



BY THE FACTS :

Diabetes Prevention Program

OCTOBER 2012



NYS HEALTH
FOUNDATION

Improving the state of New York's health

Diabetes Prevention Program

Nearly 79 million American adults are estimated to have prediabetes—a condition also known as borderline diabetes. If left unchecked, diabetes is expected to affect **one out of three American adults by 2050**. The financial costs of diabetes are also staggering—direct medical costs of diabetes are expected to soar to **\$336 billion in the next two decades**.

Yet, **diabetes is largely preventable**. One program shown to reduce the risk of this chronic disease is the Centers for Disease Control and Prevention (CDC)-recognized national Diabetes Prevention Program (DPP).

WHAT IS THE DPP?

The **DPP is a 16-week, community-based program** conducted by trained lifestyle coaches to teach people with prediabetes how to modify their eating and physical activity habits, and to sustain those changes over time.ⁱ The goal of the program is to help people **reduce their weight** through a healthy **low-calorie, low-fat diet** and by engaging in at least **150 minutes per week of moderate physical activity**.

After the initial 16 weeks, a monthly maintenance program provides ongoing support for handling special situations like holidays, staying motivated, problem solving, self-monitoring, staying active, and continuing healthy eating habits. Participants can meet with their lifestyle coach once a month for a six-month period.

WHO CAN TEACH THE DPP?

A trained lifestyle coach teaches the DPP and oversees the maintenance period. Lifestyle coaches can be certified through a CDC-approved, two-day training currently made available through the Diabetes Training and Technical Assistance Center at Emory University.ⁱⁱ **Lifestyle coaches must have strong interpersonal and group facilitation skills**. Core responsibilities include:

- ▶ lead the 16-week core class sessions;
- ▶ review and provide feedback on each participant's eating and physical activity logs; and
- ▶ weigh participants at each class.

KEY FEATURES OF THE DPP

The original DPP was developed as part of a National Institutes of Health (NIH)-funded randomized, controlled trial with the following **six key features** in mind:

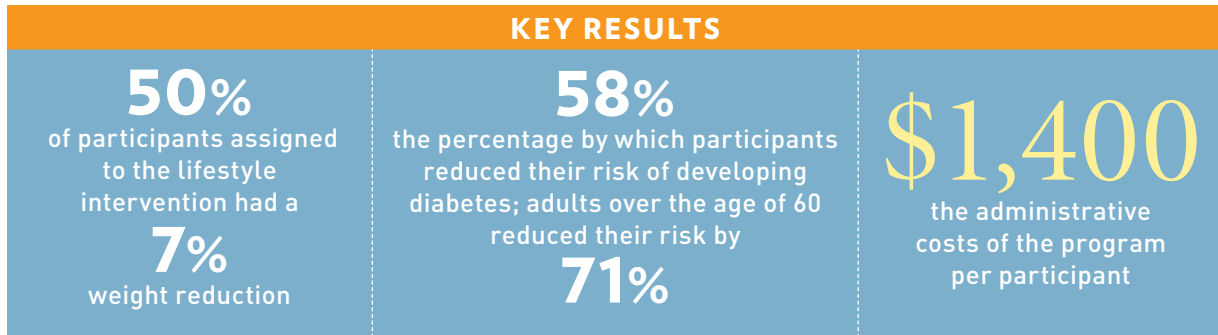
- ▶ very clear weight loss and physical activity goals;
- ▶ run by individual case managers or lifestyle coaches;
- ▶ ongoing and intensive, and includes a maintenance period;
- ▶ participants can tailor the program to their needs;
- ▶ can meet the needs of an ethnically diverse population through its materials and strategies; and
- ▶ an extensive local and national network of training, feedback, and clinical support for lifestyle coaches.ⁱⁱⁱ

The goal is to help participants achieve at least a **5–7%** weight reduction—thus reducing their risk of developing diabetes by more than **50%**.

Evidence Behind the Program

ORIGINAL DPP STUDY

The DPP was first developed and tested by the NIH as an intensive, one-on-one case management program. This initial version had strong outcomes—**half of the 3,234 participants** met the **weight loss goal of 7% reduction in body weight** and increased their physical activity.^{iv} These participants **reduced their three-year risk of developing Type 2 diabetes by 58%.**^v



COMMUNITY-BASED DPP INTERVENTION DESIGNED FOR GROUP SETTINGS (Y-DPP)^{vi}

The NIH results were strong, yet the intervention was too costly to achieve widespread replication. Researchers then translated the one-on-one lifestyle intervention into a group-based setting that was less expensive to operate. Indiana University adapted the DPP into a 16-week, community-based program delivered by the YMCA (Y-DPP). The Y-DPP has been found to be as effective as the original model, with similar weight loss goals achieved and sustained over time.



REPLICATING THE DPP IN NEW YORK STATE

In 2010, the New York State Health Foundation, in collaboration with the New York State Department of Health Diabetes Prevention and Control Program and the Alliance of New York State YMCAs, implemented the Y-DPP in **10 regions of the State.**

YMCAs were selected based on their geographic diversity, interest in and capacity to offer the program, prevalence of diabetes in their respective communities, and ability to serve high-risk, diverse populations. YMCA staff was trained to serve as lifestyle coaches and deliver the Y-DPP curriculum; more than 250 people have been served by the program. The **CDC is also funding the program at an additional 52 YMCA locations in New York City.**

KEY RESULTS

50%
of participants had a
5%
weight reduction upon
completing the program

70%
of participants reported
their general health
was better after completing
the program

7%
weight reduction achieved
by nearly
50%
of participants six months
after program completion

HEALTH PLANS REIMBURSING FOR THE Y-DPP IN NEW YORK STATE

- ▶ **UnitedHealth Group** reimburses YMCAs for each UnitedHealth member who successfully completes the program.^{vii}
- ▶ **HealthNow** reimburses \$320 per participant who completes the program and achieves weight loss.
- ▶ **Independent Health** reimburses \$320 per participant (\$50 co-pay).^{viii}

RESOURCES NEEDED TO IMPLEMENT THE DPP

The **estimated cost of training a lifestyle coach ranges from \$200–\$2,000**, depending on the location of the training center. Once a lifestyle coach is trained, **the average cost of delivering the program is \$275–325 per participant**.^{ix} In New York State, there is a local training resource based at the Quality and Technical Assistance Center housed at the Center for Excellence in Aging and Wellness, University at Albany.

Community organizations that seek to implement the DPP must be pre-approved by the CDC through its Diabetes Prevention Recognition Program (DPRP).^x The **DPRP's requirements for organizations** include:

- ▶ eligibility standards for program participants;
- ▶ participant safety and confidentiality;
- ▶ location and staffing standards; and
- ▶ supplies (e.g., a scale to weigh people, journals for participants to track their eating habits, handouts related to sessions).

ⁱ Centers for Disease Control and Prevention website, <http://www.cdc.gov/diabetes/prevention/recognition/curriculum.htm>.

ⁱⁱ Diabetes Training and Technical Assistance Center website, <http://dttac.org/>.

ⁱⁱⁱ Diabetes Prevention Program Research Group. (2002). "The Diabetes Prevention Program: Description of Lifestyle Intervention." *Diabetes Care*, 25, 2165-71.

^{iv} Diabetes Prevention Program Research Group. (2002). "Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin." *New England Journal of Medicine*, 346, 393-403.

^v *Id.*

^{vi} Ackermann R.T., Marrero D.G. (2007). "Adapting the Diabetes Prevention Program Lifestyle Intervention for Delivery in the Community: the YMCA Model." *The Diabetes Educator*, 33 (1), 69-78.

^{vii} Diabetes Prevention and Control Alliance website, <http://notme.com/dpca/preventionProgram.html>.

^{viii} Independent Health website, <https://www.independenthealth.com/Static%20Files/PDFs/Diabetes%20White%20Paper.pdf>.

^{ix} Ackermann R.T., Marrero D.G. (2007). "Adapting the Diabetes Prevention Program Lifestyle Intervention for Delivery in the Community: the YMCA Model." *The Diabetes Educator*, 33(1), 69-78.

^x Centers for Disease Control and Prevention website, <http://www.cdc.gov/diabetes/prevention/recognition/index.htm>.