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Lifestyle Interventions Are More Effective Than Drug Therapy in Preventing Diabetes

BREAKTHROUGH

Weight loss and exercise are more effective than drug therapy in preventing diabetes.

SCOPE OF THE PROBLEM

Nearly 21 million Americans suffer from diabetes, and another 54 million (one in four) adults have pre-diabetes. Alarmingly, 2 million children aged 12-19 have indicators of the disease. Obese and older individuals are most at risk, with 20.9 percent of people aged 60 and older affected. Obesity prevention across the lifespan is critical to diabetes prevention. While pre-diabetes is asymptomatic, it can be detected by a blood glucose test. People with pre-diabetes are highly likely, within 10 years, to progress to “full blown” diabetes.

ECONOMIC BURDEN

One of every ten health care dollars is attributed to diabetes.¹ In 2007, the total annual economic cost of diabetes was \$174 billion and per capita costs were \$11,744. People with diagnosed diabetes, on average, have medical expenditures about 2.3 times higher than people without the disease.

LANDMARK STUDY

In 2002, the Diabetes Prevention Program (DPP), funded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), showed that an intensive lifestyle intervention that included medical nutrition therapy, weight loss of 5-7 percent, and exercise was more effective in preventing the progression from pre-diabetes to diabetes than was drug therapy alone. During the course of the study, the chance of developing diabetes was 58 percent lower in the lifestyle intervention group, but only 31 percent lower in the group receiving drug therapy.² The DPP lifestyle approach proved more effective in older people than in younger people in preventing diabetes.³

PUBLIC HEALTH & EDUCATION APPLICATION

Promotion of physical activity, healthy dietary patterns that include higher intakes of fruits and vegetables, healthy dietary fats and abundant plant foods improve blood chemistry, body weight, help prevent diabetes and other chronic conditions.⁴⁻⁵ For children, collaborations with school food service programs, classes on nutrition and health, physical activity, parental involvement, and home activities with parents are also successful in decreasing body fat, slowing weight gain, decreasing fat intake, and/or increasing fruit and vegetable intake. African American youth and other ethnic minorities have a much higher burden of diabetes-related risk factors than do Caucasians, so future studies should include all of America’s racial and ethnic groups. Studies aimed at the prevention of diabetes during pregnancy should also be considered.

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