



## LET'S FIGHT DIABETES TOGETHER!

Did you know that 37 million people in the U.S. (11% of the population) have some form of diabetes? And while 29 million are diagnosed, 8 million people don't even know they have the disease. Diabetes is a chronic disease that affects how your body turns food into energy. There are three main types of diabetes: Type 1, Type 2, and gestational diabetes (diabetes while pregnant), but 90-95% of people with diabetes have Type 2.

In addition, 96 million (38% of U.S. adults) have prediabetes and more than 8 in 10 don't know they have it. Prediabetes puts you at increased risk of developing Type 2 diabetes, heart disease and stroke. However, you can prevent or delay prediabetes from turning into type 2 diabetes with simple, proven lifestyle changes such as exercise and dietary modifications.

National Diabetes Month, recognized each November, is an ideal time to educate yourself about risk factors, symptoms and lifestyle changes you can make to help prevent and manage this disease. Consider taking a 60-second diabetes risk assessment, explore the CDC's National Diabetes Prevention lifestyle change program that can lower your risk of developing Type 2 diabetes by as much as 58%, or help increase awareness by participating in an event sponsored by the American Diabetes Association.

The more awareness, detection, management and knowledge we have about this disease that affects so many Americans, the more we can take our health into our own hands to fight diabetes together.

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## WILL WEIGHT LOSS HELP WITH YOUR DIABETES?

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<https://www.webmd.com/diabetes/safe-diet-tips-for-diabetes>

There's no question about it. If you're overweight and have type 2 diabetes, you will lower your blood sugar, improve your health, and feel better if you lose some of your extra pounds.

You'll want to work closely with your doctor or diabetes educator, because your blood sugar, insulin, and medications will need special attention while you're losing weight.

You don't need to lose that much to make a difference for your health. One study found that people with type 2 diabetes improved their blood sugar control when they lost as little as 2% of their body weight. And research shows that losing 5% of your extra weight will make you less likely to get heart disease by improving blood pressure, blood sugar, and HDL cholesterol (the good kind).

So start by focusing on losing that 5% and keeping it off. Later, you can build from that success. Many studies have shown that lifestyle changes such as exercise and weight loss are the most effective and safest ways to manage type 2 diabetes.

If you drop even 10 or 15 pounds, that has health perks, such as:

- Lower blood sugar
- Lower blood pressure
- Better cholesterol levels
- Less stress on your hips, knees, ankles, and feet
- More energy
- Brighter mood

After you've lost that first 5% of your weight, press on. To see even more improvements, like a lower risk of heart disease and improved blood sugar over the long term, aim to drop 10% to 15% of your body weight.

Losing this amount of body weight could also be more noticeable. You may lose some inches from your waist, drop a pants size, or just feel better. These changes can motivate you to continue shedding pounds if you need to.

### DIET: THE RIGHT BALANCE FOR DIABETES AND WEIGHT LOSS

Keep tight control over your blood sugar levels while you

lose weight. You don't want to get high or low levels while you change your eating habits.

It's generally safe for someone with diabetes to cut 500 calories a day. Trim from protein, carbohydrates, and fat. The USDA says that calories for adults should come from:


- 45% to 55% carbs
- 25% to 35% fat
- 10% to 35% protein



Carbs have the biggest effect on blood sugar. Those that have fiber (whole-grain bread and vegetables, for example) are much better than eating sugary or starchy carbs, because they're less likely to spike your blood sugar and quickly make it crash.

**S.M.A.R.T. weight loss goals:** Make losing weight with diabetes easier by setting S.M.A.R.T. goals.

S.M.A.R.T. stands for Specific, Measurable, Attainable, Relevant, and Time-bound. When your goals are S.M.A.R.T., it will be simpler to stay on track with your diet.



Setting S.M.A.R.T. goals help keep big projects, like losing weight or managing blood sugar, from being overwhelming.

Your steps for success are clearly spelled out so that you know when you've met the goal.

The biggest payoff comes from turning short-term goals into long-lasting, healthy habits.

To help manage your diabetes, you need to spread carbs out more evenly throughout the day. So, for example, a S.M.A.R.T. goal could be, "I will eat a breakfast containing 45 grams of carbohydrates every day for the next 2 weeks."

Here's the S.M.A.R.T. breakdown:

**Specific:** Targeted to breakfast

**Measurable:** 45 grams, every day

**Attainable:** Breakfasts with about 45 grams of carbs are very doable. A few options:

1 cup cooked oatmeal (32 grams), ½ medium banana (13 grams), a hard-boiled egg, black coffee

2 scrambled eggs, 1 small whole-wheat pita (15 grams), 1 orange (18 grams), 1 cup 1% milk (14 grams)

3 rye crispbreads (24 grams), ½ cup nonfat cottage cheese (5 grams), 1 cup of blackberries (15 grams)

**Relevant:** Spreading carbs out is relevant because it helps you curb hunger, so you don't overeat. To hit 45 grams, you have to plan to eat protein and fat in addition to carbs at a meal. A piece of toast with an egg, for instance, will keep you feeling full longer than two slices of toast with jam. When you're more satisfied, you're likely to eat less overall.

**Time-bound:** This goal will be your focus for 2 weeks. At the end of that time, you can decide if you want to do it again or set a different goal.

## HOW EXERCISE HELPS

One of the many benefits of working out is that it helps keep your blood sugar in balance. You're also more likely to keep the pounds off if you're active.

If you're not active now, check in with your doctor first. They can let you know if there are any limits on what you can do.

Aim to get at least 2½ hours a week of moderate aerobic exercise, like brisk walking, to improve your health. You can split up the time any way you choose.

To help yourself lose weight, you'll need to do more physical activity. You should also do strength training at least twice a week. You can use weight machines at a gym, hand weights, or even your own body weight (think pushups, lunges, and squats).

Physical activity burns both blood sugar and sugar stored in muscle and the liver. If you use insulin or other diabetes medicines, you should closely watch your blood sugar levels when you start exercising. Over time, as you exercise regularly and work with your doctor, you may be able to lower doses of medications and insulin.

Each type of exercise affects blood sugar differently.

Aerobic exercise -- running or a treadmill workout -- can lower your blood sugar right away.

Weightlifting or working out hard for a long time may affect your blood sugar level many hours later. This can be a problem, especially if you're driving a car after your workout. It's one of the many reasons you should check your blood sugar before you get behind the wheel. It's also a good idea to carry snacks like fruit, crackers, juice, and soda.

## EAT GOOD TO FEEL GOOD

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<https://diabetes.org/healthy-living/recipes-nutrition/eating-well>

Knowing what to eat can be confusing—especially when life gets hectic and you’re trying to eat healthy on the go or make healthy choices when ordering fast food.

Regardless of what cuisine you prefer, here’s what all healthy eating plans have in common.

They include:

- Fruits and vegetables
- Lean meats and plant-based sources of protein
- Less added sugar
- Less processed foods



### TRY THE DIABETES PLATE METHOD.

Eating healthy is important, it can be hard to know what and how much to eat — especially when you’re managing diabetes.

If you’re looking for an easy place to start, then try following the Diabetes Plate Method. This simple guide offers a stress-free way to plan your portions without any counting, calculating, or measuring.

First, grab a 9-inch plate. You want to fill half your plate with non-starchy vegetables, one quarter of the plate of protein foods, and the last quarter of the plate with carbohydrate foods. Top it off with a glass of water or another zero calorie drink and you’ve got yourself a well-balanced plate! This helps take the guess work out of meal planning so you can spend more time doing the things you love.

Check out the types of foods listed below so you can be on your way to eating good to feel great.

#### Non-starchy vegetables

Using the Diabetes Plate Method as your guide, fill half your plate with non-starchy vegetables for a healthy meal. These vegetables keep you feeling full for longer and provide you with the great-tasting nutrients your body needs without as many calories and carbs. Non-starchy vegetables include broccoli, carrots, cauliflower and more! Learn more about non-starchy vegetables.

#### Protein

Protein is an important part of a diabetes meal plan. Are you plant-based? That’s okay! There are plenty of protein-rich plant-based options, such as beans, hummus, lentils and others. Learn about your best choices.

#### Fruits

Wondering if you can eat fruit? Yes! While fruit does count as a carbohydrate food, they are loaded with vitamins, minerals and fiber just like vegetables. Fruit can also help you satisfy your sweet tooth without the added sugar. Find out about the best choices.

#### Fats

Fats are not the enemy. Focus on adding healthy fats (like monounsaturated and polyunsaturated fats) to lower your cholesterol and protect your heart. Healthy fats can be found in foods like olive oil, nuts, avocados, some types of fish and a host of other tasty options. Make healthy choices to decrease your risk of heart disease. Get the facts on fats.

#### Diabetes superfoods

You may have heard of diabetes superfoods. Get the facts, and then supercharge your meal plan with these ten foods full of vitamins, minerals and fiber. Learn more about diabetes superfoods.

# YOGA, OTHER MINDFULNESS PRACTICES IMPROVE BLOOD SUGAR IN TYPE 2 DIABETES

Published by WebMD

<https://www.webmd.com/diabetes/news/20221014/yoga-other-mindful-practices-improve-blood-sugar-type-2-diabetes>

Oct. 14, 2022 -- Patients with type 2 diabetes achieve much better control of their blood sugar if they participate in mind-and-body-practices such as yoga, a new study shows.

While past research has been done specifically for yoga, this study, published online recently in the *Journal of Integrative and Complementary Medicine*, also looked at the benefits of other mind-and-body practices for these patients, including qi gong and meditation.

The study is “the first to show that there is a very consistent effect [on hemoglobin A1c, a marker of diabetes] regardless of which modality you use,” says one of the researchers, Richard Watanabe, PhD.

“So I think one of the important messages ... is that any sort of mind-body intervention seems to be helpful, which makes this a much more flexible tool than telling a patient that they should [just] do yoga,” says Watanabe, who is a professor of population and public health sciences at the University of Southern California’s Keck School of Medicine in Los Angeles.

There are other options available, “and if you are a busy person and getting to yoga is not doable, you can learn about meditation and do it anywhere. So again, it [is] ... a flexible tool to help their patients with blood sugar control,” he says.

“The most surprising finding was the magnitude of the benefit these practices provide,” says the lead author, Fatimata Sanogo, from the University of Southern California, Los Angeles, in a statement. “We expected there to be a benefit but never anticipated it would be this large.”

But how do mind-body practices reduce A1c? It’s not totally clear, Watanabe says, noting that more research needs to be done to figure this out.

“But I think everyone’s hypotheses is that these methods reduce stress, so the idea is that they reduce stress hormones and since these hormones do have an effect on glucose metabolism, reducing them using these modalities reduces A1c and blood sugar levels,” he explains.

Alternatively, mind-body practices might improve insulin sensitivity. “You basically allow insulin to be more efficient

at increasing glucose uptake by insulin-sensitive tissues,” Watanabe says.

So should doctors prescribe any one of the mind-body practices looked at in the study? Maybe, Watanabe says.

“Our results suggest that the effect you are going to see with the mind-body intervention is going to be on top of whatever standard of care patients are getting, so it definitely cannot hurt,” he says. He also notes that for patients with diabetes, constantly having to monitor their blood sugar levels and watch what they eat is very stressful.

“That just contributes to the difficulty in controlling blood sugar,” he says. “So I think physicians need to evaluate their patients and help them pick the thing that fits best with their lifestyle and personality, so it’s really up to the physician to work with patients and help them find something that works for them.”



## A STUDY OF STUDIES

The researchers conducted what is known as a meta-analysis, where they identified 28 studies, published between 1993 and 2022, looking at the use of mindfulness practices in patients with type 2 diabetes.

All studies excluded patients who needed insulin to control their diabetes as well as those with medical complications such as heart disease or kidney complications. The types of mind-body practices analyzed included meditation, breathing techniques, yoga, and an ancient Chinese practice known as qi gong, a type of slow-moving martial arts that’s similar to tai chi.



Using hemoglobin A1c (HbA1c) as a test that tells patients what their average blood sugar levels have been for the last 3 months, the results showed that the overall reduction in average A1c was 0.84 percentage points.

And reductions in A1c were seen with all types of mind-body practices. In patients who practiced mindfulness-based stress reduction, A1c was reduced by a mean of 0.48 percentage points. This practice involves focusing on one's breath and on a particular thought, object, or activity to engender a stable emotional state and be fully present and aware of one's surroundings.

The practice of qi gong also reduced A1c by a larger degree of 0.66 percentage points.

But the reduction in A1c was largest among those who practiced yoga, at 1.0 percentage points -- about the same degree of reduction in A1c that's seen with metformin, a drug widely used to treat type 2 diabetes around the world.

In fact, for every additional day of yoga practiced each week, the mean A1c differed by -0.22 percentage points over the study period.

Fasting blood sugar also improved significantly with mind-body practices.

Overall, the average reduction in A1c and fasting blood sugar "was clinically significant, suggesting that mind and body practices may be an effective, complementary nonpharmacological intervention for type 2 diabetes," the study authors said.

## BETTER BLOOD GLUCOSE METERS AND MORE. FIND THE DEVICE THAT CAN MAKE YOUR LIFE EASIER.

Published by The American Diabetes Association

<https://diabetes.org/tools-support/devices-technology>



### DIABETES TECHNOLOGY HAS COME A LONG WAY.

From blood glucose meters and continuous glucose monitoring (CGM) to cutting-edge insulin pumps and more, devices are easier to use and less invasive. There are lots of options so that you can find what works best for you.

### WHAT I WISH I HAD KNOWN WHEN I WAS DIAGNOSED WITH DIABETES

Being diagnosed with diabetes is hard, especially if you don't know anyone else who is living with it. It may feel like your life has changed in an instant, and you probably don't know the questions you should ask or the options available to you. Many people hide their diabetes from others instead of reaching out for support.

### WHAT IS A SMART INSULIN PEN?

The new generation of connected

insulin delivery devices may help simplify your routine.

A smart insulin pen is a reusable injector pen with an intuitive smartphone app that can help people with diabetes better manage insulin delivery. This smart system calculates and tracks doses and provides helpful reminders, alerts, and reports. They can come in the form of an add-on to your current insulin pen or a reusable form which uses prefilled cartridges instead of vials or disposable pens.

Smart insulin pens are a rapidly growing market. Why? Because they are typically more affordable, easy to use, and offer many benefits and improvements for people who depend upon insulin to manage their diabetes.

### HIGH-TECH HELP TO BETTER MANAGE YOUR DIABETES

The biggest challenges for many insulin pen (multiple daily injection) users are:

**Dose amount:** How much to inject

**Dose timing:** Shelf-life, temperature, and storage conditions


**Insulin quality:** Shelf-life, temperature, and storage conditions

### CHOOSING THE RIGHT BLOOD GLUCOSE METER

For most people, a blood glucose meter is just a part of life. That's why getting it right matters.

The two main types are standard blood glucose meters that use a drop of blood to check what your levels are at that moment and continuous glucose monitors (CGMs) that check your blood glucose regularly day or night—pick the one that works best for you and your lifestyle.

Of these two options, there are more choices than ever, from basic designs to more advanced models that have all the bells and whistles. And fancier isn't necessarily better. Here are some things to consider:



**Ease of use** – Some meters are made for simpler operation, whether it's larger buttons, illuminated screens or audio capabilities.

**Cost and insurance coverage** – Meters vary in price, and some insurers limit coverage to specific models. Start by checking with your provider to find out what they'll cover.

**Information retrieval** – Consider how the meter retrieves your information and whether you can download the data to a computer or mobile device to make it easier to share with your diabetes care team.

**Flexibility** – If you're using a blood glucose meter and are tired of finger pricks, there's an alternative site monitor that lets you draw blood samples from your arm, thigh, or the palm of your hand.

## FEWER FINGER PRICKS WITH CGM

If you have type 1 or type 2 and just want to manage your blood sugar (blood glucose) better, continuous glucose monitoring may be right for you. CGMs report your blood glucose levels in real time (for example every five minutes throughout the day), alert you when your glucose hits a high or a low limit, and provide insight into glucose trends. Learn more about continuous glucose monitoring and time in range.

CGMs work through a sensor placed on your skin. It transmits readings to a small recording device. Whether you manage your diabetes with a pump, daily injections, or oral medications, a CGM can help you manage your blood glucose.

Is a CGM right for you?

Many people with type 1 and type 2 can benefit from using a CGM. Those that would benefit the most are people that have trouble reaching and maintaining target blood sugar. CGMs are particularly useful if you often have lows and are unaware of when they happen (hypoglycemia unawareness).

Even if you have a good handle on your diabetes management, you still may want to consider using a CGM for the convenience and the elimination of finger pricks. However, you'll want to keep in mind that if you are managing your diabetes well without the use of a CGM, your insurance may not cover it—they might consider it a non-necessity.

When it comes to choosing the right CGM for you, we are here to help.

## WITH INSULIN PUMPS, IT'S YOUR CHOICE

The important thing to know is that a pump gives you options. You can get a pump, wear it for a time, decide to stop wearing it, and restart it if you think it will fit better with your treatment—work with your insurance to match whatever works for you.

Pumps are an extra piece of hardware attached to your body. They're programmed to deliver insulin continuously (basal), or as a surge (bolus) dose close to mealtime to control the rise in blood sugar after a meal. They work by closely mimicking your body's normal release of insulin.

## IS A PUMP RIGHT FOR YOU?

If your doctor determines that a pump is a good option for you, it's important to check with your insurance provider before you buy anything. Most insurance providers cover pumps, but

sometimes they may not be covered and pumps can be expensive. In addition to cost, some considerations to consider when it comes to getting a pump are lifestyle, commitment, and safety. Learn more about the pros and cons of insulin pumps, and if they may be a good fit for you.

Remember, using a pump doesn't mean you no longer have to check your blood sugar. And it can take some getting used to, from setting it up and putting it in to managing it day-to-day. Make sure you've spoken with your diabetes care team about how to use your insulin pump correctly and how to check if it's working properly.

## CONNECTED CGM-INSULIN PUMPS AND "CLOSED LOOP" SYSTEMS

A newer option to consider is using a combination CGM-insulin pump. Your insulin pump will be able to integrate your glucose data from the CGM sensor and either suggest changes to insulin dosing or adjust the appropriate amount of background or basal insulin on its own. This is triggered when you run high (more insulin needed)—or when your blood sugar runs low (insulin needs to be suspended)—so you don't have to think about it as much. Keep in mind, though, that you will still need to administer insulin for meals.

With several existing and emerging options on the market, you can pick the one that works best with your lifestyle and budget.





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## MARPAI INTRODUCES VIRTA

We are excited to announce that Marpai has added Virta as a Premium Health Partner to help our members tackle diabetes with a scientifically backed, clinical solution. Virta is a leading medical treatment for diabetes and has been clinically shown to reverse Type 2 diabetes.

Instead of managing Type 2 diabetes with drugs, Virta enables members to reverse it completely with a different approach. Virta helps patients reduce their blood sugar below the diabetes threshold, while simultaneously discontinuing the use of costly drugs. With Virta:

- 94% of patients taking insulin reduce or eliminate usage at one year, with much of these reductions occurring within weeks \*
- 60% of patients at one year are off all diabetes-specific drugs - patients are living diabetes-free. \*\*

**If your company has selected Virta to be part of your health plan, members who have Type 2 diabetes may be eligible to join Virta as soon as January 1st.**

\*Virta clinical trial

\*\*Hallberg SJ et al. Diabetes Therapy. 2018;9(2):583-612. For patients completing 1 year of treatment. Virta Health Registry for Remote Care of Chronic Conditions. Health and economic outcomes as of March 2019