

What is Diabetes?


Diabetes is a condition where your blood sugar stays too high because your body has trouble turning food into energy. Think of insulin as a "key" that lets blood sugar into your cells to be used for fuel. In diabetes, your body either doesn't make these "keys" (Type 1) or the "locks" on your cells don't work properly (Type 2). Because the sugar can't get into your cells, it builds up in your blood, which can damage the body over time.

What is Prediabetes?

Prediabetes is a condition where your blood sugar levels are higher than normal but not yet high enough to be classified as type 2 diabetes. Think of it as a "warning light" for your health. While it indicates an increased risk for heart disease and stroke, Johns Hopkins experts emphasize that it is often reversible through lifestyle changes like weight loss and exercise.

If you have already been diagnosed with diabetes, targeting an A1C below 8 is a great goal.

Blood Sugar Diagnostic Ranges

	Test Type		
	A1C Test (3-month average)	Fasting Glucose (after 8 hours)	Oral Glucose Tolerance (2 hours post-drink)
Normal	Less than 5.8%	Less than 100 mg/dL	Less than 140 mg/dL
Prediabetes	5.8% – 6.4%	100 – 125 mg/dL	140 – 199 mg/dL
Diabetes	6.5% or higher	126 mg/dL or higher	200 mg/dL or higher



How to Check and How to Improve

How Blood Sugar is Checked

Doctors primarily use three tests to "see" what is happening with your glucose levels. Each provides a different piece of the puzzle:

A1C Test (The "Big Picture"): This is a simple blood test that measures your average blood sugar over the past 2 to 3 months. It shows how much sugar is "stuck" to your red blood cells.

Fasting Blood Sugar: This checks your sugar levels after you haven't eaten for at least 8 hours, usually overnight.

Glucose Tolerance Test: You drink a sugary liquid, and your blood is tested two hours later to see how efficiently your body "clears" the sugar.

4 Steps to Improve Your Levels

1. The 5-7% Goal: Losing just 5-7% of your body weight (e.g., 10-14 lbs if you weigh 200 lbs) can reduce diabetes risk by over 50%.
2. The "Half-Plate" Rule: Fill 50% of your plate with non-starchy vegetables like greens, or broccoli to prioritize fiber, which slows sugar absorption.
3. The 150-Minute Rule: Aim for 150 minutes of brisk walking per week. Add light strength training to help your muscles burn glucose more efficiently.
4. Smart Swaps: Exchange "white" carbs like white rice or juice for "complex" carbs like oats or whole fruit to prevent sharp sugar spikes.

Type I vs Type II Diabetes, the Core Differences

To understand the difference between Type 1 and Type 2 diabetes, it's helpful to look at the "Key and Lock" analogy.

Feature	Type 1 Diabetes	Type 2 Diabetes
Problem	The body lacks "keys." The immune system destroys insulin-producing cells.	The "lock" is broken. The body makes insulin, but cells don't respond to it (Insulin Resistance).
Cause	Autoimmune reaction (genetics/environment). Not related to lifestyle.	Genetics, weight, and inactivity. The body eventually stops making enough insulin.
Onset	Usually develops quickly (weeks). Often diagnosed in children or young adults.	Develops gradually over years. Usually diagnosed in adults, though rising in youth.
Prevention	Currently, there is no known way to prevent it.	Can often be prevented or delayed with healthy lifestyle choices.
Treatment	Must take insulin every day to survive.	Healthy diet and exercise; oral medications; sometimes insulin.

Recipe Highlight: Sheet Pan Salmon & Asparagus

This is a "set it and forget it" meal that hits all the nutritional marks.

- The ingredients: Salmon fillets, a bunch of asparagus, and halved cherry tomatoes.
- The prep: Toss everything in olive oil, lemon juice, and garlic.
- The cook: Bake at 400°F for 12–15 minutes.

Why it works: Salmon provides Omega-3s (heart health), while asparagus is a non-starchy vegetable that won't spike your sugar!



Recommended Exercises

Post-Meal "Activity Bursts"

A key tip is to take a 10–15 minute walk after your largest meal. This helps clear the sugar spike that occurs right after eating.

Brisk Walking (Aerobic)

This is the best "entry-level" exercise! Walking at a pace where you can talk but not sing helps your muscles use glucose more effectively.

- Goal: 30 minutes a day, 5 days a week.

The Bottom Line

Consistent testing is the clearest way to see how your body is responding to your daily routine. Commit to checking your blood sugar regularly, regardless of how you feel in the moment.

Since your management plan is personal, connect with your provider to confirm the best frequency and monitoring tools for your specific health goals.