Exercise with Parkinson's Disease

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General Exercise

- Definition:
  - activity requiring physical effort, carried out to sustain or improve health and fitness.

- The benefits:
  - The heart
  - The muscles
  - The lungs
But what about our brain?
Bradykinesia
Slowness of movement
The Brain: Exercise with PD

- Neuroplasticity and changing Neuro-anatomy
  - Brain cells that produce dopamine gets damaged in PD
  - By the time of diagnosis 40-60% are lost
  - Experience-dependent neuroplasticity
  - Our brain adjusts based on need
Exercise with PD: The science

- What happens when we exercise:
  - Allows us to use dopamine more efficiently
  - Neuro-protective
  - Neuroplasticity

CAN THE BRAIN BE REWIRED?
The Parkinson’s Outcomes Project shows that people with PD who start exercising earlier and a minimum of 2.5 hours a week, experience a slowed decline in quality of life compared to those who start later. Establishing early exercise habits is essential to overall disease management.
Common types of Exercise for PD

- PWR! Moves
- LSVT BIG program
- Rock steady-Power Boxing
- Tai Chi
- Dance/tango
- Nordic walking/poles
- Yoga for Parkinson's
- Cycling

- The Parkinson's foundation living with Parkinson's in your area
Common themes of these exercise classes

- Posture
- Strength
- Coordination
- Intensity
  - The more you do—the more you benefit
- Balance
- Flexibility
- Endurance
Why does it matter?

- Higher intensity group:
  - Walked faster, ran faster, took longer strides, had better posture, and had bigger arm swings
  - Balance and gait improved

- Neuroplasticity:
  - Intensity, specificity, difficulty, and complexity
What does that mean for YOU

- Individual motivation
- A little is better than nothing, but a lot is better
- NOW is better than later
- Consistency

"The best exercise for you to do, is the one you enjoy doing."
When to involve Physical Therapy

- Falls
- Assistance in identifying your areas of impairment
- Staying safe with exercise
- Posture
- Pain
- Other health problems that prevent movement
- Goal of PT is to allow you to continue with exercise!
Intensive exercise helps people with PD walk and move better.

Research is continuing to reveal how and why this happens.
Questions?

More information?: The Parkinsons foundation

Upcoming presentations