

# INCREASING PHYSICAL ACTIVITY FOR PATIENTS WITH TYPE 2 DIABETES

**Exercise is an important part of a healthy lifestyle, especially for patients with diabetes. The goal is to make exercise a part of every day by doing enjoyable activities.<sup>1</sup>**

- Regular exercise in patients with diabetes helps lower blood sugar and blood pressure, and improves cholesterol levels for a healthy heart.<sup>1,2</sup>
- Burning calories contributes to weight loss, and staying active can keep the pounds off.<sup>1</sup>
- Lowering blood sugar and weight may mean taking less insulin or fewer diabetes pills.<sup>1</sup>
- By participating in structured exercise activities for at least 8 weeks, glycosylated hemoglobin (HbA<sub>1c</sub>) can be lowered by an average of 0.66%, and there is even greater benefit with higher levels of exercise.<sup>2</sup>

**The American Diabetes Association currently recommends moderate exercise for at least 30 minutes/day, 5 days/week.<sup>2,3</sup>**

- A comprehensive exercise routine should include aerobic (physical) exercise, strength training, flexibility exercises, and other forms of activities to stay active throughout the day.
- Recommendations for these activities for patients who have no medical or physical limitations are (**See charts on back**):<sup>1,3,4</sup>
  - Moderate-intensity aerobic activity for ≥30 minutes 5 days per week, or vigorous-intensity aerobic activity for ≥20 minutes 3 days per week, unless contraindicated.
- Activity can be divided into ≥10-minute segments to achieve the 30-minute goal.
- Overweight or obese patients may target 60-90 minutes, 6-7 days per week.
  - Resistance training 3-4 days per week to increase lean muscle mass. This includes upper-, core-, and lower-body strengthening exercises using free weights, resistance machines, or resistance bands.
  - Stretching exercises when muscles are warm or at the end of the activity to loosen muscles and prevent soreness.

**There is no single activity program that suits every patient with diabetes.<sup>1,5</sup>**

- Work with your clinician and the health care team to develop an activity program that fits your physical abilities, medical needs, interests, and lifestyle.
- Your health care team may recommend that you meet with an exercise physiologist or physical therapist trained to work with people with diabetes.
- The key is to choose safe and effective activities that you can enjoy and do on a regular basis.
- Make detailed plans and set realistic and specific goals.
- Keep track of your progress, perhaps using a physical activity log or a pedometer.

## EXAMPLES OF AEROBIC EXERCISE AND STRENGTH TRAINING<sup>1,2,5</sup>

### Aerobic Exercise (30 minutes/day, >5 days/week)

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| <ul style="list-style-type: none"><li>• Brisk walking outdoors with family or friends (and the dog!)</li><li>• Brisk walking on a treadmill</li><li>• Low-impact aerobics</li><li>• Swimming or water aerobics</li><li>• Bicycling outdoors or on a stationary bicycle indoors</li><li>• Volleyball or basketball</li></ul> | <ul style="list-style-type: none"><li>• Tennis</li><li>• Ice skating or roller skating</li><li>• Dancing</li><li>• Raking leaves</li><li>• Mowing the lawn</li><li>• Washing the car</li><li>• Heavy housecleaning</li><li>• Pushing a stroller</li></ul> |
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### Strength Training (3 times a week)

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| <ul style="list-style-type: none"><li>• Lift weights at home</li><li>• Join a strength training class</li></ul> | <ul style="list-style-type: none"><li>• Use the hotel fitness center when traveling</li></ul> |
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## REMAINING ACTIVE THROUGHOUT THE DAY<sup>1,4,5</sup>

- Park farther away from entrances to work or shopping for a longer walk
- Walk or bike to the destination if a short distance away
- Get off the bus one stop earlier
- Take the stairs instead of the elevator
- Walk for 30 minutes after work before driving home in traffic
- Walk home from the train or bus, taking a longer route
- Walk with a colleague or friend for 20 minutes at the start of lunch hour
- Walk around while you talk on the phone
- Avoid using the drive-up window
- Carry things up the stairs in two trips instead of one
- Play with the children
- Do some housecleaning every day
- Exercise at home while watching television
- Join a social dance club or exercise program that meets several times a week
- Go to a shopping mall, flea market, country fair, museum, or art gallery
- If wheelchair-bound, wheel yourself for part of every day

## REFERENCES

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2. American Diabetes Association. Standards of medical care in diabetes—2010. *Diabetes Care*. 2010;33(Suppl 1):S11-S61.
3. Joslin Diabetes Center & Joslin Clinic. Clinical guideline for adults with diabetes. [https://www.joslin.org/bin\\_from\\_cms/Adult\\_guidelines\\_edit\\_7\\_2\\_10.pdf](https://www.joslin.org/bin_from_cms/Adult_guidelines_edit_7_2_10.pdf). Accessed August 25, 2010.
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5. Joslin Diabetes Center. Joslin's Library: Managing your diabetes. [http://www.joslin.org/info/managing\\_diabetes.html](http://www.joslin.org/info/managing_diabetes.html). Accessed August 27, 2010.