

National Diabetes Month

November 2018

Meal Planning Tips & Tricks and Healthy
Eating Patterns for Diabetes

1. What is Diabetes?

- General information
- Risks and Complications

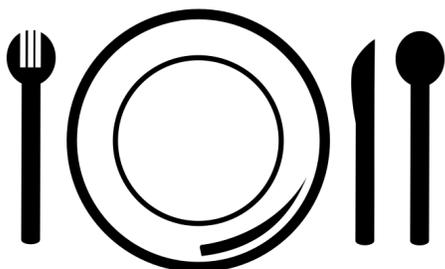


2. Am I at risk?

- Quick quiz and overview

3. What should I eat?

- Nutrient-dense foods to consume
 - Mediterranean Diet



4. Meal Planning Tips & Tricks

What is Diabetes?

Types, complications, symptoms

Type 1– Due to an autoimmune disease

- 5-10% of diabetes cases nationwide
- Occurs across all demographics
- The body does not produce insulin, which prevents glucose in our blood from being absorbed and used by cells. This causes blood sugar to rise, which is called hyperglycemia
- When glucose cannot enter cells, we feel tired, hungry and may even lose weight because our bodies cannot actually use the energy from our food
- Type 1 Diabetes Mellitus requires insulin therapy to manage blood sugar levels, in addition to proper nutrition and physical activity to keep individuals functioning well and feeling their best

Type 2– Lifestyle-related with other risk factors

- 90-95% cases of diabetes cases nationwide
- More common in older adults and certain ethnicities: African Americans, Latinos, Native Americans, Asian Americans/Pacific Islanders
- The body can produce insulin, but it cannot use it very well. Trying to accommodate this, the body produces more insulin to try to keep up with demand, but eventually the pancreas cannot produce enough to manage blood glucose levels
- Without functioning insulin, the amount of glucose in the blood rises, resulting in hyperglycemia, or high blood glucose. Long-term hyperglycemia can cause damage to the eyes, kidneys and nerves
- Treating Type 2 Diabetes Mellitus focuses on making healthy lifestyle changes and use of oral medications to manage blood glucose, as well as potential insulin therapy

COMPLICATIONS:

- Diabetes causes about 44% of new cases of kidney disease.
- Hyperglycemia can modify blood vessels in the kidney, which decreases the ability for kidneys to filter waste products from the blood.
- Hyperglycemia can also modify proteins and damage cells in the nervous system.
- This damage is responsible for symptoms like: changes in sensation, pain in the extremities, and impaired wound healing. With impaired sensation, injuries and infections may go unnoticed and progress into more serious complications.
- Blood vessels in the eyes provide oxygen to the cells to facilitate vision. Damage to these blood vessels can develop into new cases of blindness and other complications like glaucoma and cataracts. The progression of these complications can be prevented with controlling blood glucose and managing blood pressure.

SYMPTOMS OF DIABETES:

- Frequent urination
- Urgent thirst
- Hunger, even with eating
- Extreme fatigue
- Blurry vision
- Slow wound healing
- Weight loss (Type 1)
- Tingling and pain in the extremities (Type 2)

Am I at risk?

There are multiple factors that may put you at risk of developing Type 2 diabetes.

Although there are risk factors that you cannot control, there are a few important steps that you can take to pursue a healthy lifestyle and reduce your risk of developing diabetes.

Risk factors you can't control:

Family history— risk increases when a close family member has been diagnosed with diabetes

History of gestational diabetes— risk of developing Type 2 diabetes increases in women diagnosed with gestational diabetes during pregnancy

Race— risk increases in African Americans, Latinos, Asian Americans/Pacific Islanders and Native Americans, and Native Hawaiians

Gender— risk is greater in men

Age— risk increases with age

Risk factors you can control:

Physical activity— lowers risk of developing diabetes by helping to lower blood glucose, blood pressure, and blood lipids; try to include a range of aerobic, strength and flexibility activities

Proper nutrition— Consuming a diet founded on fruits, vegetables, lean proteins and whole grains, including healthy fats, fiber and reducing sodium levels

Weight management— if you are overweight, losing as little as 10-15 pounds can reduce your risk of diabetes and other chronic conditions and substantially improve your overall health



Are you at risk for type 2 diabetes?

ALERT!DAY
TYPE 2 DIABETES AWARENESS



- 1. How old are you?** **WRITE YOUR SCORE IN THE BOX.**
- Less than 40 years (0 points)
40–49 years (1 point)
50–59 years (2 points)
60 years or older (3 points)
- 2. Are you a man or a woman?**
- Man (1 point) Woman (0 points)
- 3. If you are a woman, have you ever been diagnosed with gestational diabetes?**
- Yes (1 point) No (0 points)
- 4. Do you have a mother, father, sister or brother with diabetes?**
- Yes (1 point) No (0 points)
- 5. Have you ever been diagnosed with high blood pressure?**
- Yes (1 point) No (0 points)
- 6. Are you physically active?**
- Yes (0 points) No (1 point)
- 7. What is your weight category?**
- See chart at right.

Height	Weight (lbs.)		
	119–142	143–190	191+
4' 10"	119–142	143–190	191+
4' 11"	124–147	148–197	198+
5' 0"	128–152	153–203	204+
5' 1"	132–157	158–210	211+
5' 2"	136–163	164–217	218+
5' 3"	141–168	169–224	225+
5' 4"	145–173	174–231	232+
5' 5"	150–179	180–239	240+
5' 6"	155–185	186–246	247+
5' 7"	159–190	191–254	255+
5' 8"	164–196	197–261	262+
5' 9"	169–202	203–269	270+
5' 10"	174–208	209–277	278+
5' 11"	179–214	215–285	286+
6' 0"	184–220	221–293	294+
6' 1"	189–226	227–301	302+
6' 2"	194–232	233–310	311+
6' 3"	200–239	240–318	319+
6' 4"	205–245	246–327	328+



ADD UP YOUR SCORE.

1 point 2 points 3 points

If you weigh less than the amount in the left column: **0 points**

Adapted from Bang et al., Ann Intern Med 151:775-783, 2009.
Original algorithm was validated without gestational diabetes as part of the model.

If you scored 5 or higher:

You are at increased risk for having type 2 diabetes. However, only your doctor can tell for sure if you do have type 2 diabetes or prediabetes, a condition in which blood glucose levels are higher than normal but not yet high enough to be diagnosed as diabetes. Talk to your doctor to see if additional testing is needed.

Type 2 diabetes is more common in African Americans, Hispanics/Latinos, Native Americans, Asian Americans, and Native Hawaiians and Pacific Islanders.

Higher body weight increases diabetes risk for everyone. Asian Americans are at increased diabetes risk at lower body weight than the rest of the general public (about 15 pounds lower).



The good news is you can manage your risk for type 2 diabetes. Small steps make a big difference in helping you live a longer, healthier life.

For more information, visit us at diabetes.org/alertday or call 1-800-DIABETES (800-342-2383).



What should I eat?

The right eating pattern for you will include foods you like and foods that are nutrient-dense and full of vitamins and minerals. Check out the following nutrition powerhouses to include in your diet.

1. Beans – Beans are a great source of fiber, protein, magnesium and potassium.	6. Tomatoes – Tomatoes are packed with Vitamins C and E as well as potassium.
2. Dark green leafy vegetables – Be sure to include vegetables like kale and spinach as they are packed with -soluble vitamins like Vitamin A, E and K. They also contain high amounts of calcium, potassium and Vitamin C.	7. Omega-3 rich fish – Fish like salmon, tuna, herrings and sardines are high in brain-healthy and heart-healthy omega-3 fatty acids. Aim for 2 servings per week.
3. Citrus fruit – Consuming fruits like oranges, lemons, limes and grapefruits will provide you some fiber, folate and of course, Vitamin C!	8. Nuts – Nuts are a healthy and tasty snack and meal addition containing healthy fats and fiber. If you like nuts and seeds, be sure to buy lower sodium or dry roasted varieties to keep sodium content in check.
4. Sweet potatoes – You will want to be mindful about the starch content, but in addition, you will be getting plenty of Vitamins A and C!	9. Whole grains – Wholes grains are a great source of fiber and vitamins and minerals present in the bran and germ of the grain. Be sure to look for “100% whole” on the package and the whole grain as the first ingredient listed.
5. Berries – Berries are nutritional powerhouses. For a few calories, you get a great source of fiber, vitamins, and antioxidants. The more color the better!	10. Dairy products – Dairy products are crucial sources of protein, calcium and vitamin D (when fortified). Be sure to look for lower fat varieties with low amounts of added sugars.

The Mediterranean Diet

- This is an eating pattern based on the typical foods of the Mediterranean region including fruits, vegetables, whole grains, legumes, nuts, olive oil, and moderate to low consumption of poultry and fish. Red meat is consumed in limited amounts.
- This eating pattern has gained attention as it has demonstrated positive effects on glycemic control in diabetes management and cardiovascular improvements likely related to the consumption of monounsaturated fatty acids in olive oil and omega-3 fatty acids in nuts and many types of fish.
- Following a Mediterranean-type eating pattern can protect against and reduce the risk of developing Type-2 diabetes. The protective effect of following the Mediterranean eating pattern may be attributed to the anti-inflammatory and anti-oxidative properties of the healthy fats, nuts, fruits and vegetables that are typically consumed.
- The eating pattern is also low in foods that typically have a general inflammatory effect like saturated fats, trans fats, and refined foods like cookies, cakes, and packaged convenience items.
- Following the traditional Mediterranean eating pattern can help to lower your HbA1C and therefore, improve glycemic control. Beyond helping to manage blood glucose, adhering to the Mediterranean eating pattern can also greatly improve cardiovascular risk factors such as: blood pressure, blood lipids, and the ratio of good cholesterol to bad cholesterol.



GRILLED SALMON AND AVOCADO SALAD

Vegetables, lean protein and healthy fat

Total servings: 4

Prep and cook time: 1 hour and 25 minutes

Cost per serving: \$2.07

Ingredients:

4-4oz frozen salmon filets, thawed
2 tbsp olive oil, divided
1 tbsp no-salt grill seasoning
4 cups romaine lettuce, chopped
1/2 cup red onion, thinly sliced
1 cup cucumber, thinly sliced
1 ripe avocado, peeled, seeded and sliced
1/4 cup lime juice
1 tsp Dijon mustard
1 tsp stevia
1/4 tsp salt
1/4 tsp black pepper

Instructions:

1. Preheat oven indoor or outdoor grill.
2. Pat the thawed salmon dry with a paper towel, then brush each side with the olive oil. Season with the no-salt grill seasoning.
3. Grill the salmon filets on each side 4-5 minutes, or until just cooked through. Set aside.
4. Assemble each salad with 1 cup romaine lettuce, 1/4 of the sliced onion, 1/4 of the sliced cucumber, a grilled salmon filet and 1/4 of the sliced avocado. Repeat to plate each of the 4 salads.
5. For the dressing, whisk together the lime juice, Dijon mustard, stevia, salt, pepper and 1 tbsp of olive oil. Drizzle over each salad.

Nutrition Facts: Serving size: 1 cup salad and 1 filet.
Calories: 320, Total fat: 21g, Saturated fat: 3.5g,
Cholesterol: 60mg, Sodium: 260mg, Total carbohydrate:
10g, Fiber: 4g, Protein: 24g.

Adapted from <https://www.diabetesfoodhub.org/recipes/grilled-salmon-and-avocado-salad.html>



CHICKEN CHILI

Vegetables, lean protein and fiber

Total servings: 4

Prep and cook time: 45 minutes

Cost per serving: \$1.88

Ingredients:

8oz chicken breasts, boneless, skinless, diced
1 green pepper, diced
1 small onion, diced
1 clove garlic, minced
2-14.5oz can diced tomatoes
16oz navy beans, rinsed and drained
1/4 tsp black pepper
2 tsp chili powder
1/2 tsp cumin

Instructions:

1. Spray a large soup pot with cooking spray. Add chicken and sauté over medium heat for 7 minutes or until done. Remove from the pan.
2. Add onion and green peppers and sauté over medium--high heat for 3 minutes or until the onions are clear. Add garlic and sauté 30 more seconds.
3. Add remaining ingredients along with cooked chicken and bring to a boil. Reduce heat and simmer for 15 minutes.

Nutrition Facts: Serving size: 1.25 cups. Calories: 210,
Total fat: 2.5g, Saturated fat: 0.5g, Cholesterol: 30mg,
Sodium: 470mg, Total carbohydrate: 30g, Fiber: 10g,
Protein: 19g.

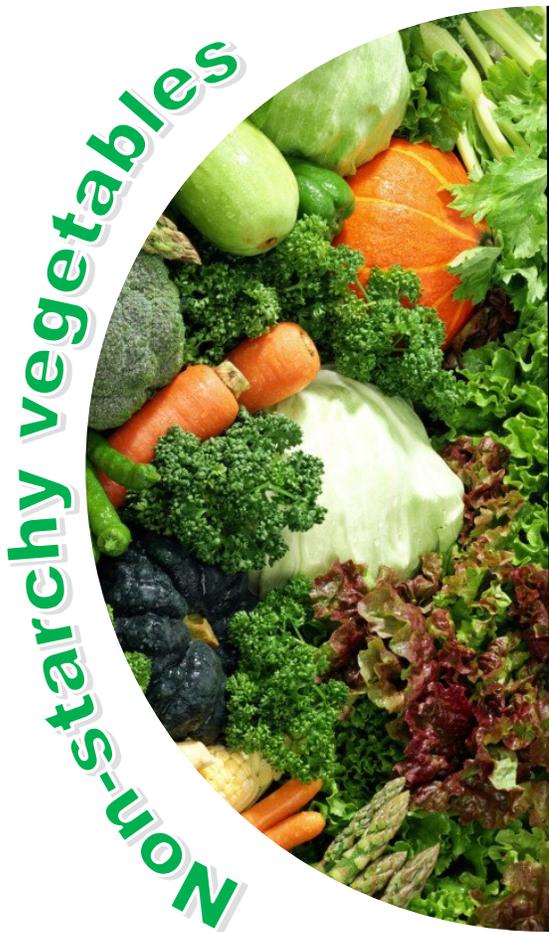
Adapted from <https://www.diabetesfoodhub.org/recipes/budget-friendly-chicken-chili.html>

For more diabetes-friendly recipes, visit: <https://www.diabetesfoodhub.org/>



Meal Planning Tips & Tricks

Meal planning is crucial for successfully managing diabetes! A little planning can go a long way with timing, portion sizes and choosing foods. Remember, there is no right way to eat when it comes to managing diabetes but there are many considerations such as foods you like, don't like and your daily lifestyle. The Diabetes Plate method is one great example of a strategy for planning meals. This method calls for you to fill half of a 9-inch plate with non-starchy vegetables, a 1/4 with lean protein and 1/4 with carbohydrates or starchy vegetables. For an interactive online tool to help you plan, visit: <http://www.diabetes.org/food-and-fitness/food/planning-meals/create-your-plate/>



Based on the Dietary Guidelines 2015-2020 and MyPlate, an average 2000 calorie diet should consist of:

2 cups fruit per day (focusing on whole fruit)

2.5 cups vegetables per day (diabetes-friendly meal plans should focus on non-starchy vegetables).

6 oz grains per day (focusing on 100% whole grains)

5.5 oz protein per day (focusing on lean proteins and plant-based proteins like nuts, seeds and legumes)

3 cups of milk products per day (low-fat milk, yogurts with low amounts of added sugar)

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For more healthy eating tips,
visit: <http://www.med.umich.edu/pfans/services/tip.html>

If you have any questions or want more information on diabetes management, be sure to set up a time to meet with a local Registered Dietitian Nutritionist.



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