

Treating Parkinson's Disease with Lifestyle Choices

Giselle Therese U. Tamula, MSN, NP-C
Everything Parkinson's
February 1, 2021

Quote of the day:

“I don’t have any choice whether or not I have Parkinson’s, but surrounding that non-choice is a million other choices I can make.”

-Michael J. Fox

Lifestyle Recommendations:

- S : sleep
- H : handle stress
- I : interact with others
- E: exercise
- L : learn new things
- D : diet

SLEEP

- Improves health and wellbeing
- Reduces stress
- Reduces risks of heart disease, diabetes and cognitive impairments
- Improves memory and mood
- Replenishes levels of neurotransmitters such as dopamine
- Clears out toxic build up in the brain

Common PD Sleep problems:

- Insomnia
 - unable to fall asleep or stay asleep
 - Trouble rolling over in bed
 - Anxiety
 - Urinating too frequently at night
- REM sleep behavior disorder (RBD)
 - occurs when you act out vivid dreams when you sleep.



Sleep Planning and Preparation

- Consistent sleep schedule
- Plan for at least 7 hours of sleep
- Avoid naps longer than 30 minutes during the day and avoid napping later on the day
- Avoid eating 3 hours before bedtime
- Avoid caffeine 8 hours prior to sleep
- Avoid consuming alcohol before bedtime
- Avoid fluids close to bedtime
- Complete any aerobic exercises at least 3 hours before bedtime
- If you do not fall asleep after 20 minutes, get out of bed, read a dull book, then go back to bed
- Establish a bedtime routine

Sleep Planning and Preparation Continued:

- Make your bedroom a quiet and relaxing sanctuary
- Limit light exposure in the evenings: no screen time 2 hours prior to bedtime
- Use blackout curtains and/or a sleep mask to limit light
 - Use motion-detection light to prevent falls when going to the bathroom at night
- Obtain a few minutes of daylight outdoors as soon as you wake up, or spend at least 30 minutes outside throughout the day

Management of Insomnia

- Cognitive-behavioral therapy for insomnia
- Books on sleep:
 - *Say Goodnight to Insomnia* by Gregg Jacobs
 - *The Insomnia Workbook: A Comprehensive Guide to Getting the Sleep You Need* by Stephanie Silberman
- Sleep stories on Calm app
- Management of urinary symptoms
- Potential use of melatonin or other supplements or medications

HANDLE STRESS

- Stress is how the brain and body respond to any demand.
- Stress can include positive or negative events.
- No meaningful life is truly free of stress.
- Chronic stress contributes to the onset and progression of a variety of physical and mental illnesses
 - Time spent in “high vigilance” mode
 - Persistent high levels of cortisol
 - A new field called psychoneuroimmunology
 - How chronic stress affects immune system and chronic inflammation



Resilience

- Capacity to recover or adjust from difficulties.
- It is the individual's perception and response to stressors which is the key factor
- 3 P's of hardship:
 - Personalization – internalization of failure.
 - Pervasiveness – the belief that one setback will spread to all aspects of life.
 - Permanence – the belief that the feeling will last forever.

Restorative Activities

- Meditation and mindfulness:
 - “The awareness that arises by paying attention in a particular way; on purpose, in the moment, and non-judgmentally.”

- Jon Zabat-Zinn

- Progressive Muscle Relaxation (PMR)
- Biofeedback
- Mindful Movement

INTERACT WITH OTHERS

- Social isolation and loneliness is associated with increased risk of developing cognitive impairment. Stay in touch with family members and friends.



Supportive Social Activities

- Participate in a club or group
- Become a volunteer
- Take group classes
- Maintain family relationships
- Schedule fun activities
- Get a pet



EXERCISE



Exercise

- Consider your current activity level, what you enjoy and what is a sustainable improvement.
- Combine exercise with nature.
- Acquire a new skill while exercising.
- Incorporate multiple forms of exercise.

Cardiovascular Exercise

- Aerobic training

At least 30 minutes of moderate-intensity aerobic exercise 5 days per week (150 minutes/week), or 20 minutes of more vigorous activity 3 days per week.

Examples include: brisk walking, cycling, swimming, elliptical, and treadmill

MAKE SURE TO OBTAIN CLEARANCE FROM YOUR INTERNIST AND/OR CARDIOLOGIST PRIOR TO EMBARKING ON A HIGH-INTENSITY REGIMEN

Resistance training

For neuromuscular strength, at a minimum of twice a week. These exercises can be accomplished using body weight, resistance bands, free weights, medicine balls, or resistance machines.

3 sets, 8-12 repetitions

Very gradual increases in resistance, repetitions, or sets, as the weeks go by

Neuromotor training

Recommended at least 2 times per week, to help decrease fall risk and maintain physical function and includes motor skill-based, balance, coordination, gait and agility exercises.

20 minutes per session

Examples include: dance, tai chi, pilates, boxing, golf

Flexibility

Should be done daily in the form of stretching or light yoga.



FRONTAL LOBE

Cognitively-Demanding Activities
Open Skill Activities
Resistance Training
Mind-Body Exercise

- Increased Gray Matter
- Improved Executive Functions
- More Efficient Brain Activity

PARIETAL LOBE

Sensory-Rich Activities
Visuo-spatial Demands
Object-Based Activities

- Increased white matter & volume
- Improved sensory network activity
- Improved task-switching abilities

OCCIPITAL LOBE

Visuo-spatial Demands
Visual Attention Demands
Motor Control & Stimulation

- Increased white & gray matter
- Improved visual skills & attention
- Increased volume & function

TEMPORAL LOBES

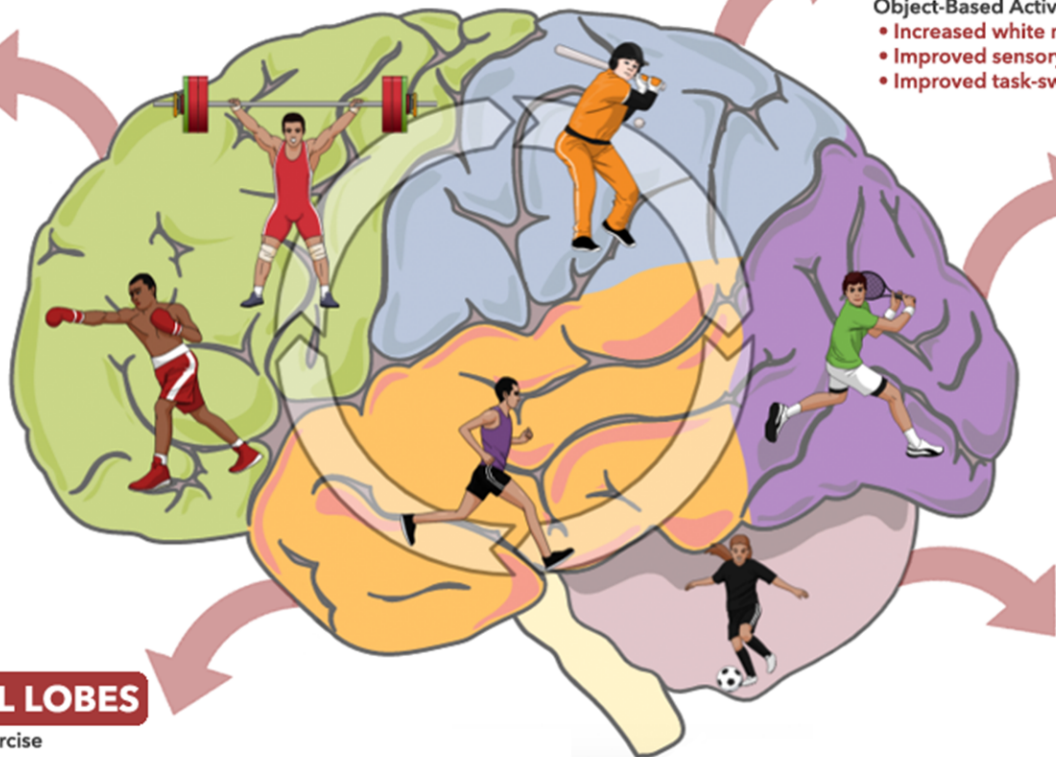
Cardiovascular Exercise
Closed Skill Activities
Generalized Physical Activity

- Improved Learning & Memory
- Increased Neurogenesis
- Increased Hippocampal Volumes

CEREBELLUM

Coordinative Exercise
Skill & Motor Learning
Open Skills Activities

- Increased cerebellar volume & function
- Improved coordination & attention
- Higher nerve cell & blood vessel volume



LEARN NEW THINGS

- Prioritize mental activities that support learning and brain health and decrease activities that contribute to mental exhaustion.
- Aim to obtain at least 4 hours of brain training each week.



Examples of Healthy Brain Stimulation:

- Taking a class
- Learning to use new technology
- Gardening
- Trying a new food or recipe
- Playing a game, including online and app-based brain games
- Playing or learning to play a musical instrument
- Arts and crafts
- Reading and writing
- Trip planning and travel

DIET

- The goal of a brain-healthy diet is to optimize your eating habits and to implement a sustainable, low carbohydrate diet, based on your willingness and ability to do so.
- Food that boosts cognition include vegetables, fatty fish, berries, and nuts.



Food to Include

- **Green leafy vegetables:** Eat green leafy vegetables, such as romaine lettuce, kale, or spinach salad daily.
- **Hydration:** Drink at least 8 cups of water daily.
- **Condiments** Use herbs and spices liberally.
- **Fats:** Focus on the unsaturated fats found in avocados, olives, nuts, and seeds.
- **Oils: Use only cold pressed oils.**
- **Nuts:** Aim to eat 1 serving of nuts/seeds daily. A serving is 1 ounce or 2 tablespoons of nut/seed butter.
- **Protein:** Aim to eat 0.8 grams of protein per kilogram of your ideal body weight. Average adults need 45-70 grams protein daily. An example of meeting your daily protein goal might be half of one chicken breast (20 grams) for lunch and one wild salmon fillet (25 grams) for dinner.
- **Fish:** Three times per week, eat 3-4 ounces wild caught fatty fish that is low in mercury (i.e. salmon, mackerel, anchovies, sardines, or herring).
- **Organic-preferred:** Choose organic products free of pesticides, hormones and antibiotics

Foods to Avoid or Limit

- **RED MEAT:** Limit red meat (beef, lamb and pork) to 6 ounces or less per week. If you consume it, choose grass-fed beef, which is higher in omega-3s.
- **SUGAR:** Avoid added sugar and sweets.
- **FRUIT JUICE:** Avoid fruit juice and dried fruit, which are high in sugar.
- **ALCOHOL:** Limit alcohol to 3 servings per week or less (4 oz. wine; 1.5 oz. liquor; 12 oz. beer).
- **PROCESSED FOOD:** Minimize refined and processed foods. Eliminate smoked and cured meats.
- **FRIED FOOD:** Avoid fried and charred foods.

Thank you very much!!

Pacific Movement Disorders Center Family

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