

# Preventing Diabetes

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# Objectives

Provide nutrition education and strategies to help you begin making lifestyle modifications today.

# We need a volunteer!



= Glucose

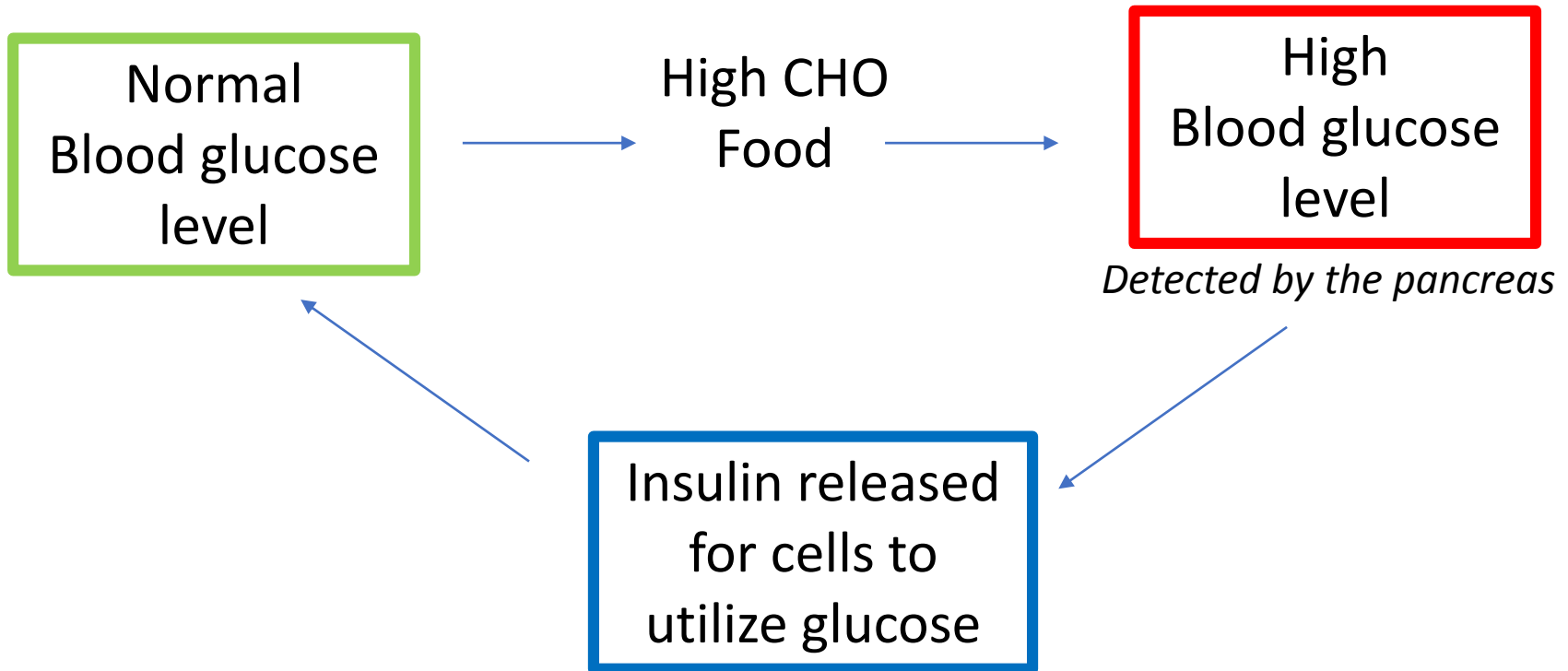


= Cells

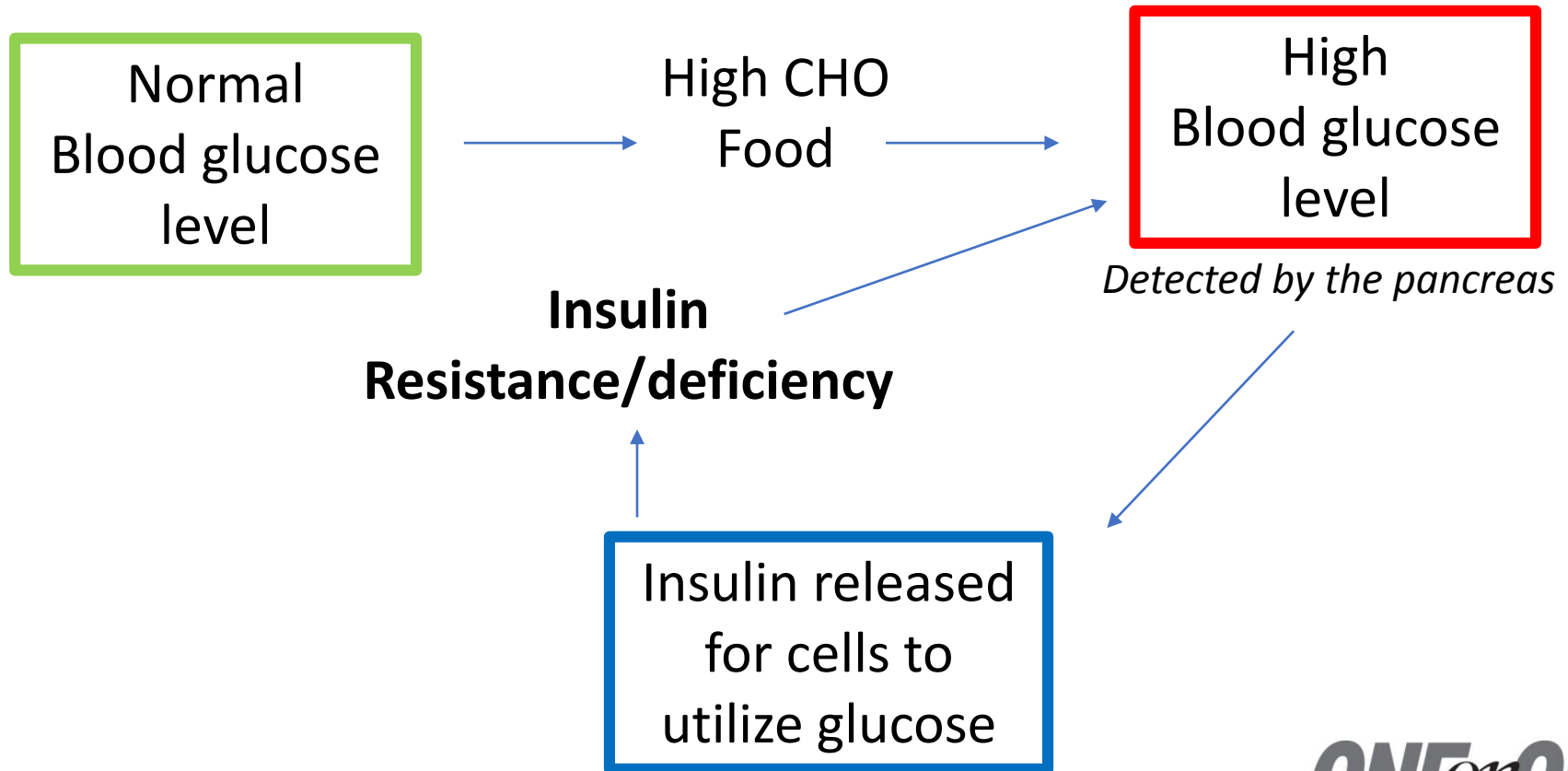


= Insulin

# Normal Blood Glucose Regulation



# Abnormal Blood Glucose Regulation



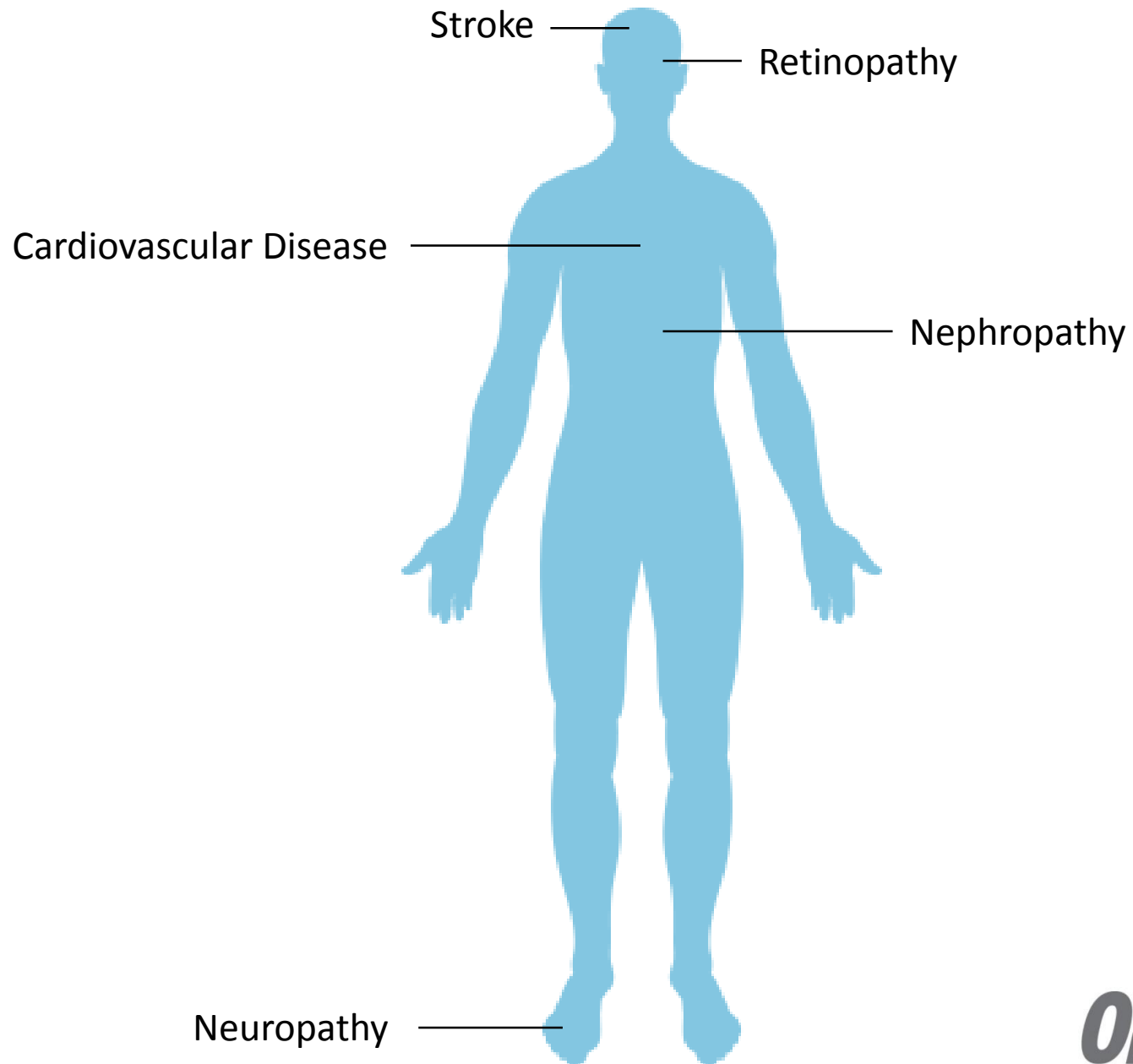
# OPPORTUNITY!



TO CHANGE

OR NOT  
TO CHANGE



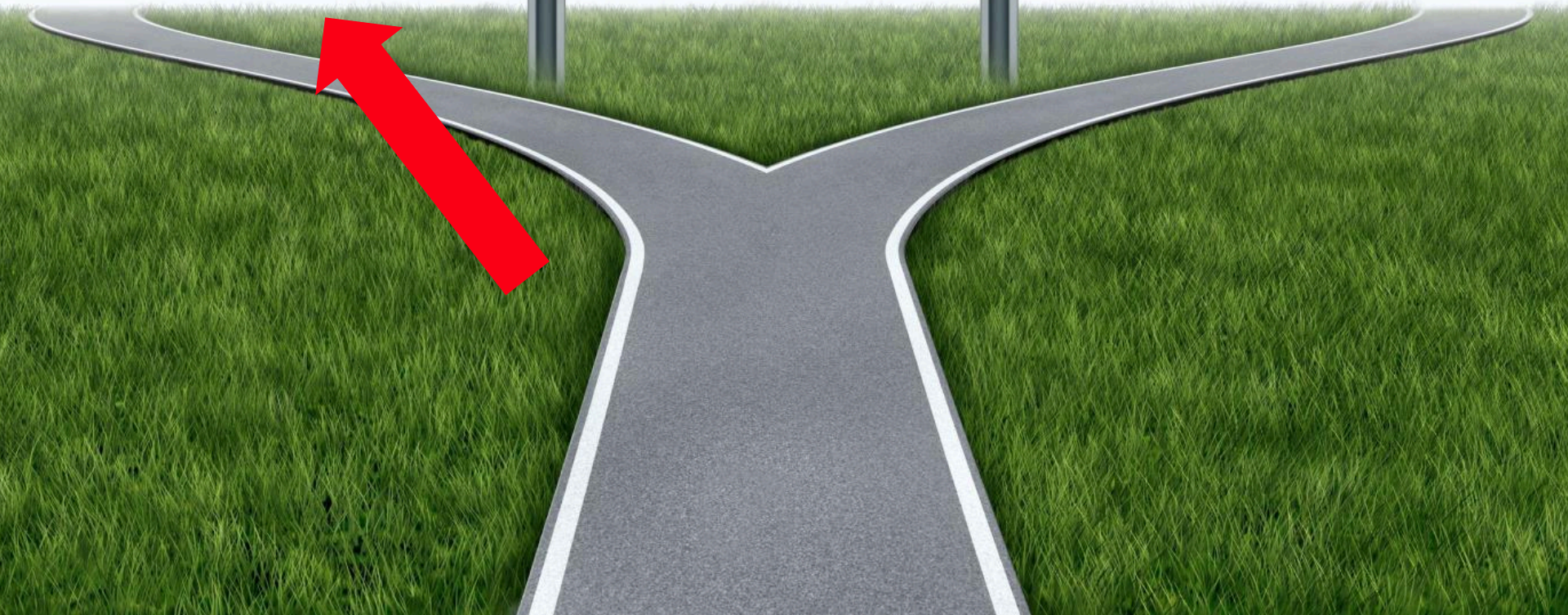


# OPPORTUNITY!



TO CHANGE

OR NOT  
TO CHANGE





## Modifiable

- Overweight/Obese
- Previously impaired fasting blood glucose
- High blood pressure
- Dyslipidemia
- Inactivity
- Smoking

## Non-Modifiable

- 45 years or older
- Family history
- Race/Ethnicity
  - African American
  - Latino
  - Native American
- Polycystic Ovarian Syndrome (females)
- History of Gestational Diabetes (females)

Lifestyle interventions such as ***diet and physical activity*** reduces your risk of developing Type 2 Diabetes by **58%**.

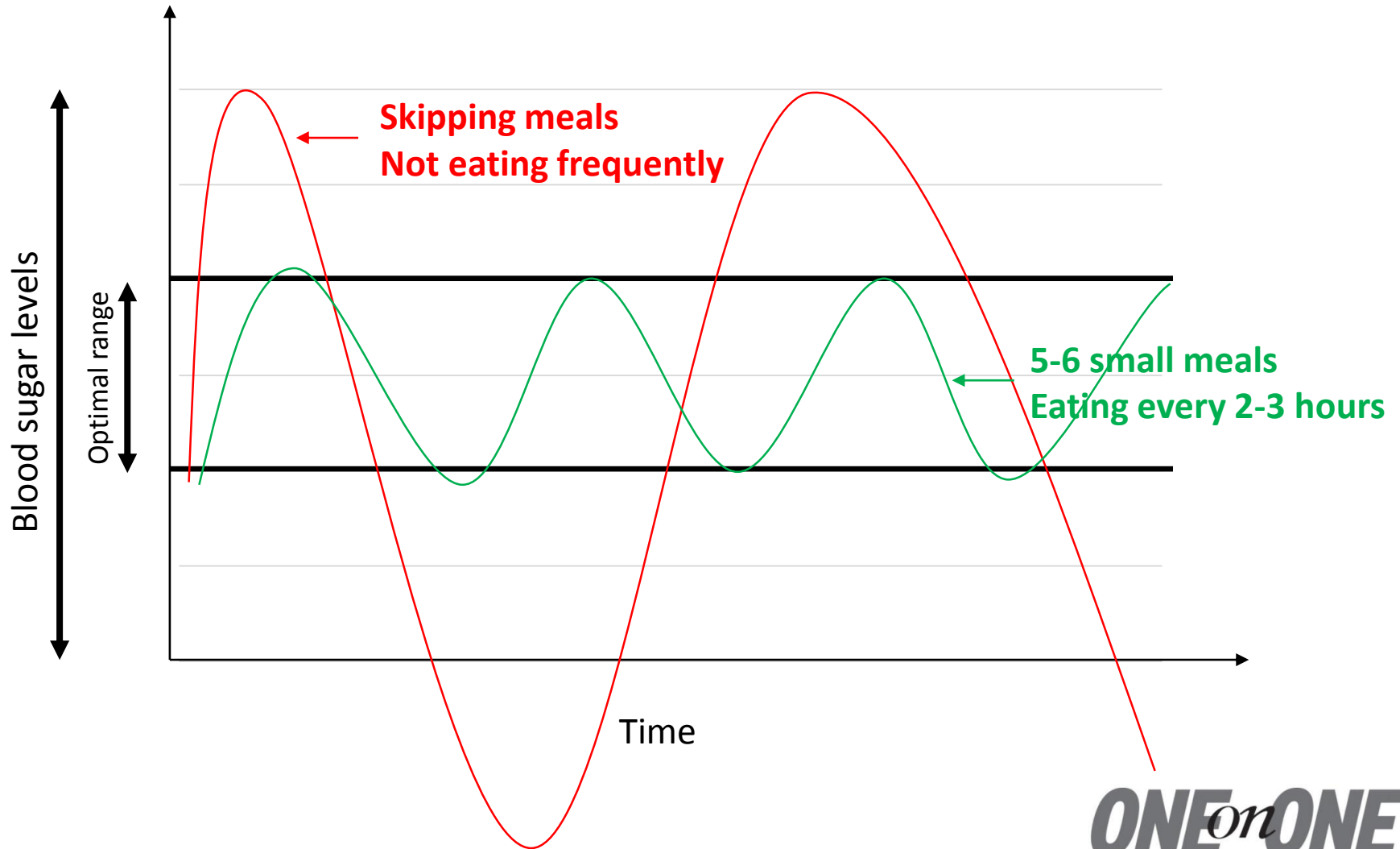
Metformin reduces your risk by 31%.

# Weight Management

Losing 5-7% of your current weight can cut your chances of developing Type 2 Diabetes in half.

Current Weight (lb)	Pounds for 5% weight loss	Pounds for 7% weight loss
175	9	12
200	10	14
225	11	16
250	12.5	17.5
275	14	19
300	15	21

# Frequency of eating



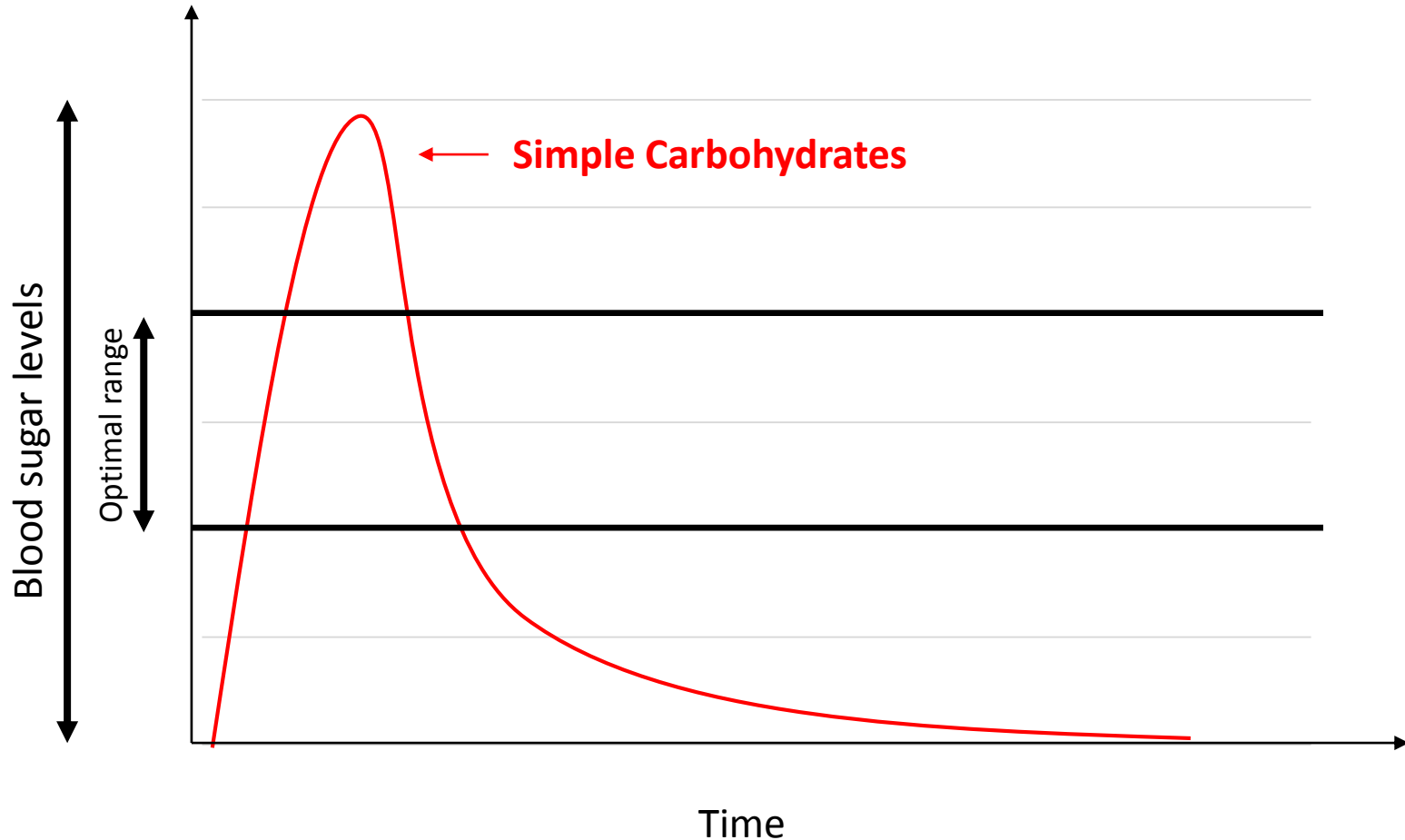
# Simple Carbohydrates



# Sweeteners

Individuals who drink **8-16oz of sugar sweetened beverages per day** have a **26% greater risk** of developing Type 2 Diabetes than those who drink less than 8oz per month.

# Macronutrient impact on blood sugar.

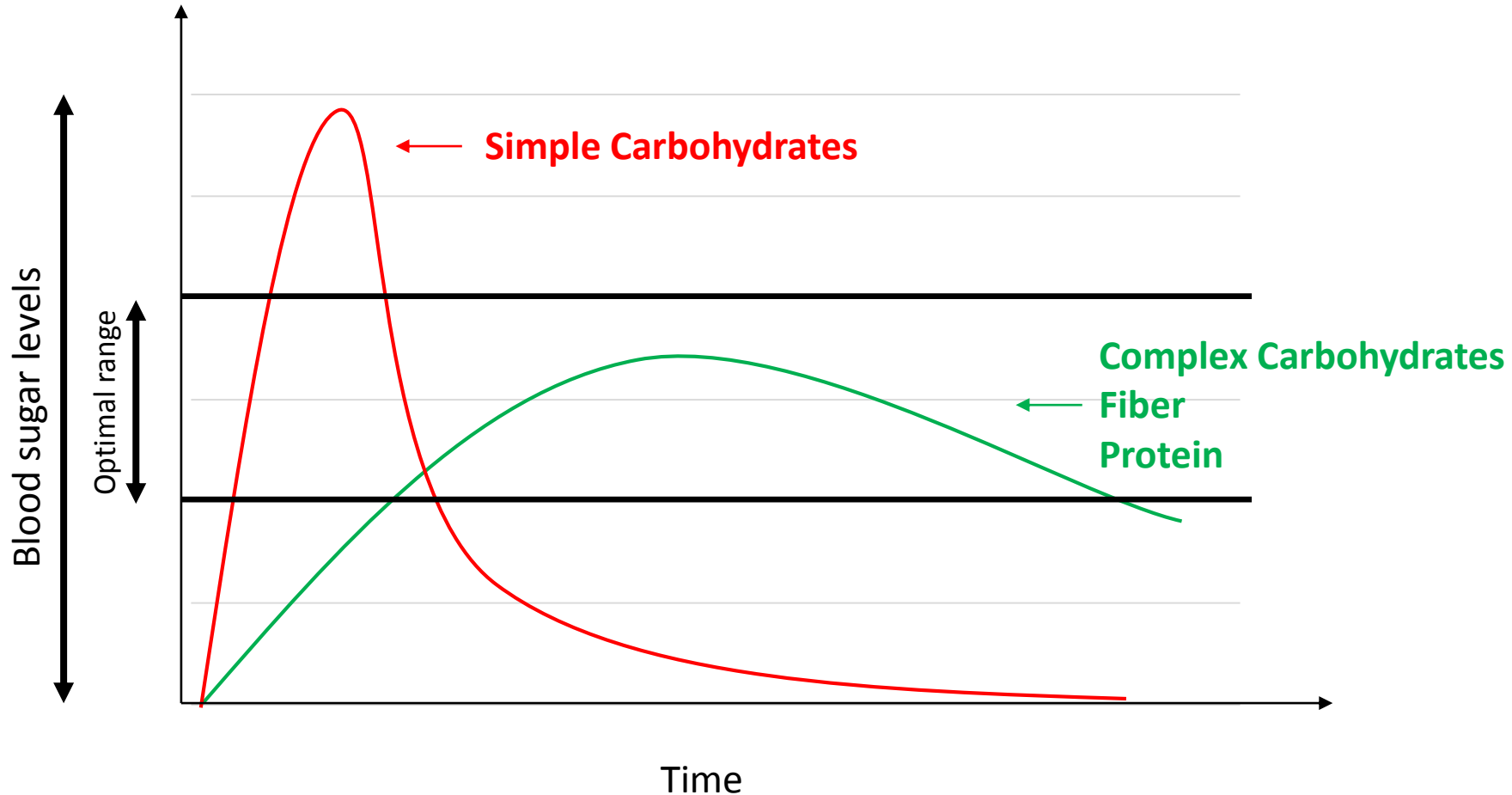


# Complex Carbohydrates





# Macronutrient impact on blood sugar.



# Fats



## Trans Fats (0% of calories)

- Fried foods and bakery items
- Some processed foods (i.e. chips, salad dressings)



## Saturated Fats (<7% of calories)

- Animal products (i.e. meat and dairy)
- Solid at room temperature (i.e. butter, creamer, coconut oil)



## Unsaturated Fats

- Avocado, nuts, seeds, fish
- Liquid at room temperature (i.e. olive and canola oil)

# Sodium

A blood pressure measurement of 140/90 increases your risk of developing Type 2 Diabetes.

**2,300 mg/day**      **—————>**      **230 mg/serving**

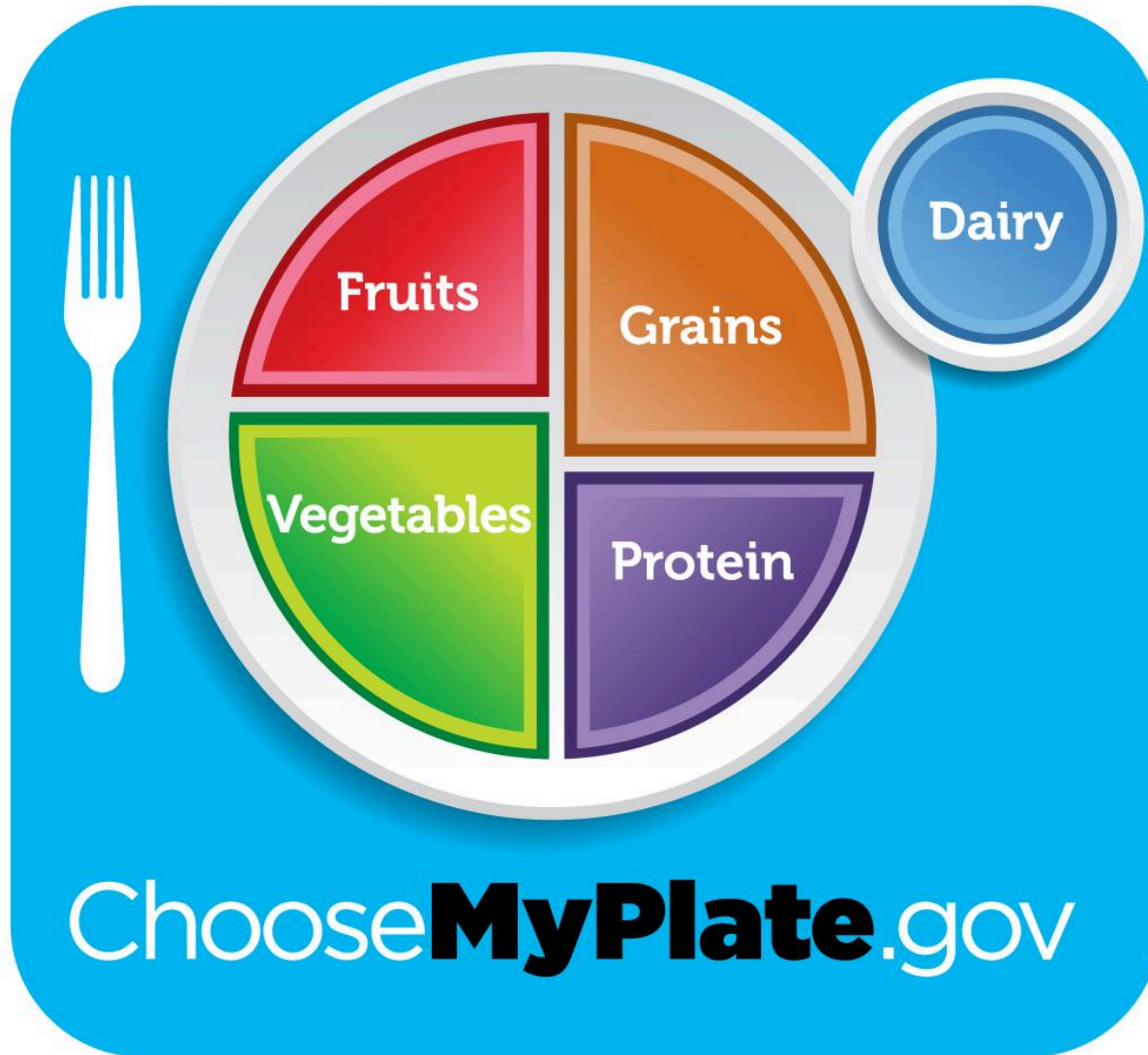
*1 teaspoon table salt = 2,300mg of sodium*

**1,500 mg/day**      **—————>**      **140 mg/serving**

# 2,000 calorie diet

	Percentage of Calories
<b>Carbohydrates</b>	55%
<b>Protein</b>	20%
<b>Fat</b>	25%

Food Group	Number of Servings
Starch	12
Fruit	2-3
Vegetables	5
Dairy	1-2
Protein	6
Fat	5



Choose **MyPlate**.gov

# Sample Day 1

## Breakfast:

- 1 cup oatmeal

## Lunch:

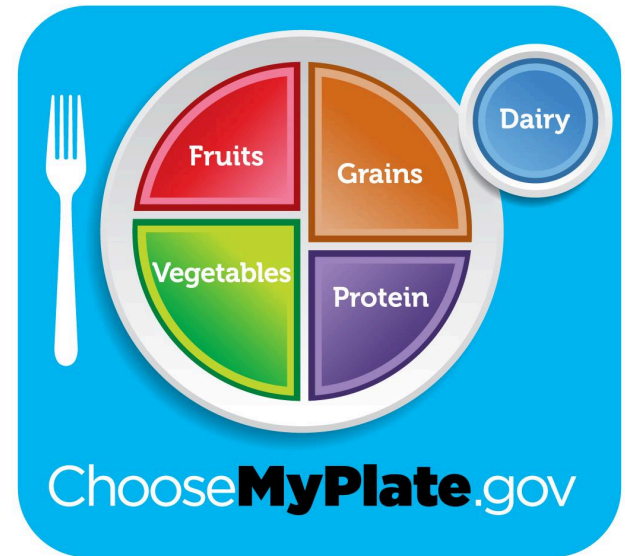
- 12" Subway® hoagie on white bread

## Dinner:

- 2 cups white pasta with ground beef meat sauce

## Dessert:

- 1 piece of fruit



# Sample Day 2

## Breakfast:

- 1 cup oatmeal (made with skim milk)
- 2 hard boiled eggs

## Snack:

- 1 cup carrots
- 2 tablespoons Greek yogurt ranch dip

## Lunch:

- Turkey Sandwich with whole grain bread
- 1 cup melon

## Snack:

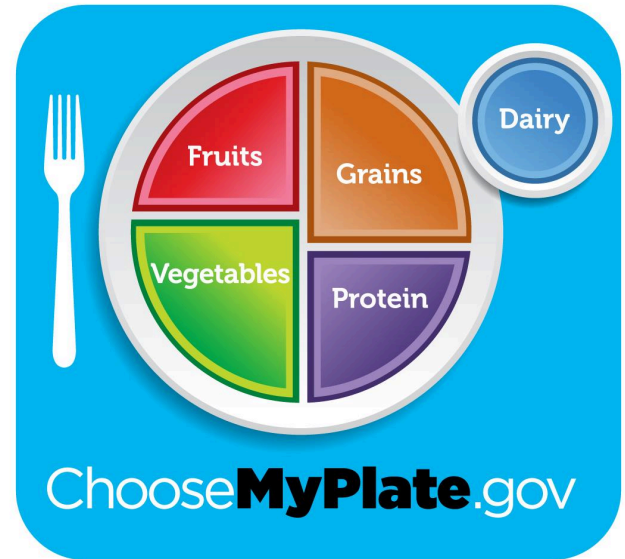
- 1 medium piece of fruit
- 1 lite string cheese

## Dinner:

- 1 cup whole grain pasta
- 3oz grilled chicken
- Side salad

## Dessert:

- 1 medium piece of fruit + 2 tablespoons powdered PB



# Do LESS...

- Eat smaller portions.
- Eat less fat.
  - Focus on types!
- Eat fewer foods high in sugar.
- Use less salt when cooking and at the table.



# Do MORE...

- Eat 5-6 small meals and snacks.
- Pair carbohydrates with protein and fiber.
  - Choose complex carbohydrates
- Eat more lean protein and low fat dairy.
- Increase physical activity.
  - People who watch 2 hours of TV per day have a 20% increased risk for developing Type 2 Diabetes.

# Medical Nutrition Therapy (MNT)

1% to 2% decreases in A1C after 3 to 6 months of diet interventions.

Weight loss of 5 to 14lb in 3 months.

Save an average of \$1,232.00 in Metformin costs per year.