

Diet Quality And Weight Status Among Urban Poor Adolescent In Kuala Lumpur, Malaysia During Covid 19

Tay JEF¹, Tung SEH², Satvinder K¹, Gan WY³, Che'Ya Nik⁴, Tan CH¹

¹Department of Food Science and Nutrition, Faculty of Applied Sciences, UCSI University, 56000 Cheras, Malaysia

²Department of Public Health Medicine, Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia

³Department of Nutrition, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

⁴Department of Agriculture Technology, Faculty of Agriculture, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia



Introduction

- The COVID-19 pandemic lockdown is associated with changes in daily lifestyle behaviour, including diet^{1,2}. However, there is limited information on diet quality and its association with weight status of urban poor adolescents during COVID-19 pandemic.
- This study aimed to determine the association between diet quality and weight status among urban poor adolescents in Kuala Lumpur, Malaysia during COVID-19 pandemic

Methodology

Study Design	Cross-sectional study (Nov 2021- March 2022)
Sampling Method	Multistage stratified random sampling
Study Area	People's Housing Program (PPR) Kuala Lumpur, Malaysia
Subjects	273 urban poor adolescents
Research Instruments	Sociodemographic data Anthropometric measurement (Weight, Height) ³ Standardized Malaysian Healthy Eating Index (S-MHEI) ⁴

Inclusion criteria

- Malaysian adolescents aged 10-17 y/o who lived in PPR

Exclusion criteria

- Adolescents with chronic medical problems, mental, physical or learning disabilities, pregnant or lactating

Results and Discussion

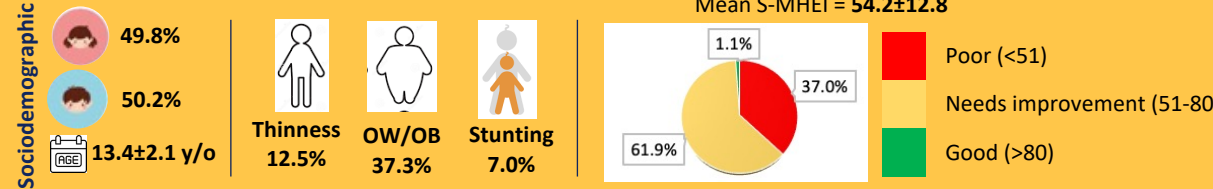


Table 1 S-MHEI score according to weight status

S-MHEI Components	Thinness	Normal	OW/OB	Total	p-value
Total grains	4.9±0.5	4.9±0.3	4.9±0.6	4.9±0.5	0.150
Whole grains	0.5±1.4	0.3±1.1	0.3±1.1	0.2±1.2	0.501
Fruits	2.6±4.2	3.6±4.9	2.8±4.3	3.2±4.4	0.149
Vegetables	4.5±4.6	4.1±4.4	4.5±4.2	4.3±4.3	0.724
Fish	5.9±5.0	5.6±4.9	5.1±4.9	5.4±4.9	0.736
Meat, poultry and eggs	9.1±2.9	8.8±3.3	8.8±3.2	8.8±3.2	0.981
Legumes and nuts	3.8±4.9	3.8±4.8	4.1±4.9	3.9±4.8	0.833
Milk and milk products	2.6±3.8	3.4±4.4	3.3±4.3	3.2±4.3	0.842
Total Fat	8.0±1.7	8.1±1.5	7.6±2.2	7.9±1.9	0.545
Sodium	8.9±2.6	7.3±4.2	7.3±4.1	7.5±4.0	0.193
Sugar	4.0±3.1	4.5±3.3	5.1±2.8	4.7±3.1	0.333
Total S-MHEI score	55.7±13.8	54.6±12.3	53.6±13.2	54.2±12.8	0.910
Poor	13 (38.2)	45 (32.8)	43 (42.2)	101 (37.0)	
Needs improvement	20 (58.8)	91 (66.4)	58 (56.9)	169 (61.9)	0.572
Good	1 (1.9)	1 (0.7)	1 (1.0)	3 (1.1)	

- Insignificant association between diet quality and its components with weight status ($p>0.05$)
- Consistent findings with past studies which also showed no significant association^{5,6}
- The lack of association could be due to diet recall bias, which lead to misreporting⁵

SD, standard deviation; Data were expressed as mean ± SD and n (%) unless otherwise indicated. p-value was estimated using Kruskal Wallis Test and Chi-square Test. Significant difference at * $p<0.05$.

Conclusion

- The findings suggested that there is no significant association between diet quality and weight status. The diet quality might not have effects on weight status of the urban poor adolescents. Nevertheless, poor diet quality and weight status is still a highlighted issue among the urban poor adolescents during COVID-19 pandemic.
- Nutrition education and intervention focus on enhancing diet quality and improving weight status should be implemented among the urban poor adolescents.

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Research Procedure

