Lifestyle Interventions Are Cost-Effective in People with Different Levels of Diabetes Risk: Results from a Modeling Study

Among the risk factors for developing type 2 diabetes, high body weight, physical inactivity and smoking are the most common cited ones. Overweight has in fact been identified as the most serious of these factors, with the risk of developing type 2 diabetes increasing by 10-30% for every 1-unit increase in BMI. Evidence favourably points towards interventions focused on diet and physical exercise to reduce the incidence of diabetes. The primary aim of this study was to explore and compare the cost-effectiveness of lifestyle interventions for individuals at different levels of diabetes risk.

This study explores the lifetime health effects and cost-effectiveness of a once-only implementation of one of two interventions:

1) A community-based programme with a duration of 5 years focused on nutrition and exercise, and targeted to the general population
2) An intensive lifestyle intervention with a duration of 3 years focusing on diet and exercise, and targeted to adults with moderate risks of developing diabetes

On average, the study pointed to greater health benefits acquired for individuals who received the lifestyle intervention. However, both interventions reduced cumulative lifetime-related medical costs, and emphasised that the intervention costs needed to prevent diseases were lower for the community-based intervention. Overall, both of the interventions seemed to be effective in reducing diabetes incidence, with both interventions identified as a cost-effective way to curb the growing burden of diabetes.