Prevalence of health, nutrition, and environment-related claims in the Brazilian packaged food supply

Ana Clara Duran¹ 2, Camila Z Ricardo², Laís A Mais³, Ana Paula Martins³, Lindsey S Taillie⁴

1. Center for Food Studies, University of Campinas (UNICAMP), Brazil
2. Center for Epidemiological Studies in Nutrition and Health (NUPENS), University of Sao Paulo (USP), Brazil
3. Brazilian Institute for Consumer Defense (IDEC), Brazil
4. Department of Nutrition, University of North Carolina in Chapel Hill, United States
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• Increasing consumption of ultra-processed foods (UPF) in Brazil → 20-30% of the Brazilian caloric intake
• Higher intake of UPF has been associated with weight gain, hypertension, and all cause mortality
• Policies aimed at improving the food environment and making healthier choices the default, such as taxation of unhealthy foods, improving nutritional labeling, and restricting the access and marketing of unhealthy foods have been proposed to fight such increasing public health burden

(Monteiro et al., 2011; Mendonça et al, 2017; Rico-Campà et al., 2019; Hall et al., 2019; Vandevijvere et al., 2019)
Front-of-package (FoP) nutritional labeling can improve consumers’ ability to assess the healthfulness of products and help them make healthier choices.

(Bollard et al., 2016; Arrua et al., 2017; 2018; Ares et al., 2018; Machin et al., 2018; Acton et al., 2019)
In Brazil, the Brazilian Health Regulatory Agency (Anvisa) is currently discussing the introduction of FoP warning labels in packaged foods and beverages.

In the same proposal, Anvisa lays out options for restricting the use of nutrition claims:

- A ban on all nutrition claims from any product containing a warning label;
- A ban only on nutrition claims relating to those that are warned about on the product;
- And/or a reduction of the relative size of FoP nutrition claims.
Nutrition and health claims have been shown to make consumers think a product is healthier than it actually is, working as a marketing strategy rather than an information tool (i.e., the ‘health halo’ effect) (Chandon et al., 2012; Acton & Hammond, 2018).

The objectives of this study are to:

- quantify the prevalence and type of front-of-package health, nutrition and environment-related claims in the Brazilian food supply
- and examine the prevalence of foods high in critical nutrients and therefore eligible to receive front-of-package warning labels on products with and without claims
• **Methods: data source**

  • **Supermarket selection**
    • Five food retailers with the largest market share in Brazil *(Euromonitor International, 2016)*

  • **Stores selection**
    • Stores located in low- and high-income neighborhoods in São Paulo and Salvador

  • **Data collection and entry**
    • Apr – Jul 2017; Aug – Nov 2017
    • Trained raters

  • **Final sample after preliminary data cleaning**
    • 10,808 unique packaged food and beverages
Data collection
Data collection
Sample

- Cross-sectional study that used data on a random 30% subsample of each of the 128 food groups of the large sample of packaged foods (n= 3,491 products)

- We did not find any statistical differences in food composition when we compared this random sample with the sample of photographed food packages
• The taxonomy developed by The International Network for Food and Obesity/NCD Research, Monitoring and Action Support (INFORMAS) was used to classify front-of-package claims:

  • nutrition claims (nutrients of benefit and not of benefit)
  • health claims (general, special diets, ‘natural’)
  • environment-related claims
Pacote de macarrão taeq com sabor funghi. Após 3 minutos, está pronto.

Pacote de macarrão Caseirito com sabor funghi. Orgânico e natural, com tempero natural, menos sódio.
Data analysis

- Data were entered twice for inter and test-retest reliability analyses and found strong reliability for all assessed claims (Cohen’s kappa≥0.82), except for claims related to the reduction of disease risk which had coefficients ranging from 0.55 to 0.76.

- Foods were classified as being high in content of critical nutrients, including free sugar, total fat, saturated fat, trans fat, sodium, and presence of nonnutritive sweeteners, using a modified version of the Pan-American Health Organization nutrient profiling model and would therefore be eligible to receive FoP warning signs.

- We examined whether foods with claims were more likely to be high in critical nutrients using 95% confidence intervals
Results

- Claims were found in 41.2% of foods and beverage

- Nutrition claims were the most prevalent (28.5%), followed by health claims (22.1%), and environment-related claims (5.2%)
Foods high in critical nutrients by presence of FoP claims

- **Health claims**
  - Presence: 52.9%
  - Absence: 58.5%

- **Nutrition claims**
  - Presence: 65.3%
  - Absence: 54.1%

- **Environment-related claims**
  - Presence: 33.5%
  - Absence: 58.6%
Thank you!

anaduran@unicamp.br