



Social Media Influence on Parent's Food Buying Practices in Regards to Artificial Sweeteners

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Introduction

The consumption of sugar has long been identified as a major contributor to the development of dental caries, due to the fermentation of sugar by oral bacteria. As a response to this concern, artificial sweeteners have gained popularity as sugar substitutes, offering a way to maintain sweetness without the same adverse effects on oral health.[1] However, artificial sweeteners are not without controversy. While they provide a low-calorie alternative and mitigate the risk of cavities, ongoing debates revolve around their long-term health implications, metabolic effects, and potential links to chronic diseases.[2]

The influence of social media has become an increasingly powerful force in shaping public perception and consumer behavior, especially in the context of dietary choices.[5] Parents, who are often inundated with conflicting information about nutrition and health, frequently turn to social media platforms for advice and recommendations. Marketing campaigns and influencer endorsements play a significant role in shaping parental choices about sugar and artificial sweeteners, creating both opportunities and challenges in promoting healthier diets for children.

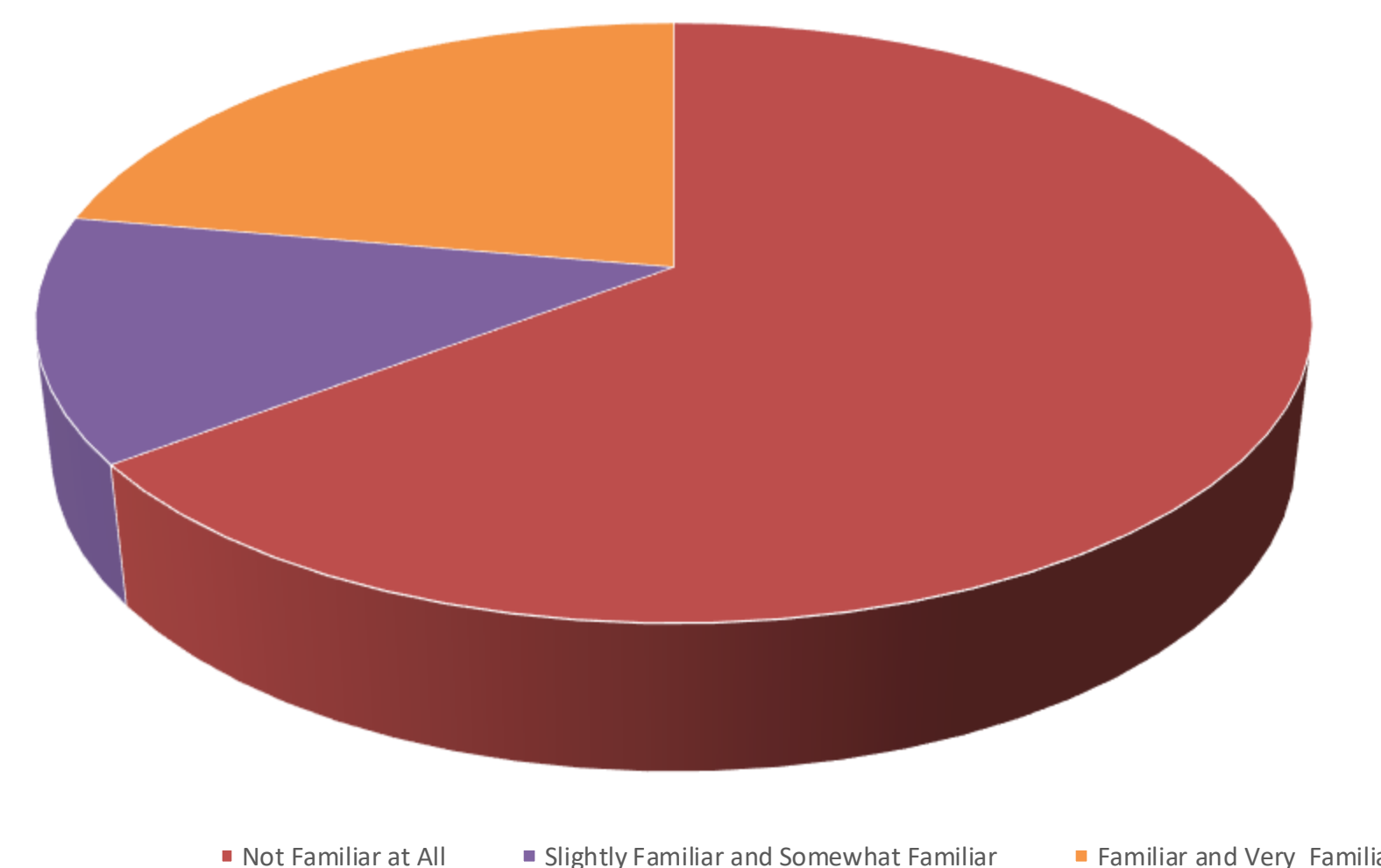
This study aims to explore the relationship between parental perceptions of artificial sweeteners, their knowledge about the associated benefits and risks, and how these perceptions ultimately impact purchasing decisions. The objective of the study is to assess where parents get their nutritional information and if that correlates to their subsequent artificial sweetener knowledge. The gaps in knowledge and identifying potential interventions could lead to more informed dietary choices, ultimately benefiting children's long-term health.

Methods

A Qualtrics survey was administered in-person to English-speaking parents of patients receiving dental care at New York University (NYU) College of Dentistry pediatric clinic, with no significant medical history. The survey included questions on demographic information, education level, household income, social media use for nutritional information, perceptions of artificial sweeteners, and purchasing behaviors related to foods containing artificial sweeteners. Data were analyzed using statistical methods to identify correlations and trends using t-tests and chi squared tests.

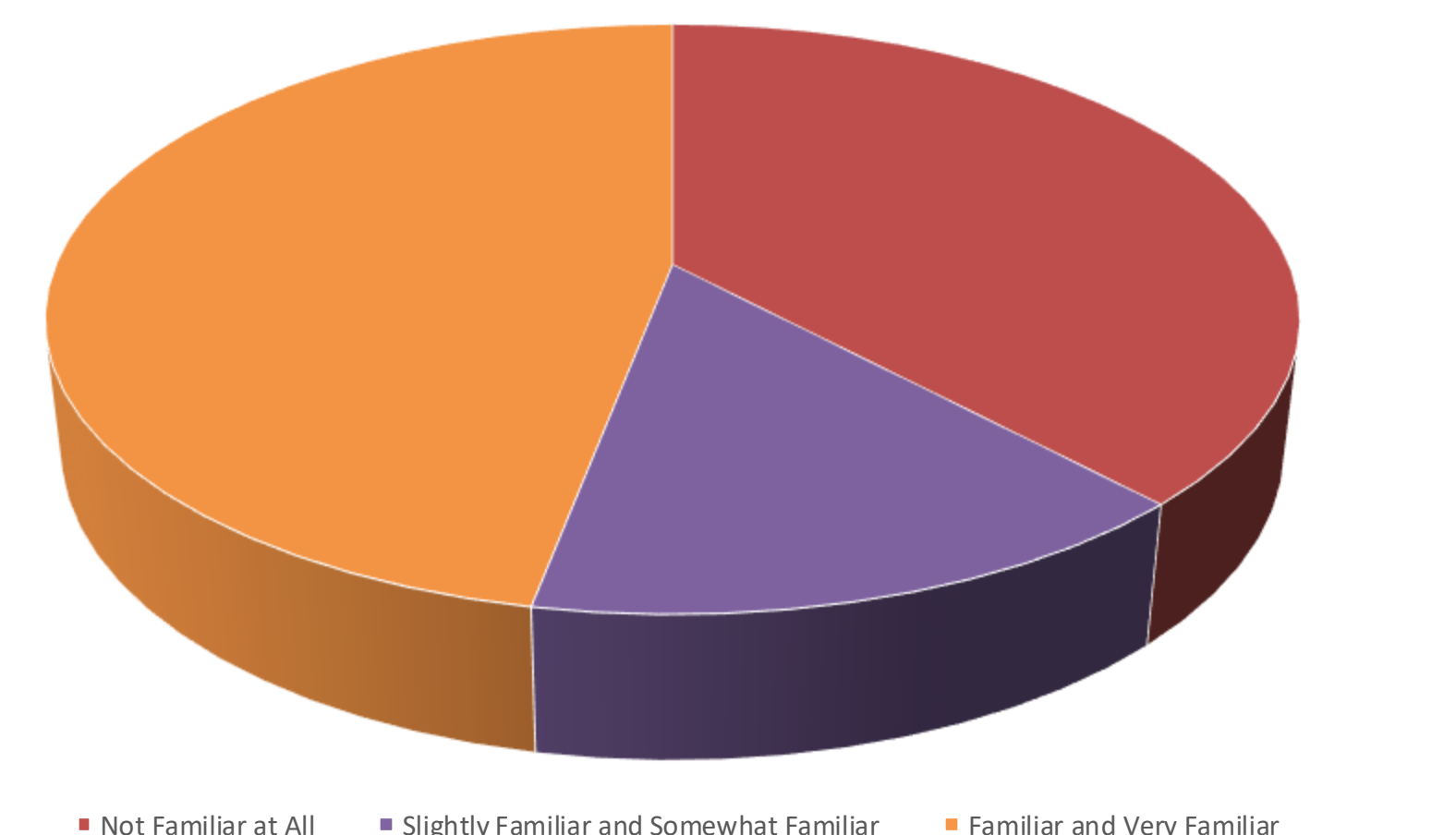
Results

Primary source of information regarding your child's nutrition and diet is Doctor, Friends/family and others [sucralose] [$p<0.05$]



133 of surveys were completed and 129 were included for final data analysis. Parent recognition of artificial sweeteners was associated to where parents get their nutritional information from. Parents who reported getting nutritional information from the internet, medical online resources, and social media were 63% likely to be “slightly, somewhat, familiar or very familiar” with the artificial sweetener *sucralose* [$p<0.05$]. Whereas, parents who reported getting their nutritional information from a doctor and friends and family were only 35% likely to be “slightly, somewhat, familiar and very familiar” with the artificial sweetener *sucralose* [$p<0.05$]. Independent of source information, parents were mostly not familiar at all with the artificial sweeteners *saccharin* and *aspartame*.

Primary source of information regarding your child's nutrition and diet is the Internet, Medical Organizations, Newspapers, and Social Media [sucralose] [$p<0.05$]



Conclusions

The study underscores the potential correlation between educational attainment and income levels with an individual's knowledge of artificial sweeteners. Our research found, while not statistically significant, that higher levels of education and greater financial resources was associated with better access to reliable nutritional information, enabling more informed decisions regarding food choices. Conversely, those with lower educational attainment and income are associated with relying on less credible sources, potentially leading to misinformation or misconceptions about artificial sweeteners and their effects on health. This study also highlights the powerful role of social media in influencing parental behaviors related to artificial sweeteners. Our research found that Instagram, TikTok, and YouTube serve as primary sources for social media dissemination of nutrition information in our population. General trends of the survey also include that parents were not able to recognize or were not familiar with common artificial sweeteners that are in processed foods which are normally available in the grocery store. Given this influence, the study suggests the need for improved digital nutritional literacy to help consumers critically evaluate online content, distinguish between credible and misleading health claims, and to make better dietary decisions.

By emphasizing the intersection of education, income, and digital media influence, this study advocates for targeted educational initiatives and policies that promote accurate nutritional knowledge, particularly in digital spaces where misinformation can be prevalent. More research needs to be done regarding the role social media plays in the way nutrition information is shared and regulated.

Sources

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