



On Your Way to Preventing **Type 2 Diabetes**



**Centers for Disease
Control and Prevention**
National Center for Chronic
Disease Prevention and
Health Promotion

Welcome!

If you're interested in preventing type 2 diabetes, this guide can help you get started. Congratulations on taking the first step! By reading this, you're already on your way.



Prediabetes puts you on the road to possibly getting type 2 diabetes.

Find out now, in less than 1 minute, if you may have prediabetes by taking the **Prediabetes Risk Test**: <https://www.cdc.gov/prediabetes/takethetest/>

How did it go?

If your result shows you're at high risk for type 2 diabetes, talk to your doctor about getting a simple blood sugar test to confirm it. Then, if you're diagnosed with prediabetes, consider joining a lifestyle change program offered by the National Diabetes Prevention Program (National DPP). This program is proven to cut the risk for type 2 diabetes in half. You can find out more at **CDC's Lifestyle Change Program website**:

<https://www.cdc.gov/diabetes/prevention/why-participate.html>

Not quite ready to join a lifestyle change program? Use this guide to help you take the first steps toward preventing type 2 diabetes.

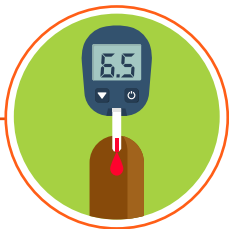
Why is prevention so important? Because type 2 diabetes is a serious, chronic health condition that can lead to other serious health issues such as heart disease, stroke, blindness, and kidney failure. If you can prevent or even delay getting type 2 diabetes, you can lower your risk for all those other conditions. **That's a pretty great deal.**

This guide will help you take small, practical steps that add up to a healthy lifestyle you can stick with and enjoy, including:

- ✓ **Starting point:** What's motivating you start this journey? What new version of yourself are you trying to create?
- ✓ **First stop:** Set a weight loss goal.
- ✓ **Second stop:** Make a nutrition plan for healthier eating.
 - ✓ Develop winning lifestyle habits.
 - ✓ Master the skills of food measurement.
 - ✓ Choose the best foods.
 - ✓ Make work, home, grocery stores, and restaurants work for you.
- ✓ **Keep moving:** Set a physical activity goal for healthier movement.
- ✓ **Track your progress:** Watch yourself succeed with a few easy steps.
- ✓ **Prepare for the long run:** Recognize the support you have to keep you going.

By making some healthy changes, including eating healthier and getting active, you can prevent or delay type 2 diabetes and improve your physical and mental health overall.

And you don't have to wait to feel the benefits—when you start making healthy changes, you get rewards right away. After taking just one walk, your blood sugar goes down. Make physical activity a habit and see how your sleep improves. Enjoy the taste of fresh, healthy food. Figure out what to do with all of your extra energy. Maybe even get closer to friends and family if you invite them along for the ride!



A little background.

About 37 million people have diabetes and 96 million people have prediabetes.

Generally, people who get type 2 diabetes started out with prediabetes. But the good news is prediabetes can be reversed! And this guide will help to teach you the basics.



What is prediabetes?

If you have prediabetes, your blood sugar is higher than normal but not high enough yet to be diagnosed as type 2 diabetes. Prediabetes is really a wake-up call to turn things around, get healthier, and not get type 2 diabetes down the road.



Considering joining a lifestyle change program?

A CDC-recognized National DPP lifestyle change program is the gold standard for preventing type 2 diabetes. A trained lifestyle coach helps guide you to make healthy changes that can cut your type 2 diabetes risk in half. You also have a support group of other people who have similar goals and challenges. This guide can't substitute for this lifestyle change program. But if you can't join one right now, or if you want a jumpstart before your program begins, we can help you get going.

Starting Point: What's motivating you to take this journey? What new version of yourself are you trying to create?

For example, you might say that you want to be more active so you can keep up with your kids or grandkids. Now that you've reminded yourself of why you want to create new habits, let's review how to create an action plan to help you build a new helpful routine.

Step 1: Figure out what needs to change. The first step is finding a routine to change for the better.



Let's assess where you stand right now when it comes to nutrition and physical activity. Write down your answers to these questions to make it easier for you to figure out which of your habits are helpful and which habits you might want to work on.

Think About How You Eat in a Typical Week

Do other people, such as friends, family, or coworkers, influence what you eat?

Do you prepare your meals ahead of time, or decide in the moment what to eat?

How comfortable are you with reading a nutrition label?

Think About How You Move in a Typical Week

How much of your commute is spent walking or biking?

How much time do you make for physical activity around the house, such as walking the dog, cleaning the house, or gardening?

How often do you dedicate 30 minutes per day for physical activity, such as walking, biking, or swimming?

Continued on next page →

Think About How You Eat in a Typical Week

Think About How You Move in a Typical Week

How often do you eat out and where?

What are your favorite ways to be active?

What makes it easier for you to eat healthier?

What makes it easier or more enjoyable for you to move more?

What makes it harder?

What makes it harder?

Step 2: Plan a new routine. Starting a new routine helps you make a positive change that will stick. Be specific and realistic. Plan small changes to your routines instead of big changes that are hard to stick with.

Step 3: Find a cue or hint for when to use your new routine.

Your cue could be one of these:

- ✓ A specific time or place
- ✓ A feeling or emotion
- ✓ Other people in your life
- ✓ An action right before or right after a regular routine

✓ **Make your new routine easy and the old one harder.**

Change your environment to support the new routine. Add or remove visual hints, such as adding a picture of you walking the dog on your phone screen or putting the kids' snacks in the cupboard.

✓ **Decide how you can make this new routine more rewarding.**

Connect a new routine to something fun, like only listening to your favorite band when taking the stairs, keeping track of the number of floors climbed, or doing your activity with a friend. Consider long-term rewards after meeting goals, like new walking shoes or a healthy meal out at your favorite restaurant.

✓ **Create opportunities to repeat and practice your new routine until it becomes automatic.**

I am going to add a stair climb every day just before my morning coffee break.

First Stop: Set a Weight Loss Goal



With your starting point in mind, set a weight loss goal. If you are overweight and have prediabetes, shedding just 5% of your weight can help reverse prediabetes.

You may not be able to lose 5% of your body weight, but by eating well and being more active, you may be able to lower your HbA1C, or just A1C. You have options to be successful.

What is HbA1C? The A1C, or hemoglobin (Hb) A1C, test is one of the commonly used tests to diagnose prediabetes and diabetes. It's a simple blood test you get from a health care provider that measures your average blood sugar levels over the past 3 months. A normal A1C level is below 5.7%, a level of 5.7% to 6.4% indicates prediabetes, and a level of 6.5% or more indicates diabetes. Within the prediabetes range, the higher your A1C, the greater your risk is for developing type 2 diabetes. Ask your health care provider for more information about A1C.

Here's an example to help calculate a weight loss goal of 5%.

Action	Example
Weigh yourself first thing in the morning for the most accurate results and record the number.	240 pounds
Determine 5% of your current weight.	Take off last digit of your weight: 24 Divide in half: 12 To lose 5%, a 240-pound person would need to lose 12 pounds.
Subtract that number from your current weight to determine your goal weight.	240 - 12 = 228 A 240-pound person's goal weight would be 228 pounds.

Now it's your turn. Calculate your personal weight loss goal here:

My current weight is _____ pounds.

5% of my weight is _____ pounds.

My goal is to lose _____ pounds, for a goal weight of _____ pounds.

Now that you've assessed your habits and preferences around eating and being active and have set a healthy weight loss goal, you're better prepared to hit the road on your way to wellness. The following pages will help you improve your current habits, gain new ones, and set yourself up for success.

Second Stop: Make a Nutrition Plan for Healthier Eating



Winning Habits: Make over your meals with a plan, the right ingredients, and life hacks.



Make a plan. You've probably noticed that someone who follows a popular diet plan might quickly lose weight, but has a hard time keeping it off long term. This is common and discouraging, so let's design a plan that you can follow for life. It doesn't need to be popular or have a name.

Your plan only needs two key ingredients to work:

1. It should be based on healthy eating.
2. It should be something you can keep doing.

People often need to try different things to create a plan that works for them. Some may cut back on sugar and eat more protein to stay fuller longer. Others may focus on crowding out unhealthy food with extra fruits and vegetables. Still others take the guesswork and temptation out of life by sticking to just a few breakfast and lunch choices that they know are nutritious. The details will depend on what you like and what fits in best with your life.

Eat well. Good food in the right amounts does so much more for you than just helping you lose the pounds; it helps you feel better and even think better. **All good things!**

Some basics to get started:



Choose these foods and drinks **more often:**



Non-starchy vegetables such as peppers, mushrooms, asparagus, broccoli, and spinach

Fruits

Lean protein such as fish, chicken, turkey, tofu, eggs, and yogurt

Whole grains such as quinoa, brown rice, and steel cut oatmeal

Healthy fats in foods like olive oil and avocado, that replace unhealthy ones

Water and unsweetened beverages



Choose these foods and drinks **less often:**



Processed foods such as packaged snacks, packaged meat, chips, granola bars, sweets, and fast foods

Trans fat, found in things such as margarine, snack food, packaged baked goods, and many fried foods

Sugary drinks such as fruit juice, sports drinks, and soda

Alcohol

Meaningful Changes That Take Minimal Effort:



Make time to cook. You'll gain impressive skills that you'll keep for a lifetime, save money, and take the guesswork out of the ingredients.

Look online for recipes that meet your skill level, time, and budget.

Many have user reviews to help you decide on a recipe.

Plan a week's worth of meals before you go grocery shopping.

You'll thank yourself later.

Swap boring veggie recipes for exciting ones.

Watch online cooking videos to learn the secrets of making vegetables tastier with different spices or methods of cooking.

Add something fresh. Find ways to add healthy sides to prepared meals when in a hurry.

Check ingredients. Use food labels to make the best choice possible between two items.

Make the same food for you and your family. Healthy eating is good for everyone!

Try Meatless Monday. Beans and lentils are cheap, tasty, and pack a protein punch.

Make family favorites with a twist.

Substitute veggies for grains or starchy carbohydrates (zucchini noodles, anyone?) or blend veggies and add to sauces.

Try not to drink your calories. They won't fill you up! Reduce fruit juice and sports drinks, and limit alcohol.

Dress smart. Dress salads with oil (a healthy one like olive oil) and vinegar, choose low-fat or fat-free yogurt over sour cream, and mustard instead of mayonnaise.

Make spices your secret weapon.

They add flavor without adding calories.

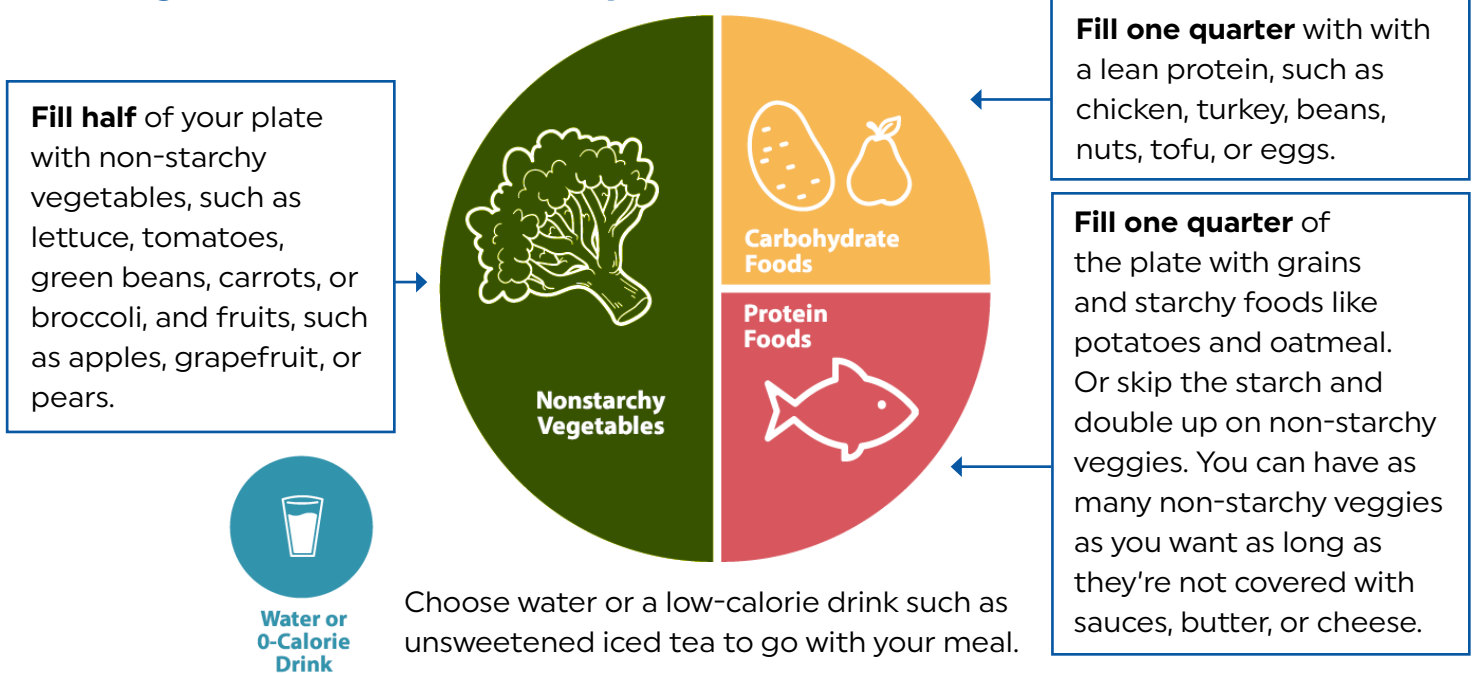
Freeze! Freeze single servings of a big batch of healthy food for work lunches or when you're too tired to cook.

Think ahead. Think about the times you're most likely to eat junk food, like after a stressful day at work. Make a plan in advance to swap out the unhealthy snack you might eat—such as a candy bar—with a healthy one, like an apple.

Master the Skills of Food Measurement: Portion Sizes and Food Labels

Size it up: get a handle on portion size. Most of us don't know just how much we're eating. One way to help manage portion size is by using the plate method.

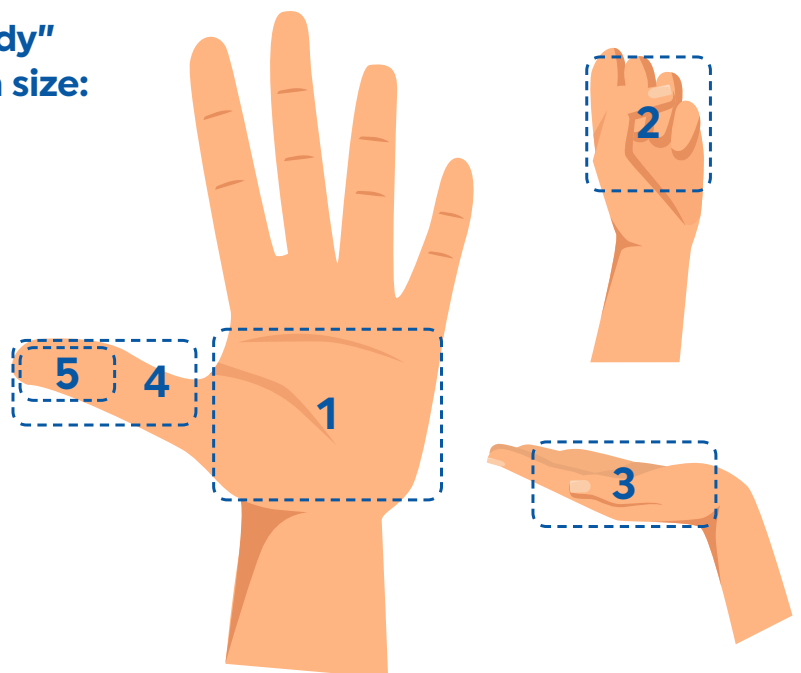
Using a basic 9-inch dinner plate:



We don't always eat off a plate, right? We eat out of bowls, fast-food packaging, or takeout boxes and containers. However, it's really the same idea. You want to make sure your meal has a good proportion of vegetables, not too much fat, and not too many starchy foods.

If you're not using a plate, this "handy" guide will help you estimate portion size:

- 1. 3 ounces of meat, fish, or poultry**
Palm of hand (no fingers)
- 2. 1 cup or 1 medium fruit**
Fist
- 3. 1-2 ounces, ¼ cup of nuts or pretzels**
Cupped hand
- 4. 1 tablespoon**
Thumb (tip to base)
- 5. 1 teaspoon**
Thumb tip (tip to 1st joint)



Choose the Best Foods: Decoding Food Labels, Eating a Healthy Variety, and Quality Calories



Put foods that don't have labels first on your grocery list. Visit the produce section to stock up on fresh veggies and fruit. (Just watch out for packaged food tucked away between the apples and asparagus, such as salad toppings and snack foods.) Then, shop the outside aisles of the store for dairy, eggs, and lean meat. Some packaged food will be on your list. **Use the Nutrition Facts label to see how many calories and grams of carbs, sugars, and fat are in the food you choose.**

Check the serving size first. All the numbers on this label are for a 1-cup serving.

Nutrition Facts	
4 servings per container	
Serving size	1 cup (227g)
Amount per serving	
Calories	280
	% Daily Value*
Total Fat 9g	12%
Saturated Fat 4.5g	23%
Trans Fat 0g	
Cholesterol 35mg	12%
Sodium 850mg	37%
Total Carbohydrate 34g	12%
Dietary Fiber 4g	14%
Total Sugars 6g	
Includes 0g Added Sugars	0%
Protein 15g	
Vitamin D 0mcg	0%
Calcium 320mg	25%
Iron 1.6mg	8%
Potassium 510mg	10%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

This package has 4 servings. If you eat the whole thing, you are eating 4x the amount of calories, carbs, fat, etc., shown on the label.

This shows you types of carbs in the food, including sugar and fiber.

Choose foods with lower calories, saturated fat, and added sugars. Avoid trans fat.

Choose foods with more fiber, vitamins, and minerals.



Eat a variety of healthy foods. Eat all kinds of different foods from the major food groups: veggies, fruits, grains, dairy or dairy alternatives such as low-fat or fat-free milk, yogurt, and other products made from soy, almonds, and cashews, and lean protein. Eating a variety of foods helps to make sure you get the vitamins and minerals you need. You don't need to eat all food groups at each meal.

Count what counts.

Don't get too hung up on calories, but definitely count them in. Cutting calories from your meals and adding physical activity to your routine can help you lose weight. But don't cut back too far. If you get too hungry, you won't stay on your plan. And remember, if you're more active, you're burning more calories.

The National Institutes of Health offers an interactive **Body Weight Planner** (<https://www.niddk.nih.gov/bwp>) that can help you determine the number of calories you should eat each day to get you to your goal weight and to maintain it.

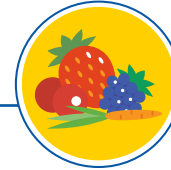
Make Work, Home, Grocery Stores, and Restaurants Work for You



Take the work out of eating at work.

From office pastries to afternoon snacks to increase energy, the workplace can be a challenge for staying on course to eat healthy. **A little food preparation goes a long way.**

- ✓ Bring your lunch to work. This can often be healthier than buying it.
- ✓ Keep fruit and vegetables in a plastic container in the fridge at work for snacks.
- ✓ Bring groceries in on Mondays and keep them in a refrigerator to make your lunch at work if you don't want to bring lunch each day.
- ✓ Package high-power snacks, such as nuts, in small containers so you don't get famished or eat too much.



Make home your healthy place.

Sticking to a healthy plan is a lot easier when you can rely on having nutritious food available at home.

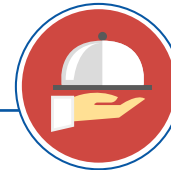
- ✓ Avoid "hiding" treats. You'll know where to find them.
- ✓ Prepare a few healthy snacks and keep them on hand as soon as you get home from the grocery store. Chop strips of peppers or celery or fruit so that healthy snacks are readily available when you get a food craving.
- ✓ Create a cooking ritual at home. Whether it's calling a friend, listening to music, or catching up on a TV show while you cook, pairing cooking with another rewarding activity makes it all the more enticing and beneficial.



Create a grocery store game plan.

The grocery store is your key to success. Plan before you go, and let an entire healthy week unfold.

- ✓ Make a shopping list based on your weekly meal plan, and stick to it.
- ✓ Focus on shopping the outer aisles where the fresh food is located. The inner aisles contain a lot of processed food and snacks that aren't as healthy. This also helps prevent temptation if you bring your kids shopping with you.
- ✓ You know this one: shop on a full stomach so you're not tempted to buy unhealthy processed food or junk food.



Restaurants: Order with ease.

- ✓ Look at the menu and nutrition info online before you go.
- ✓ If listed, compare calories of menu items to help guide your decisions. Plan what you will eat ahead of time and stick with it.
- ✓ Decide what you're going to order before you go to a restaurant, so you're not tempted by the look and smell of less healthy choices.
- ✓ Avoid buffets.
- ✓ Ask your server how food is prepared before deciding what to order.
- ✓ Ask for veggies instead of fries or other high-calorie side dishes.
- ✓ Choose baked, steamed, grilled, or broiled instead of fried.
- ✓ Share your main dish with a friend or eat half of it and wrap up the rest to take home to eat later.
- ✓ Order sauces, salad dressing, or spreads on the side, and use sparingly.
- ✓ Avoid items that seem healthy but aren't, such as salads loaded with dressing, cheese, croutons, and bacon.
- ✓ If you plan to have dessert, select a main course that is smaller or lower in calories.

Keep Moving: Set an Activity Goal for Healthier Movement



Get active. Our bodies are made to move, and we feel better when we do. That said, getting started can be a challenge. One thing is for sure—you won't stick with something that you don't like doing, and you shouldn't have to.

There are lots of ways to get moving; for example, walking is a great physical activity, and just about anyone can do it. Just be sure to check with your doctor about which activities are best for you and if there are any you should avoid.

So, set a goal that works for you! And gradually work up to being active at a moderate intensity at least 150 minutes per week. One way to do this is to aim for 30 minutes, 5 days a week. **In general, if you're doing moderate-intensity activity, you can talk but not sing during the activity.**

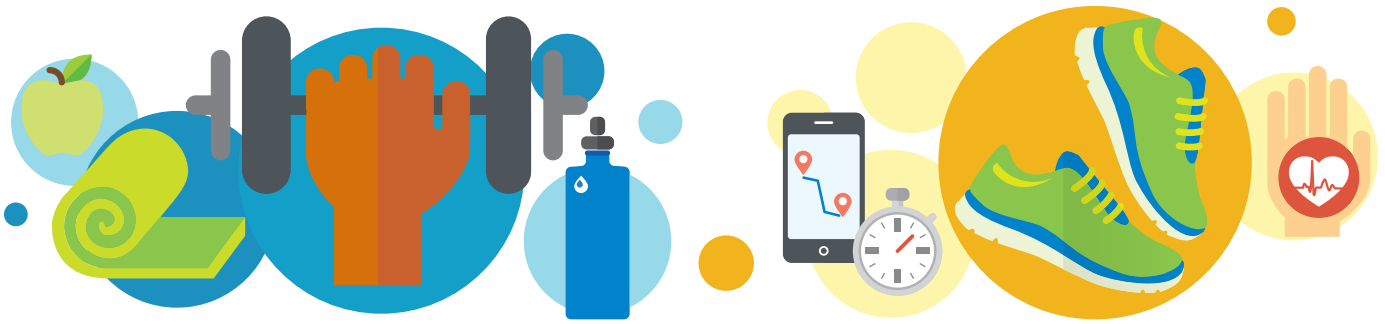
Goals	Number of days a week being active	How many active minutes each time	Total number of active minutes each week	Goal date
My physical activity goal for now				
My intermediate physical activity goal				
My ultimate physical activity goal				



Make a Plan! Put it on the calendar and choose the same time or location for your daily activity. The more regular you are physically active, the quicker being active becomes a habit.



Some Pointers:



Make it easy. Put your walking shoes and the dog's leash by the door; lay out your workout clothes the night before.

Sit less. Get up every hour and move. Set a timer on your phone with movement reminders. Walk around the room or stretch when you're watching TV or talking on the phone. Go talk to a coworker instead of sending an e-mail.

Try an activity tracker. Many of these apps are free, and it feels great to watch your steps add up.

Make goals specific. Instead of "I'm going to get in shape," think "I'm going to walk after dinner on weekdays."

Find a physical activity that you like, or you won't keep doing it.

Physical activity should feel more like summer camp than boot camp (unless you like boot camp). Dance, hike, or play—do what's fun for you.

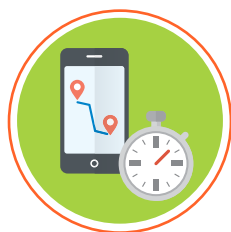
Start small. Little successes, like choosing physical activity over TV, pave the way for taking on bigger goals. Also, take it slow at first—you're still beating everyone on the couch!

Work out with a friend. When someone else is counting on you to show up, you'll likely hit the trail or the treadmill more often. There's nothing wrong with a little friendly competition.

Reward yourself. Think of a way to reward yourself for your great work. Maybe put a dollar in a jar every time you meet your daily physical activity goal. At the end of the month, treat yourself to a new outfit or a trip to the movies (just skip the buttery popcorn and candy).

Write any other strategies you plan to use for keeping active here:

Track Your Progress: Watch Yourself Succeed With a Few Easy Steps



The best way to stick with your goals and keep building on them is to measure them! Research shows that people who keep track of their food, activity, and weight reach their goals more often than people who don't.

There are lots of free tracking apps for your phone or tablet. Good old-fashioned pen and paper work too. Some people swear by taking photos of everything they eat and drink to keep them accountable.

Here's an example log:

Activity

Date: Monday, January 28

Walking	10 minutes
Stationary bike	20 minutes
Climbing stairs	10 minutes
Total	40 minutes

Weight

Starting weight	240
Week 1*	239
Week 2	236
Week 3	234
Goal weight	228

Food

Date: Monday, January 28

Time	Amount	Food Item	Calories
8:00 am	1 cup	Oatmeal	160
	½ cup	Strawberries	25
	7 oz.	Greek yogurt	150
	1 cup	Tea with sugar-free sweetener	0
11:00 am	10	Almonds	70
12:30 pm	1 piece	Pita bread	190
	2 pieces	Falafel (baked)	80
	¼ cup	Hummus	160
	2 leaves	Romaine lettuce	5
	5	Cherry tomatoes	15
	Single-serve bag	Baked chips	120
	1 cup	Water with lemon	0
4:00 pm	2 cups	Popcorn	60
6:30 pm	1 cup	Shrimp scampi	230
	1 cup	Cooked broccoli with 1 tablespoon of parmesan cheese	100
	½ cup	Brown rice	110
	1 cup	Nonfat milk	90

Total

1,565 calories

Prepare for the Long Run: Get Support and Look Ahead



Get support. Share your healthy goals and why they're important with your friends and family. Having their support and encouragement can help you stay on track.

Consider these few examples of support:

- ✓ Ask if a friend would like to walk with you after dinner.
- ✓ Invite your kids to cook a healthy meal with you or make a date night out of cooking with a partner.
- ✓ Talk to friends about struggles you're having and ask if they have advice.
- ✓ Share your successes with people you can trust to encourage you.

Who knows, you could even be helping someone you care about prevent type 2 diabetes along with you.



Go online.

There are lots of free online resources that can boost your motivation and confidence too. A quick Internet search will show you no-cost communities with people who share your goals and challenges, and who could learn from your experience (and you from theirs). If you share your health goals with others, you'll be more likely to stick to them.



Remember, your doctor, physician assistant, or nurse practitioner can help you meet your goals.

If you retake the risk test and find that you're at a higher risk, or just feel like you're struggling and not seeing the results you want, consider asking for your health care provider's advice and direction. They could also refer you to specialists, such as a registered dietitian or mental health counselor, who can help you deal with a specific challenge. If you have prediabetes, ask your doctor if joining the National DPP might be a helpful step for you.



Look ahead.

We hope this guide has helped you get started down the road to not only preventing type 2 diabetes, but also having more energy, better checkups, and better mental health.



Making lifestyle changes can take time, but if you add in small steps towards your goals every week, you can start to make living healthy a habit.