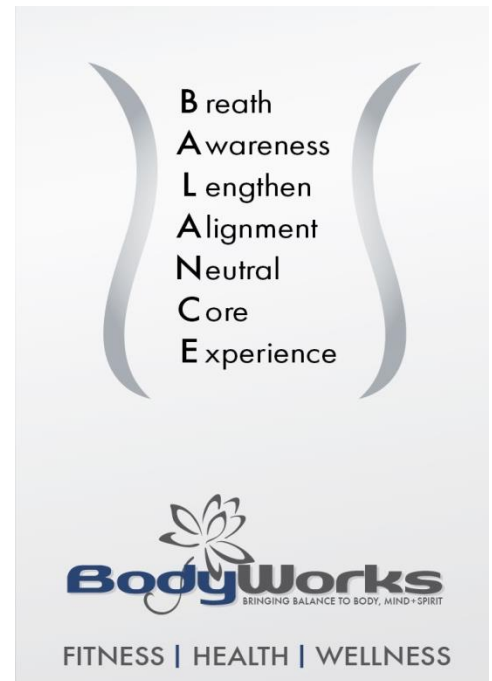


# ANTIFREEZE FOR PARKINSON DISEASE

- Parkinson's disease (PD) is a degenerative neurological disorder of the central nervous system that mainly affects the motor system.
- PD is the second most common degenerative neurological disorder after Alzheimer's disease.
- Research shows that exercise is one of the best things to combat PD and prolong the progression of the disease.



## PEOPLE WITH PARKINSON DISEASE CAN GET BETTER AND STAY BETTER WITH EXERCISE

In 2013 Rhona had the opportunity to travel to Arizona and spend a weekend with Dr. Becky Farley, the founder of the PWR!, Parkinson Wellness Recovery, Exercise4BrainChange program. This program was created on research in exercise science, motor control. And motor learning.

**Exercise4BrainChange** is more than **JUST** brain change...

- Exercise is physiological tool that promotes brain health, repair, adaptation, and behavioral recovery from the INSIDE.
- Exercise helps repair the damage
- Slows disease progression

**Volunteers:** Dependent on the activity level of participants

**DYSKINESIA:** Abnormal involuntary movements. PD clients are often unaware of their dyskinesia but can appear disabling to others

**DYSTONIA:** Characterized by muscle cramps/sustained muscle contractions. Twisting, repetitive and patterned movement, abnormal postures or both. These are common in the foot but can be seen in limbs, neck, eyes, hand, bent spine and trunk (scoliosis)

Unlike Dyskinesias, dystonias can interfere with ability to participate in weightbearing and balance exercises and cause chronic pain and tendonitis symptoms

**BRADYKINESIA:** Slowness of movement (freezing)

**AKINESIA:** Lack of movement. Mainly affected: the hands or the trunk and walking (loss of arm swing). Cause: muscle rigidity. It often begins in the legs and neck; the muscles become very stiff. When the muscles of the face are affected, the individual adopts a mask-like stare.

## WHAT DO WE NEED TO DO FOR OUR CLIENTS?

- Empower them
- Challenge them
- Expect change
- Positive Reinforcement

### **WARM UP:** Use music for rhythm (metronome works well), prompt movements

- Bicycle
- Walking/Treadmill
- Elliptical
- Pole Walking

### **WORKOUT:**

- Show clients what you are going to be doing (model, imagery, external cues)
- Push beyond energy expenditure
- Use it or lose it **OR** Use it and improve it
- Progressive challenge
- Constant high attentional focus

### **FREEZING:**

1. The 'tipping' method; shifting weight from side to side
2. The step over; visualize a line in front on the floor or place strips of duct tape in tight spaces i.e.: door jams, corners in the kitchen
3. A metronome
4. A laser pointer
5. Ask for help
6. Move another part of your body i.e.: arms

### **STRETCHING ideas:**

- **Yoga straps**
- **Standing using bike as prop**
- **TRX**
- **On the mat**
- **Chair**

### **WHAT TO WORK ON:**

- Balance
- Abduction
- Rotation
- Squatting
- Gait
- Push
- Pull
- Bend
- Lunging

## CIRCUIT IDEAS:

### **BATTLING ROPES**

**TRX** Rows, squats, lunges, biceps

**BOSU** Pushing, balance, plank, lateral jumps

**PUNCHING BAG** Boxing, kicking

**PULLUP BANDS** Gait, running, squats

**STEP** Squats, Step ups, curtsy lunges, lunges, balance work

**LADDERS** Agility work, abduction

**MEDICINE BALLS** Ball throwing, twisting

**DOWELLING** Twisting, squatting, deadlifts

**GLIDERS** Lunging, Spine Extension

**TUBING** Rotation, Pull, Paloff Press

**YOGA STRAPS**

**STANDING USING BIKE AS PROP**

**TRX**

**ON THE MAT**

**CHAIR**