CAN FUNGIFORM PAPILLAE PREDICT THE RISK OF DENTAL CARIES?

Dr. Anjana Sathyanath¹, Dr. Shruti Eshwar¹, Dr. B.K.Srivastava¹, Dr. Vipin Jain.K¹

¹Department of Public Health Dentistry, K.L.E Society's Institute of Dental Sciences, Bangalore.

INTRODUCTION

Fungiform papillae are believed to influence the taste perception and dietary prefere different individuals.

AIM

To determine the correlation between the number of fungiform

C 11							č
	and hence, the caries experi-			occurrence of de	ental caries in	18-21 yea	ars old age
different individuals.	A TO THE PLANE	gı	roup.	C. S. S.	and the second		a sector
				RESULTS			
MATERIALS AND METHODS			1012	Factors		Mean	Standard
Simple random sampling	Self administered questionnaire related to brushing habits, ethnicity, socioeconomic status, and taste preferences		121	Number of papillae	fungiform	6.87	deviation 2.315
				DM	DMFT		2.315
sampning	Clinical examination (DMFT index)		Section States	Decaye	Decayed teeth		2.035
			Stained filter	AUDIO BARDON AUDIO MININ		14 10.00 10	
	115undergraduate students of a dental college in 18-21 year-old age groupBerlin 18-21 year-old age groupSpearman's Correlation test			Factor 1	Factor 2	r value	p value
115				Number of			
undergraduate				fungiform	DMFT	-0.156	0.095
				papillae Number of			
Ŭ				fungiform	Decayed	-0.242*	* 0.009
age group				-	teeth	-0.242	0.009
			paper	** p<0.05 (s	tatistically significant)		
DISCUSSION	Spearman's Correlation test					Cossed States	
PRESENT STUDY	COMPARATIVE STUDY	INFERENCE				Million	
A higher prevalence of	High numbers of fungiform	There is an inverse			and the second		
dental caries was	papillae are commonly found	correlation between the		- and a state	100	1	6
observed among	in supertasters than non-	number of fun			The state	A PAR	CASSN -
individuals having a	tasters.	papillae and de	ental	Charles and	822		
lesser number of	An increase in the caries	caries.	1. S. C	Contraction of the		MARKING S	
fungiform papillae	experience and S.mutans	15.1.1			1. La	2	

CONCLUSION

levels were found among the

group of non-tasters as

compared to tasters.

•The DMFT score is higher in individuals having a lesser number of fungiform papillae. The taste buds on the fungiform papillae determine the taste threshold and dietary preferences, which in turn influence caries experience.

Limitation : Study sample included only students of a dental college, who may have better oral hygiene than the general population, although the mean DMFT of this age group (2.5) is close to that obtained in this study.

PUBLIC HEALTH SIGNIFICANCE

•A higher prevalence of dental caries is observed among individuals having a lesser number of fungiform papillae. Hence, the number of fungiform papillae could be used as an effective tool in caries risk assessment.

Photographs of stained areas

REFERENCES

•Verma P, Shetty V, Hegde A. Propylthiouracil (PROP)-A tool to determine taster status in relation to caries experience, streptococcus mutans levels and dietary preferences in children. Journal of Clinical Pediatric Dentistry. 2007 Jan 1;31(2):113-7.

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