

Dietary and physical activity recommendations to prevent type 2 diabetes in South Asian adults: a systematic review (paper in review: full paper will be published soon)

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Abstract

Intervention trials and guidelines for the prevention of type 2 diabetes (T2D) in populations of South Asian origin often include strategies to improve diet and physical activity that are based on strategies developed for other populations. These may be less applicable to the South Asian target populations. We aimed to provide an overview of included recommended dietary and physical activity components, and to identify whether these were supported by evidence of their effectiveness. Databases were searched until August 2016 for intervention studies and guidelines with an adult South Asian population without T2D. The protocol was registered in PROSPERO, registration number: CRD42015207067. The quality of included studies and guidelines was assessed. Dietary and physical activity components, and effects on T2D incidence, glucose and adiposity measures, were summarized in tabular format and evaluated narratively. Fourteen intervention studies and four guidelines were identified. Dietary and physical activity components were similar to recommendations for the general population. No evidence to support the effectiveness of components was provided. Moreover, we were unable to assess patterns of components to determine the effects of specific components. Evaluation of current and emerging components among South Asian populations and subgroups seems necessary to formulate more specific recommendations in future guidelines and intervention studies.