Yale school of public health

Job Talk

Vasanti Malik, ScD, MS The Global Burden of Obesity and Diabetes: Role of Diet Quality and Implications for Policy

Type 2 diabetes (T2D) has reached epidemic proportions in many countries around the world, as economic growth and urbanization continue to fuel rapid nutrition transitions that promote positive energy balance. A major characteristic of these transitions has been a shift from intake of coarse whole grains rich in dietary fiber to intake of highly refined carbohydrates, such as polished white rice and refined wheat flour. Intake of added sugars, particularly from sugary beverages has also increased dramatically in many countries. Together, these changes have resulted in an overall reduction in the carbohydrate quality of the diet.

Research has shown that consumption of high-quality carbohydrates, such as whole grains can reduce the risk of developing T2D by improving blood glucose and insulin levels. In contrast, consumption of refined grains has been associated with increased risk of T2D. Adopting a diet that is rich in whole grains could therefore be a cost-effective, feasible, and sustainable approach to T2D prevention, particularly in low- and middle-income countries (LMC), which have limited resources and infrastructure to manage escalating rates of chronic diseases. In this talk, I will describe some pilot work that aims to improve the carbohydrate quality of staple foods to prevent T2D in countries undergoing epidemiological transition. Projects are at various stages in design and implementation in 10 countries in Asia, Africa, the Middle East and Latin America to assess the effect of substituting culturally-appropriate whole grains for refined carbohydrates staples on intermediate markers of T2D risk. Prior to conducing dietary interventions, the cultural acceptability of intervention foods is evaluated using focus groups. Results from these studies will be used to design larger trials to assess whether whole grain dietary modification can have a long-lasting, measurable impact on T2D prevention with the goal of motivating policy and dietary recommendations.

Tuesday, December 10, 2013 1:00 pm - LEPH - 216 - 60 College Street

Lunch provided