

# Dental Caries and Body Mass Index: A Cross-Sectional Study among Urban Schoolchildren of Age between 7 and 15 Years in Chennai, India

Sir,

I thank the editorial team of the *International Journal of Community Dentistry* and Dr. Al-Mendalawi MD for their keen interest in our study. We appreciate and thank Dr. Al-Mendalawi for his valuable comments and for pointing out the importance of region-specific body mass index cutoff for assessment.<sup>[1]</sup> As rightly quoted in the editorial, population specific standards measure overweight and obesity, have not been revised since 2015.<sup>[2]</sup> The Dietary Guidelines for Indians by the Indian Council of Medical Research after 2011 have not adopted the new guidelines by the Indian Pediatric Association as they are reported to have similar cutoffs.<sup>[3]</sup> Furthermore, we would like to bring to notice that, though the revised growth charts provide substantially better information, there has still not been any agreed-upon consensus for the same from the governing bodies indicating the need for a pan-India study to better understand the population changes.<sup>[4]</sup> As a result, the next available standardized data which allowed easier categorization of the study population for analysis was used, which is the CDC criterion.<sup>[5]</sup> However, taking note on the comments by Dr. Al-Mendalawi, we have reassessed the data according to the percentile specification given in the study by Kadhikar *et al.* (2015) and compared the factors separately for boys and girls. This study considers boys above the 71<sup>st</sup> percentile and girls above the 75<sup>th</sup> percentile in the height–weight chart as obese, in contrast to the 85<sup>th</sup> percentile values based on CDC guidelines. This revised analysis demonstrated that there existed a positive correlation between obesity and dental caries among boys, similar to what was demonstrated in our earlier results. Further snacking was associated with obese females though not found to have any statistically significant correlation [Table 1a and b].

Hence, within the limitation pointed out in our manuscript, we would like to reconfirm that with the exception of dental caries and obesity in boys, none of the factors demonstrated correlation among this sampled population. We do hope this explanation would satisfy our readers. We again thank for the interest generated in this study.

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Nil.

## Conflicts of interest

There are no conflicts of interest.

**Table 1a: Revised distribution of variables assessed among males in the study**

Factors assessed	Male BMI_new		Chi-square significance
	Not obese, n (%)	Obese, n (%)	
Dental caries			
Absent	47 (21.1)	9 (9.5)	0.015*
Present	176 (78.9)	86 (90.5)	
Sweet score			
Low risk	31 (13.9)	10 (10.5)	0.486
Moderate risk	109 (48.9)	53 (55.8)	
High risk	83 (37.2)	32 (33.7)	
Junk			
Yes	83 (37.2)	42 (44.2)	0.260
No	140 (62.8)	53 (55.8)	
Snack			
Yes	143 (64.1)	63 (66.3)	0.780
No	80 (35.9)	32 (33.7)	

\* $P \leq 0.05$  indicates statistical significance; Spearman's correlation for dental caries and gender was found to be  $P=0.006$  which is significant. BMI: Body mass index

**Table 1b: Revised distribution of variables assessed among females in the study**

Factors assessed	Female BMI_new		Chi-square significance
	Not obese, n (%)	Obese, n (%)	
Dental caries			
Absent	15 (8.2)	14 (12.7)	0.230
Present	167 (91.8)	96 (87.3)	
Sweet score			
Low risk	11 (6.0)	15 (13.6)	0.060
Moderate risk	100 (54.9)	61 (55.5)	
High risk	71 (39.0)	34 (30.9)	
Junk			
Yes	61 (33.5)	51 (46.4)	0.035*
No	121 (66.5)	59 (53.6)	
Snack			
Yes	135 (74.2)	76 (69.1)	0.418
No	47 (25.8)	34 (30.9)	

\* $P \leq 0.05$  indicates statistical significance; Spearman's correlation for junk and gender was found to be  $P=0.810$  which is not significant. BMI: Body mass index

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