



Parkinson's: The Importance of Physical Activity and Movement

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Exercise

- u Why do it?
- u What exercise?
- u How do I start?

Interest in Exercise

- u 1982 articles on PubMed when entering key word search “Exercise” and “Parkinson’s”
- u 3,610,000 hits on a google search

Exercise: Why do it?

- u Physical: Strength, Balance, Stamina
- u Emotional: Aids with depression, anxiety
- u Mental: Improves memory
- u Sleep: Improves sleep

Basic Science Evidence

- u Studies of rat and monkey models, where animals are given a toxic substance to produce Parkinson's movement features, demonstrate that aerobic exercise can protect from these toxins

Clinical Evidence

- u Multiple studies, with multiple exercise types, demonstrate improvement in speed and agility as well as performance of activities of daily living and quality of life measures

What exercise?



JUST DO IT.

General Guidelines

- u American Academy of Sports Medicine for adults > 50 :

30 min aerobic \geq 5 days per week (“moderate”)

20 min vigorous 3 days/week

10 min strengthening 2 days/week

(210 min total per week)

- u Center for Disease Control (CDC) for adults >65: 240 minutes of activity (includes gardening, housework) per week

Clinical Evidence

(no particular order and not exhaustive)

- u Tai Chi
- u Dance
- u Qi Gong
- u Cycling
- u Physical therapy (including LSVT)
- u Boxing
- u Water Aerobics
- u Treadmill

How Do I Start?

- u Be realistic
- u Start Slow
- u Build

References

- u van der Kolk NM, King LA . **Effects of exercise on mobility in people with Parkinson's disease** [Mov Disord](#). 2013 Sep 15;28(11):1587-96. doi: 10.1002/mds.25658.
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- u Petzinger GM, Fisher BE, McEwen S, Beeler JA, Walsh JP, Jakowec MW . **Exercise-enhanced neuroplasticity targeting motor and cognitive circuitry in Parkinson's disease.** [Lancet Neurol](#). 2013 Jul;12(7):716-26. doi: 10.1016/S1474-4422(13)70123-6.