

Evaluation of Dietary Habits Causing Caries in Primary School Going Children of Bhopal City: A Comparative Study

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ABSTRACT

Background: Dental caries is a disease in which diet play a significant role. Increased prevalence of dental caries is associated with increased consumption of carcinogenic diet and lack of oral health education

Materials and Method: The present study was done in the 10 randomly selected primary schools of Bhopal city. Data was collected about the availability of cariogenic and non-cariogenic food in the canteen and questionnaire was filled out about the eating habits of school children and the effect of various habits to the caries status of the primary school children was assessed.

Result: The present study suggests that the food available in primary school canteens is less cariogenic. The children's eating habits from canteen, home and both has no significant association with deft score.

Conclusion: This study suggests that other factors can be responsible for the caries status of the primary school children. Further investigation is needed to assess the other factors like complete diet history, utilisation of dental services, age, gender etc.

Keywords: Caries, diet, oral hygiene.

INTRODUCTION

Dental caries is a multifactorial disease and preventable public health problem which restricts with normal nutrition and speech.¹ Dental caries is a disease in which diet play a significant role². Increased prevalence of dental caries is associated with increased consumption of carcinogenic diet and lack of oral health education³. Schools play an important role in certifying good health of a child but the eating pattern of children in schools is often ignored. In school canteens foods most readily available are energy-dense fast foods, carbonated soft drinks, sugary breakfast cereals, salty snacks and baked goods, tend to be high in fats, sugars and salt and nutrient-poor. Snacking in schools remains

a potential cause of worry given its role in promoting caries particularly among children.⁴ Students using the canteen often are frequently purchasing snacks and sugar-soft drinks from shops near school, most likely owing to availability of pocket money and an emerging independence⁵. Therefore, this study investigates the availability of cariogenic food in primary school canteen in Bhopal city.

MATERIALS AND METHODS

The present study was done in the 10 randomly selected primary schools of Bhopal city. Only those

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schools were randomly selected having their own canteen and day boarding facility only. Data was collected about the availability of cariogenic and non-cariogenic food in the canteen and questionnaire was filled out about the eating habits of school children. Total 160 subjects were examined in this study by systemic random sampling. The aim of the study is to investigate the availability of cariogenic food in primary school canteen and to assess the effect of various habits to the caries status of the primary school children in Bhopal city. Evaluation of statistical significance between groups to be compared was made by independent unpaired t-test and ANOVA for mean values, Post Hoc and chi-square test and pearson's correlation coefficient for frequencies. Probability value of less than 0.05 was considered statistically significant. The data was analysed using SPSS version 20.

RESULTS

Total 160 subjects were examined in this study by systemic random sampling. Mean age of the childrens are 7.87 ± 1.35 years. Mean DMFT of school children was- 0.67 ± 1.074 and Mean deft was 2.09 ± 2.213 .

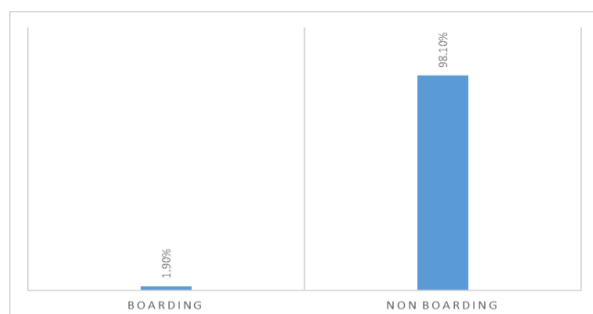


Fig 1: Boarding and Non boarding children.

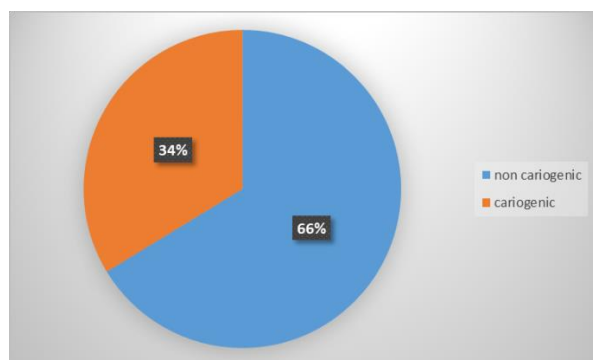
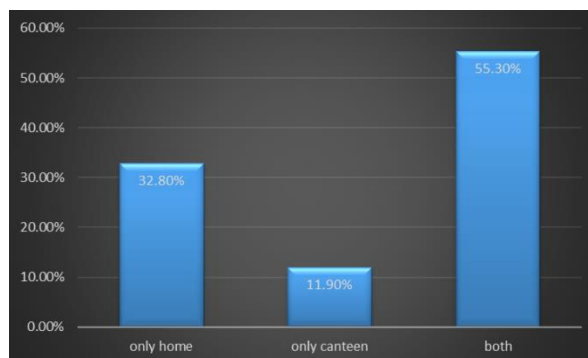


Fig 2: Percentage of cariogenic and non-cariogenic foods in school canteen.



Statistically not significant in relation to the mean deft.

Fig 3: Eating habits of children.

Table 1: Types of food in school canteens

Non cariogenic	Cariogenic
Tea	Chocolates
Patties	Cream roll
Idli	Pastry
Dosa	Jalebi
Vada	Ice cream
Sambhar	
Chips	
Burger	
Kurkure	
Noodles	
Samosa	
Kachori	
Poha	

Table 2. Brushing Habit

	BRUSHING HABIT	NUMBER
	once	113
	Twice	45

Statistically not significant in relation to the mean deft.

DISCUSSION

The present study suggests that the food available in primary school canteens is less cariogenic. The Mean deft is 2.09 ± 2.213 which is similar to the other studies.¹ The childrens eating habits from canteen, home and both has no significant association with deft score. There is no change in deft because of the brushing habits. Thus this study

suggests that other factors can be responsible for the caries status of the primary school children. Further investigation is needed to assess the other factors like complete diet history, utilisation of dental services, age, gender etc.

CONCLUSION

Due to the change in the standards of living and food habits demands more awareness among our children, parents and teachers about the food that is being consumed particularly by schoolchildren in the absence of any monitoring by their parents /guardians. Therefore, such eating atmosphere is needed in the school that achieves a goal of a healthy caries free generation.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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