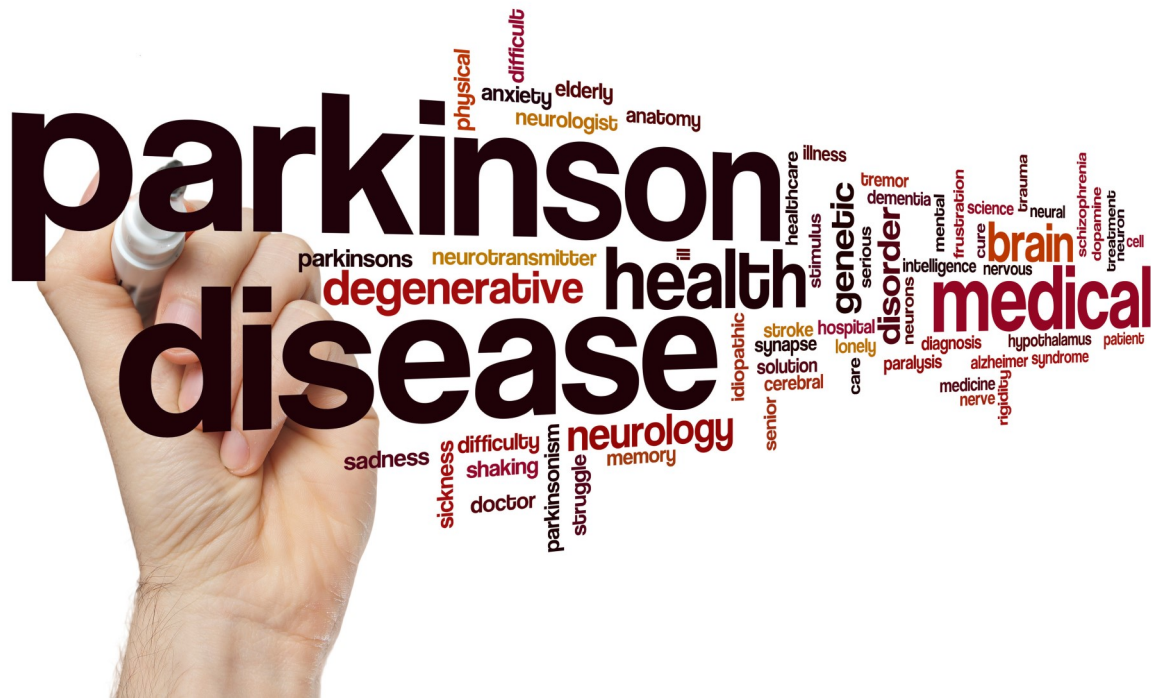




FIGHT BACK AGAINST PARKINSON'S

*Improving the Quality of Life and Overall Wellness
of People with Parkinson's Disease Through Exercise*



Parkinson's disease (PD) is a neurodegenerative disorder that affects the brain (predominately dopamine-producing neurons) and how the body moves. Symptoms may develop slowly over years and often progress differently from one person to another due to the diversity of the disease. Early symptoms can include tremors, a shuffling gait, and an overall slowing of physical movement.

While medications and, in some cases, surgery may be recommended as treatments, research is showing that exercise may be one of the best – and most underused – ways of battling the condition.¹ In fact, patients who exercise at least 2 ½ hours per week experience a slower decline in their quality of life.

The challenge when it comes to exercise (and this applies to everyone, not just those with Parkinson's Disease) is how to get started. In this guide, we'll look at the benefits of establishing an exercise program, the best types of exercise for people with PD, how and when to get started and complementary therapies.

**March 2012, Harvard Health Letter*

THE BENEFITS OF EXERCISE

Exercise is important for people with Parkinson's disease because it helps maintain balance, mobility, strength, endurance and the ability to perform daily routines. More specifically, regular exercise can benefit people with PD in two ways:



Symptom Management

- Reduce stiffness and improve mobility, posture, strength, balance and gait.
- Increase oxygen delivery to the brain which helps maintain the neurotransmitters responsible for keeping the heart, lungs, and nervous system healthy.
- Reduce depression, anxiety and stress and improve sleep.

Slower Disease Progression

- Improved mobility decreases the risk of falls and other complications associated with PD.
- Decreased changes to the brain caused by aging and PD due to the neuroprotective qualities of exercise.
- Increased efficiency in the use of dopamine, the neurotransmitter that helps regulate movement and emotional response.



EXERCISE SUGGESTIONS FOR PEOPLE WITH PARKINSON'S



1

There is increasing evidence that aerobic and learning-based exercises could be neuroprotective in aging individuals and those with neurodegenerative diseases.²



2

It's important to include aerobic activity that challenges the heart and lungs and that includes exercises that promote good body mechanics, balance, proper posture, trunk rotation, and rhythmic and symmetric movements.



3 Incorporate “Random practice”. This includes aerobic exercise with movement patterns that challenge an individual to change tempo, type of activity or direction. It’s important because people with PD often have difficulty shifting from one activity to another or performing two activities at the same time.



4 According to recent research, high intensity training (in short intervals) can reduce symptom progression. In a new study, researchers said people with Parkinson’s can stall the decline in their motor skills by engaging in high-intensity exercise three times a week.³

SPECIFIC EXERCISE SUGGESTIONS:

- Dancing
- Swimming/Aquatics Classes
- Boxing
- Walking
- Cycling
- Yoga
- Tai Chi
- Sports Activities
- Fitness classes designed specifically for people with Parkinson’s Disease



The sky is the limit . . .



WHEN TO GET STARTED

First, be safe. Prior to beginning any exercise program, consult your neurologist and primary care doctor about any concerns and suggestions. It's important to ensure that you can safely begin to exercise.

Once you get the go-ahead from your doctor, it's important to get started right away. Several important research studies⁴ have indicated that moderate to high intensity exercise sessions scheduled three to four times per week can slow the progression of symptoms.

Exercise that gets the heart working at 80 to 85 percent of its maximum capacity was found to provide health benefits that didn't show up in people with Parkinson's who got no or moderate-intensity exercise.

"We are stopping people from getting worse, which is significant, particularly if we catch them early in the disease," said Daniel Corcos, PhD, a study co-lead author and a professor of physical therapy and human movement sciences at Northwestern University's Feinberg School of Medicine. "We gave [our study participants] a proper workout. This is not mild stretching. This is high intensity. It's part of the idea that exercise is medicine."⁵



THE IMPORTANCE OF “GROUPS” TO EXERCISE ADHERENCE

It's no secret that human beings are social creatures. From the earliest ages, we create attachments to family and friends and form wonderful memories of doing things together - playing, collaborating on school and work projects, attending dances and social events, participating in sports and other activities and celebrating life's occasions like weddings and birthdays.

And yet, when it comes to exercise, we often try to go it alone. Sometimes it works, but more often it doesn't. Research suggests that over 50% of people who embark on an exercise

program drop out after 6 months⁶. How can we improve our adherence to an exercise program? Workout with others - especially others who are experiencing the same challenges you may be facing!



Whether it's a group of two or twenty, just remember that the greater your sense of "groupness", the more likely you are to show up on time, work harder and stick to your program.



SOME BENEFITS OF EXERCISING IN A GROUP:

- **Mutual motivation** - you benefit from the support of others engaged in the same activity.
- **Friendship** - working out with others is a great way to meet people who share a common interest or challenge.
- **Novelty** - A common reason given for quitting an exercise program is boredom; social interaction and workout variety can help you maintain interest.
- **Safety** - A structured exercise class or group training session led by a certified instructor or trainer can help everyone from exercise newcomers to experienced “veterans” workout safely and effectively.
- **Accountability** - Weekly appointments to meet buddies to exercise will help you stick to your routine. In addition, group fitness classes or training sessions usually take place at the same time on the same day every week making them easy to remember.

COMPLEMENTARY THERAPIES

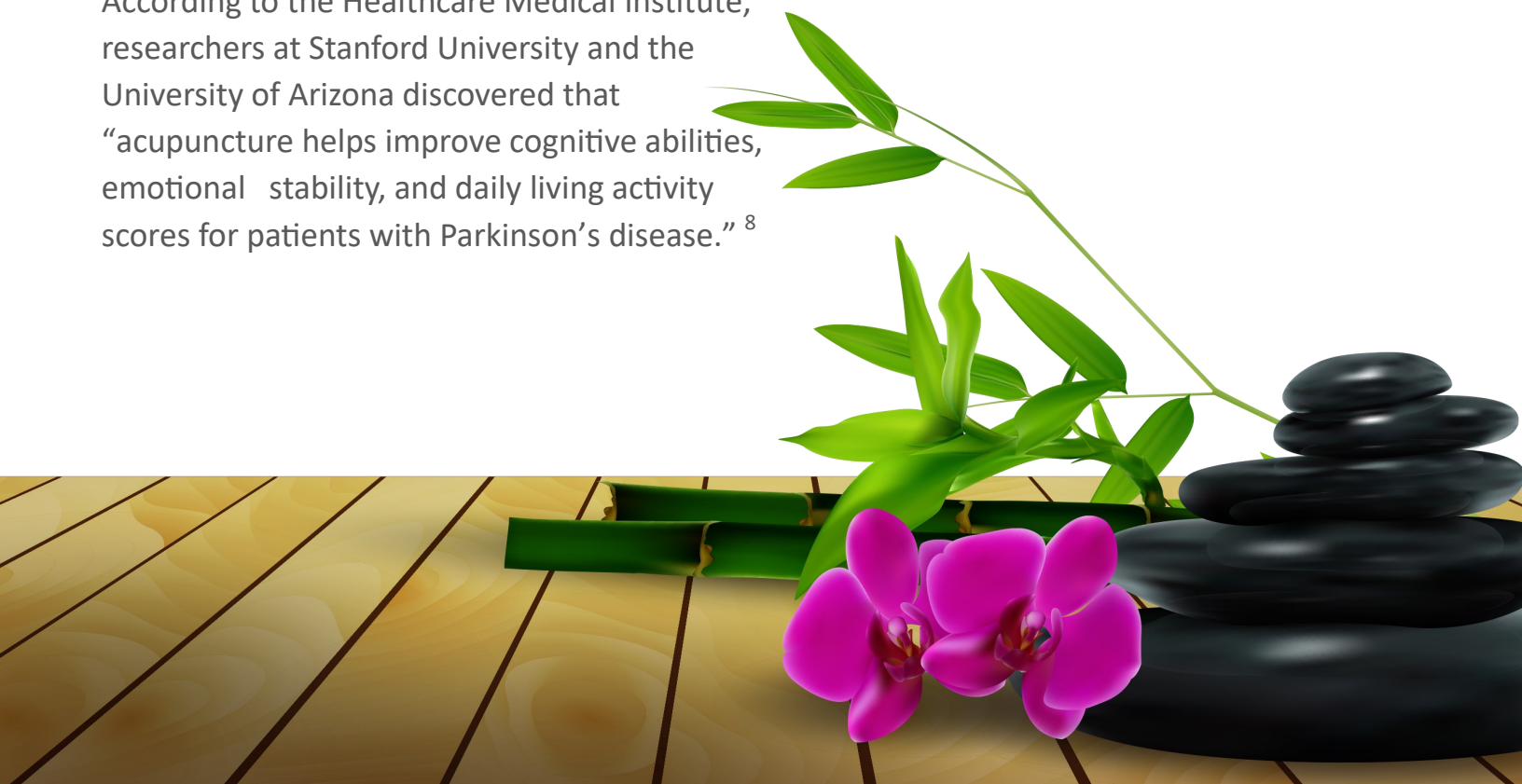
Massage

As stated in Health Care, Massage Therapy, Healthy Living, “A Parkinson’s patient’s muscles are constantly subject to contractions and tremors which do not allow the chance for rest and relaxation. Massage therapy can help increase blood flow, alleviate tension and facilitate movement. Parkinson’s patients often have depression and sleep disturbances. Massage can help reduce cortisol levels, thereby improving sleep, decreasing anxiety and improving overall wellbeing. Most Doctors will suggest adding massage to your treatment plan.”⁷



Acupuncture

According to the Healthcare Medical Institute, researchers at Stanford University and the University of Arizona discovered that “acupuncture helps improve cognitive abilities, emotional stability, and daily living activity scores for patients with Parkinson’s disease.”⁸



THE PARKINSON'S PROGRAM AT CORNERSTONE CLUBS

Cornerstone Clubs consists of three award winning health and fitness facilities, a full-service day spa and an event center serving the Central Bucks area.

Since 1995, Cornerstone has operated with one guiding focus – community. Health and fitness is rarely an individual endeavor. It is through supportive relationships that Cornerstone's members have been able to make their lives healthier and happier, regardless of fitness level or health status at the time of joining.

The Parkinson's Program at Cornerstone is designed to help an under-served segment of our community. A diagnosis of Parkinson's Disease can be frightening, but as with most health challenges, the right kind of exercise program can help alleviate, and in some cases reverse, symptoms.

Cornerstone Clubs' Parkinson's Program includes two classes with great track records. PWR! Moves and Rock Steady Boxing have been proven to greatly improve the symptoms associated with Parkinson's and, thus, overall quality of life. Membership also includes access to all of our facilities, to additional classes like yoga, aquatics and indoor cycling and also discounts on all Spa services at the Spa at Cornerstone and at our Doylestown and New Hope locations.

**CONTACT THE PARKINSON'S PROGRAM
DIRECTOR AT CORNERSTONE**

For more information:

www.parkinsonalliance.org/

www.parkinson.org/

www.michaeljfox.org/

www.theparkinsoncouncil.org/

www.davisphinneyfoundation.org/

www.briangrant.org/

References:

¹ March 2012, Harvard Health Letter

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⁴ www.jamanetwork.com/journals/jamaneurology/article-abstract/FEB18 edition

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⁶ Wilson and Brookfield, 2009

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⁸ www.healthcmi.com