
Nutritional Consequences due to Soft Drink and Beverages Intake Causing Obesity among Children with Genetic Diseases

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Background

A rapidly growing epidemic of obesity is associated with many health risks. Obesity is a complex condition, with serious social and psychological dimensions, affecting virtually all ages and socioeconomic groups. Sugar sweetened soft drink and beverages are highly linked to obesity and other health problems such as type 2 diabetes and heart disease. Consequently, there are many campaigns being launched to reduce consumption of sweetened energy among children. To create better choices for people many associations and organizations have banned sugary drinks including fruit juices in addition to sugary soda drinks. One area that is not well known as a source of excess sugar and that can increase obesity risk are soft drink and beverages. Since children who consume these soft drink and beverages may derive as much as 12% of their sugary drink intake from these drinks, as their parents also are misguided because mostly the labels on soft drink and beverages mentions low calories and low sugar contents and they happily buy for their children or allow them to consume. Soft drink and beverages are very popular in children with genetic diseases also as their parents or guardian thinks that it will give strength to their children specially those who have physical disabilities also.

Aims and Objectives

- To study the attitude, perception and practices regarding soft drink and beverages intake in obese children with genetic diseases.
- To analyze the myths and facts related to soft drink and beverages intake in obese children with genetic diseases.
- To study the association between excess usage of soft drink and beverages and obesity in children with genetic diseases.

Material and Methods

A pre-validated self-designed detailing information on soft drink and beverages and obesity was administered the staff and care takers and parents and guardian of children with genetic diseases enrolled with different rehabilitation centers and schools for children with genetic diseases. In India, Pakistan, Nepal, Russia and Malaysia to study their attitude, perception and practices regarding sports or soft drink and beverages and associated sugar contents and the myths and facts related to the reasons as why they allow their children to have such drinks. The research on this topic is limited and diverse; hence, the salient points in questionnaire were taken from the available literature and published articles. Staff and care takers and parents and guardian of children with genetic diseases were also requested to give opinion about the calories and other details mentioned on the labels on soft drink and beverages which their children are consuming. The children with genetic diseases body mass index was also recorded to assess them whether they are overweight and in obese category and was correlated with the amount of soft drink and beverages consumed by them.

Results and Discussion

Our study showed that there is link between excess usage of soft drink and beverages and obesity, which may not be acknowledged as sources of sugar in children with genetic diseases. This may be

because, energy and sports drinks though may have fewer calories and less sugar than regular sugary drinks, so staff and care takers and parents and guardian of children with genetic diseases. take it for granted as they are not given awareness regarding associated health risks and as a myth they also enjoy health 'halos' due to an advertising focus on their cognitive benefits. It was found out that staff and care takers and parents and guardian of children with genetic diseases are misled energy or sports drinks labels. 26% of staff and care takers and parents mentioned that some labels do not convey how much sugar is actually in the product, or what is the effect of 20 grams of carbohydrate in one Soft drink and beverages might imply for the individual consumer. 65 % of them stated that they were not aware that the glucose found in soft drink and beverages is a simple carbohydrate, which is dispersed into the bloodstream immediately. 69% were not aware that too much glucose, as found in soft drink and beverages, can adversely affect memory, concentration and other forms of mental activity. It was found in our study that on the analysis of 14 different soft drink and beverages, it showed all drinks were contained in non-reusable containers, thus providing excess sugar in a single serving. Our study showed that the added sugar intake from soft drink and beverages had associated relationship to reduced sleep duration. 54 % of parents and care takers of children with genetic diseases stated that they were fascinated by information on soft drink and beverages through media like Facebook and were misguided as these drinks will help their disable children and will give them more physical and mental strength. Our study also showed that the sugar content across different brands of soft drink and beverages was inconsistent suggesting the amount is not guided by any legal limits.

Conclusion

This study conclude that soft drink and beverages consumption is an increasingly dangerous, yet overlooked health issue for a variety of reasons, especially among children with genetic diseases who are already physically and mentally challenged and where consumption is widespread. The added sugar content in the form of sucrose, glucose, or high fructose corn syrup ranges in quantity and is a potential contributor to the ongoing obesity problem in these children. Although many parents also today are often unaware of the sugar content of several popular brands, in the form of sucrose, glucose, or high fructose corn syrup and are unaware that 2-3 servings a day of these drinks are equal to 4-6 times the maximum recommended sugar intake. Yet, despite the magnitude of the obesity problem among children with genetic diseases and the possibility that energy and sports drinks may be compounding this, there are very few active solutions discussed as what should be done to combat this threat.