Can Information Improve Visual Attention to Sugar Content? Evidence from an Incentivized Beverage Choice Experiment

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Introduction

In this study, we investigated:

- individual heterogeneity in visual attention to the information from the Centers for Disease Control and Prevention (CDC) about added sugar, and
- changes in visual attention to sugar content on the updated Nutrition Facts Label (NFL) due to additional information.

CDC information about added sugars (text and picture formats)

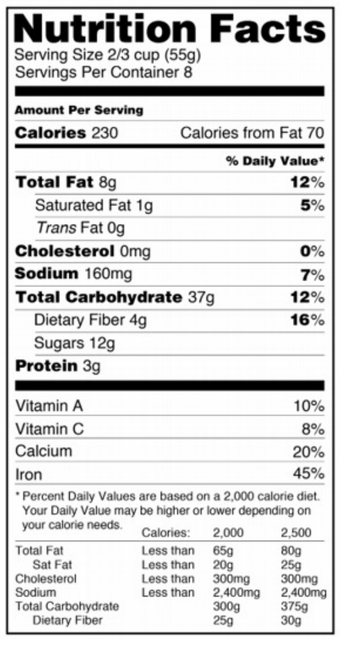
Americans are eating and drinking too much added sugars which can lead to health problems such as weight gain and obesity, type 2 diabetes, and heart disease. To live healthier, longer lives, most need to move more and eat better including getting fewer calories from added sugars. This is one of the Healthy People 2020 objectives.[1]

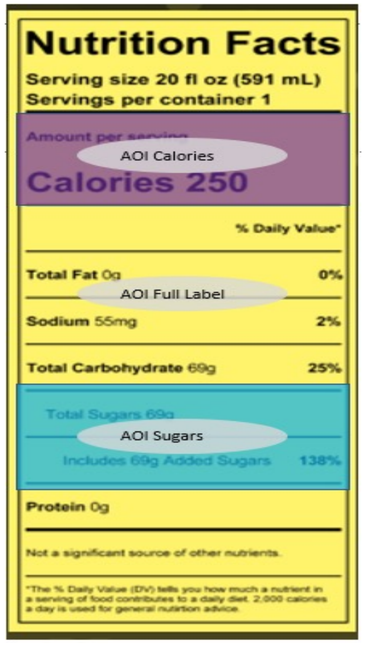
What are added sugars?

- Added sugars are sugars and syrups that are added to foods or beverages when they are processed or prepared. Naturally occurring sugars such as those in fruit or milk are not added sugars.
- Added sugars are called by many different names. Examples of added sugars seen on ingredient labels, according to the *2015—2020 Dietary Guidelines for Americans*,[2] include brown sugar, corn sweetener, corn syrup, dextrose, fructose, glucose, high-fructose corn syrup, honey, lactose, malt syrup, maltose, molasses, raw sugar, and sucrose.

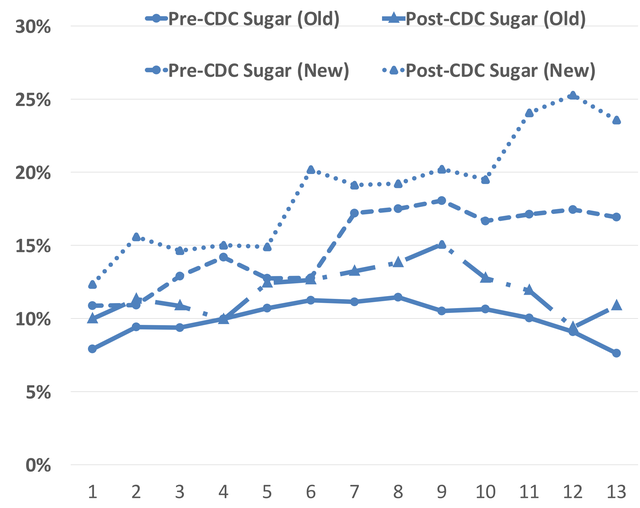
Source: Adapted from the Centers for Disease Control and Prevention Data & Statistics Portal.

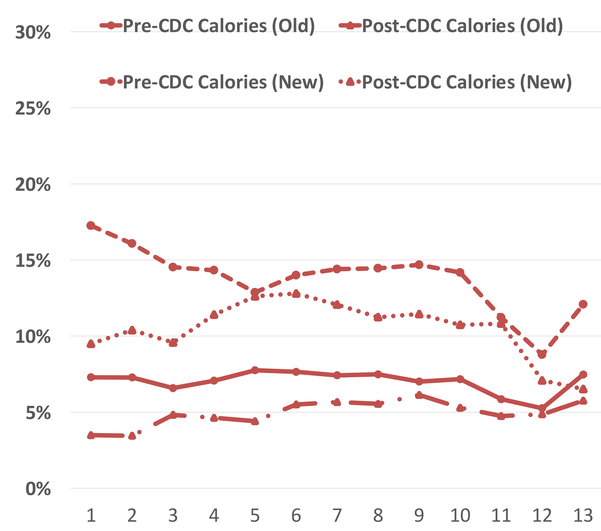
Previous & updated NFLs and definition of AOIs



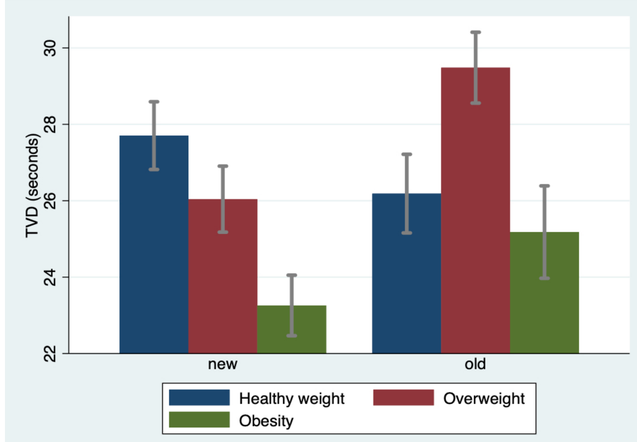


Side-by-side comparison of relative TVD to sugar content (Left) and calories (Right)

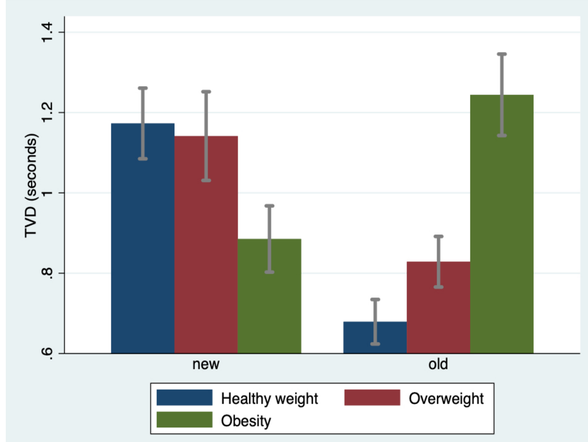




Average TVD to CDC information (text format) by BMI Group



Average TVD to CDC information (picture format) by BMI Group



Results and conclusions

- Total visit duration (TVD) results indicated that participants spent more time inspecting the sugar content in the updated NFL, suggesting that updated NFL garnered relatively more visual attention.
- The provision of information about added sugars had a positive impact on participants' visual attention to sugar content. Participants displayed longer visual duration to sugar content after receiving information regardless of viewing previous or updated NFL.
- Obese participants with a body mass index (BMI) of 30.0 or higher paid less visual attention to the CDC information, especially to the text format. They also paid less visual attention to sugar content in the subsequent beverage choices.
- Participants who paid more visual attention to the CDC text showed increased visual attention to sugar content, while those who paid more visual attention to the CDC picture paid less visual attention to sugar content when making beverage choices, particularly with the updated NFL.