

TABLE TENNIS CAN BE BEST POSSIBLE THERAPY FOR INDIVIDUALS WITH PARKINSON'S DISEASE... BUT ALSO FOR PATIENTS WITH OTHER MODERN DISEASES

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Abstract: Parkinson's disease (PD) is among Dementia and Alzheimer diseases most threatened disease of modern times – it is common and debilitating disorder. In PD affected are nerve cells in a part of a brain that produce dopamine. Worldwide population is getting older as generations before, so now so called “modern diseases” needs far more attention from research centres at universities and medical institutions. There is increasing evidence that learning-based exercises could be neuroprotective in aging individuals and those with neurodegenerative disease (National Parkinson Foundation, 2019). **Learning-based** memory exercises can also help keep our memory sharp. Practicing table tennis challenges the individual to change playing situation, tempo, speed, movement activity, or direction - what is in table tennis referred to as “random practice” exercises. Individual's brain builds connections when an activity (TT ball) crosses from one side of the field of vision to the other. As people get older, these connections start to break. Always changing situations in table tennis practice and tournament still benefit people with Parkinson's disease. Individuals are also forced to anticipate where the TT ball is going, which help keeps their mind working and aids in the therapeutic properties. For people with Parkinson's disease also the social element of sports activity is important because depression is a common symptom of the disease, which causes a loss of dopamine-producing brain cells. Among other's table tennis is one of the rare activities that individuals with PD and their families can do together. The idea to recommend table tennis as a best sport for patients with PD it is to encourage neuroplasticity, which means the brain creates new connections between neurons to compensate for deficits elsewhere. Research from the *Parkinson's Outcomes Project*, the largest-ever clinical study of Parkinson's, found that people with PD who engaged in at least 2.5 hours of exercise a week had a better quality of life than those who didn't exercise at all or started exercising later (National Parkinson Foundation, 2019). Dr. Wendy A. Suzuki, Professor of Neural Science and Psychology in the Center for Neural Science at New York University stated: “In table tennis we have enhanced motor functions, enhanced strategy functions, and enhanced long-term memory functions.” Table tennis works parts of the brain that are responsible for movement, fine motor skills and strategy (Kloeffler, 2011). Kloeffler (2011) at the end of his presentation challenges researchers with his call: “If science one day proves a connection between table tennis and an increase in mental strength, ping pong could graduate from the basement to the classroom.” Hopefully ITTF and other universities and medical institutions worldwide will find resources to slow down PD with table tennis activities.