DIABETES AND HYPERTENSION MANAGEMENT



RIO GRANDE VALLEY CHRONIC CARE MANAGEMENT



School of Public Health Brownsville Regional Campus

The University of Texas Health Science Center at Houston

https://www.uclahealth.org/marc/ mindful-meditations



Salud y Vida Diabetes Self-Management Education Classes Cameron County

Brownsville Schedule

Su Clínica

105 E. Alton Gloor Blvd.

Español: Martes de 5:30-7:30 pm

Tony Gonzalez Recreational Park

Start : September 12, 2019

34 Tony Gonzalez Drive

Español: Jueves de 10:00 - 12:00pm

Brownsville Community Health Center

191 East Price Road

Español: Sábados de 9-11 am

Harlingen Schedule

Su Clínica

1706 Treasure Hills Blvd.

English: Thursday from 6-8 pm

Rio Grande State Center 1401 South Rangerville Road Español: Martes de 9:30 ⁻11:30 am

San Benito Schedule

San Benito C.I.S.D. Landrum Educational Complex 450 South Dowling St San Benito, TX 78586 Español: Miercoles de 6–8 pm Español: Jueves de 10 am–12 pm

Salud y Vida Diabetes Self-Management Education Classes Hidalgo County

Alton Schedule

Alton Recreational Center

349 Dawes Ave, Alton, TX 78573

Español: Miércoles de 10 am – 12 pm

McAllen Schedule

Hope Family Health Clinic

2332 Jordan Rd.

Español: Martes de 10 am - 12 pm

OBJECTIVES

- Define Diabetes and High blood pressure
- Know the symptoms of hyperglycemia and hypoglycemia and what actions are needed with each
- Identify your glucose and blood pressure targets
- Describe healthy lifestyle activities that help in managing diabetes and blood pressure
- Begin self monitoring activities





SHARE

What is diabetes? What is one of your barriers in controlling diabetes? What do you expect from this class?

DIABETES

- Diabetes is the **7th leading cause of death** in the U.S.
- •When you have diabetes, your body either doesn't make enough insulin or cannot use its own insulin as well as it should.
- In type 2 diabetes, hypertension is often present as part of the insulin resistance.

Diabetes is a chronic disease that has no cure.



HOW IT WORKS

- Glucose (sugar) enters the bloodstream, from food we eat. This is then used as energy for the body.
- Insulin is produced by the pancreas, which is located near the stomach.
- Insulin helps move glucose to muscles, liver cells, and fat.



INSULIN AND GLUCOSE (SUGAR)

- Insulin and glucagon are hormones secreted from the pancreas
- Insulin moves sugar from the blood to the cells
- Sugar (glucose) produces the main source of energy for the body.



What happens when we eat?



After we eat, the majority of the food turns into glucose , which is the primary fuel for the body

Regulation of Blood Glucose

Glucose stays at normal levels in a person who does not have diabetes because...

Insulin is released the necessary time and in necessary amounts



Insulin helps glucose enter the cells

High Blood Glucose (Hyperglycemia)

When you have diabetes, the glucose in the body accumulates for several possible reasons...

Very little insulin is produced

The cells can not use insulin well



The liver produces a lot of glucose

Hyperglycemia Can Be the Cause of Serious Long Term Complications

Chronic complication of diabetes



Two fundamental types of diabetes

Páncreas

Type 1 Diabetes

The pancreas produces very little or no insulin at all

Type 2 Diabetes

The cells don't use insulin correctly (insulin resistance)

With time, the ability of the pancreas to produce insulin, decreases

WHAT IS A RISK FACTOR?

- Risk factors are the conditions that increase the possibility of a person to get or develop diseases.
- ModifiableCan be changed
 - Can be changed
- Non-modifiableCannot be changed



MODIFIABLE RISK FACTORS

- Obesity
- Lifestyle
- Increase of lipids in blood
- Polycystic Ovarian Syndrome
- Smoking







NON-MODIFIABLE RISK FACTORS

- Age
- Family history
- Gestational diabetes
- Ethnicity







EXERCISE BREAK

SHARE

What can you do to control your diabetes and High blood pressure?

DIABETES SELF MANAGEMENT

A person takes control of his or her condition.



Good News for Type 2 Diabetes

Keeping A1C levels and Blood pressure in the recommended range, decreases:



Estudio para la Posibilidad de Diabetes del Reino Unido

A1C ₁	eAGmpt
5	97
5.5	111
6	126
6.5	140
7	154
7.5	169
8	183
8.5	197
9	212
9.5	226
10	240
10.5	255
11	269
11.5	283
12	298

RECOMMENDED GLUCOSE LEVELS

Before Meal	80-130 mg/dl
After Meal (1-2hrs)	<180 mg/dl
A1C	<7.0%
A1C may also be reported as eAG	154 mg/dl

HYPOGLYCEMIA

Hypoglycemia

- Also referred to as low blood sugar
- Occurs when blood sugar levels fall below 70 mg/dl



HYPERGLYCEMIA

Hyperglycemia

• Also referred to high blood sugar

• Occurs when blood sugar is more than 200 mg/dl

Symptoms



BENEFITS OF CHECKING BLOOD GLUCOSE LEVELS

- Adjust your lifestyle
- Helps with diet, exercise and medication
- Reduces the risks of hypo or hyperglycemia due to excess or insufficient medicine



WHEN CHECK BLOOD GLUCOSE LEVELS?

Recommended schedule:

- Early morning
- Before meals
- 2 hours after meals
- Before bedtime
- Before and after exercise
- Symptoms of low or high blood glucose

Note: The doctor may recommend more or less frequent self monitoring base on the patient ability to control their glucose level and other factors



WHAT IS BLOOD PRESSURE?



Blood pressure is the force that blood puts on the arteries when the heart expands and relaxes.

WHAT IS HIGH BLOOD PRESSURE?

When the force of blood pushing outwards on your arteries is higher than it should be.



Artery Vessel Blood Pressure exerted by blood on vessel walls.

What is blood pressure?

Blood pressure is the force that moves blood through your arteries. Arteries are the blood vessels that carry blood from your heart to the rest of your body. High blood pressure is when your blood pressure is usually higher than it should be. It is also called **hypertension**.

RECOMMENDED BLOOD PRESSURE LEVELS

Blood Pressure Categories



BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 - 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 - 139	or	80 - 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

CONTROLLED BLOOD PRESSURE FOR A PERSON WITH DIABETES



blood pressure should be kept below 130/80

BENEFITS OF CHECKING BLOOD PRESSURE LEVELS

- Adjust your lifestyle
- Helps with diet, exercise and medication
- Regular monitoring can actually create a baseline for your symptoms and provide valuable information regarding treatment outcomes.



WHEN CHECK BLOOD PRESSURE LEVELS?

Recommended schedule:

- At same time every day
- After a change in medication treatment
- Before your next doctor appointment
- Before and after exercise
- Symptoms of low or high blood pressure

Note: The doctor may recommend more or less frequent self monitoring base on the patient ability to control their BLOOD PRESSURE level and other factors



WHAT AREA WOULD I LIKE TO WORK ON?

