

# Lifestyle Pillars for the Prevention and Treatment of Type 2 Diabetes

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## I. Healthful Eating <sup>[1-15]</sup>

Follow a predominantly [whole food plant-based eating pattern](#) that includes a variety of minimally processed vegetables, fruits, whole grains, legumes, nuts and seeds.

- Fresh or frozen non-starchy vegetables and fresh or frozen fruit (any combination – fill ½ of the plate)
- Starchy vegetables such as sweet potatoes or winter squash or whole grains such as oats, whole grain bread, barley, brown rice (any combination – fill ¼ of the plate)
- Plant protein sources such as beans, lentils, peas, soybeans, or minimally processed soy products such as tofu and tempeh (any combination – fill ¼ of the plate)
- Include an ounce (~28g) of nuts or seeds each day, with an emphasis on choices that are rich in omega-3 fatty acids such as ground flaxseed, chia seeds, hemp seeds, or walnuts
- Minimize or avoid the use of oils and other forms of concentrated or processed fats such as margarine – small amounts of fat such as cooking spray to prevent food from sticking to a pan are okay
- Drink plenty of water during the day. Women should aim to get approximately 2.2 L (73 ounces) and men 3 L (100 ounces) of water daily. Eating fruits and vegetables that contain plenty of water also helps with fluid intake. Those who live in hot climates or are very physically active may need to consume more water

Many people find their weight and blood sugars improve if they eat just two to three times per day, with the last meal being light and approximately 3–4 hours before bedtime.

**NOTE:** Before making significant dietary changes, address medication adjustments with your health care provider to prevent hypoglycemia and hypotension; discuss hypoglycemia and hypotension awareness and management. (<https://deprescribing.org/what-is-deprescribing/>)



## II. Physical Activity <sup>[16, 17]</sup>

- Whenever possible, go on a short walk (at least 10-minutes) or engage in any type of light physical activity immediately after every meal
- Although light physical activity is recommended immediately following a meal, more strenuous workouts are generally better to do at least 2 hours after meals or before them
- Do moderate-to-vigorous aerobic activity at least 150–300 minutes a week
- High-intensity exercise may provide additional blood glucose control
- Do at least 2-3 sessions of resistance exercises that work all major muscle groups per week. This should include lower body movements such as squats, lunges, and/or hip hinges, core exercises, and upper body pushing and pulling movements such as push-ups, shoulder presses, pull-ups, and rows
- Avoid prolonged sitting. Stand up for three minutes for every 30 minutes of sedentary activity



### III. Develop Strategies to Manage Stress <sup>[18-23]</sup>

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- Share concerns and feelings with caring individuals
- Seek social support and psychosocial therapy as needed
- If possible, enroll in a lifestyle program
- Do progressive muscle relaxation
- Practice mindfulness
- Engage in activities with a like-minded group
- Get screened for and, if needed, seek treatment for anxiety and depression
- Practice forgiveness



### IV. Avoid Risky Substances <sup>[22, 24]</sup>

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- Avoid all tobacco products
- If you smoke, enroll in a smoking cessation program, or call 1-800-QUITNOW (available in 50 states)
- Seek alcohol and substance abuse counseling when appropriate – visit <https://www.rethinkingdrinking.niaaa.nih.gov/>
- Participate in a program that offers counseling and medications as needed
- Consider downloading and using an app to help

### V. Improve your Sleep <sup>[22, 25-28]</sup>

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- Aim to get 7-9 hours of sleep a day
- Practice sleep hygiene
  - Have a regular sleep schedule
  - Keep noise and light in the bedroom to a minimum
  - Get sunlight or bright light exposure early in the day
  - Exercise regularly
  - Engage in relaxing activities before bedtime
  - Avoid caffeine late afternoon and evening and limit during the day
  - Avoid electronics or screens while in bed
  - Keep your lights dim and avoid bright light exposure close to bed time
  - Avoid eating late

**NOTE:** Talk with your healthcare provider if you have any concerns about sleep



### VI. Form & Maintain Healthy Relationships <sup>[17, 18, 21, 22, 29]</sup>

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- Seek support from family and friends
- Join community groups that support a healthy lifestyle
- Engage in relevant social networks
- Work collaboratively with your healthcare team
- Seek healthcare providers who model healthy lifestyle behaviors



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