

Estimating changes in burdens of cardiometabolic health due to dietary transition in Korea

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The burden of chronic diseases in Korea has increased over the past 10 years. However, quantitative estimates of how changes in diet and metabolic risks have contributed to these shifting burdens are not currently available. This study aims to evaluate the contributions of the dietary factors and metabolic factors to chronic diseases such as cardiovascular disease, stroke, and diabetes burdens in Korea and to estimate how these contributions have changed over the past 10 years. We used data on risk factors by sex, age, and year from Korea National Health and Nutrition Examination Survey. Relative risks for the effects of risk factors on cause-specific mortality were obtained from meta-analyses. The population-attributable fraction (PAF) attributable to risk factors was calculated across sex- and age- strata from 1998 to 2011. The results showed that suboptimal diet and high blood pressure were the leading risk factors for CMD mortality in Korea. Among individual dietary factors, high intake of sodium and low intake of fruits and whole grains were responsible for the highest CMD deaths especially later year of KNHANES. Our results highlight the need for effective interventions to manage dietary risk factors, as well as to reduce the burden of metabolic risks. Our findings inform the need for evaluation of evidence-based national government policies to improve diet and prevent CMD in Korea.