

Power of the Punch

Air boxing and boxing-based fitness classes don't involve sparring or the risk of getting clocked in the head. Jab, cross, uppercut, cross, cross.

Beginners may punch it out on a speed bag, learn proper form, and practice their footwork with conditioning drills while timing their moves to energetic music.

Noncontact boxing boasts virtues for anyone who wants to get stronger, fend off age-related cognitive decline, or improve hand-eye coordination—and feel exhilarated while doing it. According to experts at Rock Steady Boxing, a program that utilizes boxing training to combat Parkinson's disease, a passion for shadowboxing can even help fight off certain neurological conditions.

"My students love boxing because they just feel so powerful," says Leigh Anne Richards, who has a Master of Education degree in health and physical education and specializes in training people in midlife and older. She brought the Rock Steady Boxing program to Montgomery, Alabama, a few years ago.

"When you're 50 and above, it's not so much about how high you can jump or how much weight you can lift; it's about functional fitness—being able to work in the yard, play with grandchildren, or carry boxes up to the attic," she says.

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Shadowboxing is safe for those with arthritis or osteoporosis while still getting your blood pumping and lifting your mood. Exercises that use bodyweight, such as boxing, strengthen and stabilize the muscles around joints and provide important weight-bearing exercise to stave off osteoporosis. Plus, the intense full-body workout that boxing provides uniquely connects body and mind in a way that can make you feel on top of the world.

Richards, 61, draws inspiration from seeing her clients transform themselves physically and mentally. One 85-year-old man, who used a walker and had a shuffling gait due to his condition, came to the class helped by a caregiver. With regular boxing practice, he gained increasing awareness of his balance, his foot placement, and weight distribution, and he learned to aim punches at a target with deliberation. Over time, his lost abilities began to return bit by bit.

"It was unbelievable, the progress he made. He started picking up his feet and walking [into the gym] ahead of his caregiver—and he stopped using the walker," says Richards.

Another student, in his late 60s, had been a competitive cyclist in his earlier years, before Parkinson's disease robbed him of mobility in one leg and caused him to hunch forward. "We work on everything that older adults need, including balance, gait, walking, and agility," says Richards. "Boxing-based drills enabled him to gradually regain his posture and ease of movement, together with a class full of other people who were similarly giving it their all." My students are all so attached to each other, and they are cheerleaders for each other, says Richards. "It is such a time of camaraderie."

Benefits for Mind and Body

Medical research backs up the power of fitness boxing as a way for older adults to gain vitality, strength, and balance. "Balance issues are common with everyone who starts aging," says Richards. "With boxing, we may have you stand on one foot, keep one leg up, or stand on a balance object while you hit the bag first with one hand and then the other, so you're constantly challenging your balance."

As a form of high-intensity interval training (HIIT), boxing involves swapping between short periods of going full tilt and then doing something low intensity. "We do a burst of punching as hard as you can for one minute, then switch to jumping jacks for 30 seconds," says Richards. "High-intensity workouts have been shown to improve and delay the symptoms of Parkinson's, but they're also anti-aging for everybody."

Amazingly, HIIT workouts appear to correct the decline in cellular health that naturally comes from aging, making muscle cells actually act younger, according to research from the esteemed Mayo Clinic. In fact, people in their mid-60s and older who did HIIT workouts for 12 weeks had more and healthier energy-producing mitochondria in their muscle cells compared to those who did other forms of exercise, such as riding a stationary bike at a moderate pace, *The New York Times* reported.

While the punches are intensely physical, the shifting patterns bring intense focus to the mind. When

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Richards calls out a series of punches by number—one, two, four, two, two—students have to concentrate and make their bodies respond.

"You've got to quickly process, what punch is a two? What is a four?" Richards says. "Other times, we put dots with numbers on the bag. While they look at the center dot, I'll call out different numbers. That works the brain and promotes hand-eye coordination."

With one student, a former certified public accountant whose abilities with numbers were slowed by Parkinson's disease, Richards offered the number sequence in different ways to encourage the use of multiple neural pathways. She did this by having him listen to the numbers, read them from a whiteboard, and say them out loud, all while performing the punches.

Pushing hard with bursts of intense exercise beyond one's comfort zone can increase dopamine production in the brain even more than medication, according to a Cleveland Clinic study of people with Parkinson's disease. The research subjects that did this type of exercise enjoyed better motor function that persisted for four weeks. "It's what they call *forced exercise* because you're making yourself go harder than you normally would for a short time—unlike, for example, when you're just walking," says Richards.

Another part of youthfulness is having the hand-eye dexterity that lets you pick up tiny objects. Those fine motor skills begin to slip away as the brain ages, but hitting a speed bag or repeatedly reaching out to aim at a target is known for improving coordination and that can translate into increased ease when doing daily activities.

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Fighting Off Disease

At Rock Steady Boxing (RSB), Parkinson's disease is the opponent.

Founded in 2006 by former Marion County, Indiana, prosecutor Scott C. Newman, RSB is a



501 (c)(3) nonprofit organization giving people with Parkinson's disease hope by empowering them to fight back and improve their quality of life through a noncontact boxing-based fitness curriculum.

RSB initially began through the friendship of Newman and Vince Perez after Newman had been diagnosed with early-onset Parkinson's at the age of 40. Refusing to let his friend go down without a fight, Perez turned to his experience as a Golden Gloves boxer to design a program that attacks Parkinson's at its vulnerable neurological points. Exercises vary in purpose and form but share one common trait: They are rigorous and intended to extend the perceived capabilities of the participant.

Perez's intuitive insight is now proven to have merit through an increasing body of medical research. In fact, in the last seven years, there is evidence that progress is made in all stages of the disease by those participating in the RSB program.



Getting Started

The popularity of fitness boxing has skyrocketed in recent years, and many gyms now offer different types of boxing classes for people of all fitness levels. To find a Rock Steady Boxing gym, which specifically serves those with a diagnosis of Parkinson's disease, visit the website at rocksteadyboxing.org

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. There, you can find a gym by a zip code or city search.

You can also practice boxing at home, either with a fitness boxing video or some simple pieces of equipment from a sporting goods store or online retailer, says Richards. One of her favorite exercises uses a *reflex ball*, also called a *boxing fight ball*, which is basically a headband with a tennis ball attached by an elastic band. Professionals and beginners alike practice punching, dodging, and weaving for an addictive workout that burns calories and improves hand-eye coordination.

Those who want to spar with a spouse, friend, or grandchild can use a pair of boxing pads or focus mitts that one person wears on their hands while the other throws punches—as hard or lightly as you want—for a great way to work up a sweat and improve aim, accuracy, and timing.

Another piece of home equipment that gained popularity during the pandemic of the past year is a speed bag, which is just a light punching bag on a base that's filled with sand or water. You can hit it with padded gloves, hand wraps, or your bare fists, and it springs back after each hit. There are also inflatable punching bags—reminiscent of the blow-up colorful clown versions that 1970s kids loved. With home boxing equipment like that, you're sure to be a hit with any visiting grandchildren.

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