

City Of Mission's



Healthline

November
2016

Welcome to this month's edition of *Healthline*. In this issue, we will be focusing on the importance of *Diabetes*.

Save the
Date!

Upcoming Events:

November 17, 2016
Employee Appreciation
Luncheon

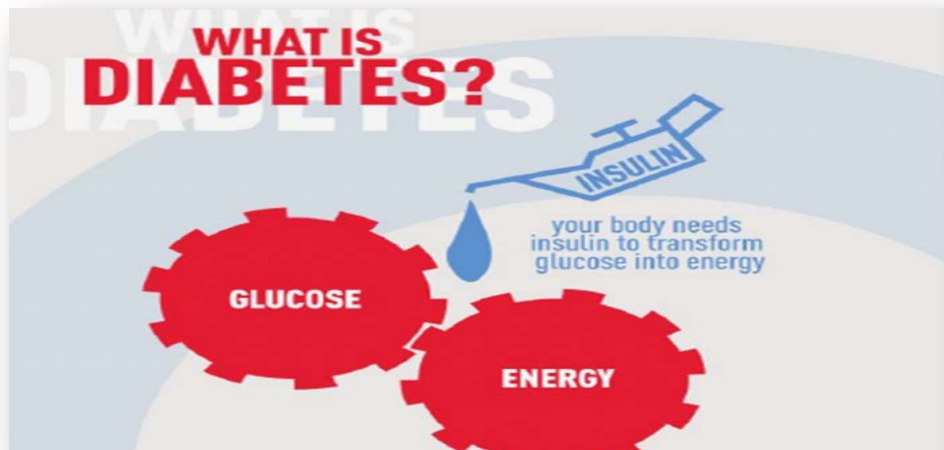
What is Diabetes?

Diabetes can strike anyone, from any walk of life. And it does—in numbers that are dramatically increasing. In the last decade, the cases of people living with diabetes jumped almost 50 percent – to more than 29 million Americans.

Worldwide, it afflicts more than 380 million people. And the World Health Organization estimates that by 2030, the number of people living with diabetes will more than double. Today, diabetes takes more lives than AIDS and breast cancer combined—claiming the life of 1 American every 3 minutes. It is a leading cause of blindness, kidney failure, amputations, heart failure and stroke. Living with diabetes places an enormous emotional, physical and financial burden on the entire family. Annually, diabetes cost the American public more than \$245 billion.

Just what is diabetes? To answer that, you first need to understand the role of insulin in your body. When you eat, your body turns food into sugars, or glucose. At that point, your pancreas is supposed to release insulin. Insulin serves as a “key” to open your cells, to allow the glucose to enter—and allow you to use the glucose for energy. But with diabetes, this system does not work. Several major things can go wrong – causing the onset of diabetes. Type 1 and Type 2 diabetes are the most common forms of the disease, but there are also other kinds, such as gestational diabetes, which occurs during pregnancy, as well as other forms.

Source: Diabetes Research Institute Foundation



Type One Diabetes

The more severe form of diabetes is Type 1, or insulin-dependent diabetes. It's sometimes called "juvenile" diabetes, because type 1 diabetes usually develops in children and teenagers, though it can develop at any age.

Immune System Attacks

With Type 1 diabetes, the body's immune system attacks part of its own pancreas. Scientists are not sure why, but the immune system mistakenly sees the insulin-producing cells in the pancreas as foreign, and destroys them. This attack is known as "autoimmune" disease. These cells-called "islets"-are the ones that sense glucose in the blood and, in response, produce the necessary amount of insulin to normalize blood sugars. Insulin serves as a key to open your cells to allow the glucose to enter and allow you to use the glucose for energy. Without insulin, there is no key. So, the sugar stays—and builds up—in the blood. The result: the body's cells starve from the lack of glucose. And if left untreated, the high level of "blood sugar" can damage eyes, kidneys, nerves, and the heart, and can also lead to coma and death.

Insulin Therapy

So, a person with Type 1 treats the disease by taking insulin injections. This outside source of insulin now serves as the "key"—bringing glucose to the body's cells. The challenge with this treatment is that it's often not possible to know precisely how much insulin to take. The amount is based on many factors, including;

- Food
- Exercise
- Stress
- Emotions and general health

Source: *Diabetes Research Institute Foundation*

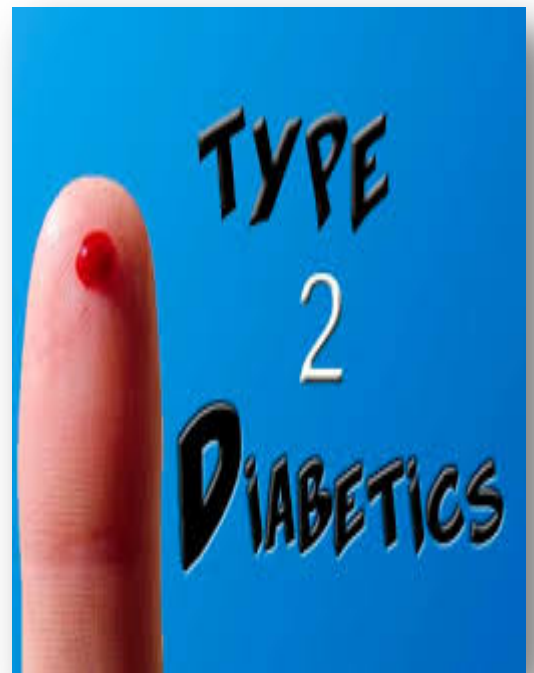


Type Two Diabetes

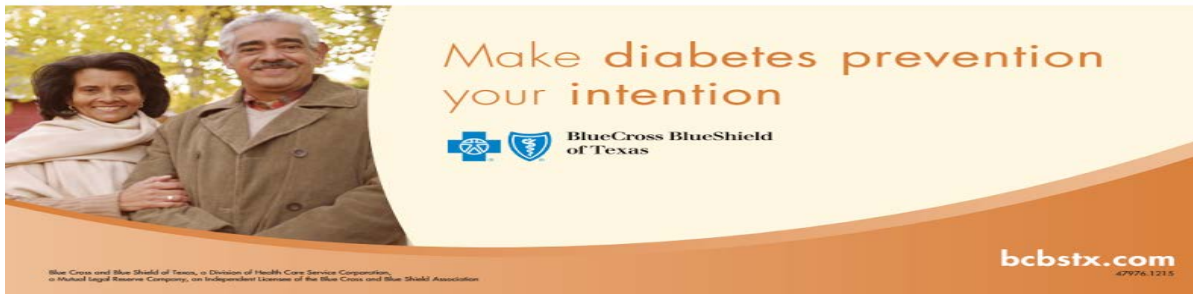
The most common form of diabetes is called Type 2, or non-insulin dependent diabetes. This is also called adult onset diabetes, since it typically develops after age 35. However, a growing number of younger people are now developing type 2 diabetes.

People with type 2 are able to produce some of their own insulin. Often, it's not enough. And sometimes, the insulin will try to serve as the key to open the body's cells, to allow the glucose to enter, but the key won't work. The cells won't open. This is called insulin resistance.

Often, type 2 is tied to people who are overweight, with a sedentary lifestyle. Treatment focuses on diet and exercise. If blood sugar levels are still high, oral medications are used to help the body use its own insulin more efficiently. In some cases, insulin injections are necessary.



Source:
Diabetes Research Institute Foundation



Stop Diabetes In Its Tracks

Before people develop type 2 diabetes, they almost always have pre-diabetes – blood glucose levels that are higher than normal but not yet high enough to be diagnosed as diabetes. More than 5.4 million people in the United States have this condition.

If you have pre-diabetes, you can prevent the development of diabetes by:

- 🍎 Step 1
Engaging in just 30 minutes of daily moderate physical activity.
- 🍎 Step 2
Making healthy food choices
- 🍎 Step 3
Reducing your body weight by five to ten percent.

Source:

American Diabetes Association

Question & Answer

What should my blood sugar be when I wake up (fasting) and before meals? What about after?

Answer: For most people with diabetes, the American Diabetes Association recommends a fasting or before-meals blood glucose (or blood sugar) goal of 70-130 mg/dl. One to two hours after eating, a postprandial blood sugar reading at or under 180 mg/dl is recommended.

Does a diagnosis of type 2 diabetes mean I will have to go on insulin?

Answer: No. People with type 2 diabetes may or may not ever need to take insulin injections, depending on several factors, including the timing of diagnosis. Research indicates that if type 2 diabetes is treated early and blood sugar is controlled initially and over the years, the pancreas is more likely to produce enough insulin longer. But a person who lives with type 2 upward of 15 years is unlikely to continue to make sufficient insulin and will need to take it via syringe, pen, or pump.

Can I get rid of type 2 diabetes if I stop eating carbohydrate and/or lose a lot of weight?

Answer: No, but you can control it. If you have prediabetes or were just diagnosed with type 2, losing a lot of weight can put the condition into remission. Weight regain, aging, and the natural progression of type 2 diabetes can bring it back. Not eating carbohydrate or severely restricting it is nearly impossible for any length of time. It's also not healthy, because you won't get essential nutrients.

Why is it OK to eat fruit when it's full of carbohydrate? Are some fruits better to eat than others?

Answer: The calories in all fruits (fresh, frozen, dried, and canned without added sugar) are mainly carbohydrate with a bit of protein. People with diabetes need to eat a certain amount of carbs every day for energy and essential nutrients. Healthy sources of carbs include fruits, as well as vegetables, whole grains, legumes (beans), and low-fat dairy foods.



Tips For Managing Diabetes

Managing diabetes is a challenge every day. There are so many variables To keep in mind—food, exercise, stress, general health, etc.—that keeping blood sugar levels in the desired range is a constant balancing act. Here are some tips that may help you with that balancing act:



- ❖ **Carb Counting** – Carbohydrates have the greatest impact on your blood sugar levels. Carbs are broken down into glucose. So if you eat too much of them, your blood sugar level may rise. For this reason, people with diabetes find it helpful to keep track of the carbs they eat in order to manage their blood sugars.
- ❖ **Checking Blood Sugar** – Many people are frightened to check their blood sugar—or blood glucose—levels because they do not want to see levels that are higher or lower than their target range. Checking blood sugars at home, in school, and in the workplace is key to managing diabetes. It puts you in control of your diabetes.
- ❖ **Exercise and Diabetes** – Exercise has so many health benefits, but a lot of times getting started can be difficult. The good news is that to reap the benefits of physical activity, you just have to move more during the day.
- ❖ **Facts About Fat** – Controlling intake of fats is important to everyone, especially people with diabetes. There are several kinds of fats, including: saturated fats, trans fatty acids, cholesterol, monounsaturated fats, polyunsaturated fats, and omega 3 fatty acids.
- ❖ **Meal Planning** – Understanding portion sizes is the first step in healthy eating—and a big part of managing diabetes. The DRI has developed a portions guide, along with meal planning tips, to assist you in making educated choices regarding your food choices.
- ❖ **Setting Goals** – Diabetes can impact all aspects of life and all aspects of life can impact diabetes. With all the challenges of managing diabetes, it can be difficult for people living with the disease to stay on track. Setting goals can help you to achieve this—goals for things like eating, exercise, checking blood sugar, reducing stress, etc.

Source:

Diabetes Research Institute Foundation

Healthy Recipe

Apple Cinnamon Fruit Leather

Fresh autumn apples, warm cinnamon spice and the natural sweetness of dates are all it takes to make these simple, natural fruit snacks. Snacking is a great way to add a variety of healthy plant foods to your diet, throughout the day. These fruit leathers are rich in fiber and contain quercetin, a flavonoid with anti-inflammatory properties.

Makes 4 Servings

Per serving: 450 calories, 0 g total fat, 12 g carbohydrate, 0 g protein, 2 g dietary fiber, 0 mg sodium.



Ingredients:

- ❖ **5 medium apples, chopped**
- ❖ **1-2 cup water**
- ❖ **1 large date, pitted**
- ❖ **1 tsp cinnamon**

Directions:

1. Place chopped apples in a medium saucepan with water. Bring to a simmer, cover and cook for about 10 minutes.
2. Add pitted date and cinnamon and mash. Cover and cook another 2-3 minutes on low heat.
3. Put a mixture into a blender or food processor and process until smooth.
4. Pour onto a baking sheet lined with parchment paper or non-stick baking mat and spread with a spatula into a thin layer.
5. Bake at 175-200 degrees (as low as your oven will go) for 2-3 hours or until it's tacky but doesn't stick to your finger.

Move Of the Month:

30 Day Squat Challenge
Strengthen your core & tone your legs!

30 day SQUAT CHALLENGE

1 BASIC SQUAT 15 reps	2 KICKBACK SQUAT 20 reps	3 BASIC + KICKBACK SQUATS 15 reps each	4 BASIC + KICKBACK SQUATS 20 reps each	5 REST DAY	6 SUMO SQUAT 15 reps	7 REACHING SUMO SQUAT 20 reps
8 SUMO + REACHING SQUATS 15 reps each	9 SUMO + REACHING SQUATS 20 reps each	10 REST DAY	11 OBLIQUE SQUAT 15 reps	12 JUMP SQUAT 20 reps	13 OBLIQUE + JUMP SQUATS 15 reps each	14 OBLIQUE + JUMP SQUATS 20 reps each
15 REST DAY	16 NARROW SQUAT 15 reps	17 PISTOL SQUAT 10 reps each leg	18 NARROW + PISTOL SQUATS 15 reps narrow 15 each leg pistol	19 NARROW + PISTOL SQUATS 15 reps narrow 20 each leg pistol	20 REST DAY	21 CURTSEY SQUAT 10 reps each leg
22 SPLIT SQUAT 15 reps each leg	23 CURTSEY + SPLIT SQUATS 10 each leg curtsy 10 each leg split	24 CURTSEY + SPLIT SQUATS 15 each leg curtsy 15 each leg split	25 REST DAY	26 ISOMETRIC SQUAT 10 reps each leg	27 POP SQUAT 30 reps	28 ISOMETRIC + POP SQUATS 15 reps each leg iso 20 reps pop
29 ISOMETRIC + POP SQUATS 20 reps each leg iso 30 reps pop	30 FINAL SUPERSET CHALLENGE! 5 reps, 2 sets of every move together					

Complete the puzzles and turn them to Human Resources by November 12, 2016 by 12:00 p.m. to be entered into a raffle for a \$10 gift card!

Puzzle

Congratulations to
last month's winner:
Elia Tijerina
City Secretary

Diabetes

C N O G O G S G I I O J T S S
I S A V E U E N L S I S W T N
R E R I G S S N S U I Q A R O
C T T A T U T E E G T T O E I
U E R O L I N A O T I E S S T
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A A N L I T O E T I C C I A C
T I K F T T E I I R O X S R I
I D X B E U C P E D W N C C L
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| 🍷 Blood Glucose | 🍷 Dietician | 🍷 Research |
| 🍷 Chronic | 🍷 Exercise | 🍷 Statistics |
| 🍷 Circulation | 🍷 Fitness | 🍷 Sugar |
| 🍷 Complications | 🍷 Genetics | 🍷 Symptoms |
| 🍷 Diabetes | 🍷 Gestational | 🍷 Type One |
| 🍷 Diabetologist | 🍷 Gluten | 🍷 Type Two |
| 🍷 Diagnosis | 🍷 Insulin | |

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	4	8		2	1	3
	5	2				9
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3			9	2		5

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Next Month's Issue:

Holiday Safety