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Background

- Fruit drinks are a major source of added sugars in children’s diets<sup>1</sup>
- ~\$1B spent a year marketing food and beverages to U.S. children<sup>2</sup>
- Front-of-pack (FOP) child-directed marketing is misleading and not proactively regulated<sup>3</sup>
- Few studies examine the relationship between FOP child-directed marketing and the nutrient profile of beverages

Methods

- Beverage purchase data from a national sample of 1,048 households with 0-5-year-olds were linked with FOP label and nutrition data to conduct a content analysis
- Sample: **Fruit drinks** (n=510), **100% juices** (n=337), and **non-carbonated flavored waters** (n=40)
- Regression models assessed **beverages with and without child-directed marketing** to examine differences in:
  - Claims** (macronutrient, micronutrient, natural/healthy, and fruit & juice)
  - Non-nutritive sweeteners**
  - Nutrient content** (calories, total sugar (g), and percent daily value (% DV) of vitamin C)

Results

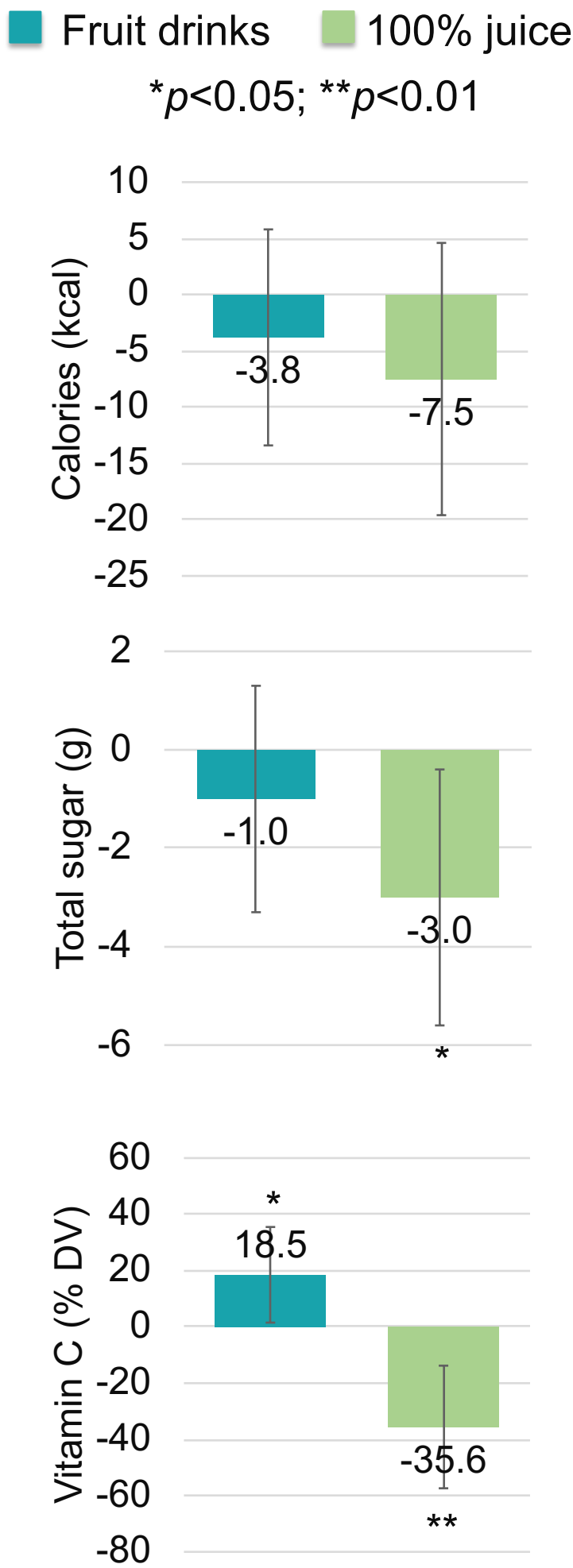
Figure 1: Example of beverages without and with child-directed marketing



Table 1: Odds of claims on beverages with child-directed marketing (fruit drinks n = 227; 100% juice n = 54) vs. control (fruit drinks n = 283; 100% juice n = 283)

	OR (95% CI)
<b>Fruit Drinks</b>	
Macronutrient claims	1.3 (0.9, 1.9)
Micronutrient claims	2.1 (1.5, 3.1)***
Natural or healthy claims	1.4 (1.0, 2.1)
Fruit & juice claims	0.9 (0.6, 1.2)
Presence of non-nutritive sweeteners	1.0 (0.7, 1.5)
<b>100% Juice</b>	
Macronutrient claims	1.0 (0.5, 1.8)
Micronutrient claims	0.7 (0.4, 1.3)
Natural or healthy claims	1.2 (0.6, 2.4)
Fruit & juice claims	1.3 (0.2, 11.2)
Presence of non-nutritive sweeteners	N/A

Figure 2: Difference in nutrient content: beverages with child-directed marketing (fruit drinks n = 227; 100% juice n = 54) vs. control (fruit drinks n = 283; 100% juice n = 283)



Implications

- Fruit drinks with child-directed marketing had significantly more micronutrient claims and vitamin C than fruit drinks without.
  - May mislead parents into believing sugary drinks are healthy and appropriate for their children
- Greater regulation is needed for FOP beverage marketing on sugary drinks with child-directed marketing
  - FDA should update regulations—don’t allow fortification of sugary beverages
  - Codify FTC recommendations<sup>4</sup>—set nutrition standards for what can be marketed to children
  - Expand Children’s Food & Beverage Advertising Initiative (an industry-led effort to reduce advertising of unhealthy food and beverages) to include marketing on beverage FOP

References

1. Kay MC, et al. *Nutrients*. Jun 26 2018;10(7)doi:10.3390/nu10070825  
2. *A Review of Food Marketing to Children and Adolescents*. Federal Trade Commission. 2012.  
3. Duffy EW, et al. *J Acad Nutr Diet*. Jan 2021; 121(1):36-46 e4. doi:10.1016/j.jand.2020.08.009  
4. *Marketing Food to Children and Adolescents: A Review of Industry Expenditures, Activities, and Self-Regulation*. Federal Trade Commission. 2008.