

Factsheet

Before You Begin Exercise



There are many benefits of regular physical activity and exercise, and no matter what your level of injury is, exercise is for everyone!!!

Staying active is often considered a key factor in maintaining and improving overall health. Benefits of moderate physical activity can be even greater for individuals with a disability since they have a tendency to live less active lifestyles. Inform your primary care physician prior to beginning a new exercise routine to make sure there are no medical issues you need to consider once you start to exercise. If possible, consult a trained exercise professional for an individualized exercise prescription.

Benefits of regular physical activity and exercise

- Weight control
- Improved strength and endurance to perform activities of daily living
- Decreased anxiety and depression
- Enhanced feeling of well-being
- Protection against development of chronic diseases such as diabetes,
- Prevention of secondary conditions such as cardiovascular disease, pressure sores, hypertension and respiratory distress
- Increased cardiac (heart) and pulmonary (lung) function
- Lowered cholesterol and blood pressure

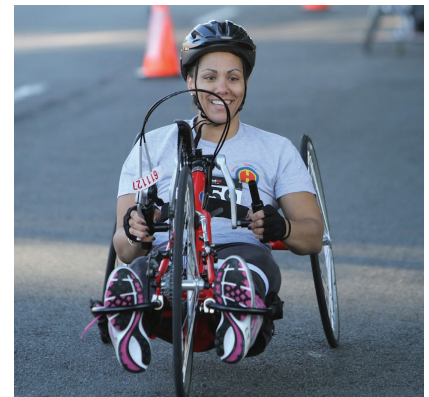


Types of exercise

There are several different types of exercise that may benefit you in different ways:

Cardiovascular Exercise – Primarily benefits your heart, circulatory system and lungs. Examples of cardiovascular exercise are:

- Aerobic exercise
- Circuit training
- Arm ergometry
- Wheelchair ergometry
- Sports (tennis, basketball, swimming, quad rugby, cycling etc.)



The American College of Sports Medicine (ACSM) recommends that adults participate in moderate-intensity aerobic exercise for at least 30 minutes on at least 5 days of the week, which may include housework/chores, brisk-paced wheelchair propulsion, and exercise during which you can still talk easily.

ACSM also recommends that adults participate in high-intensity exercise for at least 20 minutes on at least 3 days per week, which may include playing sports and exercise that makes you feel out of breath. The exercise does not need to be all at once. Two 10 minute sessions of exercise can be just as beneficial as one 20 minute session, since you are active more frequently. It is always a good idea to start slow and gradually increase the amount of time and days per week you exercise. The Spinal Cord Injury Information Network recommends starting with 10 minutes of exercise every other day and then slowly increasing the time you exercise.



There are many ways that you can incorporate cardiovascular exercise into your daily life. If you use a manual wheelchair, try parking a little farther from the store entrance and using a ramp instead of an elevator.

The best way to get active is to get your family and friends active as well. Even shopping trips to the mall can add some aerobic exercise to your daily routine!

Resistance exercise – Primarily benefits you by making you stronger (improving muscular strength) and/or giving you better endurance so you can do things longer (improving muscular endurance). Examples of resistance exercise are:

- Weight machines
- Free weights
- Exercise bands



There are two ways to resistance train: for muscular strength or for muscular endurance. If your goal is to increase muscular strength, you should use a heavier weight (one that is difficult for you to lift more than 6-8 times). Perform 6-8 reps 3-5 times, with at least 3-5 minutes of rest between sets. If your goal is to increase muscular endurance, you should use a lighter weight (one that you can lift at least 12-15 times). Perform at least 12-15 reps 2-3 times, with 1-2 minutes between sets.

It is important keep on breathing while resistance training. Exhale while pushing the weight up or out and in-hale while letting the weight down or in. Resistance training sessions should be held 2-3 times per week with at least one day of rest between sessions.

Flexibility exercise – Primarily aimed at giving you greater range of motion in joints and more flexibility in your body. Examples are:

- Stretching
- Stretching with assistance
- Yoga
- Pilates



Flexibility training should be incorporated before and after every cardiovascular and strength workout. Be sure to hold stretches (without bouncing) for 30-60 seconds and progress slowly. REMEMBER stretching should never be painful!

Spinal cord injury related considerations when exercising

- Incontinence – Make sure to empty your bowel and bladder before exercising
- Spasticity – Stretch spastic muscle groups and avoid exercises that cause excessive spasticity.
- Orthostatic hypotension (drop in blood pressure) – Monitor blood pressure throughout exercise, avoid quick movements and make sure you drink enough water.
- Thermoregulation (irregular body temperature) - Make sure you wear appropriate clothing in warm vs. cold climates, and drink plenty of water.
- Pressure Sores – Make sure you maintain your pressure relief guidelines while exercising, and get out of sweaty clothes as soon as you are done exercising.
- Joint strain – Stop exercising if you experience any pain in your joints while exercising. Consult your doctor before beginning exercise if you have a history of joint pain, particularly in your shoulders. If you do experience joint pain, certain exercises may need to be avoided. Consider consulting a trained exercise professional for an individual exercise program that is designed to avoid exercises that will cause you joint pain.

Important safety considerations

- Stop exercising if you experience pain, discomfort, nausea, dizziness, lightheadedness, chest pain, irregular heartbeat, shortness of breath or clammy hands
- Check medications and their effects during exercise
- Drink plenty of water
- Wear appropriate clothing
- Set realistic short-term and long-term goals
- Find and follow an exercise program that meets your specific goals



RRTC on Secondary Conditions in the Rehabilitation
of Individuals with Spinal Cord Injury



MedStar National
Rehabilitation Network

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Sponsored by the National Institute on Disability and Rehabilitation Research (NIDRR), U.S. Department
of Education, Grant #H133B090002 and Craig H. Neilsen Foundation, Award #184425 in cooperation
with MedStar National Rehabilitation Hospital.