Exercise

Research has shown that strengthening exercise moderately improves muscle strength in people with peripheral neuropathy. In addition, regular exercise may reduce neuropathy pain and can help control blood sugar levels. Ask your physician to refer you to a Physical Therapist regarding an exercise program that’s right for you.

A comprehensive physical activity routine includes four kinds of activities:
- Aerobic Exercise
- Flexibility Exercise
- Strength Training Exercise
- Balance Exercise

Aerobic exercise increases your heart rate, works your muscles, and raises your breathing rate. For most people, it’s best to aim for a total of about 30 minutes a day, between 3-5 days a week. If you haven’t been very active recently, you can start out with 5 or 10 minutes a day and work up to more time each week. Or split up your activity for the day—try a 10-minute walk after each meal.

- Take a brisk walk (outside or inside on a treadmill)
- Take a low-impact aerobics class
- Swim or do water aerobic exercises
- Stationary bicycle indoors

Physical Therapy

Physical therapy may be helpful in maintaining strength, mobility, and function regardless of the underlying cause of Peripheral Neuropathy (PN).

The objectives of physical therapy include:
- Maintaining and improving functions via range-of-motion exercises consisting of progressive stretching and self stretches
- Strengthening muscles—this includes exercising against increasing resistance, use of weights, and isometric exercise
- Balance training which provides stability and prevents falls
- Enhancing balance and posture through braces and/or splints as recommended by your physical therapist

Occupational Therapy

Occupational therapy is instrumental in helping you cope with the functional, vocational, and social impact of peripheral neuropathy by:

- Improving sensory-motor skills
- Teaching you to avoid exposure to environmental or industrial toxins
- Teaching self-care activities
- Teaching you safety issues, (e.g., paying more attention to the terrain when walking since falling or tripping may pose a risk for patients with PN)
- Teaching you to pay attention to issues which involve automatic functions (e.g., learning how to change positions smoothly to avoid a sudden drop in blood pressure and the risk of falling)
- Splinting is often used in the treatment of compression mononeuropathies, such as carpal tunnel syndrome
Flexibility exercises, also called stretching, help keep your joints flexible and reduce your chances of injury during other activities. Gentle stretching for 5 to 10 minutes helps your body warm up and get ready for aerobic activities such as walking or swimming.

As a “rule of thumb”, stretching should be comfortable. As you hold the stretch you will feel the tension decrease in the muscle. You should then be able to go a little farther on the next repetition. If you feel pain with the stretching, do not push as hard. If the pain remains, contact your healthcare professional.

Tear out these pages and follow the exercises at home or visit our website to see a complete list.

Check with your physician before beginning any exercise treatment.

**Calf Stretch**
Place one leg far behind you with the toe pointed slightly inward. Take a large step forward with the opposite foot. With the front knee slightly bent, lean forward keeping your back heel on the floor. You should feel a muscle stretch in the calf of your back leg.

Hold: 15-20 seconds on each leg  
Repeat: 3 repetitions each leg/2 times a day.

**Seated Hamstring Stretch**
Sitting on the front half of a firm chair, place one leg out straight with the foot pointing up. Bend the opposite knee so that your foot is flat on the floor. Center your chest over the straight leg, and slowly straighten your back until you feel a muscle stretch in the back of your leg.

Hold: 15-20 seconds on each leg  
Repeat: 3 repetitions each leg/2 times a day.

**Plantar Fascia Stretch**
While facing a door frame, place your heel as close to the door frame as possible. Slowly lean forward, allowing your heel to slide back as your toes extend upward. To increase the stretch, bend the front knee toward the door frame. You should feel a muscle stretch in the bottom of your foot and along your heel cord.

Hold: 15-20 seconds  
Repeat: 3 repetitions each leg/2 times a day.

**Quadriceps Stretch**
Lying on your side, pull heel toward buttocks until a comfortable stretch is felt in the front of the thigh.

Hold: 15 seconds  
Repeat: 3 repetitions each leg/2 times a day.

**Finger Opposition**
Touch each thumb to each fingertip. Begin with the index finger and proceed toward the little finger. Begin with slow controlled movements and move more rapidly as coordination improves.

Repeat: 15 repetitions/2 times a day.
WRIST FLEXOR STRETCH
Keep the elbow straight, grasp hand and fingers, then slowly bend wrist back until stretch is felt.

Hold: 15 seconds
Repeat: 3 repetitions each wrist/2 times a day

WRIST EXTENSOR STRETCH
Keep the elbow straight, grasp hand and fingers, then slowly bend the wrist forward until stretch is felt.

Hold: 15 seconds
Repeat: 3 repetitions each wrist/2 times a day

WRIST/ HAND RADIAL AND ULNAR DEVIATION
With fingers straight, gently bend wrist from side to side as far as possible.

Repeat: 15 repetitions each wrist/2 times a day

HAND/FOREARM PRONATION/SUPINATION
With the arm in a handshake position, slowly rotate palm down until stretch is felt. Relax. Then rotate palm up until stretch is felt.

Repeat: 15 repetitions each wrist/2 times a day

Balance Exercises
Keeping your balance system healthy is especially important if you have problems due to illness, such as joint pain, weakness or dizziness. Balance training can help you get back to normal, and overcome feelings of stiffness or unsteadiness. Balance, in particular, is emerging as an important element for the elderly. Older muscles are smaller and slower and respond less efficiently when you need to brace yourself, making you more vulnerable to falls.

KITCHEN COUNTER—STANDING BALANCE
While standing at the kitchen counter, place two finger tips on the counter. Stand on one foot lifting the other off the floor. Slowly lift your hands away from the counter and maintain your balance as long as you can. Minor balance checks are acceptable as long as you continue to maintain your balance with minimal help from your hands.

Hold: 5-10 seconds
Repeat: 2 repetitions each leg/2 times a day

SIDE LEG RAISE
Hold chair or table with one hand, then one fingertip, then no hands; then do exercise with eyes closed, if steady. Stand straight, directly behind chair or table, feet slightly apart. Hold chair or table for balance. Slowly lift one leg to side, 6-12 inches. Slowly lower leg and repeat with other leg. Your back and knees are straight throughout exercise.

Hold: 5-10 seconds
Repeat: 2 repetitions each leg/2 times a day
Contact the facility nearest you for more information on diagnosis and treatment.

University Pain Center (UPC)
Rush University Medical Center
1725 W. Harrison St., Suite 550
Chicago, IL 60612
To schedule an appointment call: 312-942-6631

UPC—Palos Heights, IL
7600 College Dr., 1st Floor
Palos Heights, IL 60463
To schedule an appointment call: 708-923-9771

UPC—Rush Oak Park Hospital
610 S. Maple Ave., Suite 500
Oak Park, IL 60634
To schedule an appointment call: 312-923-9771

Northwestern Medical Faculty Foundation
Galter Pavilion at (Northwestern Memorial Hospital)
675 N. St. Clair – Suite 20-100
Chicago, IL 60611
To schedule an appointment call: 312-695-7950

Johns Hopkins Medical Center
600 N. Wolfe St.
Baltimore, MD 21287
To schedule an appointment call: 410-955-9441
Out of state patients call 410-735-4872

University of Chicago
The Jack Miller Center for Peripheral Neuropathy
5841 S. Maryland Ave.
Chicago, IL 60637
To schedule an appointment call: 773-702-5546

www.universitypaincenters.com
www.nmff.org

For other locations visit our website.

To learn more about peripheral neuropathy and the Foundation, visit our website at www.foundationforpn.org
The mission of the Foundation for Peripheral Neuropathy can only be sustained through the generosity of people who share our vision to advance research and provide an improved quality of life for those living with Peripheral Neuropathy. With your contribution, you become an important part of our success and a special part of our family. We hope that you will share in our commitment to dramatically improve the lives of those living with peripheral neuropathy.

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