What is the relationship between rates of obesity by neighborhood and the number of adults reporting sugary drink consumption?



ECON
2505ID-OL60
Final Paper
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12/12/2023
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The growing number of people with obesity worldwide is worrisome and comes from a mix of how we live, changes in society, and money matters, all adding up to make health problems related to carrying too much weight more common. One big part of this is how much sugary drinks we have. More people gaining weight from drinking sugary drinks highlights the importance of being cautious about consuming too much sugar. Data from the NYC Health and Environment Data portal, shows that there's a clear connection between being overweight and drinking sugary drinks.

The presented data(Fig. 1) sheds light on various neighborhoods in New York, uncovering a distinct correlation between the reported levels of sugary drink consumption and the corresponding obesity rates among adults. Notably, individuals reporting low sugary drink intake exhibited a trend where 46.7% had low obesity rates, 40% had medium rates, and 13.3% had high rates. In contrast, adults with medium sugary drink consumption displayed a different pattern, with 12.5% having low obesity rates, 56.3% medium rates, and 31.3% high rates. For those reporting high sugary drink consumption, a striking observation emerged, as 0% had low obesity rates, while 55.5% had medium rates and 44.4% had high rates.

This analysis suggests a compelling association between sugary drink consumption and obesity prevalence in New York neighborhoods. The progressive increase in obesity rates with higher levels of sugary drink intake indicates a potential link between the two variables. The absence of low obesity rates among individuals with high sugary drink consumption further accentuates the significance of moderating sugary beverage intake.



Three sources were researched to show how sugary drinks are linked to obesity. These resources provide different information that helps us understand the connection between drinking sugary beverages and gaining too much weight. By putting together insights from these three places, we build a stronger case to support the idea that sugary drinks play a role in causing obesity.

The first resource, by Gonzalez-Morales, et al. called "Soft Drink Intake Is Associated with Weight Gain, Regardless of Physical Activity Levels: The Health Workers Cohort Study -International Journal of Behavioral Nutrition and Physical Activity," looked at how drinking soft drinks, how much exercise people do, and their body weight are connected in a group of Mexican adults. The researchers used information from a health worker's study and found that having one extra soft drink per day was linked to gaining 0.10 kg of weight each year. Surprisingly, doing more exercise didn't change this link whether someone did a little or a lot of exercise, they still gained weight from drinking more soft drinks. The study challenges the idea that just exercising a lot can cancel out the weight gain from drinking soft drinks. Instead, it suggests that public health efforts should focus on controlling how much soft drinks people have, rather than just promoting exercise to prevent weight gain. While the study has strengths like its design and accurate weight measurements, there are also limits, like possible mistakes in how people reported their soft drink intake and exercise, and the fact that the group studied might not represent all Mexicans. Overall, the study gives us important insights into how what we eat, how much we move, and our weight are all connected.

The second resource, by Malik, et al called "Intake of Sugar-Sweetened Beverages and Weight Gain: A Systematic Review," which reviewed thirty studies that looked at how drinking sugary beverages, like sodas, affects our weight. The studies included different types, like ones that looked at people at one point in time, others that followed people over time, and some that tested interventions. Big studies found a link between drinking sugary drinks and gaining weight. The ones that followed people over time showed that more sugary drinks lead to more weight gain, both in kids and adults. The review also talked about challenges in understanding this link, like small study sizes and other factors making it tricky. It suggested that cutting down on sugary drinks could help lower the risk of being overweight and mentioned other health issues like type 2 diabetes. Even though there are some challenges in the research, the review supports the idea that reducing sugary drink intake is good for public health and suggests promoting healthier drink options.

And the third resource, by the familiar Malik, and Hu called "The Role of Sugar-Sweetened Beverages in the Global Epidemics of Obesity and Chronic Diseases," focused on health issues such as gaining weight, type 2 diabetes, heart diseases, and liver problems. Strong evidence from studies that followed people over time and controlled experiments supports these links. When it comes to gaining weight, drinking sugary drinks makes people feel less full, and they don't eat less afterward, leading to more calorie intake. These drinks, especially those with fructose, can cause health problems by affecting blood sugar, insulin resistance, and other metabolic issues. Proposed solutions to reduce sugary drink intake include taxing these drinks, limiting their advertising, and educating the public. While alternatives like artificially sweetened drinks exist, their health effects are still debated. Even natural sugary drinks like fruit juice raise similar concerns. Healthier options like water, tea, and coffee are recommended. More research is needed to understand the health effects of different sugars, alternative drinks, and global access to clean water. In summary, the review highlights the significant impact of sugary drinks on global health, contributing to the obesity epidemic and various chronic diseases, and emphasizes the need for coordinated global actions to address these issues through better nutrition policies and healthier food environments.

In conclusion, the rising global obesity issue is closely tied to our lifestyles, societal changes, and economic factors, with sugary drink consumption playing a substantial role in this concerning trend. The data from New York neighborhoods strongly indicates a connection between higher sugary drink intake and increased obesity rates. Analyzing three distinct sources reaffirms this association, emphasizing the importance of addressing sugary beverage consumption to combat and potentially reduce obesity. While challenges exist in the research, such as variations in study sizes and potential reporting errors, the overall evidence supports the

idea that reducing sugary drink intake is beneficial for public health. The proposed solutions, including taxation, advertising limits, and public education, underscore the need for coordinated global efforts to promote healthier beverage choices and combat the obesity epidemic.

Bibliography

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