 g/100 g	≥ 3g/100 ml
Sodium	≥ 600 mg/100 g	≥ 300 mg/100 ml

- Started in oct/2022
- Until oct/2023: products that were already on the market
- Until oct/2024: small businesses products
- Until oct/2025: non-alcoholic beverages in returnable packaging



Limitations transformed into improvements

- **Warning for sweeteners**
- **Nutrient profile model**
- **Sinergy with the Brazilian Dietary Guideline (Guia Alimentar para a População Brasileira)**



Mexico's Experience with Warning Labeling

2020



CONTIENE EDULCORANTES, NO RECOMENDABLE EN NIÑOS

CONTIENE CAFEÍNA EVITAR EN NIÑOS



PLOS MEDICINE

RESEARCH ARTICLE

Evaluation of the Mexican warning label nutrient profile on food products marketed in Mexico in 2016 and 2017: A cross-sectional analysis

Alejandra Contreras-Manzano¹, Carlos Cruz-Casarrubias², Ana Munguía³, Alejandra Jáuregui⁴, Jorge Vargas-Meza⁵, Claudia Nieto⁶, Lizbeth Tolentino-Mayo¹, Simón Barquera¹

PLOS MEDICINE

RESEARCH ARTICLE

Predicting obesity reduction after implementing warning labels in Mexico: A modeling study

Ana Basto-Abreu¹, Rossana Torres-Alvarez¹, Francisco Reyes-Sánchez¹, Romina González-Morales¹, Francisco Canto-Osorio¹, M. Arantxa Colchero², Simón Barquera¹, Juan A. Rivera¹, Tonatiuh Barrientos-Gutierrez¹

Durán et al. Health Research Policy and Systems (2022) 20:108 <https://doi.org/10.1186/s12961-022-00922-2>

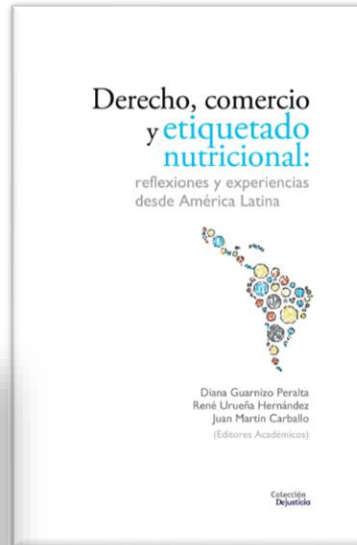
Health Research Policy and Systems

RESEARCH

Open Access

Analysis of stakeholders' responses to the food warning labels regulation in Mexico

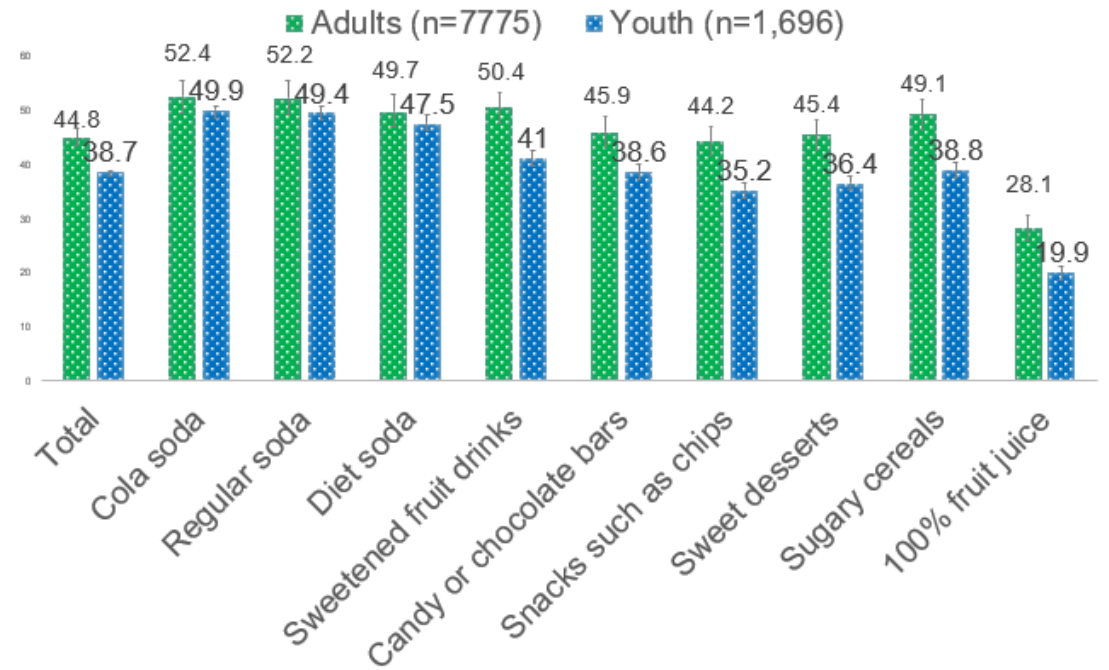
Regina Durán¹, Edalith Asmitia¹, Juan Rivera², Simón Barquera¹ and Lizbeth Tolentino-Mayo¹



2022



Which food groups have people stopped buying the most?



@1CINyS

@CINyS, @NOM_051 y @elpoderdelc

Centro de investigación en Nutrición y Salud

El Poder del Consumidor

Mandatory front-of-package (FOP) nutrition labelling in Uruguay

Gastón Ares (Universidad de la República)



Before implementation

Extensive amount of research to design the policy. Key learnings:

- Importance of **interpretive elements**.
- **Highlighting products high in nutrients associated with NCD** was the most effective strategy to improve understanding and encourage healthier food choices.
- **Importance of graphic design** to maximize impact.

After implementation

Improvement in consumer understanding of nutritional information.

6 out of 10 consumers report using FOP nutrition labelling when making their food purchases (**stable since implementation**).

FOP nutrition labelling **discourages purchase of products high in nutrients associated with NCDs**.

No negative effects on the food industry.

Chilean Law of Food Labeling and Advertising

Changes in grocery purchases following mandatory warning labels



After 3 years of regulation,* significant changes in food & beverage purchases.



Among unhealthy products purchased with warning labels:

CALORIES

↓ **23%**
or 52 kcals per person per day

SUGAR

↓ **37%**
or 30 calories from sugar per person per day

Sugar decline as impactful as a sugary drink tax

SATURATED FAT

↓ **16%**
or 6 calories from sat. fat per person per day

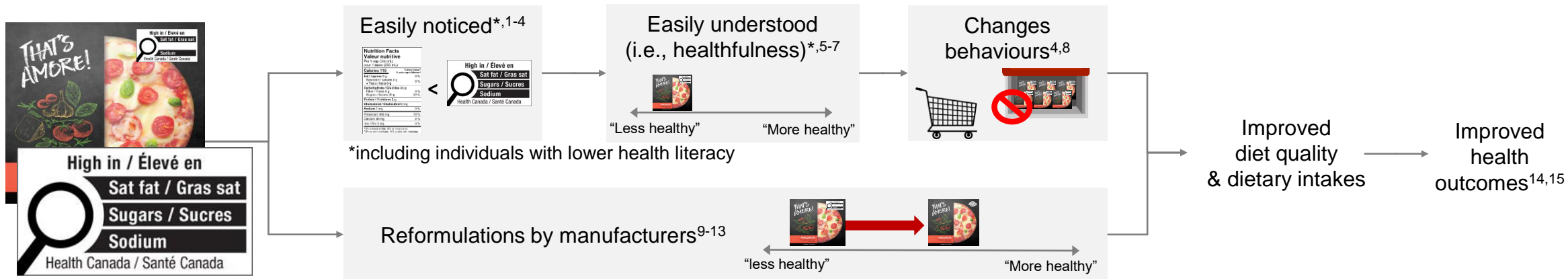
SODIUM

↓ **22%**
or 86 mg per person per day



Front-of-pack Labelling (FOPL): Lessons from Canada and beyond

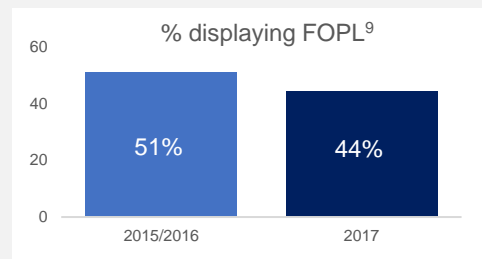
1) FOPL improves diet quality & dietary intakes and ultimately, health outcomes.



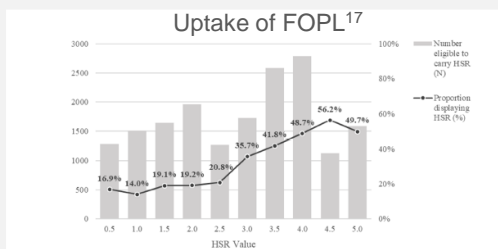
2) Mandatory FOPL is needed.



100% compliance

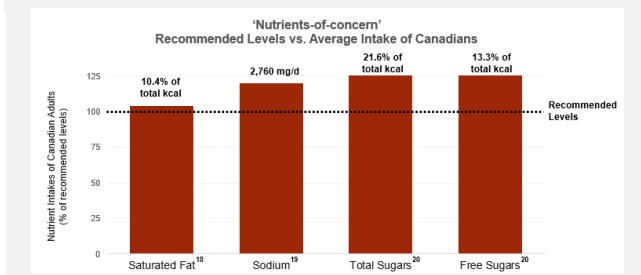


~40% compliance; mostly by "more healthy" products^{16,17}

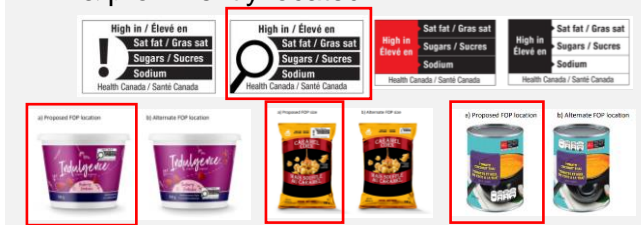


3) Regulations must be clear for maximum benefits.

A. Nutrients based on excessive intakes:



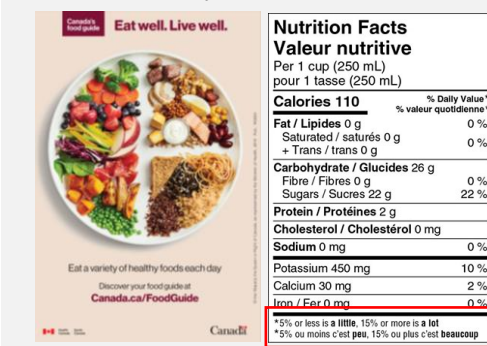
B. Design to be interpretable & prominently located^{8,21}:



C. Reference values & thresholds:

- Per serving size
- Per 100 g or 100 ml
- Per 1,000 kcal

D. Consistency



REFERENCES: 1. Talati et al. *Nutrients*. 2019;11(8):1934.; 2. Egnell et al., *Nutrients*. 2018;10(10):1542.; 3. Acton et al., *Prev Med*. 2020;136:106091. 4. Acton et al. *Int J Behav Nutr Phys Act*. 2019;16(1):46.; 5. Goodman et al. *Nutrients*. 2018;10(11):1624.; 6. Franco-Arellano et al. *Appetite*. 2018;149:104629.; 7. Mansfield et al. *Nutrients*. 2020;12(10); 8. Acton et al. *Appetite*. 2018;121:129-37.; 9. Reyes et al. *PLoS Med*. 2020;17(7):e1003220. 10. Alé-Chileit et al. *Marketing Science*. 2022;41(2):243-70.; 11. Barahona et al. *Econometrics*. 2023;91(3):839-68.; 12. Quintiliano Scarpelli et al. *Nutrients*. 2020;12(8):2371. 13. Quiral et al. *Rev Chil Nutr*. 2019;46:245-53. 14. Labonte et al. *PLoS One*. 2019;14(12):e0226975. 15. Flexner et al. *Front Nutr*. 2023;10:1098231.; 16. Jones et al. *Nutrients*. 2018;10:997.; 17. Shahid et al. *Nutrients*. 2020;12(6):1791. 18. Harrison et al. *Nutrients*. 2019;11(9):1964.; 19. Health Canada. 2018. 20. Liu et al. *Health Rep*. 2020;31(10):14-24.; 21. Leger Marketing. 2018.

Thank you!