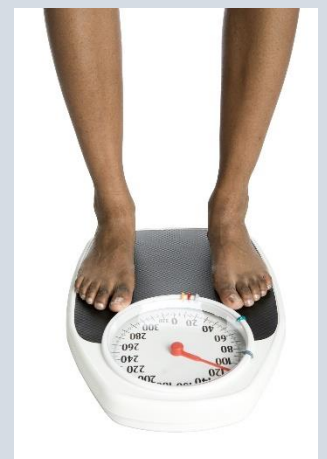




Florida Health Literacy Initiative Teaching About Diabetes Toolkit November 2019



1. Student Research and Discussion Questions

- a. What is diabetes? Explain why untreated diabetes is dangerous.
- b. Why don't all carbohydrates affect blood glucose (sugar) in the same way?
- c. What is the difference between a simple carbohydrate and a complex carbohydrate?
- d. How can people decrease their chances of developing diabetes?

2. Diabetes Vocabulary Words (English and Spanish) –

<https://kidshealth.org/en/teens/diabetes-center/#catwords-to-know>

3. Diabetes Overview Video

CDC - <https://www.youtube.com/watch?v=wmOW091P2ew>

UK Government - <https://www.youtube.com/watch?v=wZAjVQWbMIE>

4. Class Activities Relating to Diabetes

- a. **Blood Sugar Math Activity** – page 87 Staying Healthy Teacher's Guide (Blue Book)
- b. **Technology Activity** – page 97 Staying Healthy Teacher's Guide (Blue Book)
- c. **Classroom Toolkit** – Great plain language handouts and activities. Some of this is geared to small children but the majority is appropriate for adults as well.
http://www2.jdrf.org/site/DocServer/Kids_Walk_ClassroomToolkit.pdf?docID=1086

5. Diabetes Articles for student reading and discussion

<https://www.cdc.gov/diabetes/diabetesatwork/pdfs/DiabetesWhatIsIt.pdf>

<https://www.diabeteseducator.org/docs/default-source/living-with-diabetes/tip-sheets/cardiovascular-disease/cvdprevention.pdf?sfvrsn=12>

http://schoolwalk.diabetes.org/swfd/swfd_factory.pdf

6. 50 Ways to Prevent Type 2 Diabetes – This list is a good conversation starter. Have students pick a few factors to they can improve.

<https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-type-2-diabetes/50-ways>

7. Prediabetes Video explaining how to calculate personal risk –

<https://www.youtube.com/watch?v=n2VyBnEAx7E>

8. Personal Story of a Woman's Journey to Health after being diagnosed with prediabetes – 3 ½ minute video

<https://www.youtube.com/watch?v=uyHuEG3ZegU>

9. Infographics (See below)

- a. Choosing Whole Grains over Refined Grains**
- b. Prediabetes**
- c. Diabetes short version and Long Version**

What Is Diabetes?

<https://teenshealth.org/en/teens/prevention.html> (available in Spanish and English with audio)

Diabetes is a disease that affects how the body uses [glucose](#), a sugar that is the body's main source of fuel. Your body needs glucose to keep running. Here's how it should work.

1. You eat.
2. Glucose from the food gets into your bloodstream.
3. Your pancreas makes a [hormone](#) called [insulin](#).
4. Insulin helps the glucose get into the body's cells.
5. Your body gets the energy it needs.

The [pancreas](#) is a long, flat gland in your belly that helps your body digest food. It also makes insulin. Insulin is kind of like a key that opens the doors to the cells of the body. It lets the glucose in. Then the glucose can move out of the blood and into the cells.

But if someone has diabetes, the body either can't make insulin (this is called [type 1 diabetes](#)) or the insulin doesn't work in the body like it should (this is called [type 2 diabetes](#)). The glucose can't get into the cells normally, so the [blood sugar level](#) gets too high. Lots of sugar in the blood makes people sick if they don't get treatment.

Can Type 1 Diabetes Be Prevented?

Type 1 diabetes can't be prevented. Doctors can't even tell who will get it and who won't.

In type 1 diabetes, a person's [immune system](#) attacks the pancreas and destroys the cells that make insulin. No one knows for sure why this happens, but scientists think it has something to do with [genes](#). Genes are like instructions for how the body should look and work that are passed on by parents to their kids. But just getting the genes for diabetes isn't usually enough. In most cases, something else has to happen — like getting a virus infection — for a person to get type 1 diabetes.

Type 1 diabetes isn't contagious, so you can't catch it from another person or pass it along to your friends. And stuff like eating too much sugar doesn't cause type 1 diabetes.

Can Type 2 Diabetes Be Prevented?

Type 2 diabetes is different. Sometimes, type 2 diabetes can be prevented.

In type 2 diabetes, the pancreas can still make insulin, but the body doesn't respond to it in the right way. This problem is usually related to being [overweight](#). In the past, mainly overweight adults developed type 2 diabetes. Today, more kids and teens have type 2 diabetes, probably because more kids and teens are overweight.

[Getting to a healthy weight](#) is one way to help prevent type 2 diabetes. Making healthy food choices and getting enough exercise are other good steps to take. If a person makes better food choices and becomes more physically active, it can help prevent diabetes from becoming a problem.

Some people are more likely to get type 2 diabetes than others based on things that can't be changed. For example, people with a Native American, African, Hispanic/Latino, or Asian/Pacific Islander racial/ethnic background are at higher risk for getting type 2 diabetes. And people who have family members with type 2 diabetes are also more likely to develop it.

How Can I Protect Myself From Getting Type 2 Diabetes?

If you want to help keep yourself from getting type 2 diabetes — or just be healthier in lots of other ways — take these steps:

- **Eat good-for-you foods.** Try to eat foods that are low in fat and high in other nutrients — like whole-grain cereals and breads, fruits, vegetables, dairy products, and lean proteins. These super foods provide you with the nutrition you need to grow, but are also great for helping you get to or stay at a healthy weight, which can help prevent type 2 diabetes.
- **Limit fast food and sugary sodas.** Eating lots of calorie-laden fast food and sugar-filled beverages — like sodas, juices, and iced teas — can lead to a lot of weight gain.
- **Get up and go.** Staying active and decreasing the amount of time spent in sedentary activities (like watching TV, being online, or playing video or computer games) can also help to prevent type 2 diabetes. You don't need to join a gym or commit to three sports every school year — being active can be as simple as walking the dog or mowing the lawn. Try to do something that gets you moving every day.
- **If you have questions about your weight, ask.** If you think you may be overweight or you're just wondering what being healthy is all about, a doctor or a registered dietitian can help. These health care pros can help you find out what your weight goals should be and how to get there — and stay there.

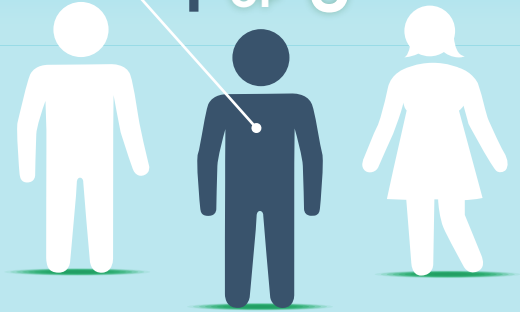
PREDIABETES

COULD IT
BE YOU?

84.1
MILLION

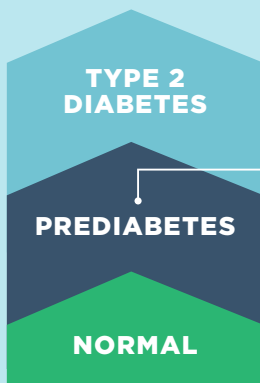
84.1 million
American adults —
more than
1 out of 3 — have
prediabetes

1 OUT OF 3



9 OUT OF 10

people with prediabetes
don't know they have it



Prediabetes is
when your blood
sugar level is higher
than normal but not
high enough yet to
be diagnosed as
type 2 diabetes

Prediabetes increases your risk of:



TYPE 2
DIABETES



HEART
DISEASE



STROKE



If you have
prediabetes,
losing weight by:



EATING
HEALTHY



BEING
MORE
ACTIVE

can cut your risk of
getting type 2 diabetes in

HALF



Ignore prediabetes and type 2 diabetes risk goes up — and so does risk for serious health complications:



BLINDNESS



**KIDNEY
FAILURE**



**HEART
DISEASE**



STROKE



**LOSS OF TOES,
FEET, OR LEGS**

YOU CAN PREVENT TYPE 2 DIABETES

FIND OUT IF YOU HAVE PREDIABETES —

See your doctor to get your blood sugar tested



- ✓ eat healthy
- ✓ be more active
- ✓ lose weight

**JOIN A CDC-
RECOGNIZED**
diabetes
prevention
program



LEARN MORE FROM CDC AND TAKE THE **PREDIABETES RISK QUIZ** AT
www.cdc.gov/diabetes/basics/prediabetes.html

REFERENCES

Centers for Disease Control and Prevention. National Diabetes Statistics Report: Estimates of Diabetes and Its Burden in the United States, 2017. Atlanta, GA: U.S. Department of Health and Human Services; 2017.

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, released December, 2016. Data are from the Multiple Cause of Death Files, 1999-2015, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on April 4, 2017.

CDC's Division of Diabetes Translation works toward a world free of the devastation of diabetes.



A SNAPSHOT

DIABETES IN THE UNITED STATES

DIABETES

**30.3
MILLION**

30.3 million
people have
diabetes



That's about 1 out of every 10 people



**1
OUT
OF
4**

don't know
they have
diabetes

PREDIABETES

**84.1
MILLION**



84.1 million people —
more than 1 out of 3 adults —
have prediabetes



**9
OUT
OF
10** don't know they
have prediabetes



If you have
prediabetes,
losing weight by:



**EATING
HEALTHY**



**&
BEING
MORE
ACTIVE**

can cut your risk of
getting type 2 diabetes in
HALF



COST



**\$245
BILLION**

Total medical costs and lost
work and wages for people
with diagnosed diabetes

Risk of death
for adults with
diabetes is



**50%
HIGHER**



than for
adults without
diabetes

Medical costs
for people with
diabetes are
**more than
twice as high**

\$



\$

as for people
without diabetes

2X

People who have diabetes are at higher risk
of serious health complications:



BLINDNESS



**KIDNEY
FAILURE**



**HEART
DISEASE**



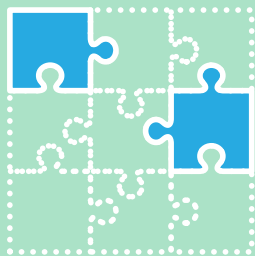
STROKE



**LOSS OF
TOES, FEET,
OR LEGS**

TYPES OF DIABETES

TYPE 1



BODY DOESN'T MAKE ENOUGH INSULIN

- Can develop at any age
- No known way to prevent it

Nearly **18,000 youth** diagnosed each year in 2011 and 2012

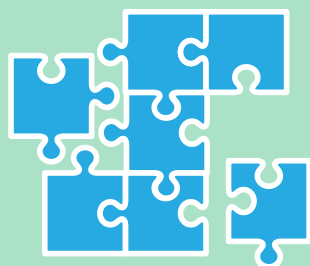


In adults, type 1 diabetes accounts for approximately

5%

of all diagnosed cases of diabetes

TYPE 2



BODY CAN'T USE INSULIN PROPERLY

- Can develop at any age
- Most cases can be prevented

In adults, type 2 diabetes accounts for approximately

95%

of all diagnosed cases of diabetes



More than **5,000 youth** diagnosed each year in 2011 and 2012

RISK FACTORS FOR TYPE 2 DIABETES:

1.5
MILLION

People
18 years
and older
diagnosed
in 2015



BEING
OVERWEIGHT



HAVING
A FAMILY
HISTORY



BEING
PHYSICALLY
INACTIVE



BEING
45 AND
OLDER

WHAT CAN YOU DO?

You can **prevent** or **delay** type 2 diabetes



LOSE
WEIGHT
IF NEEDED



EAT
HEALTHY



BE MORE
ACTIVE

LEARN MORE AT www.cdc.gov/diabetes/prevention
OR SPEAK TO YOUR DOCTOR

You can **manage** diabetes



WORK WITH A
HEALTH
PROFESSIONAL



EAT
HEALTHY



STAY
ACTIVE

LEARN MORE AT www.cdc.gov/diabetes/ndep
OR SPEAK TO YOUR DOCTOR

REFERENCES

Centers for Disease Control and Prevention. National Diabetes Statistics Report: Estimates of Diabetes and Its Burden in the United States, 2017. Atlanta, GA: U.S. Department of Health and Human Services; 2017.

American Diabetes Association. Economic Costs of Diabetes in the U.S. in 2012. Diabetes Care. 2013;36(4):1033-1046.

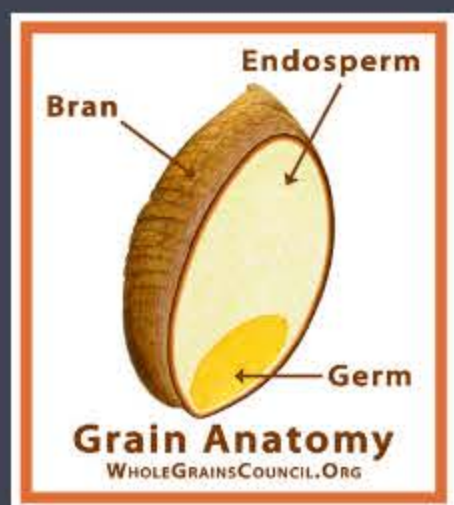
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Mayer-Davis EJ, Lawrence JM, Dabelea D, Divers J, Isom S, Dolan L, et al. Incidence Trends of Type 1 and Type 2 Diabetes among Youths, 2002-2012. N Engl J Med. 2017;376:1419-29.

CDC's Division of Diabetes Translation works toward a world free of the devastation of diabetes.



REPLACE YOUR GRAINS



Use Whole Grains Instead of Refined Grains

Whole Grains include all parts of the grain. Refined grains remove the germ and bran and only use the starchy inside part of the grain. The germ and the bran are full of fiber , iron and vitamins.

RICE

Use brown rice instead of white rice



HOT BREAKFAST

Choose oatmeal instead of white grits or Cream of Wheat



BREAD

Choose 100% whole grain bread instead of white bread or sweet bread



TORTILLAS

Choose 100% whole grain corn or whole wheat tortillas instead of flour



SET YOUR GOAL!

Make sure at least 50% of the grains you eat are Whole Grain.

Not sure if its Whole grain?
Check the Dietary fiber on the nutrition label. Good sources of grains have at least 4 grams of fiber per serving.

TRY A NEW WHOLE GRAIN

Homemade Popcorn
Quinoa
Bulger (cracked wheat)
Wheat Berries
Amaranth
Farro
Freekeh
Teff
Black Rice

KNOW THE LINGO

Multigrain - a food that contains more than one type of grain. May not be whole grain.

Refined grains - contain only the kernel's innermost part.

Fortified products - contain added nutrients that weren't in the original product.

Enriched products - have had some of the original nutrients lost during processing added back in. This is not as healthy as eating the original food.

For more info, visit the Florida Literacy Coalition at floridaliteracy.org

National Diabetes Month 2019 – Downloadable Social Media Posts

	FACEBOOK POST	INSTAGRAM POST	TWITTER POST
Shareable Social Media Post #1	<p>November is National Diabetes Month! How much do you know about the link between diabetes and heart disease? Learn more from @NIDDKgov: https://www.niddk.nih.gov/health-information/communication-programs/ndep/partner-community-organization-information/national-diabetes-month/</p>	<p>November is #NationalDiabetesMonth! How much do you know about the link between #diabetes and #HeartDisease? Learn more from the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) at niddk.nih.gov.</p>	<p>November is National #DiabetesMonth! How much do you know about the link between #diabetes and #HeartDisease? Learn more from @NIDDKgov: https://www.niddk.nih.gov/health-information/communication-programs/ndep/partner-community-organization-information/national-diabetes-month/</p>
	<p>Adults with diabetes tend to develop heart disease at a younger age, and their most common causes of death are heart disease and stroke. This National Diabetes Month take steps from @NIDDKgov to reduce your risk. https://www.niddk.nih.gov/health-information/communication-programs/ndep/partner-community-organization-information/national-diabetes-month/</p>	<p>Adults with #diabetes tend to develop #HeartDisease at a younger age, and their most common causes of death are heart disease and stroke. This #NationalDiabetesMonth take steps from the @National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) to reduce your heart disease risk. Visit niddk.nih.gov to learn more. #DiabetesMonth</p>	<p>Adults with #diabetes tend to develop #HeartDisease at a younger age, and their most common causes of death are heart disease and stroke. This National #DiabetesMonth take steps from @NIDDKgov to reduce your heart disease. https://www.niddk.nih.gov/health-information/communication-programs/ndep/partner-community-organization-information/national-diabetes-month/</p>
Shareable Social Media Post #2			