



Exercise and MS

Regular exercise is essential to maintaining a healthy lifestyle and is recommended for everyone, including individuals with multiple sclerosis (MS). People with MS often ask about the risks and benefits of exercise.

Some questions commonly asked about exercise are:

- Will exercise make my symptoms (like fatigue, pain and weakness) worse?
- Could exercise cause a relapse of my MS symptoms?
- Will my sensitivity to heat make it difficult or impossible for me to exercise?

Despite these concerns, current research shows:

- Exercise is a popular way to improve health, physical functioning and overall well-being for people with MS.
- There are safe ways to exercise for people with MS.

Exercise, if done properly, DOES NOT make your MS worse or cause a relapse of your MS symptoms.

How can exercise benefit you?

Exercise may have a number of benefits for individuals with MS, including:

- Improved mood (less depression and/or anxiety)

- Increased strength and mobility
- Decreased overall fatigue (even if you experience more fatigue immediately after exercise)
- Improved social interactions/self-esteem
- Improved bowel and bladder functioning
- Increased clarity of thinking
- Improved sleep
- Preventing weight gain

Some people with MS report feeling worse when they first start exercising, or feel more fatigued after exercise instead of energized. Generally, these symptoms get better as you become more accustomed to exercise and get in better physical shape.

Setting exercise goals

People with MS have a wide range of physical abilities so it is important to consult your health care provider to develop the best exercise program for you. For example, if you use a wheelchair your health care provider can recommend physical activities that you can safely do in your wheelchair.

- Talk with your health care provider before starting an exercise program to get advice on where to start.
- Keep your health care provider informed about your exercise progress so he/she can guide you towards your goals.

- Talk with a physical therapist to identify specific exercises to help you achieve your fitness goals safely.
- Keep track of your progress.
 - ◆ Start with realistic and attainable exercise goals. Write down what exercises you want to do, when, where and for how long.
 - ◆ Keep track of your exercise progress to help you set new goals. Some people find that tracking their exercise activities helps them stay motivated.
 - ◆ If you do not meet your exercise goals, don't get discouraged. Any exercise is better than no exercise.
- Write down your barriers to exercise, and bring notes to your health care provider to help you brainstorm ways to overcome them.
- It does not matter whether you are “exercising” in a gym or through walking or propelling your wheelchair outside. It all counts.
- You may not see immediate benefits, but don't worry -- if you stick to your plan, you will. Benefits such as losing weight, increasing physical strength or decreasing day-to-day fatigue may take some time.
- Make exercise a habit. Make some form of physical activity part of your daily routine like taking a walk after lunch.
- Avoid sitting in front of the TV or computer for extended periods. Take a 5-minute stretch or activity break at least once per hour.
- Think of easy ways to include more physical activities into your daily routine. For example, you may take the stairs instead of the elevator or propel yourself faster in your wheelchair.

Keeping up with exercise

Staying motivated to keep up with an exercise program is difficult for many people. Try the different approaches below to see what helps keep you on-track.

- Where and when you exercise can help keep you on-track.
 - ◆ Are you more likely to exercise in the morning, afternoon or night?
 - ◆ Does exercising with a friend give you encouragement to exercise?
 - ◆ Would joining an exercise class help keep you motivated to stick with it?
- Keep a positive attitude. Focus on the physical activities that you CAN DO and not those that you can't.
- Find physical activities you enjoy and schedule those activities often.

About exercise

Your exercise program should include stretching, aerobic exercise (for increasing your endurance), and strength-training.

Stretching – Improving flexibility in your muscles is important for maintaining your ability to perform everyday activities and prevent injuries.

- Stretch for at least 10 minutes per day.
- Stretch only after you have done a 5-10 minute warm-up to prevent injuries caused by stretching cold muscles. You can also stretch after your workout.
- Stretch slowly, holding each stretch for 30-60 seconds. Be sure to stretch all the

major muscle groups in your body. Yoga and tai chi include a variety of stretching exercises.

Aerobic activity (also called endurance or cardio activity) is any activity that causes your heart rate to increase for an extended period of time. Some popular choices for people with MS are walking, swimming, cycling, and water aerobics. You can also use stationary equipment for some activities such as a stationary bike or treadmill.

- Experts recommend a goal of at least 150 minutes total of moderate-intensity aerobic activity per week.
- If you are just getting started, increase your aerobic activity slowly. Start with a shorter time period and work up to 150 minute total over many weeks or as you feel comfortable.
- If time is limited, you can use several 10 minute periods of exercise in a day.
- You know you are doing moderate-intensity aerobic exercise when you can talk but not sing. You will be breathing more heavily than usual, and you'll be sweating. But, you'll feel like you can keep going for a while.
- Another way to tell when you're doing moderate-intensity aerobic exercise is by checking your pulse and calculating your heart rate. For more information on how to take your pulse and calculate your heart rate, go to CDC Target Heart Rate.

Strength training (also called resistance training) is any kind of activity that causes your muscles to work against an applied force or weight. This helps maintain and improve the strength of your muscles. You

can do strength training exercises with weights (such as small hand weights, wrist cuff weights, or even a soup can) or you can use elastic resistance bands.

- Do strength training exercises at least twice a week.
- Do a variety of strength training exercises so you target all your major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).
- Do core strength exercises to strengthen the muscles in your stomach, back and around your pelvis. Pilates and yoga include many core strength exercises.

Preventing problems

- Start slowly by not pushing yourself to do too much at once, especially if you have been inactive for a long time.
- Keep hydrated. Water is the best hydration – drink more water before, during, and after you exercise.
- Make sure you stay cool. This can mean exercising in front of a fan, in a cool room, or after the peak heat of the day. Or, you can use a cooling device (vest, wrist bands, etc.).
- Take time to recuperate after you exercise. You may need to rest and replenish your body with protein and water.
- Do not continue to exercise during times when your MS symptoms are exacerbated. While exercise doesn't cause exacerbations of MS, it's better to conserve your energy and rest during these periods.
- Use appropriate footwear.

- Be safe when you exercise by preventing falls and injuries that can happen when your body is tired or you have MS symptoms that affect your balance.

Where can you exercise?

The most common exercise is walking or wheeling. Walking is free and can be done alone, with someone else, or your dog. Go slowly and take rests as needed.

Community centers, YMCAs, and private fitness facilities offer a variety of exercise classes, aerobic and strength training equipment, and activities such as swimming, water aerobics and wheelchair basketball.

For those who prefer to exercise in their homes, many equipment options are available, ranging from simple exercise bands, exercise balls and free weights to more complicated (and expensive) equipment such as wheelchair rollers and electrical stimulation cycles. Exercise videos for people with disabilities are available as DVDs and online through the local library or through resources list below. Public TV stations also offer fitness programs such as Sit and Be Fit.

Resources

Multiple Sclerosis Foundation, Exercise and MS video - <http://www.msfocus.org/view-video.aspx?videoID=6>

National MS Society, Exercise - <http://www.nationalmssociety.org/living-with-multiple-sclerosis/healthy-living/exercise/index.aspx>

Healthfinder.gov, Get Active- <http://healthfinder.gov/prevention/ViewTopic.aspx?topicId=22>

National Center on Physical Activity and Disability - <http://www.ncpad.org/>. Provides exercise videos and information on exercise programs for people with all types of disabilities.

Physical Activity Guidelines for Americans - <http://www.health.gov/PAGuidelines/>

American College of Sports Medicine - <http://www.acsm.org/>

References

Artherholt SB and Verrall, A. The benefits of physical and social activity. *The Motivator* (the magazine of the MS Association of America), Winter-Spring issue, 2012. <http://www.msassociation.org/publications/winter-spring12/cover.story.asp>

National MS Society website, Exercise page. <http://www.nationalmssociety.org/living-with-multiple-sclerosis/healthy-living/exercise/index.aspx>

Authorship

Content is based on research evidence and/or professional consensus of faculty at the University of Washington Multiple Sclerosis Rehabilitation Research and Training Center. This factsheet may be reproduced and distributed freely with the following attribution:
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Disclaimer

This information is not meant to replace the advice from a medical professional. You should consult your health care provider regarding specific medical concerns or treatment.