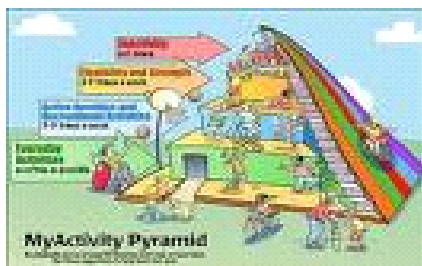


Diabetes Partners in Prevention: A Publication of the Connecticut Department of Public Health Spring 2011



Physical Activity and Type 2 Diabetes

Stephanie M. Poulin, MPH, MT(ASCP), Epidemiologist, Connecticut Department of Public Health



Approximately 6.9% of Connecticut's adults have diagnosed diabetes. Of these individuals, an estimated 35.7% are physically inactive (compared with 21.2% of all Connecticut's adults). Behavioral Risk Factor Surveillance System (BRFSS) survey respondents were categorized as physically inactive if they reported no physical activity in the previous month.¹ Recent, high-quality studies have highlighted the positive health effects of regular physical activity.

These studies have demonstrated that participation in regular physical activity helps prevent and control insulin resistance, prediabetes, type 2 diabetes, and diabetes-related health complications. Physical activity also aids in the management of blood glucose levels, lipids, blood pressure, and cardiovascular risk and mortality.

In December 2010, the American Diabetes Association and the American College of Sports Medicine published new recommendations for physical activity for individuals with type 2 diabetes. The new guidelines recommend that individuals with type 2 diabetes should accumulate at least 150 minutes per week of moderate to vigorous aerobic exercise. They recommend that individuals should engage in aerobic exercise at least 3 days per week, with no more than 2 consecutive days between aerobic activity sessions. Resistance training performed 2 to 3 times per week on non-consecutive days is also recommended.

These recommendations take into account the fact that many people with diabetes may have health-related complications that limit their ability to undertake sustained vigorous physical activity. The expert panel concluded that most persons with type 2 diabetes can exercise safely as long as certain precautions are taken and that increasing physical activity is critical for optimal health in individuals with type 2 diabetes. However, sedentary individuals with type 2 diabetes should be evaluated by a physician before participating in exercise more intense than a brisk walk.

The new guidelines for exercise in type 2 diabetes were published jointly in the December 2010 issues of *Diabetes Care* (<http://care.diabetesjournals.org/>) and *Medicine & Science in Sports & Exercise* (<http://journals.lww.com/acsm-msse/pages/default.aspx>).

¹The data source for percentage of adults with diabetes who are inactive and for the percentage of Connecticut adults who are inactive is the Behavioral Risk Factor Surveillance System (BRFSS) survey. In the years 2007 to 2009, 20,174 Connecticut adults responded to the BRFSS telephone surveys.

**Diabetes Boot Camps at Charlotte Hungerford Hospital
Lois Pelletier, RN, CDE**

Charlotte Hungerford Hospital Diabetes Education Center conducted two "Diabetes Boot Camps" at the Wisdom House Retreat Center in Litchfield. There was a three day session for people with type 1 diabetes and a separate session for those with type 2.

Participants were able to get experience on a rowing ergometer, row on Bantam Lake and walk on the boardwalk at White Memorial Foundation. Attendees also attended a series of presentations on diabetes, participated in interactive group sessions and created sample meal plans. Group sessions were also offered for spouses/significant others to discuss their concerns about living with someone with diabetes.

Both the type 1 and type 2 participants wore continuous glucose monitors to record blood sugar readings every five minutes. They were able to see how exercise and healthy portion controlled meals affected blood sugars in a positive way. Patients reported they intend to check blood sugars more often, exercise more regularly and make healthier food choices. Attendees will be followed every three months to measure outcomes.

**Charter Oak Community Health Center Creates Chronic Disease Department
Mayra Cagganello, CHES, MPH**

Charter Oak Health Center (COHC) has created a new Chronic Disease Department. By creating this department COHC has made chronic care a part of the organization's vision, mission, goals, performance improvement, and business plans. The Health Center has a core team in charge of planning and implementation of changes in the organization. The team members include an Internal Medicine Doctor, a Pulmonologist, a Certified Health Education Specialist, a Dietician, a Nurse Educator, and Certified Diabetes Educator/APRN. The team meets weekly to discuss the incorporation of the chronic care model in their delivery system and the progression of the changes implemented. The team has completed multiple Performance Improvement Plans (PIP). The outcomes of these PIPS include (but are not limited to) an increase in the number of patients who have been screened for diabetes, asthma, and Chronic Obstructive Pulmonary disease. For more information contact Mayra Cagganello at mcagganello@thecharteroak.org



**Diabetes Benefit Redesign at Daymon Worldwide Inc.
William Pokluda, Daymon Worldwide**

Daymon Worldwide (based in Stamford, CT) offers health benefits to its approximately 1300 United States payroll benefit-eligible employees. In 2010, Human Resources staff consulted with the Diabetes Prevention and Control Program at the Department of Public Health to design a more "diabetes friendly" benefits package. Starting In 2011, Daymon will cover diabetes related treatment at 100% In-Network. This includes diabetic supplies, glucose monitors, nutritional counseling, laboratory tests and prescription drugs.

In addition, Daymon offers free-of-charge to all its covered members access to a number of wellness-related tools and services to support the overall health of its membership, which includes those with diabetes. Employees can take advantage of online health risk assessments and tools, health coaches, disease management, and maternity management programs. Annual routine physicals are also covered at 100% In-Network. Employees are eligible to receive financial rewards for getting their annual physical and for participating in wellness programs. Additionally, to raise awareness about everyone's individual health risks, in 2011 Daymon will sponsor "Blueprint for Wellness" (a voluntary "know your numbers" program) through Quest Diagnostics to help employees identify their risk for metabolic syndrome, which includes a test for blood glucose levels. Participants in the Blueprint for Wellness are also eligible to receive financial rewards for their participation. Overall, the new diabetes benefit changes build upon a number of benefit and wellness efforts that Daymon has offered to its employee and their family members the past several years.

**The number of Americans with diabetes rises to 25.8 million
Cindy Kozak, RD, MPH, CDE, Connecticut Department of Public Health**

The Centers for Disease Control and Prevention (CDC) has released the 2011 national diabetes fact sheet showing that 1 of 3 U.S. adults is at high risk of developing type 2 diabetes. To get these new facts about diabetes go to <http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

Highlights of the data show that nearly 26 million Americans now have diabetes. Further, an estimated 79 million U.S. adults have prediabetes, a condition in which blood sugar levels are higher than normal, but not high enough to be considered diabetes. Prediabetes raises a person's risk of type 2 diabetes, heart disease and stroke.

Diabetes affects 8.3 percent of all Americans, and 11.3 percent of adults aged 20 years and older, according to the 2011 National Diabetes Fact Sheet. About 27 percent of those with diabetes – 7 million Americans – do not know they have the disease. Prediabetes affects 35 percent of adults aged 20 years and older.

Racial and ethnic minorities continue to have higher rates of diabetes after adjusting for population age differences. For adults, diabetes rates were 16.1 percent for American Indians/Alaska Natives, 12.6 percent for blacks, 11.8 percent for Hispanics, 8.4 percent for Asian-Americans, and 7.1 percent for non-Hispanic Whites.

Jewel Mullen, MD, MPH, MPA, Commissioner
Cindy Kozak, RD, MPH, CDE, Diabetes Program Coordinator

Diabetes Prevention & Control Program
410 Capitol Avenue, MS11APV
P.O. Box 340308
Hartford, CT 06134-0308
860-509-7737 cindy.kozak@ct.gov