

# P.L.L.U.S.



**“Life In Spite of Pills”**

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

## What do actor, Michael J. Fox, former world heavyweight boxing champion Muhammad Ali, and Attorney General Janet Reno have in common?

The answer is Parkinson's disease. Parkinson's disease is a progressive neuromuscular disease that can be helped with exercise, according to Dr. Jeffrey Bronstein, Assistant Professor of Neurology at the University of California, Los Angeles (UCLA) and Director of the UCLA Movement Disorder Program. He prescribes special exercise as critical to helping those with Parkinson's disease to maintain a quality of life, avoid depression and remain active.

Westwood Village Rotary Club, in partnership with the Westside Family YMCA, both in Los Angeles, initiated just such a program, called P.L.L.U.S. (Parkinsonians Learning Lifelong Useful Skills). Its aim is to maximize flexibility, posture, and functional mobility. YMCA certified aerobic trainer, Rachel McCoy-Bedford and Dr. Bronstein developed the exercises, and the program includes social support meetings with a psychologist. P.L.L.U.S. classes meet at the YMCA where members feel more like athletes than patients in a hospital therapy setting.

The goal of P.L.L.U.S. is to enable people with Parkinson's disease to attend classes everywhere in the world. Rotary clubs are encouraged to sponsor training of Parkinson's exercise instructors, develop local classes and support groups and distribute an exercise video (provided with a grant from Dupont Pharmacy) to those who cannot attend classes or where there is a lack of exercise facilities.

For more information, please contact: P.L.L.U.S. Program, Westside Family YMCA, at 11311 La Grange Avenue, Los Angeles, CA 90025. You may also visit the website [www.pllus.org](http://www.pllus.org) or call (800) 908-2732.

To order a PLLUS video, send \$7.00 to:

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

## HOW TO GET STARTED

1. Analyze the Market (complete a needs assessment survey)
2. Distribute needs assessment survey
  - a. Establish a network with your local Rotary Club, hospitals, YMCA's and APDA (American Parkinson's Disease Association) support groups.
  - b. Determine time and day of class to target a minimum of three classes per week.
  - c. Identify possible sites for the exercise class and support sessions.
  - d. Meet with a physical therapist who treats PD patients.
  - e. Meet with a neurologist to discuss and improve the exercise program.
  - f. Learn about the Parkinson's disease.
3. Create an Advisory Committee of 5-7 with a Medical Doctor (preferably a neurologist who treats PD patients). Create a Commission with a Chart of Work along with job description samples.
4. Partner with your local Rotary Clubs or another civic organization to help promote and educate the community regarding Parkinson's disease.
5. Exercise Class Program components:
  - a. A warm, friendly, qualified Group Exercise Instructor with experience in working with older adults. Certification in at least one of the following: YMCA Group Exercise Instructor, AFAA, ACE and PACE (through the Arthritis Foundation).
  - b. Class description: length of class should be no less than one hour and no more than 1.5 hours.
  - c. Class assistant (volunteer(s) from class) to help take attendance and update the roster.
  - d. Minimum enrollment depends on the budget: A minimum of 10 participants per class is recommended, with a maximum ratio of 25 students per instructor.

#### Program Equipment Suggested:

- 20 individual exercise mats – approximately 3'x6'.
  - Assorted hand weights (1 lb., 2 lb., 3 lb. & 5lb) per participant.
  - Dyna Bands or Xertubes (optional) and can be used instead of weights for resistance training.
  - Schwinn DX 900 exercise bikes (optional).
  - Comfortable chairs with back support
  - Music/speaker system (portable stereo is ok).
  - Suggested space size: 800 to 1,300 square feet.
  - Floor: suggest hardwood floor.
6. Support Group Meetings: Meeting Space for 25 chairs in a circle that promotes privacy and comfort. Coffee and cookies are a nice amenity.
- a. Establish bi-monthly Support Group meetings (each meeting lasting approximately 1.5 hours). Recruit a trained volunteer(s) facilitator to head the meetings and help plan special lectures with guest speakers for medical updates.
  - b. Coordinate seasonal "get-together" luncheons.

## CLASS FORMAT

### I. Warm-up (20-25 minutes): mobility, flexibility and basic aerobics

- A. Pre-exercise 10 second heart-rate taken.
- B. Mobility / Flexibility (standing erect, good posture, knees soft, abdominal tight, chin in, looking straight ahead).
  1. Upper body:
    - a. Arm circle stretches with deep breaths, pulling shoulder blades together and elbows back.
    - b. Shoulder shrugs and circles.
    - c. Overhead reaches, stretching to ceiling.
    - d. Arms reach front, pulling bent elbows back (opening chest, shoulder blades together).
    - e. Interlace fingers, arms overhead, squeezing slightly back.
    - f. Triceps stretch.

- g. Arms out to side, palms face back, opening up chest; then each on a diagonal, followed by a full range of motion in shoulders, circles back.
    - h. Head turns for neck mobility.
    - i. Ear to shoulder tilts and half-circles, chin to chest.
    - j. Hold neck stretch while reaching opposite arm out to side and downward.
  2. Trunk Mobility:
    - a. Standing tall, no leaning front or back or twisting, reach fingertips to thighs, bending at waist.
    - b. Trunk twists, using arms to follow through while looking over shoulders in direction of twist.
    - c. Hands on waist, lean slightly forward, to side, back and side (as if drawing a circle).
    - d. Hip circles in each direction through the pelvis.
  3. Hand and Wrist Mobility:
    - a. Palms down, open and close fists; repeat with palms up.
    - b. "Play the piano" bending through joints of fingers.
    - c. Wrist circles.
    - d. Bending and circling thumbs.
    - e. Wrist/forearm flexes or stretches.
  4. Balance:
    - a. Feet apart, rock from balls of feet to heels, or heel raises only for those with poor balance.
    - b. "Moon walking" through whole foot, one to the other.
    - c. Balancing ankle circles close to the floor (if unable to balance, use wall).
    - d. Heel to toe point and flex each side.
    - e. Feet apart, reach arms overhead, then sweep arm down, bending knees as if sitting on a chair, heels down; SLOWLY, several times.

5. Aerobic Warm-up (5 minutes); Slow, basic moves (no grapevines) with emphasis on picking up feet and looking straight ahead with good posture.

1. Marching.
2. Step touches.
3. Hamstring curls.
4. Knee-lifts, arm reaches.
5. Walk 8 steps forward, 8 back.
6. 10 second heart rate.

*(Note: if class begins at 10:50, the above should be done at 11:15)*

## II. CARDIOVASCULAR WORK (15 minutes)

- A. Walking around circumference of gym (remind them to use good posture and pick up their feet, walk tall, chin in, pump arms), **OR Stationary** bikes.

## III. STRENGTH WORKS (15 minutes)

- A. Upper body, light weight work
1. Biceps/triceps.
  2. Chest.
  3. Upper back.
  4. Deltoids, shoulders.
  5. Forearms, wrists. **OR**
- B. Wall work
1. Push-ups.
  2. Wall reaches, leaning slightly in or out.
  3. Calve raises, together or one footed with a calf/hip flexor stretch.
  4. Standing sideways, abductor leg lifts\*  
*\*turn around and repeat previous two on other side.*
  5. Back to wall, knee raises, leg extensions (for hips and quads).
  6. Back to wall, posture in shoulders, squeezing shoulder blades back towards wall then with arms to side, brushing backs of arms up and down wall (buttocks and upper back pressed into wall, chin tucked in for help with posture).
  7. Facing wall, alternate back leg lifts – gluts, straight leg, hamstrings, bent leg (small range of motion, careful of lower back).

## IV. COOL-DOWN/RELAXATION (15 minutes); done with mats on floor.

- A. Abdominal work:
1. Basic crunches and side crunches.
- B. Leg work (if none in previous segment):
1. Front leg raises.
  2. Buttock squeezes.
- C. Final Stretch:
1. Both knees into chest, holding backs of thighs.
  2. One knee into chest, hamstring stretch.
  3. Hip/torso stretch with knee side to side, arms out to side, shoulders down.
  4. Inner thigh/groin stretch with feet together on floor, knees open (like a dead frog).
  5. Full body stretch, then arms to side.
  6. Wrist circles in air, thumb tip to fingertips, etc.
- D. Relaxation:
1. Deep breathing exercises, breathing in deeply and out through pursed lips.
  2. Tensing and relaxing body.
  3. Final heart rate
  4. Standing slowly, coming up in stages, using hands and legs (be aware that dizziness and lightheadedness is common)  
*Note: It is important that to check that everyone can stand! Give assistance where needed!*