

# MG and Exercise

*Excerpted from the "Practical Strategies for Living with MG" presentation by physical therapist Brittany White, October 2014, at Palos Community Hospital, Palos Heights, Illinois*

Myasthenia gravis is often called the "snowflake disease" for good reason. Just as each snowflake is unique, MG presents in a unique way for each patient – in terms of which muscles are affected, the severity of weakness, and even how symptoms change from one day to the next. As a result, there's no single approach to exercise.

Once your MG is stable and you have your doctor's approval, consistent exercise will improve many aspects of your life. It won't happen overnight, and you should take it slowly to avoid fatigue. But by progressing gradually and following some guidelines you can improve your strength. Keep in mind:

- **The dollar per day rule** says you should "budget" energy to accomplish daily activities. Avoid exhausting yourself in the morning by using 75 cents of your dollar with exercise.
- **Exercise at your best time of day.** For most MG patients this is in the morning after medications have kicked in.
- **Exercise when your medications are at peak dose.** For pyridostigmine, this is 1.5-2 hours after taking it.
- **Exercise the large, proximal muscles of the body.** These include upper arm and shoulder muscles, and thigh and hip muscles.
- Exercises should be **short in duration and never exceed moderate intensity.** Moderate exercise intensity is exercise that:
  - Raises your heart rate no more than 30 beats per minute from resting baseline
  - Does not cause shortness of breath at peak of exercise
  - Does not cause MG symptoms to become worse during the exercise (for example, drooping of the eyelids)
  - Doesn't still leave you tired two hours after exercise
  - Should not cause severe muscle soreness the day(s) after exercise

How can you tell if you should or shouldn't exercise? How long should you do an activity? What kind of exercise is best? For answers, you'll want to pay careful attention to your body's energy and strength, and be sure to check with your doctor.

You should avoid exercise if your MG is active - if your breathing is weak, or you struggle to swallow, for example, or if your symptoms are unstable or seem to be worsening. At this time it's better to conserve energy to avoid falls and injury.

If you experience any of these things you are exercising at too high of an intensity!

## Types of Exercises and Devices

Some exercise machines are more appropriate than others for MG patients. The upper body ergometer is useful for arm exercise. For lower extremities, the stationary bike or elliptical machine (with stationary arm supports) can help. These pieces of equipment provide self-paced activity that involves large muscle groups and are safe to use.



## MG and Exercise (continued)

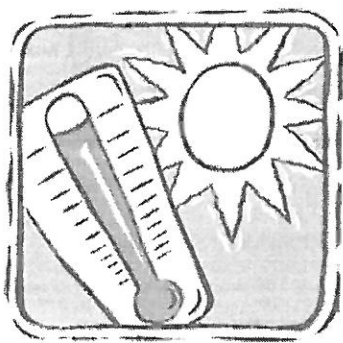


**Walking** is an excellent exercise. Be sure to walk on flat surfaces at a comfortable pace in a controlled environment; avoid extreme heat or stressful situations like busy streets. Indoor walking tracks are great!

**Weight training** also can be good, but always use light weights, no more than 10 to 12 repetitions and three sets per exercise. To avoid muscle fatigue, alternate between upper extremity and lower extremity exercises.

### Things to Avoid

Because treadmills are not self-paced you run the risk of overexerting yourself.



Avoid the heat and increased temperatures as this can make symptoms worse. Swimming is an excellent exercise, but never swim in water that is above chest high to avoid too much fatigue. Some research suggests that whole body cooling suits, cold packs or cool showers and baths can ease muscle fatigue in patients with MG.



**Avoid treadmills**

If this is overwhelming don't panic! Ask your doctor for a prescription for physical therapy. A physical therapist can get you started on a program you can continue on your own.

Ms. White used these sources for her presentation:

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Common sense is genius dressed in its working clothes. - Ralph Waldo Emerson