



# Diabetes Life Lines

## Take advantage of the spring season by being active!

The mild weather of spring can inspire you to get out and get moving! Physical activity and exercise are important for everyone, including people with diabetes. Exercise helps control blood sugar and is great for your heart. It can also help you reach and stay at a healthy weight. Some studies show that exercise is as good as medicine for depression! Here are ways to get moving more this spring season and beyond!

### Explore different new activities.

Springtime in Georgia is often cool enough to go for a walk yet warm enough to go for a swim! Try walking, jogging, biking, swimming, group fitness classes (aerobics, Zumba, yoga, etc.), or other activities to find one you enjoy! Try different walking trails in your area. Enjoy a day trip to a nearby park. See [gastateparks.org](http://gastateparks.org) to find one near you.

### Set short- and long-term activity goals.

Setting a goal can help you make exercise a habit. Both long-term and short-term goals are important. Setting one long-term goal, such as walking 10,000 steps per day by the end of the summer or walking a 5k for your favorite community service organization, is a great first step to being more active. But that can seem overwhelming if you are not active now.

Setting smaller weekly short-term goals will help you reach your long-term goal! If you are walking 2,000 steps per day right now, your first weekly goal could be to go for an extra half mile walk during your lunch break or after dinner.

One mile is about 2,000 steps, so an extra half mile walk would increase your daily steps by about 1,000. Slowly increase the length of your walks each week (take a  $\frac{3}{4}$  mile walk the second week, a 1 mile walk the third week, etc.) until you reach your goal of 10,000 steps per day!

**Find an exercise buddy.** Research shows having people to exercise with can help you start and stay active. An exercise buddy makes sure you stick to your physical activity plan. They also make exercise more fun! Whether it's a friend, spouse, child, or grandchild, find someone who enjoys the same activities as you and work toward your activity goals together.

### Spring clean your way to good health.

Don't forget that your spring cleaning may count as exercise too. Activities like scrubbing the pollen from your outdoor chairs and weeding the garden can get your heart pumping. If an activity is hard enough that you can talk but you cannot sing, then it counts as exercise!

So spring your way into good health by moving more! Your body will thank you!



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## The Keto Diet Could Mean Danger for People with Diabetes

There has been a lot of talk these days about carbohydrates (often called just “carbs”). Are carbs bad, and should we avoid them? Are low-carb diets good for people with diabetes? Will I lose weight if I don’t eat carbs? The ketogenic (or “keto”) diet claims to hold the answers to all of these questions, but this low-carb diet could mean danger for people with diabetes.

Carbs are the body’s preferred energy source and the brain’s *only* energy source under normal, healthy conditions. The brain can adapt to another fuel called “ketones” produced by breaking down fat. However it functions best on carbs. Since carbs are essential and the body can’t make them on its own, we have to get them from food!

Still, carbs are the nutrient that causes the largest increases in blood sugar. Blood sugar control is a primary concern for people with diabetes. This means that the amount and timing of carbs eaten are important. You may be wondering, “Since people with diabetes have trouble using carbs, would it just be easier not to eat them?” This is what the keto diet and many other very low-carb diets say, but let’s take a closer look.

The keto diet claims to improve blood sugar control and cause fast weight loss. It provides typically less than 50 grams of carbs per day (compared to a recommended minimum 130 grams per day). This extreme limit of carbs naturally results in lower blood sugar levels. People may also lose weight since the body has less of its preferred fuel (carbs) and turns to burning fat for fuel.

These results sound too good to be true! Although a healthy body is able to adjust to this diet in the short-term, it may spell trouble for people with diabetes. Because only small amounts of carbs are being eaten, dangerously low blood sugar levels (hypoglycemia) can result. This can be even worse if oral diabetes medications and/or insulin are still being taken. Another dangerous condition called diabetic ketoacidosis (DKA) can also result in people with diabetes that are eating very low amounts of carbs, like in the keto diet. DKA occurs when levels of ketones (the body’s other fuel used when it doesn’t have enough carbs available) get dangerously high. DKA can cause dehydration and lead to coma or even death. Because of the risks for hypoglycemia and DKA, people with diabetes should NOT try the keto or similar low-carb diets without being carefully monitored by their doctor.



The long-term effects of the keto diet are also largely unstudied. The keto diet often includes large amounts of saturated fats, which increase the chance of getting heart disease. Thus, a major long-term concern is poor heart health. The diet is also very hard to follow, so people often stop the diet and regain some or all of the weight that they lost. In addition, the diet almost completely eliminates whole grains, fruits, and starchy vegetables. This means that people also miss the fiber, vitamins, and minerals these food groups provide.

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Based on the research we have now, following a more balanced diet that includes all of the food groups and uses carb counting to help control blood sugar levels is likely a safer eating pattern for long-term health. Remember, never start a new diet or make major changes in your eating habits or medications without first consulting your doctor.



### Ways to Minimize Blood Sugar Spikes When Eating Carbohydrates

In addition to carb counting (see [Volume 31, Number 1](#) of the Diabetes Life Lines Newsletter for more info about carb counting), there are ways to prevent or minimize large, fast increases in blood sugar levels in people with diabetes when eating carbs. Fat, fiber, and protein all slow overall digestion and absorption. This means that these nutrients can keep sugars from reaching the blood as quickly and prevent large, fast increases in blood sugar levels (commonly called blood sugar “spikes”). Let’s look at some specific ways to include healthy fats, fiber, and protein into meals and snacks.

**Eating fat with carbs.** Combining healthy fat with carbs can be as simple as eating a handful of nuts or seeds with fruit or whole grain crackers for a snack. Try spreading 1 or 2 tablespoons of peanut or another nut butter onto your apple, whole grain crackers, or whole grain toast.

Have you ever tried avocado toast? Avocados are high in healthy fats, so adding sliced avocado to your whole grain toast is a delicious way to slow down absorption of the carbs in the bread while also working to keep your heart healthy! When combining fat with carbs, just remember to focus on sources of healthy fats such as nuts, seeds, avocados, and liquid oils, like olive, and canola oil.



**Eating fiber with other carbs.** Fiber is actually a type of carb, but the body can’t break it down like it can starches and sugars. This means that fiber does not cause an increase in blood sugar. In fact, fiber helps minimize blood sugar spikes from other carbs. It is found in plant foods including whole grains, vegetables, fruits, nuts, and seeds. To learn more about fiber, check out the last edition of the Diabetes Life Lines Newsletter, [Volume 32, Number 1](#). Many plant foods naturally have fiber along with other carbs... Eating whole plant foods (whole grains, vegetables, and fruits) is an easy way to make sure you are eating fiber with your carbs. Other ways to combine fiber with carbs are to use whole grain ingredients in dishes, such as whole grain flour to make muffins. You can also add high-fiber seeds such as chia seeds or flaxseeds to almost any dish to increase the fiber content! Ground flaxseed or flaxseed meal can be added to recipes for baked goods to add more fiber.

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**Eating *protein* with *carbs*.** Examples of ways to combine protein with carbs are eating a boiled egg with your whole grain toast or piece of fruit for breakfast, adding some chicken or beans to your brown rice, eating tuna with your whole grain snack crackers, or eating low-fat or non-fat yogurt with fruit for a fiber- and protein-rich snack.

Notice that many of these foods or combinations of foods are high in more than one or even in all three of these nutrients! For example, beans are full of fiber and protein. Many nuts and seeds and peanut butter have healthy fat *and* fiber *and* protein! Incorporating lots of whole, plant-based foods into your meals and snacks makes combining fat, fiber, and protein with carbs much easier.





### Avocado Breakfast Bruschetta

This recipe makes great use of summer produce and is a good example of combining high fiber carbohydrates, with protein and fat to minimize blood sugar spikes. The carbohydrates from the bread are balanced by the fiber in the bread and vegetables, healthy fats in the avocado and eggs, and protein from the eggs, cheese, and bread.

**Makes: 4 servings**

#### Ingredients

- 1 ripe avocado
- 2 medium tomatoes
- 1 green onion
- 1/2 cup chopped fresh basil (plus 2 tbsp for garnish)
- 4 eggs (hard-boiled)
- 4 slices whole-wheat bread
- 1/4 cup part skim (reduced fat) ricotta cheese
- black pepper to taste



#### Directions

1. Dice avocado, tomatoes, and green onions.
2. Peel and chop hard-boiled eggs.
3. Reserving 2 tbsp. basil for garnish, gently toss first five ingredients in a small bowl. Add pepper to taste.
4. Toast bread and spread 1 tablespoon ricotta cheese per slice.
5. Top with avocado mix and garnish with chopped basil.

Adapted from <https://whatscooking.fns.usda.gov/recipes/myplate-cnpp/avocado-breakfast-bruschetta>

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Dear Friend,

*Diabetes Life Lines* is a bi-monthly publication sent to you by your local county Extension agent.

It is written by an Extension Nutrition and Health Specialist and other health professionals from the University of Georgia. This newsletter brings you the latest information on diabetes self-management, healthy recipes and news about important diabetes-related events.

If you would like more information, please contact your local county Extension Office.

Yours truly,

County Extension Agent

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