

# P.L.L.U.S.

## Parkinsonians Learning Lifelong Useful Skills Program



Developed in Partnership with the Westwood Village  
Rotary Club and the Westside Family YMCA.



## Introduction to the P.L.L.U.S. Program

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The P.L.L.U.S. (Parkinsonians Learning Lifelong Useful Skills) Program first began in 1996 as a project of the Westwood Village Rotary Club and the Westside Family YMCA. The main goal of the program is to maximize flexibility, posture and functional mobility in participants with Parkinson's disease. A bimonthly support group is also provided to help meet the emotional needs of the participants.

# Goals of the P.L.L.U.S. Program

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Because of the individual variance, complexity, and progressive nature of the disease as well as the impact of medications, it is not clear to what extent exercise plays in managing Parkinson's disease. More research is needed on the effects exercise has on Parkinson's disease. However, individuals in the early stages of the disease should be able to benefit from exercise just as those that are healthy. Since the age group mostly afflicted with this disease is also the same group who is at higher risk for cardiovascular disease, exercise potentially can have the most impact.

As indicated by the American College of Sportsmedicine (ACSM) in *ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities*, the focus of exercise for this population should concentrate on stretching, aerobic activity, functional movements, and muscle strengthening.

The goals of an exercise program should be to:

- Improve joint mobility and flexibility
- Improve coordination and balance
- Enhance neuromuscular stimulation
- Improve cardiovascular endurance
- Increase muscle strength
- Improve control over gross motor movements, such as walking
- Improve ability to perform everyday activities
- Help control stress

## Sponsorship

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The goal of the Westside YMCA and the Westwood Village Rotary Club is to expand the P.L.L.U.S. program to expose more individuals with Parkinson's Disease to the benefits of incorporating exercise into their treatment. To promote expansion of the P.L.L.U.S. program, the Westside Family YMCA will provide a startup fee, if necessary, of up to \$500 for organizations to start their own P.L.L.U.S. programs.

The Westside Village Rotary Club has been instrumental in the success of the P.L.L.U.S. program at the Westside Family YMCA. We encourage all organizations interested in starting their own P.L.L.U.S. program to contact their local Rotary club for support. More information on the Rotary club can be found at <http://www.rotary.org/>. To find your local rotary club go to: club locator: <http://www.rotary.org/support/clubs/index.html>

## Recruiting

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To recruit active participants in the P.L.L.U.S. program the program must establish a network in the community via the local Rotary club, hospitals, doctor's offices specializing in Parkinson's treatment, and the local APDA (American Parkinson's Disease Association) chapters and support groups. Local APDA chapters and support groups can be contacted via the information provided below. In addition, the resources provided below will provide you with information on local physicians specializing in the treatment of Parkinson's Disease. It is important to establish a professional resource network including neurologists and physical therapists familiar with treating Parkinson's patients.

American Parkinson Disease  
Association  
1250 Hylan Blvd.  
Suite 4B  
Staten Island, NY 10305-1946  
info@apdaparkinson.org  
<http://www.apdaparkinson.org>  
Tel: 718-981-8001 800-223-2732  
Calif: 800-908-2732  
Fax: 718-981-4399

National Parkinson Foundation  
1501 N.W. 9th Avenue  
Bob Hope Research Center  
Miami, FL 33136-1494  
mailbox@parkinson.org  
<http://www.parkinson.org/>  
Tel: 305-547-6666 800-327-4545 Fla:  
800-433-7022  
Fax: 305-243-4403

Parkinson Alliance  
211 College Road East  
3rd Floor  
Princeton, NJ 08540  
admin@parkinsonalliance.net  
<http://www.parkinsonalliance.net>  
Tel: 609-688-0870 800-579-8440  
Fax: 609-688-0875

Parkinson's Action Network (PAN)  
300 North Lee Street  
Suite 500  
Alexandria, VA 22314  
info@parkinsonsaction.org  
<http://www.parkinsonsaction.org>  
Tel: 800-850-4726 703-518-8877 Calif:  
707-544-1994  
Fax: 703-518-0673

Michael J. Fox Foundation for  
Parkinson's Research  
Grand Central Station  
P.O. Box 4777  
New York, NY 10163  
<http://www.michaeljfox.org>  
Tel: 212-213-3525

Parkinson's Disease Foundation  
(PDF)  
710 West 168th Street  
New York, NY 10032-9982  
info@pdf.org  
<http://www.parkinsons-foundation.org>  
Tel: 212-923-4700 800-457-6676  
Fax: 212-923-4778

Parkinson's Institute  
1170 Morse Avenue  
Sunnyvale, CA 94089-1605  
outreach@parkinsonsinstitute.org  
<http://www.parkinsonsinstitute.org>  
Tel: 408-734-2800 800-786-2958  
Fax: 408-734-8522

Parkinson's Resource Organization  
74-090 El Paseo  
Suite 102  
Palm Desert, CA 92260-4135  
info@parkinsonsresource.org  
<http://www.parkinsonsresource.org>  
Tel: 760-773-5628 310-476-7030 877-  
775-4111  
Fax: 760-773-9803

Worldwide Education & Awareness for  
Movement Disorders (WE MOVE)  
204 West 84th Street  
New York, NY 10024  
wemove@wemove.org  
<http://www.wemove.org>  
Tel: 800-437-MOV2 (6682) 212-875-  
8312  
Fax: 212-875-8389

## Instructor Training

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The P.L.L.U.S. program requires two instructors to run the group exercise class. The primary instructor will lead the group exercises while the secondary instructor will aide the patients through the movements, helping with stability, balance, and proper movements through each exercise.

It is suggested that the group fitness instructor must have an up-to-date primary group exercise certification through a nationally recognized organization, such as AFAA or ACE.

It is not required that the instructor have any previous experience working with an elderly or special needs population. The Westside Family YMCA will provide training for new instructors from a master instructor who specializes in group exercise classes for individuals with Parkinson's Disease.

## About the Master Instructor

Originally from London, Rachel McCoy-Bedford has been a dedicated employee of the Westside Family YMCA since 1988. She is certified by the Aerobics and Fitness Association of America as an Aerobics Instructor, as well as a Personal Trainer. Rachel is inspiring and motivating and knows how to guide you in making the appropriate exercise choices. She has extensive experience teaching people with arthritis as well as people diagnosed with Parkinson's disease.

## Class Format

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### TYPES OF EXERCISES

#### Aerobic

Aerobic exercise is any activity that uses the large muscles of the body in a rhythmic manner for a given period of time. Exercise of this type involves time and intensity. Examples of aerobic exercise include walking, cycling, dancing, jogging, stair climbing, and swimming. Since there is a large variability on an individual's function, exercise program should consist of various types of activity. For example, having stationary cycling available for those that might have an increased risk of falling due to balance and gait problems. The ACSM recommends aerobic exercise 3 days a week and working up to no more than 60 minutes of aerobic activity per day.

## Strength (weight) training

While aerobic training helps build up endurance, weight training increases the size and strength of muscles and improves balance. Strength training can play an important role in the development of self-confidence and body satisfaction by increasing strength, building and toning muscles, and increasing muscular endurance. It can also help maintain coordination and balance and prevent injuries resulting from weak muscles. Participants should be supervised and cued to insure proper technique and avoid injury. The ACSM recommends using light weight for 1 set of 8-12 repetitions, 3 days a week, focusing on major muscle groups.

## Stretching

Stretching is critical to counteract the effects of muscle rigidity and achieve a full range of motion. Stretching will help increase the range of motion for improved joint mobility, help maintain and/or improve posture, decreases the risk of muscle tissue

injury, improve circulation, and release muscle tension. Stretch until you feel a gentle pull, then hold each stretch position for 15-30 seconds, without bouncing. Begin with 3 repetitions of each stretch position. Do not stretch to the level of experiencing pain. Pain prevents relaxation and actually causes increased muscle tension. Avoid stretching to the point of pain.

## GUIDELINES

A prudent exercise plan enables participants to begin slowly and increase their intensity gradually as their fitness level increases. Heart rate can be used to measure intensity (i.e., 60-80% of maximum heart rate), but caution should be used since heart rate responses may vary from day to day. The type of exercise that works best depends upon symptoms, fitness level, and overall health. Generally, exercises that stretch the limbs through the full range of motion are encouraged.

# CLASS FORMAT

## I. WARM UP

Duration: 20-25 minutes

A. Pre-exercise: monitor heart rate for 10 seconds.

B. Mobility/Flexibility exercises

1. Upper body

Examples:

- Arm circles
- Shoulder shrugs and circles
- Overhead reaches
- Arms reach front and pull back
- Interlace fingers and stretch arms overhead
- Tricep stretch
- Chest stretch
- Neck stretches

2. Trunk

- Side bends (shoulders directly over hips and bend to side)
- Trunk twists
- Hip circles

3. Hand and Wrist

- Open and close fists
- Fingers full range of motion
- Thumb circles
- Forearm flexes

4. Balance

- Rock front to back
- Balancing ankle circles
- Point toes, flex heel
- Gentle squats

C. Aerobic Warm Up

1. Marching

2. Step touches

3. Hamstring curls
  4. Knee lifts
  5. Walk up and back
- D. Mid-Exercise: monitor heart rate for 10 seconds.

## II. AEROBIC EXERCISE

Duration: 15 minutes

- A. Walking
- B. Stationary biking

## III. STRENGTH TRAINING

Duration: 15 minutes

- A. Upper Body
  - Biceps
  - Triceps
  - Chest

- Upper back
  - Deltoids/shoulders
  - Forearms, wrists
- B. Wall Work
    - Push-ups
    - Wall reaches
    - Calf raises
    - Abductor leg lifts
    - Knee raises
    - Leg extensions
    - Gentle wall squats
    - Glut squeezes

## IV. COOL DOWN

Duration: 15 minutes

- A. Abdominals



## SUPPORT GROUP MEETINGS

- Organize bi-monthly support group meetings.
- Include muscle groups targeted for patients with movement disorders.
- Be aware that workout environment is safe: avoid slippery floors, poor lighting, and other potential dangers. Participants may require external support provided by a chair or volunteer.
- Be aware that participants may have problems balancing and avoid exercises which may cause a potential fall.

## P.L.L.U.S. Program Information

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### Contact Information

The Westside Family YMCA  
11311 La Grange Avenue  
Los Angeles, California 90025  
Phone: (310) 477-1511  
Fax: (310) 575-0271

### Website

[www.pllus.org](http://www.pllus.org)

## DVDs

To order the “PLUS... There’s Exercise” DVD, send \$10.00 to:

The Westside Family YMCA  
11311 La Grange Avenue  
Los Angeles, California 90025

or

The American Parkinson Disease Association, Inc.  
1250 Hylan Blvd., Suite 4B  
Staten Island, NY 10305-1946, USA  
(800) 223-2732; (718) 981-8001