

Parkinson's Exercise Guidelines

Exercise recommendations should be tailored to the client's ability, medication status, and stage of disease following health screening.

	Aerobic Activity	Strength Training	Flexibility	Neuromotor/Functional Training Balance, Agility, & Multitasking (BAM)
Frequency	At least 3 days/week	At least 2-3 non-consecutive days/week	At least 2-3 days/week, with daily being most effective	At least 2-3 days/week, with daily integration as possible
Time	At least 30 minutes of continuous per session. Interval training may be considered.	Build to 30-60 minutes per session.	Static Stretching: Hold each major muscle group for 15-30 seconds. Dynamic Stretching: Actively move muscles and joints for 15-30 seconds.	Build to 30-60 minutes of focused BAM activity per session. May integrate with other exercise domains or activities of daily living.
Consider activities that combine domains to efficiently reach at least 150 minutes of exercise per week.				
Intensity	Start at moderate intensity: 60-65% HRmax [HRmax=208-(0.7*age)] or Rate of Perceived Exertion (RPE) 12-13/20 or 3-4/10. Progress over time (6-8 weeks) to vigorous intensity: 75-85% HRmax or RPE 14-17/20 or 5-7/10, when physiologically appropriate and safe. Teach client to self-monitor.	Start at a comfortable weight that client can lift for 10 repetitions to fatigue. Progress to 2-3 sets of 8-10 repetitions to fatigue while maintaining integrity of movement.	Full extension, flexion, or rotation stretch to the point of slight discomfort. For static stretch: 2-3 repetitions of each stretch. For dynamic stretch: 8-10 movements in each direction. Progress range of motion and static hold as client can tolerate.	Appropriate challenge delivered in a safe manner given the setting (individual vs group). Progress time, motor, and cognitive challenges as client improves.
Type	Prolonged, rhythmic activities using large muscle groups (e.g., brisk or incline walking, running, fast cycling, swimming, rowing, elliptical, dancing).	Major muscle groups of the upper and lower body and core using weight machines, resistance bands, or body weight. Include both flexor and extensor muscles. Consider circuit training and resistance training with balance challenges.	Static Stretching: All major muscle groups after exercise. Dynamic Stretching/Active Range of Motion: Prior to intense aerobic and strengthening exercise; Include diaphragmatic breathing and meditation.	Balance: Static and dynamic balance activities include single leg stand, weight shifting, reaching, multi-directional large amplitude movements, and functional training (e.g., steps, floor-to-stand, sit-to-stand, using varied surfaces, perturbations). Agility: Activities that move the body quickly in different directions (e.g., multi-directional stepping, turning, backwards walking, obstacles, sport, dance). Multi-Tasking: Primary motor activity (e.g., walking, balance) with secondary motor (e.g., carrying, head turns, bouncing ball) or cognitive task (e.g., counting, listing, recall).
Parkinson's-Related Considerations	Prioritize safety (i.e., ambulatory status, physical assistance, equipment). Risk of freezing of gait, or dystonia that can be worsened with exercise. Consider comorbidities (e.g., musculoskeletal, cardio-respiratory & cognitive). Risk of Parkinson's related autonomic dysfunction, including orthostatic hypotension, blunted heart rate response to exercise, and arrhythmias associated with PD or medications. Recommend using RPE to monitor intensity for PwP with blunted HR response to exercise.	Prioritize posture and body mechanics. Dystonia and dyskinesia may impact exercise selection. Progress with increasing weights. Use free weights with caution. Consider comorbidities (e.g., spinal stenosis, osteoporosis, osteopenia, arthritis & injuries).	Consider rigidity (stiffness) & dystonia (fixed posture) and general worsening of flexed posture with disease progression. Consider comorbidities (e.g., osteoporosis, pain, arthritis and spinal stenosis)	Consider safety: anticipate needs for supervision or assistance due to varied physical ability, cognitive engagement, and attention. Allow upper extremity support when needed. Consider comorbidities (e.g., peripheral neuropathy, cognitive decline, orthostatic hypotension) and risk of freezing of gait.
	Consider collaborating with a licensed physical therapist (PT) specializing in Parkinson's disease to assist with full functional evaluation and individually-tailored exercise recommendations, taking into account complex medical history. It is recommended that all PwP be assessed by a qualified PT upon diagnosis and every six months thereafter unless an issue arises to warrant more frequent evaluations . External cues may be used to optimize movement. Recommend exercise sessions to occur during ON medication periods for optimal benefit and safety.			
Time Management	Time allocations per domain of exercise can be executed with creativity and utilizing time management skills. For example, while aerobic activity is recommended for at least 150 minutes/week, one can incorporate circuit training with other domains of exercise.			