



DEPARTMENT OF ECONOMIC SECURITY

*Your Partner For A Stronger Arizona*

The Division of Developmental Disabilities

Quality Improvement

# DIABETES TYPE 2

## Providing Adequate Care

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## ▶ Part I

- ▶ Introduction
- ▶ What is Diabetes?
- ▶ Type I vs. Type II Diabetes
- ▶ Complications of High Blood Sugar

## ▶ Part II

- ▶ Self-Care
  - ▶ Lifestyle
  - ▶ Blood Sugar Testing
  - ▶ Medical Plan of Care
- ▶ Medical Care
  - ▶ PCP
  - ▶ Specialist
  - ▶ Treatment Plan
- ▶ Preventing Complications

# Introduction - purpose of the program

## ▶ General Information

- ▶ The purpose of this presentation is to provide *general information and resources* regarding the management of Diabetes Type II - it is not intended to replace medical care.

## ▶ Resources

## ▶ Create Opportunity

# Introduction - In case you haven't heard.

## ▶ American Diabetes Association

**Mission:** To prevent and cure diabetes and to improve the lives of all people affected by diabetes.

- ▶ The American Diabetes Association is no longer using the term “diabetic”. People with diabetes are individuals with diabetes, not “diabetics.”
- ▶ The term “Diabetic” will continue to be used related to complications, e.g., “diabetic retinopathy.”

## What is Diabetes?

Diabetes means that your body no longer processes sugars correctly or on it's own.

The following section will discuss...

- ▶ Physiology
- ▶ Diabetes Types I & II
- ▶ Complications
- ▶ High and Low Blood Sugar



# What is Diabetes?

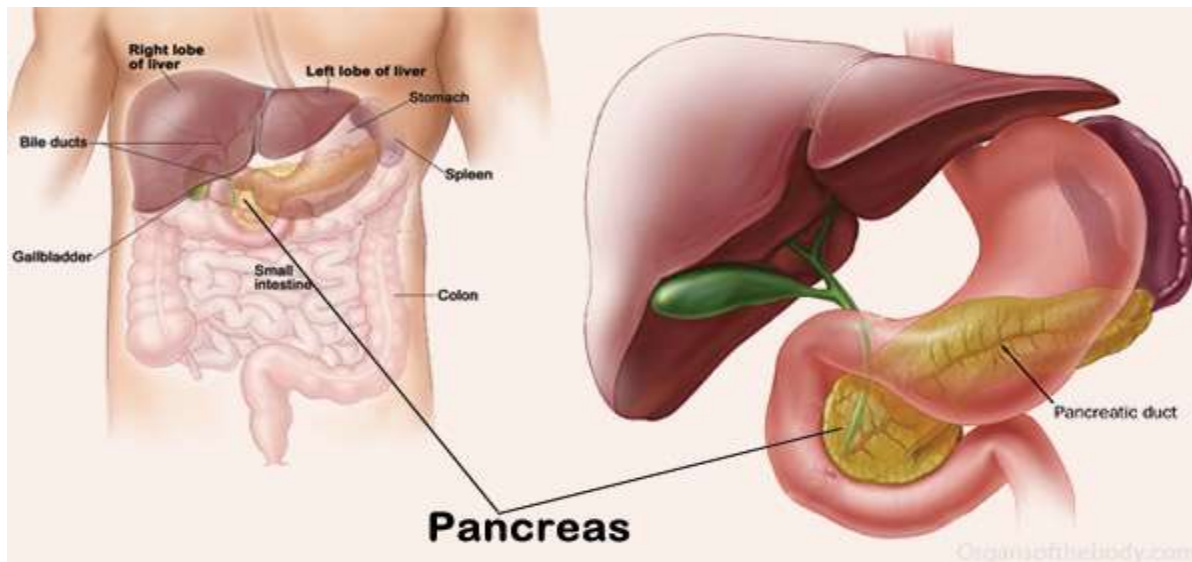
- ▶ Diabetes is a disease in which the body does not control the amount of glucose (sugar) in the blood.
- ▶ It causes sugar to collect in the blood stream raising the sugar levels higher than normal



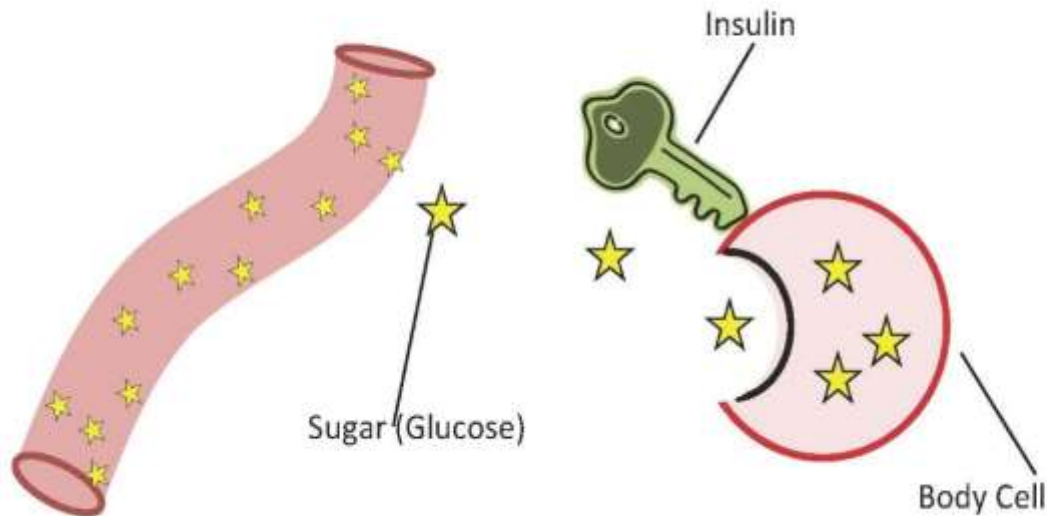
# The Pancreas and Insulin

- ▶ The pancreas is a gland
  - ▶ It releases enzymes into the intestine to help breakdown and digest food.
  - ▶ It releases the hormone *insulin* into the bloodstream.

The body needs insulin to use sugar in the blood stream for energy.



# The Body and Glucose (Sugar) . . .

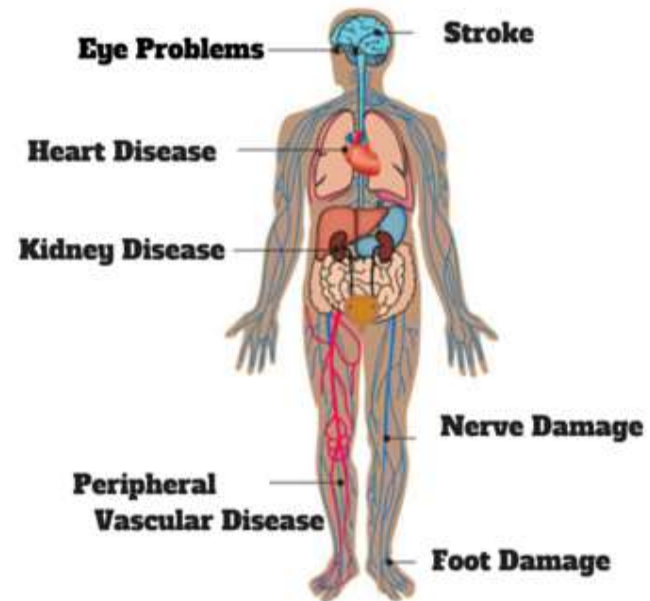


When a cell needs energy, insulin acts as a key to unlock the cell. This opens the cell so sugar can enter and be used for energy.



# High Blood Sugar (Hyperglycemia)

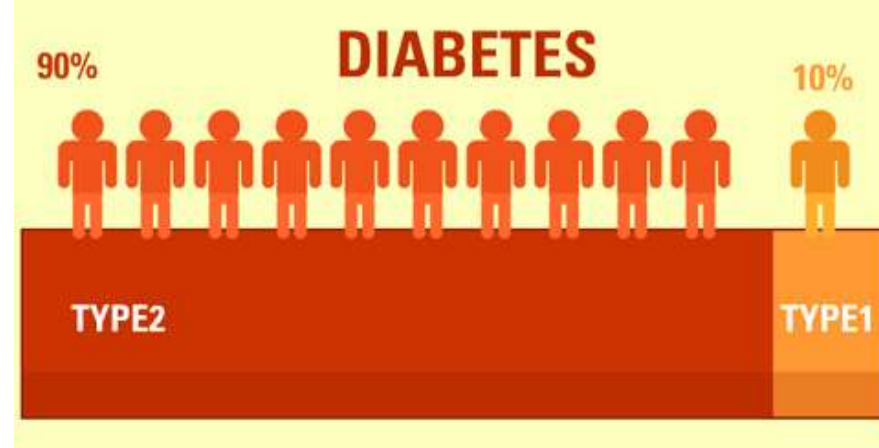
- ▶ High blood sugar damages vessels causing “complications” including:
  - ▶ Heart disease
  - ▶ High blood pressure
  - ▶ Stroke
  - ▶ High cholesterol
  - ▶ Kidney disease
  - ▶ Vision problems / blindness
  - ▶ Nerve damage
  - ▶ Skin problems
  - ▶ Infections



## low blood sugar (hypoglycemia)

- ▶ In people who have developed diabetes
  - ▶ Low blood can occur due to diet, medications and exercise
  - ▶ Low blood sugar is “life threatening” if not treated.
  - ▶ Low blood sugar is when the amount of sugar in the blood is too low to meet the body’s needs.

# Types of Diabetes: Type 1 vs. Type 2



## Type 1 Diabetes

- ▶ Age of Onset: usually childhood, young adulthood
- ▶ Cells that make insulin are destroyed by body
  - ▶ Auto immune disorder
- ▶ **No Insulin production**
- ▶ Treated w/ daily insulin by injection with a syringe

## Type 2 Diabetes

- ▶ Age of Onset:
  - ▶ Most Common in adults; increasingly common in children
  - ▶ Overweight; Inactivity
- ▶ Insulin resistance - first step
- ▶ **Insufficient insulin production**
- ▶ **Resistance to insulin's effects**
- ▶ Treated w/ insulin medication + exercise + food intake

# PART II

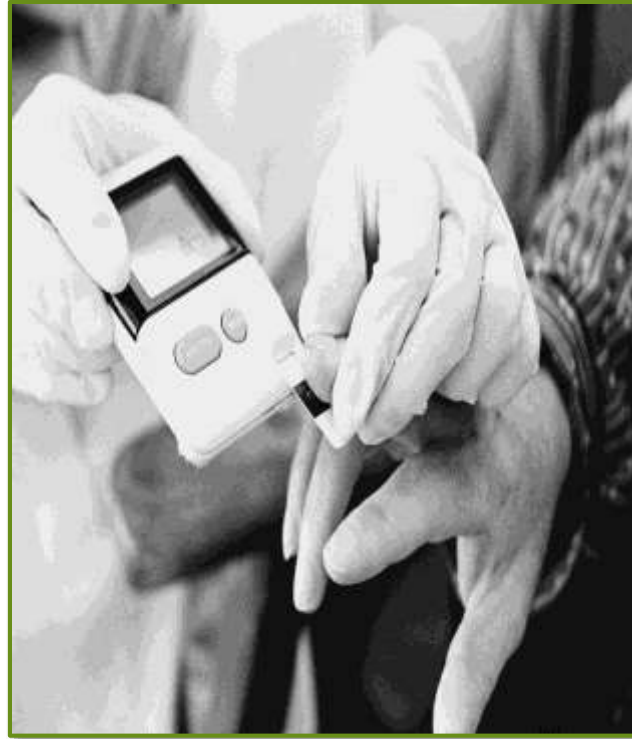
- ▶ Self-Care
  - ▶ Lifestyle
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# Self-Care

- ▶ Diet
- ▶ Exercise
- ▶ Blood Sugar Monitoring
- ▶ Management Plan  
(from a medical provider)

# Medical Care

- ▶ PCP (2-4 times per year)
- ▶ Endocrinologist (2-4X a year)
- ▶ Lifestyle Modification
- ▶ Blood Sugar Testing
  - ▶ Action Plan (when to call)
  - ▶ A1c Testing
- ▶ Oral Medication
- ▶ Insulin Therapy
- ▶ Oral and Insulin Combo
- ▶ Blood Pressure Therapy
- ▶ Blood Lipid Management
- ▶ Annual Surveillance
  - ▶ Eyes
  - ▶ Kidney function
  - ▶ Feet



# COMPLICATIONS: high blood sugar causes damage

- ▶ Neuropathy (nerve damage)
- ▶ Skin Integrity (pressure sores, infections)
- ▶ Visual Changes (retinal bleeding)
- ▶ Kidney Disease (damage to small blood vessels in the kidneys)
- ▶ Amputations (decreased feeling allows serious infections leading to amputation)
- ▶ Heart Disease
- ▶ Stroke
- ▶ Infections
- ▶ Gum Disease
- ▶ Premature Death

# Manage Blood Sugar (BS)

- ▶ Sustained (4 hours or more) BS over 170 causes damage in the body
- ▶ Normal range is 70-100 after fasting (first thing in the morning) or Less than 140 (2 hours after eating)
- ▶ Blood Sugar changes constantly - you may have to check several times a day (am before eating, before meals, and at bedtime).
- ▶ Have a medical plan in place for addressing BS that is too low or too high.
- ▶ How can BS get too low?
- ▶ Low BS is a medical emergency - have a plan!



# Wrap-up and Questions

- ▶ Resource Packets (Fact-Sheet)
- ▶ Business Card - On-Site presentation?
- ▶ Presentation Evaluation Form

Thank you for your attention!