Nutrition-Related Policy and Environmental Strategies to Prevent Obesity in Rural Communities: A Systematic Review of the Literature, 2002-2013

Residents of rural communities in the United States are at higher risk of obesity than people living in urban and suburban environments. Poverty and lack of access to healthy retail food outlets limit access to healthy foods and contribute to less healthy diets. Policy and environmental change strategies supporting healthier dietary intake can prevent obesity and promote health equity. However, little is known about the effectiveness of these strategies in rural communities. The purpose of this systematic review was to coordinate evidence on the adaptation, implementation, and effectiveness of policy and environmental obesity prevention strategies in rural areas.

A database search identified 663 articles, of which 33 articles (reporting 29 studies) met inclusion criteria for the review. The studies included rural areas in the US (n=25) and Canada (n=4). Included in this group were American Indian Tribes and First Nations of Canada (n=13).

The review was guided by the Centers of Disease Control and Prevention’s (CDC) Recommended Community Strategies and Measurements to Prevent Obesity in the United States (COCOMO’s). There are 10 nutrition strategies within COCOMO. The review found that many, but not all COCOMO strategies were applied in a rural setting and that multiple approaches were used to adapt them. The most commonly implemented strategies focused on increasing the availability of healthy foods and beverages and limiting the availability of unhealthy ones. Fewer studies examined approaches to limiting advertising of less healthy food and beverages or modifying portion size.

Overall the findings do not provide policy makers with information about the effectiveness of different approaches, but do provide insights into the various options available to improve the food environment in rural communities. The review highlighted some key areas for further research. These include: i) comparing the effectiveness of policy changes in rural and urban communities, ii) more investigation into environments in rural settings such as hospitals and recreational sites, iii) aligning federal food and nutrition assistance programs with efforts to increase access to local foods, iv) more research that includes cost data on implementing intervention strategies and v) exploration of the economic impact of increasing local food access and the role of food champions.