

# Diabetes Prevention and Insulin Education

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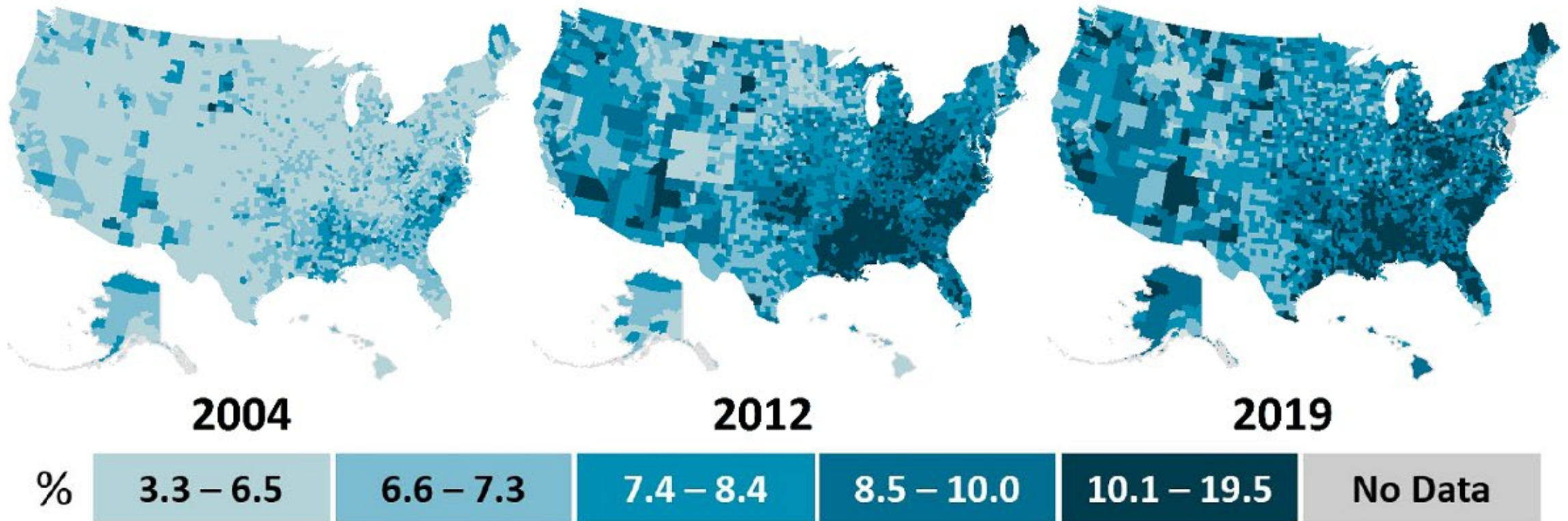
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# A few things...

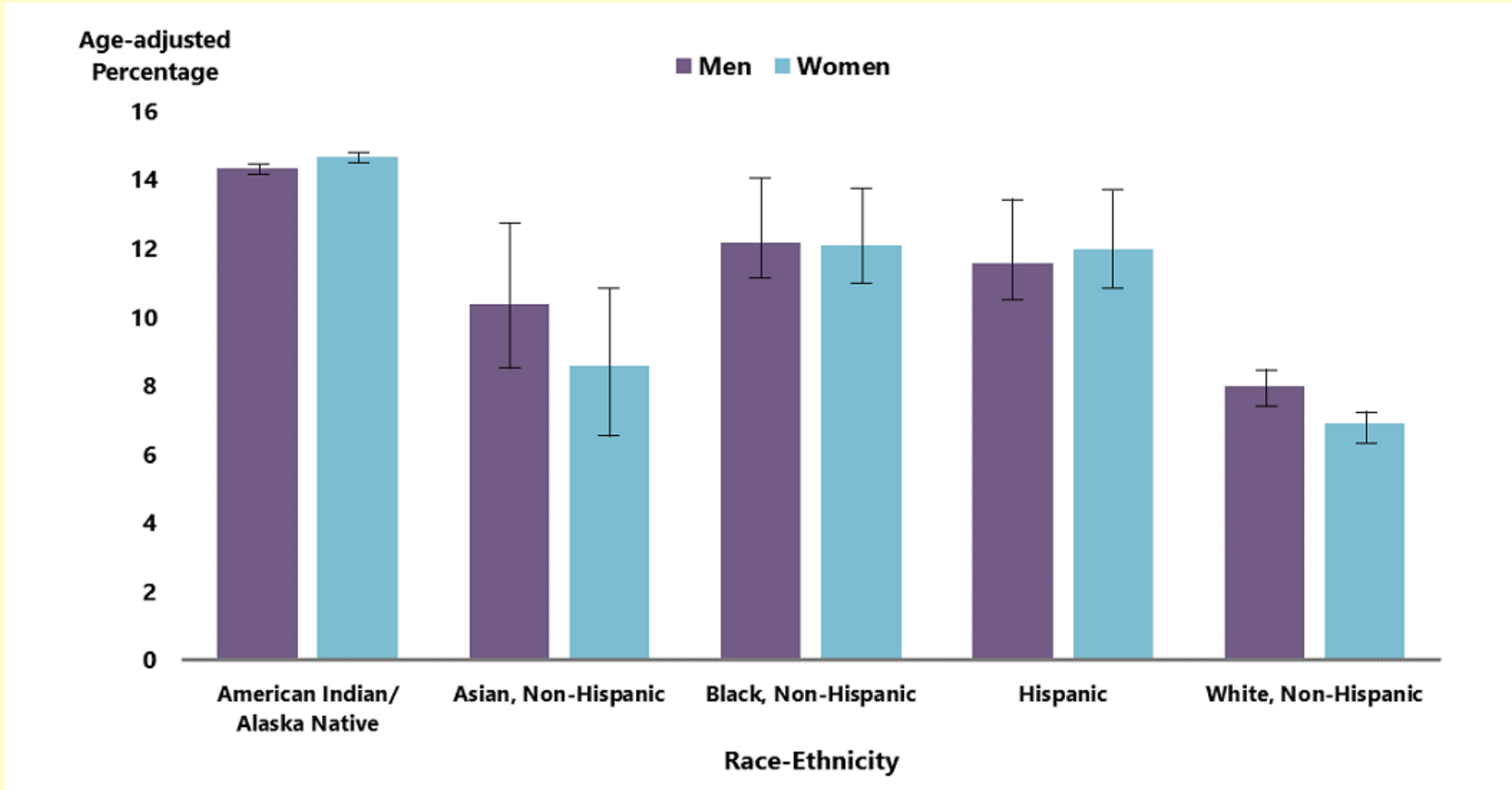
- Please enter any questions you have in the chat. We will get to as many questions as we can.
- Scan this QR code to access this presentation plus bonus information.



# Approximately 28.7 million people are living with diabetes



# Prevalence of diagnosed diabetes by race/ethnicity group and sex for adults aged 18 years or older



# What is diabetes?

- Chronic disease that affects how your body uses energy (glucose)
  - Disturbances in carbohydrate, protein, and fat metabolism
  - May be due to a lack of insulin availability (type I diabetes)
  - May be due to reduction in biologic effects of insulin (type II diabetes)
- Three types:
  - Type I (5-10%)
  - Type II (90-95%)
  - Gestational
- Pre-diabetes – elevated blood glucose levels but does not meet diagnostic criteria for diabetes



# Risk factors – type II diabetes

- Family history
- Age
- Prediabetes
- History of gestational diabetes
- Physical inactivity



# Can I prevent diabetes?

- Depending on your risk factors, there are some things you can do to reduce your risk for diabetes.

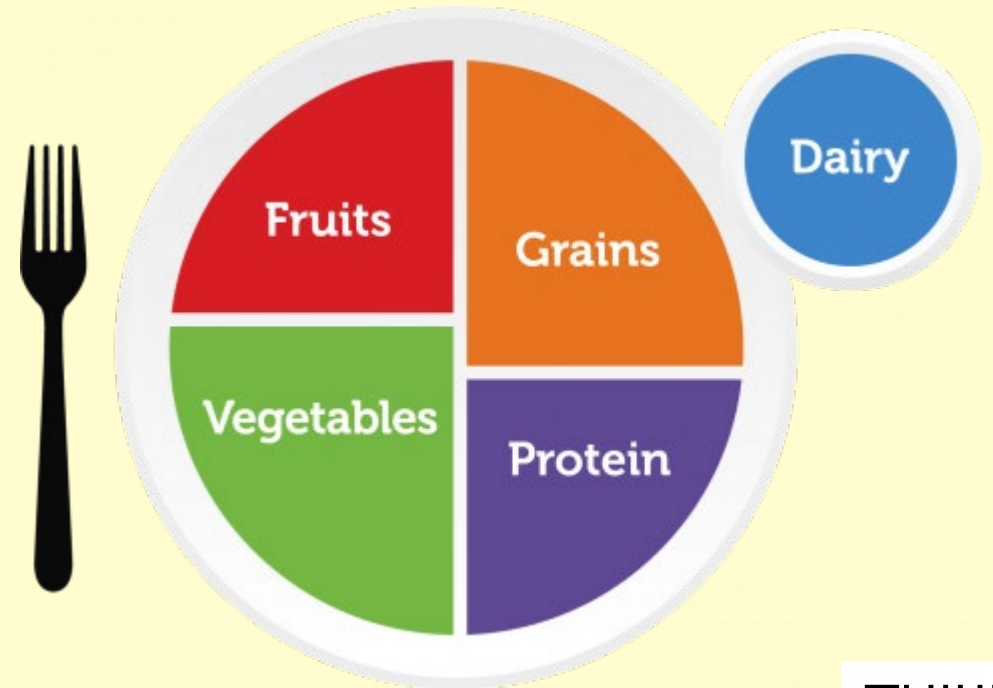


<https://www.cdc.gov/diabetes/prevention/index.html>



# Can I prevent diabetes?

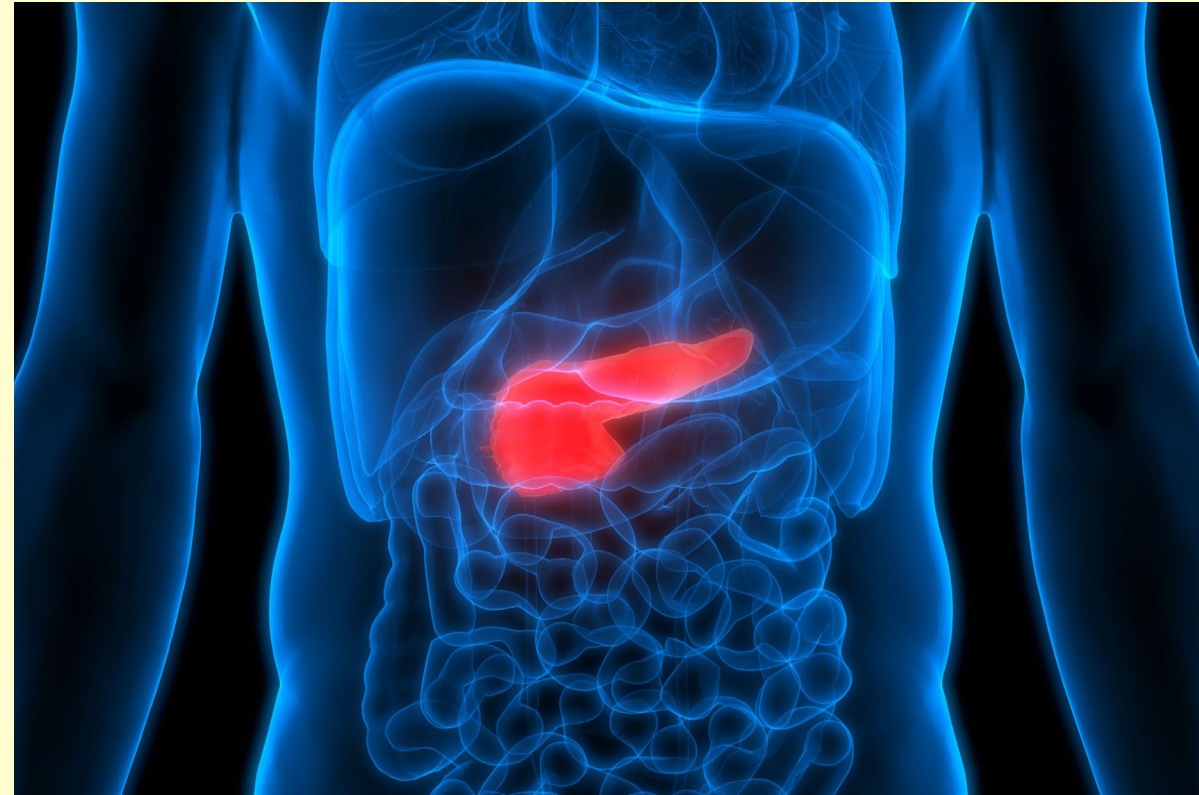
- Depending on your risk factors, there are some things you can do to reduce your risk for diabetes.
  1. For some, weight loss can help.
  2. Be more physically active
  3. Eat healthy plant foods
  4. Eat healthy fats
  5. Make healthy choices





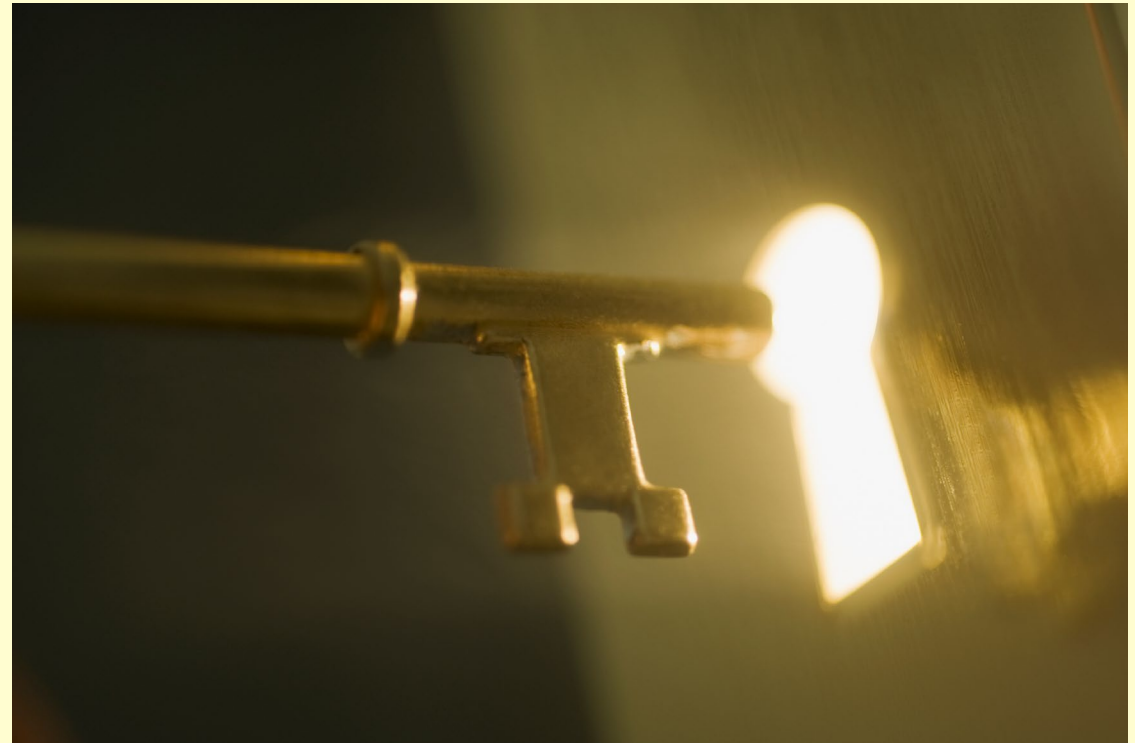
# What is insulin?

- Hormone made by your pancreas
- Insulin is required to move glucose from your blood into your cells



# What is insulin?

- Hormone made by your pancreas
- Insulin is required to move glucose from your blood into your cells
  - Glucose cannot enter the cells unless



# Who needs insulin?



- People who do not make insulin (type I diabetes)
- People who make insulin, but the cells no longer respond to the insulin (insulin resistance, type II diabetes)
- People who don't make enough insulin (type II diabetes)



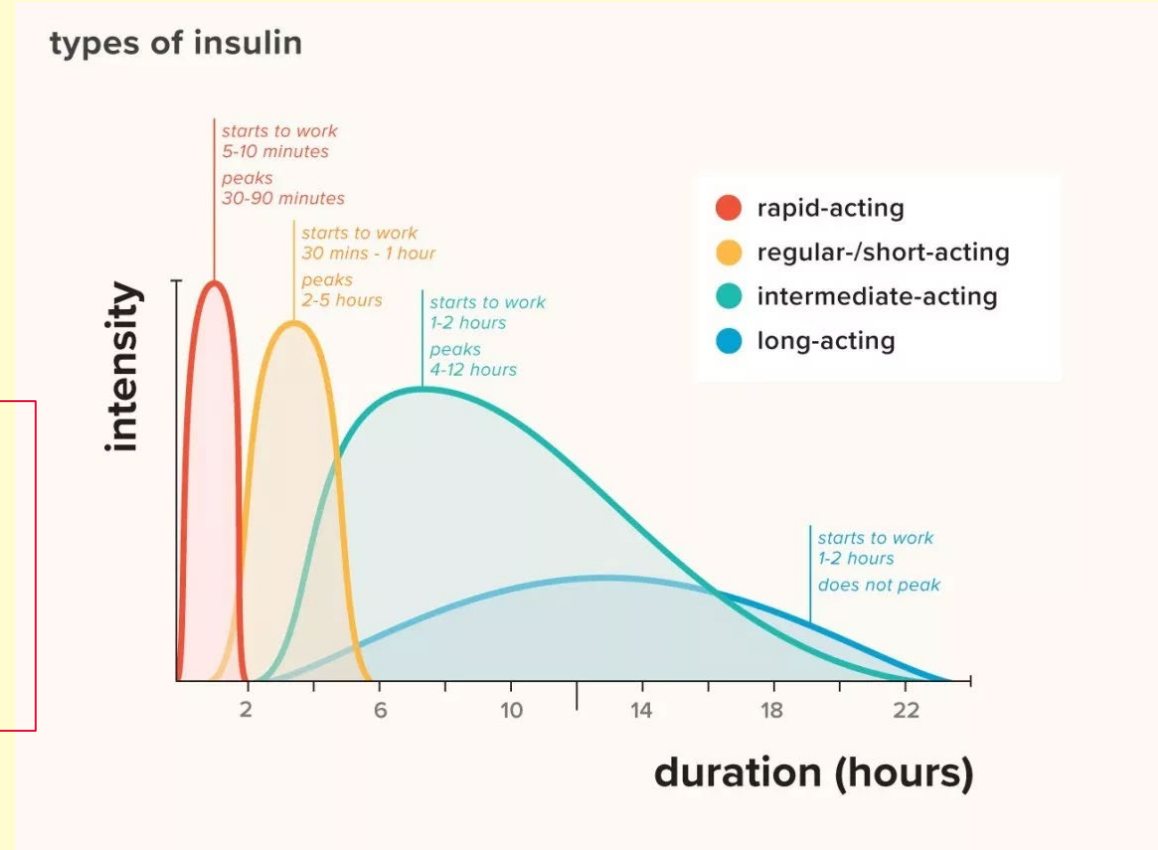
# Types of insulin

- 4 types:

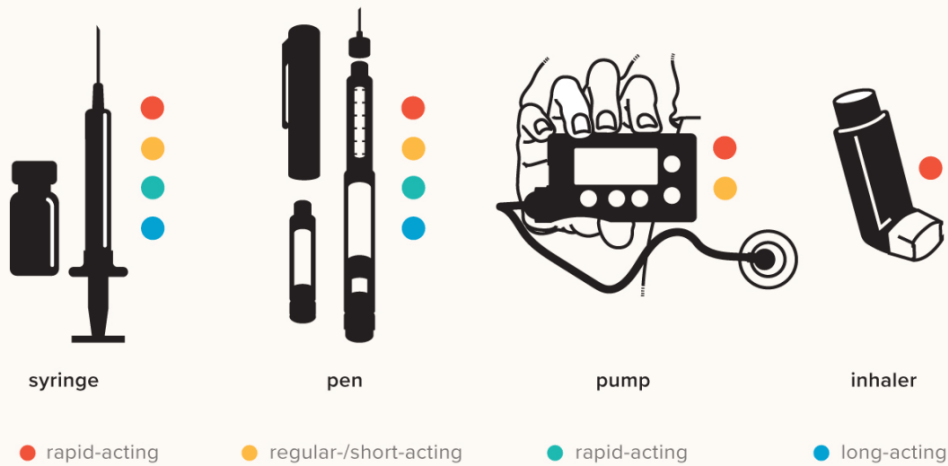
- Rapid acting
- Short acting
- Intermediate acting
- Long acting

Taken before  
a meal

Manages  
glucose  
throughout  
the day



## how to take insulin?



### Rapid-acting insulin include:

- insulin aspart ([NovoLog](#))
- insulin glulisine ([Apidra](#))
- insulin lispro ([Humalog](#))

Regular- or short-acting products generally use [insulin regular](#), including:

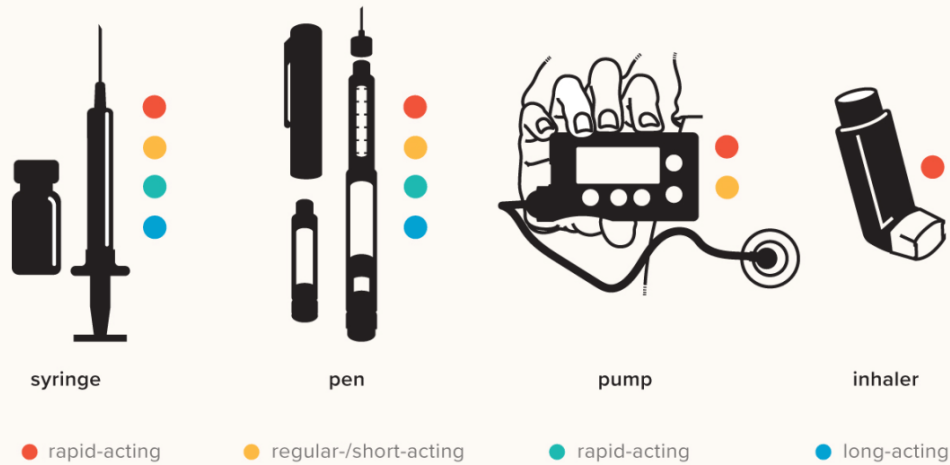
- [Humulin R](#), Humulin R U-500, Humulin R U-500 KwikPen
- Novolin R, Novolin R Innolet, Novolin R PenFill
- ReliOn/Humulin R
- ReliOn/Novolin R

Intermediate-acting products generally use insulin isophane, including:

- [Humulin N](#) Humulin N KwikPen, Humulin N Pen
- Novolin N, Novolin N Innolet, Novolin N PenFill
- ReliOn/Novolin N



## how to take insulin?



Long-acting insulin products include:

- [insulin detemir](#) (Levemir, Levemir FlexPen, Levemir FlexTouch, Levemir InnoLet, Levemir PenFill)
- insulin degludec ([Tresiba FlexTouch](#))
- [insulin glargine](#) (Basaglar KwikPen, Lantus, Lantus OptiClik Cartridge, Lantus Solostar Pen, Toujeo Max Solostar, Toujeo SoloStar)

Combined regular- or short-acting and intermediate-acting insulin include:

- blends of insulin isophane and insulin regular (Humalin 50/50, Humulin 70/30, Humulin 70/30 KwikPen, Novolin 70/30, ReliON/Novolin 70/30)
- blends of insulin lispro and insulin lispro protamine (Humalog Mix 75/25, Humalog Mix 75/25 KwikPen)



# Do you have to take insulin for diabetes?

- For type I diabetes – yes. Definitely
- For type II diabetes, not everyone needs insulin.
  - Examples: metformin, glyburide, Farxiga<sup>®</sup>

Find more information here:



# Summary

- Diabetes is a prevalent chronic disease that is increasing in the United States
- For people at-risk for diabetes, diabetes prevention through lifestyle changes may decrease risk of developing diabetes
- People living with diabetes require medications to manage glucose and metabolism
- For many, insulin is required to manage their diabetes and to prevent complications



Let's get to some Q & A

