Harold Schnitzer Diabetes Health Center

Focus on the National Diabetes Prevention Program

Delaying/preventing diabetes in those at high risk

National Diabetes Prevention Program

- **What is it?**
- **Does it work?**
- **Program overview**
- **What's Happening in Oregon?**

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Diabetes Vs. Prediabetes

Type 1 Diabetes- Pancreas no longer makes insulin (auto-immune condition).

Type 2 Diabetes- Combination of insulin resistance and less insulin being made. Caused by genetic and lifestyle factors.

Pre-Diabetes = "Pre type 2" diabetes. Caused by genetic and lifestyle factors.

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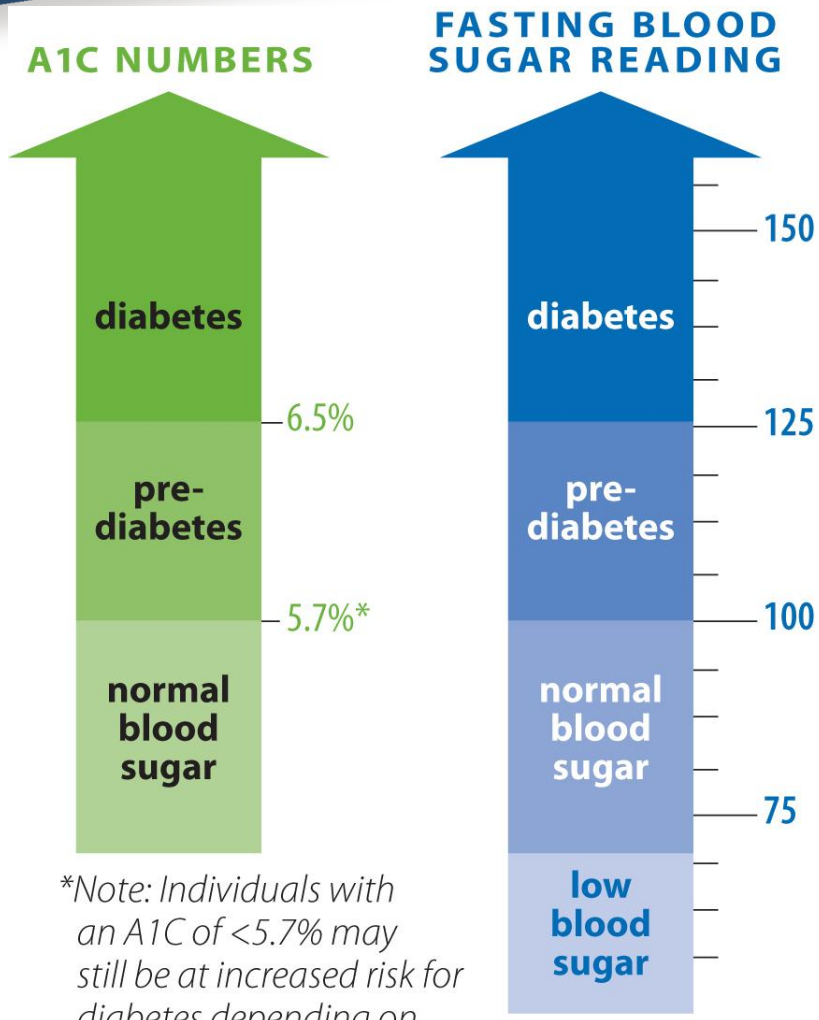
Diabetes Vs. Prediabetes



*Note: Individuals with an A1C of <5.7% may still be at increased risk for diabetes depending on risk factors like obesity and family history of diabetes.

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How Widespread Are Diabetes and Prediabetes?

The CDC projects that as many as **one in three adults** in the U.S. could have diabetes by 2050 if current trends continue.

- In the United States nearly **26 million** people have **diabetes** (2011)
  - 11.3 % of the U.S. adult population
  - More than 1 out of 4 (7 million) do not know they have the disease
- An estimated **79 million** U.S. adults have **prediabetes**
  - 35% of U.S. adults
  - 5-15% develop diabetes each year

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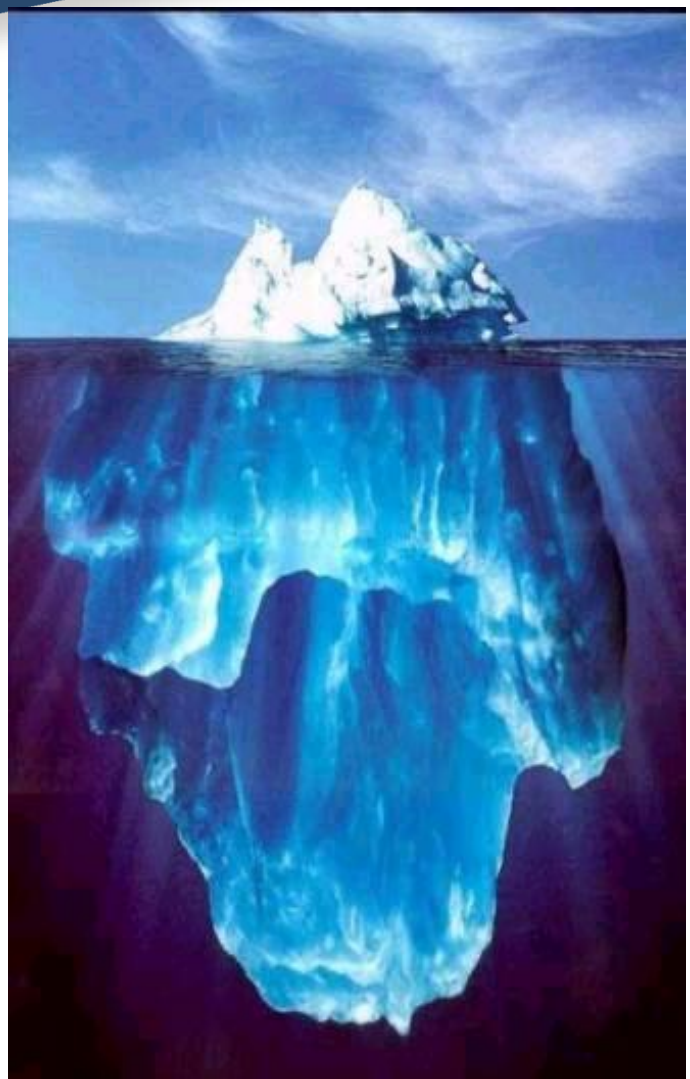
On the Horizon…



Diabetes = Almost 26 million

Pre-Diabetes = 79 million

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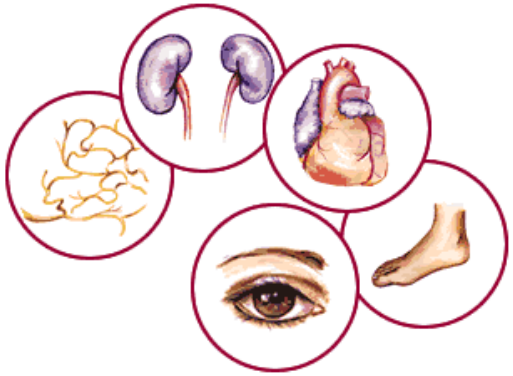
Diabetes Complications

Poorly controlled blood sugar can result in problems with:

- the eyes
- the kidneys
- the heart
- the brain
- blood vessels
- the Nervous System:
  - feet and hands
  - digestive, bladder, and sexual functioning
  - blood pressure regulation



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Diabetes Complications

Pre-Diabetes Comorbidity Risks:

- 5 year risk of total mortality increases by 50-60%
- 5 year risk of cardiovascular mortality Increases by 150%

Circulation 116: 151-157, 2007.

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What is Behind the Obesity Epidemic?

- Approximately 80%-90% of people with type 2 diabetes are overweight or obese
- In the United States, approximately 68% of adults are considered overweight or obese

Obesity is the primary risk factor for developing **type 2** diabetes.

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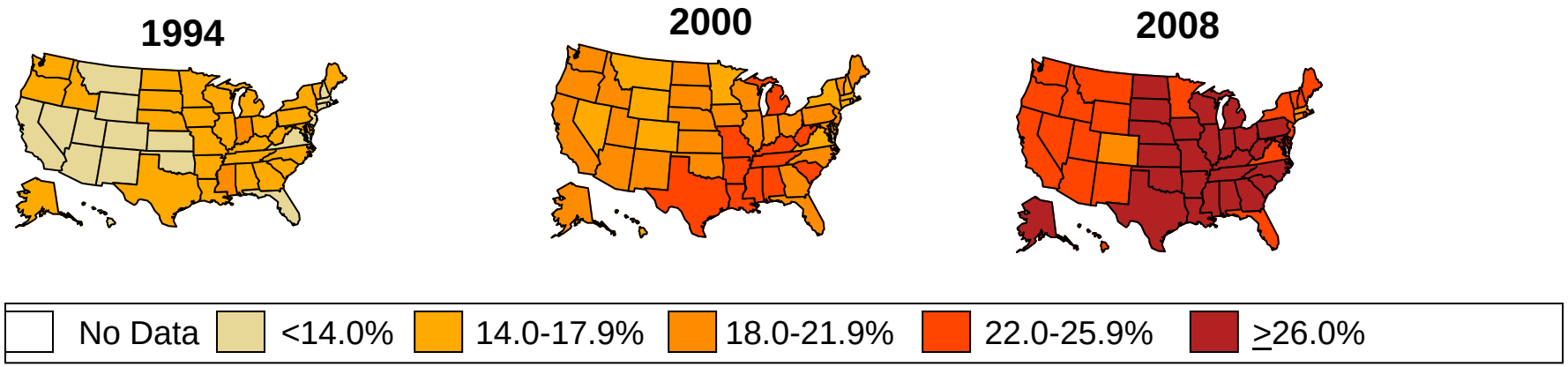
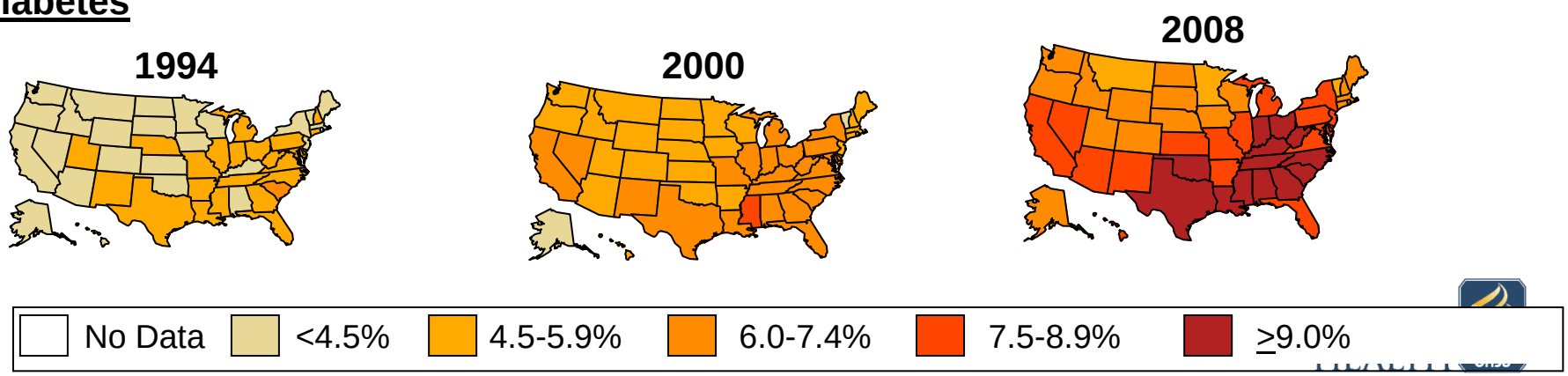
Obesity & Diabetes

Obesity (BMI ≥30 kg/m^2)



Diabetes



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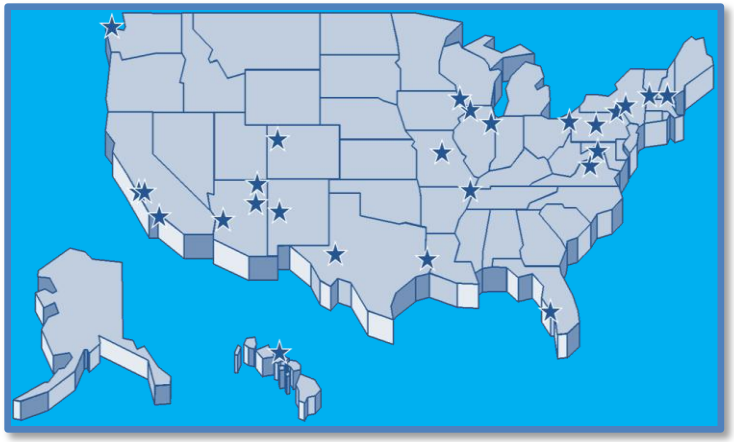
Diabetes Prevention Program

Original Research



Multicenter National Clinical Trial

- 3,234 participants with Pre-DM
- 27 clinical centers in U.S.

Study Population

- 45% of population from ethnic minority groups (Native American, Latino, African American, Asian American, Pacific Islander)
- Mean Age = 51
- Mean BMI = 34

New England Journal of Medicine 346: 393-403, 2002.

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Study Interventions

Lifestyle

- Reduced calories, low-fat diet
- 150 minutes of exercise per week (30 minutes of walking 5 days per week)
- Weight loss goal = 7% of body weight

Metformin (Diabetes Drug)

- 850 milligrams 2 times per day

Placebo (No Intervention)

Diabetes Prevention Program

Results

Risk Reduction Compared to Placebo

Lifestyle

o Risk for developing diabetes decreased by 58%

Metformin (Diabetes Drug)

o Risk for developing diabetes decreased by 31%

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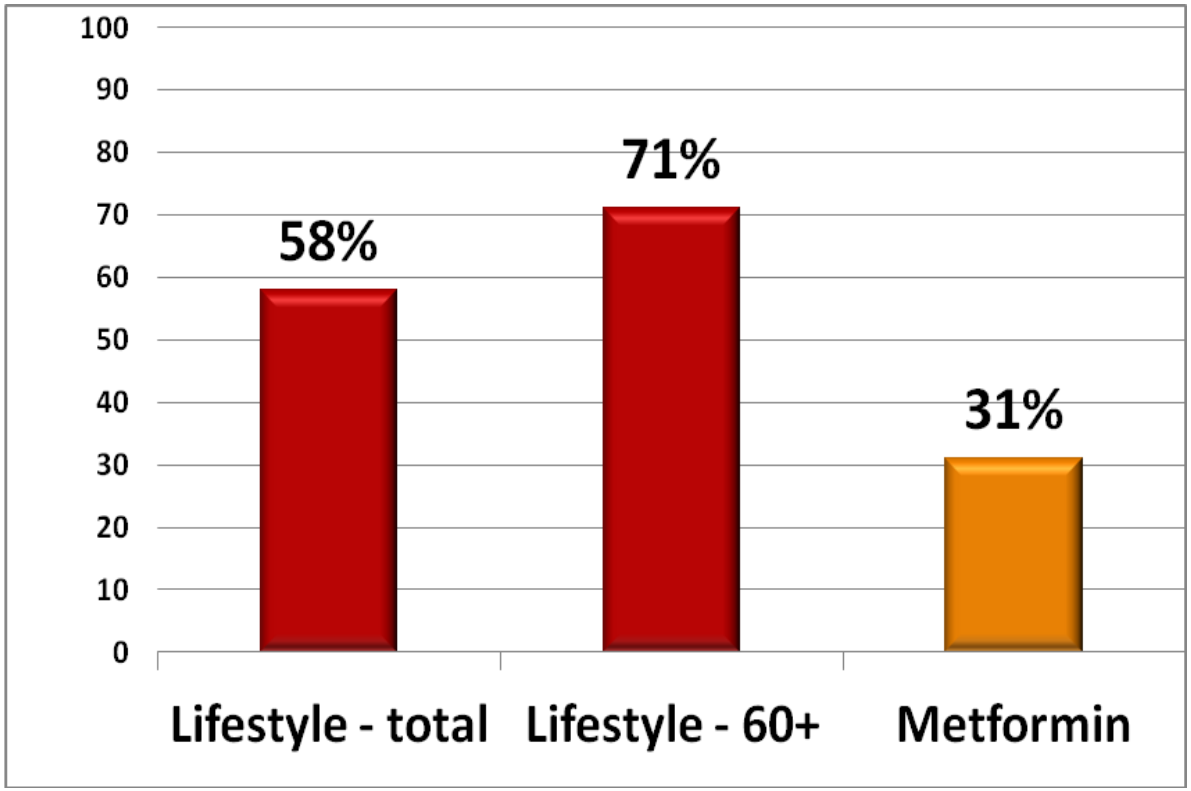
Diabetes Prevention Program

More Data

More Results



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National Diabetes Prevention Program

A little weight loss goes a long way

Did All Study Participants Lose 7% of Their Body Weight?

- About one-half of the study group met the 7% weight loss goal
- The good news is that every 2.2 lbs lost equated to a 16% risk reduction
- All weight loss was beneficial (not just for people who achieved their 7% wt loss goal)

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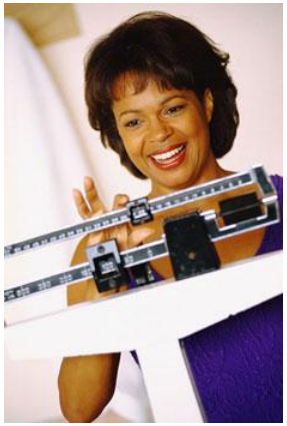
What Did the DPP Research Study Show?

- **Weight loss** was the most important factor in lowering the risk for type 2 diabetes
- The effect of weight loss on the risk for type 2 diabetes was the **same across the board** – regardless of sex, socioeconomic status, race, or ethnicity
- Millions of people with diabetes in the U.S. can **prevent or delay type 2 diabetes** through modest weight loss as part of a structured lifestyle program



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Diabetes Prevention Program

DPP 10 Year Follow-up

Prevention or delay of diabetes can last for at least 10 years

Lifestyle 10 year follow-up

- Risk for developing diabetes decreased by 34%
- Age 60-85 = risk decreased by 49%

Metformin 10 year follow-up

- Risk for developing diabetes decreased by 18%

Lancet 374: 1677-1686, 2009.

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DEPLOY Study

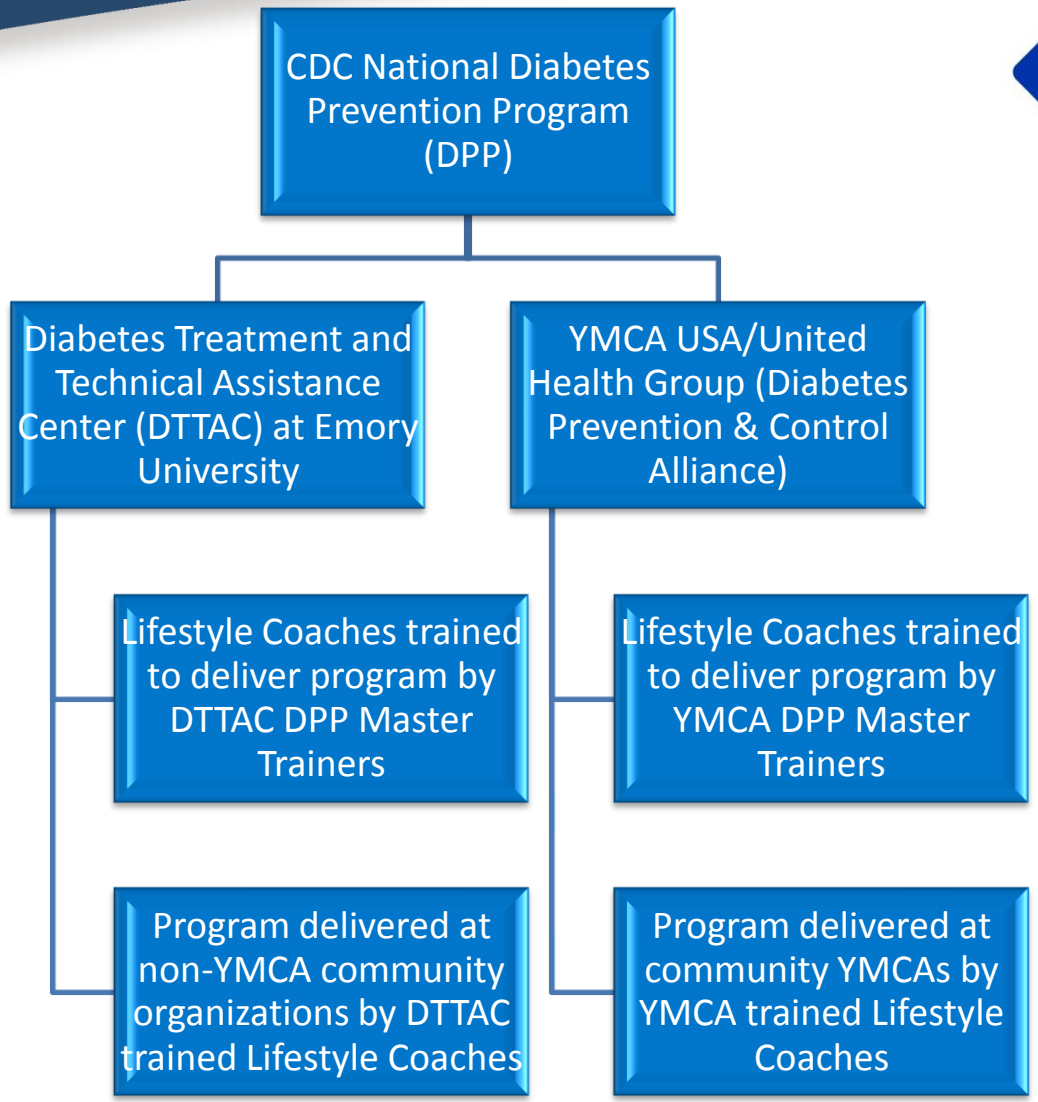
Group Delivery by YMCA Personnel

Indianapolis YMCA wellness instructors trained to deliver a group based lifestyle intervention to the fidelity of original DPP

- After 6 months, study participants lost an average of 6% of their body weight (12.2 lbs) and were able to maintain their weight loss at the 12-14 month follow-up visit

Am J Prev Med, 35 (4): 357-363 2008.

National Diabetes Prevention Program



Diabetes Training & Technical Assistance Center

Diabetes Training and Technical Assistance Center: Established at Emory University in 2009 with funding from the Centers for Disease Control and Prevention (CDC), Division of Diabetes Translation (DDT)

Curriculum:

- ✓ Developed curriculum for use in National DPP
  - Partnered with CDC/DDT, Indiana University, University of Pittsburgh, and YMCA of the USA

Training:

- ✓ Developed and provide training program for Lifestyle Coaches and Master Trainers

Support:

- ✓ Manage CDC-funded online learning community to support Lifestyle Coaches, Master Trainers, and recognized organizations

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OHSU

Eligible National DPP Participants

Overweight Adults:

- Limited to persons ages 18 years and older with a BMI of 24 or greater (Asian Americans: 22 or greater)

Prediabetes:

- 50% of participants must have prediabetes **diagnosed** through blood test (FPG, A1C, OGTT)
  - **OR** history of **gestational diabetes**

- Other 50% eligible if screen positive for prediabetes based on **National Diabetes Prevention Program Risk Test**

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CDC Risk Test

- ✓ Baby > 9 lbs.
- ✓ Sibling or parent with diabetes
- ✓ At risk height/weight chart
- ✓ Under 65 and get little to no exercise
- ✓ Age

CDC Prediabetes Screening Test

NATIONAL Diabetes PREVENTION PROGRAM

COULD YOU HAVE PREDIABETES?

Prediabetes means your blood glucose (sugar) is higher than normal, but not yet diabetes. Diabetes is a serious disease that can cause heart attack, stroke, blindness, kidney failure, or loss of feet or legs. Type 2 diabetes can be delayed or prevented in people with prediabetes through effective lifestyle programs. Take the first step. Find out your risk for prediabetes.

TAKE THE TEST—KNOW YOUR SCORE!

Answer these seven simple questions. For each "Yes" answer, add the number of points listed. All "No" answers are 0 points.

Yes	No	
1	0	Are you a woman who has had a baby weighing more than 9 pounds at birth?
1	0	Do you have a sister or brother with diabetes?
1	0	Do you have a parent with diabetes?
5	0	Find your height on the chart. Do you weigh as much as or more than the weight listed for your height?
5	0	Are you younger than 65 years of age and get little or no exercise in a typical day?
5	0	Are you between 45 and 64 years of age?
9	0	Are you 65 years of age or older?

Add your score and check the back of this page to see what it means.

AT-RISK WEIGHT CHART

Height	Weight Pounds	Height	Weight Pounds
4'10"	129	5'7"	172
4'11"	133	5'8"	177
5'0"	138	5'9"	182
5'1"	143	5'10"	188
5'2"	147	5'11"	193
5'3"	152	6'0"	199
5'4"	157	6'1"	204
5'5"	162	6'2"	210
5'6"	167	6'3"	216
		6'4"	221

National Center for Chronic Disease Prevention and Health Promotion
Division of Diabetes Translation

CDC

OHSU HEALTH & SCIENCE UNIVERSITY

National DPP Components

National Diabetes Prevention Program

COMPONENTS

Training: Increase Workforce

Train the workforce that can implement the program cost effectively.

Recognition Program: Assure Quality

Implement a recognition program that will:

- Assure quality.
- Lead to reimbursement.
- Allow CDC to develop a program registry.

Intervention Sites: Deliver Program

Develop intervention sites that will build infrastructure and provide the program.

Health Marketing: Support Program Uptake

Increase referrals to and use of the prevention program.

CDC Recognition Process

Apply
- Apply for recognition (agree to curriculum, duration, intensity)

2 wks
- Granted "pending recognition" by CDC

Begin
- Organization begins lifestyle change program

6 mos
- Organization submits evaluation data (every 6 months)

24 mos
- Recognition status assessed (granted full or remain pending)

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CDC Diabetes Prevention Recognition Program (DPRP)

- Pending recognition is granted when an organization agrees to:
  - use an evidence based curriculum
  - meet duration and intensity of the program
  - Provide data reports every six months as described in the DPRP Standards Organization submits data every six months to CDC DPRP
- CDC DPRP evaluates program 24 months after first class
- CDC Grants full recognition status if outcomes are met
- Recognition status is evaluated every 24 months thereafter

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Activity

Diet Nation

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Why Not the (*Insert Popular Diet Name Here)?*

- Program focus on type 2 diabetes prevention
- Secondary health benefits
- *Sustainability*
- Bottom line: participants can make their own choices in how they reach their program goals

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National Diabetes Prevention Program

How it Works…

- *Lifestyle Coach works with groups of participants to reduce their risk by:*
  - Losing weight through healthy eating (5-7 % of starting weight)
  - Physical activity (avg. 150 minutes per week)
  - Learning to identify and address barriers to healthy eating and physical activity
- *Relies on self-monitoring, goal setting, group process*
- *1 year program*
  - **Core**: 16 sessions, usually held weekly
  - **Post-core**: monthly sessions over 6-8 months

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National Diabetes Prevention Program

Content- Core

Skills	1. Welcome 2. Be a Fat and Calorie Detective 3. Three Ways to Eat Less Fat and Fewer Calories 4. Healthy Eating 5. Move Those Muscles 6. Being Active: A Way of Life 7. Tip the Calorie Balance
Controlling the external environment	8. Take Charge of What's Around You 9. Problem Solving 10. Four Keys to Healthy Eating Out
Psychological and emotional	11. Talk Back to Negative Thoughts 12. The Slippery Slope of Lifestyle Change 13. Jump Start Your Activity Plan 14. Make Social Cues Work for You 15. You Can Manage Stress 16. Ways to Stay Motivated

National Diabetes Prevention Program

Content- Post-Core

Introduction: (1 topic)

- Goal-setting and self-monitoring

Healthy Eating and Nutrition: (5 topics)

- Different types of fat
- Food preparation and recipe modification
- Not skipping meals, healthy meal and snack planning
- Fruits and vegetables, mindful eating
- Adding fiber, water, whole grains

Physical Activity: (2 topics)

- Overcoming barriers, health benefits
- Lifestyle activity, using a pedometer, flexibility and balance

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National Diabetes Prevention Program

Content- Post-Core

Managing Stress and Preventing Relapse: (4 topics)

- Overcoming self-defeating thoughts, assertiveness
- Handling Holidays, Vacations, and Special Events
- Preventing relapse
- Stress management and relaxation techniques

Chronic Disease: (2 topics)

- Heart disease, cholesterol, blood pressure
- Type 2 diabetes

Program Conclusion: (1 topic)

- Long-term goals, strategies, and self-review

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Key Strategies of the Lifestyle Change Program

- Regular group sessions – Core and Post-Core
- Group dynamics
- Goal setting and tracking
  - Weight loss
  - Physical activity
  - Eating (fat grams, calories)
- Regular weigh-ins, weight charting
- Self-monitoring

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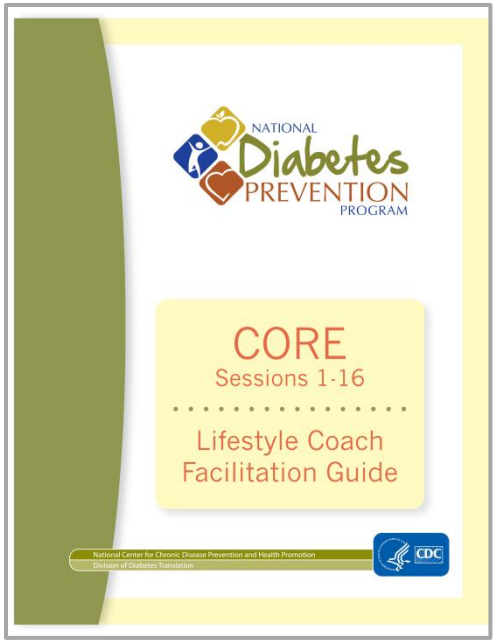
CORE Lifestyle Coach Facilitation Guide

- Lifestyle Coach Preparation Checklist
  - Materials
  - Tasks (Before/During/After)
- Lifestyle Coach Brief
  - Learning objectives
  - Session overview
  - Key messages to reinforce
- Session Presentation
- Follow Up



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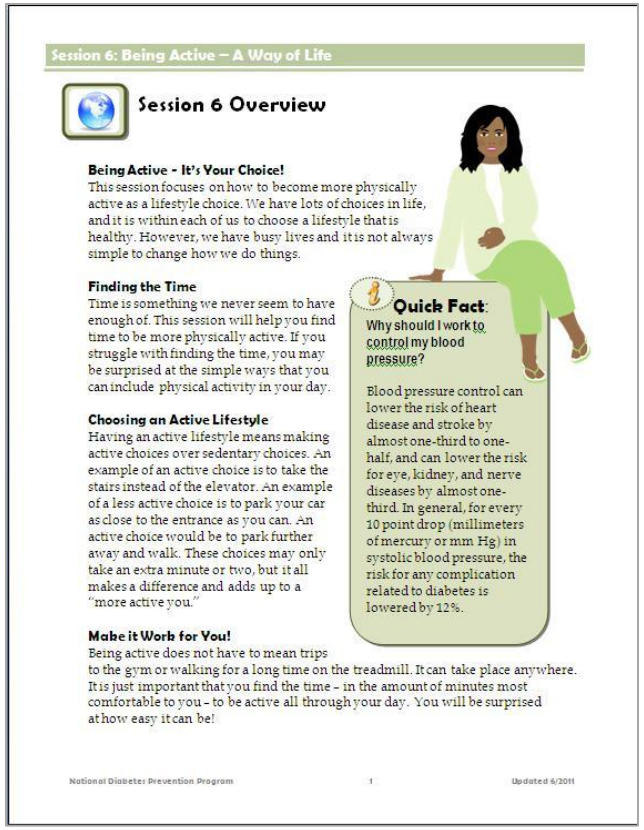
CORE Participant Notebook

- Handouts and worksheets that reinforce content of each session
  - Session overview, “Quick Fact,” and “To-Do”
  - How Am I Doing? Charts
- Handouts are given <u>by session</u> at the beginning of the session
- Participants are expected to bring their notebook to each session
- Separate Post-Core Participant Notebook



Session 6: Being Active – A Way of Life

Session 6 Overview

Being Active - It's Your Choice!
This session focuses on how to become more physically active as a lifestyle choice. We have lots of choices in life, and it is within each of us to choose a lifestyle that is healthy. However, we have busy lives and it is not always simple to change how we do things.

Finding the Time
Time is something we never seem to have enough of. This session will help you find time to be more physically active. If you struggle with finding the time, you may be surprised at the simple ways that you can include physical activity in your day.

Choosing an Active Lifestyle
Having an active lifestyle means making active choices over sedentary choices. An example of an active choice is to take the stairs instead of the elevator. An example of a less active choice is to park your car as close to the entrance as you can. An active choice would be to park further away and walk. These choices may only take an extra minute or two, but it all makes a difference and adds up to a "more active you."

Quick Fact:
Why should I work to control my blood pressure?

Blood pressure control can lower the risk of heart disease and stroke by almost one-third to one-half, and can lower the risk for eye, kidney, and nerve diseases by almost one-third. In general, for every 10 point drop (millimeters of mercury or mm Hg) in systolic blood pressure, the risk for any complication related to diabetes is lowered by 12%.

Make it Work for You!
Being active does not have to mean trips to the gym or walking for a long time on the treadmill. It can take place anywhere. It is just important that you find the time – in the amount of minutes most comfortable to you – to be active all through your day. You will be surprised at how easy it can be!

National Diabetes Prevention Program 1 Updated 6/2011

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Participant Food and Activity Tracker

Goals

	Fat Grams	Calories	Minutes of Activity
Daily			
Weekly Average			

Totals

	Fat Grams	Calories	Minutes of Activity	Weight
Day 1				
Day 2				
Day 3				
Day 4				
Day 5				
Day 6				
Day 7				
Total				

NATIONAL Diabetes PREVENTION PROGRAM

Food and Activity Tracker

Name: _____

Starting Date: _____

My To-Do this week:

_____

_____

_____

_____

_____

_____

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Role of the Group

Life Experiences

- Ideas, examples, problem solving, answers to questions
- Participants likely face many of the same challenges and can learn from one another

Support & Accountability

- Participants and Lifestyle Coach form support network
- Held accountable for trying solutions and ideas

Participant Self-Management

- Motivation to change comes from the individual
- Group and Lifestyle Coach do **not** use direct persuasion

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What Tools are Needed?

Program provides:

- **Scale for weigh-ins at each session**
- **Food and Activity Trackers**
- **Participant Notebook**
- **Fat and Calorie Counter *(recommended)***

Participants acquire: (recommended)

- **Bathroom scale**
- **Tools for weighing and measuring food**
- **Suitable shoes for physical activity**

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Diabetes Prevention in Oregon

Douglas County DPP in Action

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Diabetes Prevention in Oregon

Where Else?

Indian Health Service

- Cow Creek
- Warm Springs
- NARA (Native American Rehabilitation Association)

Roseburg

- Central Douglas County Family YMCA

Eugene

- Eugene Family YMCA
- Center for Family Development

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Diabetes Prevention in Oregon

Where Else?

Lebanon/Corvallis

- Samaritan Health Plans

Salem

- Family YMCA of Marion & Polk Counties

Portland

- Harold Schnitzer Diabetes Health Center @ OHSU

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National Diabetes Prevention Program

Now Available at OHSU!

1 Year Program

- 16 weekly core sessions
- 8 monthly post-core sessions
- Group delivery of program to help participants achieve:
  - 7% weight loss
  - 150 minutes of physical activity
- $249.00 for the year

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Diabetes Prevention in Oregon

Recently Trained to Deliver National DPP…

African American Health Coalition

Providence Health & Services Parish Outre

Virginia Garcia Memorial Health Center

March Wellness Health & Fitness Center at OHSU

Cauzi LLC

Asian Health & Service Center

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National Diabetes Prevention Program: Helpful Websites

CDC Home

Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

SEARCH

A-Z Index A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

National Diabetes Prevention Program

Diabetes Public Health Resource

The National Diabetes Prevention Program is a public-private partnership of community organizations, private insurers, employers, health care organizations, and government agencies. These partners are working to establish local evidence-based lifestyle change programs for people at high risk for type 2 diabetes. To learn about the program and how to get involved, read more...

Replay

FOA
Awards will be announced by Sept 30, 2012 GO»

Program Video
Get the Curriculum
Grant Update »

Email page
Print page
Get e-mail Updates
Subscribe to RSS
Listen to audio/Podcast

Program Topics

About the Program
Learn about the lifestyle change program, partners, and national program components...

About CDC Funded Sites
Find an up-to-date list of...

Prediabetes: Am I at risk?
Find out about prediabetes and how you can...

Newsroom
Find information about the program...

Diabetes Training and Technical Assistance Center
Get training to be a lifestyle coach and more...

Resources
Read Frequently Asked Questions about the program...

Apply for Recognition

CDC welcomes organizations that offer a lifestyle change program to prevent type 2 diabetes to apply for recognition by the **Diabetes Prevention Recognition Program (DPRP)**, a component of the National Diabetes Prevention Program.

Find a Program

Search by state to find a lifestyle change program for you or to refer a patient.

Could You Have Prediabetes?

Take the Quiz

INFO SHARE

www.cdc.gov/diabetes/prevention

www.cdc.gov/diabetes/prevention/recognition

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"A Change For Life…"

dttac
Diabetes
Training and Technical
Assistance Center