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The relationship between health risk and consumption of confectioneries : An instrumental variable approach (Article) (Open Access)

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Abstract

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Consumption of confectioneries is a determinant of health risk. However, how health risk determines the intake of confectioneries remains unclear. The objective is to examine how waist circumference (WC) as a measurement of health risk influences the consumption of confectioneries among adults. The research question is that do high-risk people consume more confectioneries than low-risk people? Methods: A quantitative research design with a focus on establishing a correlation between the measurement of health risk and consumption of confectioneries was adopted. Secondary analysis of a nationally representative cross-sectional data was used. The population of interest was the Malaysian population, regardless of being obese or non-obese. Analyses stratified by body mass index (BMI) or WC were not conducted. An instrumental variable (IV) approach was used to estimate the regression of consumption of confectioneries. BMI was used as an IV for WC. In the first stage, we regressed WC on all exogenous variables, including BMI. Then, we replaced the original values of WC with the fitted values of WC. Results: BMI was an appropriate IV for WC. An additional cm of WC was associated with a 0.022 unit of reduction in the serving of confectioneries per week. The negative relationship between WC and consumption of confectioneries indicated that adults who had high health risk consumed lesser confectioneries than adults who had low health risk. Conclusion: Drawing from the IV regression results, the present study highlighted that people with high health risk, rather than people with low health risk, were less likely to consume confectioneries. © 2020. Malaysian Journal of Nutrition. All rights reserved.

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