

Diabetes and Physical Activity

Translating Evidence into Action

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Introduction

At no time has the need been more apparent for effective community-wide initiative on behalf of the health of Americans. As much of the nation's attention has been drawn to the fact of public health as the frontline of defense against terrorism, an epidemic of subtle but compelling urgency and lethality has been sweeping the nation. And, as with terrorism, the twinned epidemics of sedentary lifestyles and diabetes cannot be contained without the concerted efforts of informed leadership in our communities using proven approaches to counter the threat.

Nearly 16 million Americans have diabetes, one third of whom are as yet undiagnosed.¹ Diagnosed diabetes in adult Americans increased from 4.9% in 1990 to 6.5% in 1998,² and 1999 data from the Behavioral Risk Factor Surveillance System reveal that the prevalence increased by 6% in just 1 year.³ In 1990, only four states reported that greater than 6% of residents were diagnosed with all types of diabetes, but just a decade later, the number of states reporting levels that high rose to 42 in the year 2000.⁴

Coincidences abound in the midst of rapid changes, but it is no coincidence that the incidence of diabetes has risen in tandem with the prevalence of sedentary lifestyles and obesity in our country. In the 6-year period from 1994 to 1999, the number of U.S. states in which greater than 15% of the population was overweight climbed from 17 to 44.⁵

Despite these alarming statistics, we know there are ways to turn the trend. Last year, the Diabetes Prevention Program announced the results of a large clinical trial indicating that at least 10 million Americans at high risk for type 2 diabetes would be able to reduce their level of risk by 58% through diet and exercise.⁶ Those who achieved this reduction had engaged in walking or other moderate-intensity exercise for 30 minutes each day and reduced their body weight by 5% to 7% — a 5% weight loss yielding a nearly 60% reduction in risk for diabetes!

How then can we translate the success achieved

within the controlled environment of a clinical trial to practical, real-world circumstances? This supplement to *The American Journal of Preventive Medicine* offers important guidance in this respect. The Task Force on Community Preventive Services is a crucial partner in this effort. Launched in 1996 under the auspices of the Department of Health and Human Services, the Task Force is charged with the comprehensive review of the science base in support of various community-based interventions, and the development of recommendations for their application in health promotion and disease prevention. The Task Force publishes its recommendations in the *Guide to Community Preventive Services*.

In the area of diabetes, the lineage and relationship of the work of the Task Force on Community Preventive Services with that of the U.S. Preventive Services Task Force is especially apt, as perhaps with no other disease is the importance of the link between clinical and community interventions so clear. The potential for gain against the toll from diabetes is great, but only if we pair aggressive clinical interventions with equally aggressive community action fundamental to broad lifestyle changes. The articles in this supplement show that we have learned much about the effectiveness of individual approaches, location-specific initiatives and community-wide interventions, both for improving management of diabetes and for increasing physical activity.

Recommendations presented here should be helpful for state and local health departments, policymakers, healthcare systems, managed care organizations, researchers, funders of public health programs, and other interested audiences. Even beyond our shores, the findings will help better alert and equip our colleagues and cousins in other nations, for whom the magnitude of our travails may be serving as a harbinger of some of the problems looming large on their horizons.

We in The Robert Wood Johnson Foundation welcome the recommendations of the Task Force, as both a call and a blueprint for the sort of action that works. Among our goals over the years for reducing chronic disease among Americans has been a commitment to reducing the avoidable burden imposed by diabetes. The Foundation continues its work in this field, with

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dedicated programming for improving self-management and community supports for individuals who are diagnosed with or at risk for diabetes. Our physical activity initiatives include national programs to increase activity among Americans aged 50 and older, to explore policy and environmental issues that impact our ability to be physically active within our communities, and to foster community design that re-engineers activity back into our lives.

I applaud the Task Force for its pioneering contributions to establishing such a strong evidence base for the community-wide success we all seek on behalf of a diabetes-free life for those already in harm's way, as well as those whose risk is only now beginning to take form. The existence of the Task Force recommendations, and the actions they trigger and enhance, will bring us all closer to the fulfillment of our mutual aspirations for a population that reaches its full health potential.

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