

# MANAGING DIABETES THROUGH DIET AND EXERCISE

In partnership with POTENTRx

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## What is Diabetes?

There are two main types of diabetes: type 1 and type 2. Type 1 diabetes pertains to the body's inability to produce the hormone insulin, while type 2 diabetes refers to an insulin-resistant state. Insulin regulates the body's ability to turn carbohydrates into usable energy or store them for future use. People with type 1 diabetes need insulin shots to regulate their blood sugar level. People with type 2 diabetes do not respond to insulin, ultimately their cells are starved of energy and their blood sugars are elevated. Over time, this can cause be detrimental to the eyes, liver, kidneys, nerves and heart.

## Know Your Facts!

### Q: What is a normal, healthy blood sugar level?

A: A normal fasting blood glucose (sugar) level is below 100 mg/dl. The A1C test measures your average blood glucose over the past 2-3 months and should be below 5.7%.

### Q: If I have diabetes, what should my blood glucose levels be?

A: The American Diabetes Association recommends that eAG (average blood glucose for the past 2-3 months) be 154 mg/dl which correlates to an A1C value of 7%. Before a meal, blood glucose levels should be between 70-130 mg/dl and after a meal it should be less than 180 mg/dl.

### Q: Why is diabetes bad?

A: Diabetes can increase your risk for kidney disease, high blood pressure, stroke, foot complications, and ketoacidosis (acid build up from burning fat instead of glucose) among other things.

### Q: What are symptom of diabetes?

A: Common symptoms of diabetes include: urinating often, feeling very thirsty, feeling very hungry although you are eating, extreme fatigue, blurry vision, cuts/bruises that are slow to heal, weight loss even though you are eating more (type 1), tingling, pain, or numbness in the hands/feet (type 2).

### Q: Is there anything I can do to control my diabetes aside from taking medication?

A: Yes! There are many modifiable risk factors that contribute to diabetes. Please refer to the reverse side for lifestyle changes that can help to prevent or relieve diabetes.

***Diabetes is the seventh leading cause of death and affects 29 million people in the United States.***

*Diabetes.org, 2015*





## What Can Lifestyle Changes Do For Diabetes?

There are many effective lifestyle changes to manage diabetes—staying at a healthy weight can reduce your risk for many of the negative factors of diabetes.

Exercise and a healthy diet are the two main lifestyle changes that you can make to manage or lower your risk of diabetes. The Mediterranean diet is a recommended nutrition program, but visit [diabetes.org](http://diabetes.org) to see a diabetes friendly diet in accordance to the American Diabetes Association. In addition, smoking should be refrained from. Smoking increases your risk of many types of diseases and can make the risk factors of diabetes worse. Although drinking alcohol can cause hypoglycemia shortly after drinking and up to 24 hours later, it is okay to drink in moderation. It is recommended that women drink no more than 1 alcoholic drink per day, and men should drink no more than 2 drinks per day.

## Factors of Diabetes

There is no one, definite cause of diabetes, but the following are known to increase risk for diabetes:

### Modifiable Risk Factors

Obesity or being overweight, smoking, lack of physical activity, high blood glucose, high blood pressure, and unhealthy cholesterol levels.

### Non-Modifiable Risk Factors

Family history of heart disease or diabetes, age, gender (men at higher risk), ethnicity, history of cardiovascular disease, and history of gestational diabetes (diabetes only during pregnancy).

## What Can Exercise Do For Diabetes?

Both aerobic and resistance exercise can help manage your blood glucose by activating the protein GLUT-4, which facilitates glucose uptake by your cells. Resistance training has been shown to be more beneficial than aerobic training. A combination of aerobic and resistance exercise is best for controlling blood glucose, rather than either one alone. At least 3 aerobic exercise sessions in a week with no more than 2 consecutive rest days is recommended. For resistance training, it is recommended that at least 2 sessions per week on nonconsecutive days are performed, but 3 days a week is better. A sample schedule could be aerobic exercise on Monday, Wednesday, and Friday, and resistance exercise on Tuesday, Thursday, and Saturday. Aerobic exercise should consist of at least moderate intensity workouts (40-60% of maximal aerobic capacity) for a weekly total of around 150 minutes. Resistance exercise should target all main muscle groups using 5-10 different exercises. You should use weights that are at least 50% of your 1 repetition max, with 8-10 repetitions, for 3-4 sets. Gradually increasing the resistance will yield greater results in strength and blood sugar control.

