

# PEOPLE WITH PARKINSON'S DISEASE BENEFIT WITH PROGRESSIVE RESISTANCE TRAINING

*It is crucial for individuals living with Parkinson's to be physically challenged and progressive resistance training is a systematic approach to continually challenging the body to promote ongoing strength and muscle growth yielding a better quality of life!*



Parkinson's Disease research indicates Progressive Resistance Training (PRT) improves cognitive function, sleep, motor performance, drug efficacy while decreasing constipation, fatigue, depression and minimizing PD-related falls!

PRT, also known as progressive overload, is a principle that involves applying stress on the musculoskeletal system that is greater than what the body is accustomed to. When gradually increasing the intensity of workouts over time it stimulates continued muscle growth and strength gains.

It is key to strengthen ALL major muscle groups!



## BENEFITS OF PRT:

### INCREASED MUSCLE STRENGTH

Progressive Resistance Training (PRT) helps build muscle strength by challenging the muscles to adapt to higher demands. Functional improvements include: better balance, increased walking speeds, longer and faster strides, improved turning, and ease of rising from a chair.

### MUSCLE GROWTH

The principle of progressive overload encourages muscle growth, also known as hypertrophy, by stimulating muscle repair and growth in response to increased stress. When not exercising for 3-5 days, strength loss begins!

### IMPROVED ENDURANCE

Gradually increasing the intensity of workouts can lead to improved endurance.

## Gradual Intensity Methods

The intensity of workouts is increased in a controlled and gradual manner, preventing the body from adapting too quickly and potentially leading to injury. This can be accomplished by:

- Adding more weight to the exercise
- Increasing sets/repetitions to all exercise
- Increasing intensity by increasing the pace/reducing rest time
- Changing exercises stimulates different muscles/preventing plateaus

*Regardless of age or diagnosis, it's never too late to get strong and stay strong! Individuals with Parkinson's Disease are often treated with caution and restriction and yet, research has proven that a strong body can overcome symptoms at any stage of Parkinson's Disease. It's never too late to gain more freedom!*

## Can Exercise Help People with Parkinson's Disease? 4 Things to Know

Higher physical activity levels were strongly associated with better functioning in activities of:

- daily living, cognitive processing speed, posture stability, balance, and gait

Other research shows that high-intensity exercise slows the progression of Parkinson's Disease.

<https://www.yalemedicine.org/news/can-exercise-help-people-with-parkinsons> Yale Medicine, Jul 2024

## The Power of Strength Training for Parkinson's Disease: Enhancing Health and Well-Being

By actively engaging in regular strength training exercises, individuals can not only increase their physical strength and stability but also potentially enhance:

- dopamine utilization • alleviate symptoms and • slow disease progression

<https://petersonforparkinsons.org/the-power-of-strength-training-for-parkinsons-disease-enhancing-health-and-well-being> Peterson Foundations for Parkinson's, Aug 2023

## Strength Training for Parkinson's Patients: Empowering Movement and Quality of Life

Strength training, also known as resistance training, has been shown to offer a multitude of benefits:

- enhanced mobility and flexibility • improved muscle strength • improved balance & posture
- neuroplasticity and brain health • dopamine release and mood enhancement

<https://www.ewmotiontherapy.com/blog/strength-training-parkinsons> EVI Motion Therapy, Aug 2023

## Why Exercise is Critical for People with Parkinson's Disease

Exercise has been shown to improve specific symptoms:

- improved cognitive function, depression, sleep, motor performance, drug efficacy
- decreased constipation, fatigue • stop or slow osteoporosis, minimizing PD-related falls

<https://www.apdaparkinson.org/article/why-exercise-with-pd> American Parkinson Disease Assoc., Jul 2021

## Progressive Resistance Training Improves Bradykinesia, Motor Symptoms and Functional Performance in Patients with Parkinson's Disease

<https://www.dovepress.com/progressive-resistance-training-improves-bradykinesia-motor-symptoms-a-peer-reviewed-fulltext-article-CIA> Clinical Interventions in Aging, Jan 2020

## Strength and Physical Functions in People with Parkinson's Disease

Resistance training significantly improves strength, endurance and muscle size in individuals with PD and consequently, the authors believe it should be recommended by the physician as a treatment option for people with PD

<https://doi.org/10.2217/fnl-2019-0009> Future Neurology, May 2019

## Parkinson's Disease and Strength Training Benefits:

Exercise is amazing because it changes the way our brain functions. Studies have shown that in people who regularly exercise, brain cells use dopamine more efficiently

<https://www.parkinson.org/blog/tips/strength-training> Parkinson's Foundation, Dec 2016

## Strength Training for Parkinson's Disease: Benefits and Prescription Based on Research

Progressive resistance training (PRT) means performing strengthening exercises that are gradually made more challenging as strength is improving. PRT research indicates improvements in:

- walking • bradykinesia and functional performance
- balance • strength and motor skills • quality of life

<https://www.neurolab360.com/blog/strengthtrainingforpd-fhm3k> NeuroLab 360 Rehabilitation & Wellness, Haas et al 2012, Corcos et al 2013, Chung et al 2014, Vieira de Moraes Filho et al 2020

## Weight Training Improves Parkinson's Symptoms

New research suggests weight training for two years significantly improves the motor symptoms of Parkinson's disease compared to other forms of exercise such as stretching and balance exercises

<https://www.aan.com/PressRoom/Home/PressRelease/1028> American Academy of Neurology, Feb 2012

