

Fact Sheet

Exercise

Parkinson's Disease & Movement Disorders Center

Most people are aware that exercise is important for improving strength and cardiovascular health, but it may also have unique properties that make exercise essential to the management of Parkinson's disease (PD).

PD is caused by the degeneration of dopamine-producing cells in a particular area of the brain called the substantia nigra –the area of the brain responsible for making connections that facilitate movement. While scientists have not yet discovered a way to regenerate these lost cells, we do know that the rest of the brain retains the ability to learn and to make new connections throughout life; this is termed “neuroplasticity”. Exercise has been shown to promote the release of dopamine (the chemical which is deficient in PD) as well as brain growth factors; these chemicals may facilitate neuroplasticity, and make movements more automatic through the formation of new connections.

Specific benefits of exercise on the body and mind are worth mentioning. While flexibility and balance tend to decline with age, these problems are exaggerated in PD. Simply stated, improving strength and flexibility through exercise reduces fall risk and is vital for reducing hospitalization and improving quality of life. Studies show that regular exercise can reduce fatigue, improve mood (through the release of natural endorphins), enhance immune function, improve sleep, and possibly even improve cognition. Physical activity is integral in improving non-motor function.

What type of physical activity should I do? There are two important points to remember: 1) ANY activity is likely to be better than no activity at all. 2) If you can find an activity that you enjoy, you are more likely to keep doing it.

Studies have shown that strength and resistance training, aerobic exercise, dancing, physical therapy, Tai Chi, Yoga and even certain interactive video games, can be beneficial forms of physical activity in PD.

Functional Exercises: In order to maintain or improve your functional abilities, you can practice activities that you find are getting more difficult. For example, you can practice standing up from a chair 10 times, or rolling from side to side in a bed.

PD Specific Exercise Programs can be found at:

- RIC Adaptive Sports & Fitness Program 312-238-5001
- NM Integrative Medicine at 312-926-8400

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