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Cycling and Seniors Part 1

The Benefits of Cycling for Seniors

RIDING REGULARLY HELPS EVERYONE’S HEALTH, BUT THOSE IN THEIR GOLDEN YEARS CAN UNCOVER SOME PARTICULARLY IMPORTANT PAY-OFFS.

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While exercise is important for all people of all ages, the effects physical activity can have on older adults is significant. This is because age is naturally associated with physical and mental declines, including higher risk of chronic illnesses, increased risk of arthritis and joint pain, decreased muscular and bone health, and even increased levels of depression and anxiety. But just because these declines naturally take place, that doesn’t mean you can’t slow or even reverse some of their effects.

“Regular physical activity helps seniors maintain good health, improve their quality of life, and increase their overall well-being,” says Mary Sabat, MS, RDN, a personal trainer and dietitian in private practice in Georgia. “It can enhance physical strength, flexibility, and endurance, making it easier to perform daily activities and maintain independence.”

While the benefits of exercise for seniors apply to practically all forms of physical activity (with varying levels of specific benefits depending on the exercise), cycling is an activity that’s particularly well-suited for the senior population due to its accessibility. After all, cycling is easy

on the joints, even for those with joint pain or injuries. “It can be tailored to individual fitness levels and adjusted to accommodate different abilities and physical limitations, too,” says Sabat. “Recumbent bikes, trikes, or electric-assist bicycles can be used to make cycling more accessible for those with mobility challenges or balance issues.”

Robert Patterson, a 69-year-old cyclist (and interestingly, a bicycle accident lawyer) who has been cycling for more than 40 years attests to his personal benefits, pointing first to the aerobic and strength-building gains he’s enjoyed over the years, but also to the mental health benefits. “Cycling also benefits my mental health. My attitude and overall focus are always improved by being on the bike,” he says.

Improves heart health

Aerobic exercise is the key to managing heart health. Because the heart is a muscle, it needs to be exercised on a regular basis to maintain its strength and optimal function. And because the heart and lungs work together with the venous system to deliver oxygenated blood to your muscles, any exercise that increases your heart rate and breath rate for an extended period of time will help improve your heart health and overall cardiovascular function.

Plus, as anyone who has ever pushed the pedals and pumped through a 20- or 30-minute bike ride knows, cycling will definitely get your heart rate up. The repetitive cycling motion qualifies as a moderate to intense form of aerobic exercise that you can easily adapt to your personal fitness level. This means that even if you haven’t exercised in years, by starting at a lower intensity and making adjustments to your workouts based on your heart rate, you can safely and effectively add cycling to your weekly routine.

“As individuals age, the risk of heart disease increases,” says Sabat. “Cycling is a low-impact aerobic exercise that helps improve cardiovascular fitness, strengthens the heart muscle, and enhances blood circulation. It can lower the risk of heart attacks, strokes, and high blood pressure, thereby promoting a healthy heart.”

In fact, a series of two 2019 review studies (Part 1 and Part 2) published in the *British Journal of Sports Medicine* found that all forms of cycling reduce the risk of cardiovascular disease and also reduced the risk factor profile for poor heart health—meaning that cyclists had better body composition stats, blood lipid profiles, cardiorespiratory fitness levels, and more time spent exercising. All of these together help mitigate the risk for developing heart disease.

Reduces the risk of chronic diseases

Heart disease isn’t the only chronic disease that benefits from a regular cycling routine. In fact, practically any chronic condition, including type 2 diabetes, arthritis, and cancer can be combated with a regular ride. This is because exercise helps keep the blood flowing, systems moving, and cells turning over in a way that promotes overall health. For instance, high-

intensity exercise (and high-intensity cycling, specifically) helps improve blood glucose response which may reduce the risk of type 2 diabetes.

Even in the case of cancer, participating in a regular cycling routine has been shown to reduce the risk. For example, a May 2020 study published in *The Lancet* found an association between participating in a daily bike commute and a 16 percent decrease in cancer mortality and an 11 percent decrease in cancer incidence.

“By incorporating a ride here and there into their routine, seniors can reduce the risk of chronic conditions. These conditions can be debilitating, but with regular exercise, seniors can take proactive steps toward prevention and management,” says Josh Weight, a certified sports physiotherapist and the director of Gravity Physio in Australia.

Strengthens and protects the joints

It’s not unusual for seniors to experience regular joint pain associated with arthritis or previous injuries. In fact, according to the National Poll on Healthy Aging, about 70 percent of older adults report current joint pain. This can be exacerbated by extended periods spent sitting, or simply not moving around much, as sedentary behavior is directly associated with increased incidences of knee and other joint pain.

While on the surface this may not seem like a big deal, it can lead to a cascading series of events where joint pain or arthritis contributes to a reduced range of motion. This reduced range of motion can influence balance, coordination, and even the ability to perform everyday tasks. These issues can also contribute to a reduced quality of life and even an increased risk of falls. As such, any activity that can be done without contributing to joint pain while protecting and strengthening the structures that help stabilize the joints (muscles, tendons, and ligaments) is an important undertaking for older adults’ overall health and well-being.

“Cycling is a low-impact activity that puts minimal stress on the joints, making it an excellent option for individuals with joint-related issues. It provides a cardiovascular workout without placing excessive strain on the knees, hips, or ankles,” Sabat says.

Develops muscular strength, endurance, and power

Whether done on an indoor bike or a more traditional road or mountain bike, one thing’s for sure: Cycling works the legs. It takes muscular strength, power, and endurance to keep the pedals moving, especially when climbing a hill or ramping up the resistance. But it’s not just the legs and glutes that benefit—cycling can help build strength in the shoulders, upper back, and core, as well.

Of course, you may not be looking to build massive quads as one of your long-term fitness goals, but developing muscular strength isn't just about looking strong—it's about maintaining your quality of life.

It's estimated that muscle mass starts declining by 3 to 8 percent every decade following your 30th birthday, with those rates increasing further once you hit 60. This age-related muscular decline eventually makes it more challenging to continue doing everyday activities like climbing a set of stairs or lifting and carrying groceries. It's important to participate in exercises, like cycling, that will help maintain or build muscle mass over time to safeguard your ability to perform these daily activities.

In fact, according to a 2015 review study published in the *European Review of Aging and Physical Activity*, adults over 70 years of age experienced increased muscular strength and power when participating in a cycling exercise program at least three times a week for 12 to 16 weeks. This data flies in the face of anyone who believes they can't develop muscle or strength as they age—it's not only possible, it's critical to overall health and functional ability.

Enhances balance and coordination

One area in which cycling can be particularly beneficial is its influence on balance and coordination. This has ties to muscular strength, as strong, trained muscles tend to perform and react more quickly to stimuli than those that aren't worked regularly. However, it also has to do with the unique requirements of cycling itself.

"Cycling requires balance and coordination to stay upright and navigate," says Andrew White, a personal trainer and owner of Garage Gym Pro. "This can be especially beneficial for seniors as these abilities tend to decline with age, increasing the risk of falls and injuries."

This isn't just conjecture—a 2018 prospective study published in the *Journal of Aging and Physical Activity* found that older adults (between the ages of 65 and 85) who cycled daily had better balance, a faster pace while walking, and better self-reported lower-extremity function compared to those who didn't bike regularly. Based on this study, it appears that cycling helps preserve balance and coordination which contributes to lower-body function that can help prevent falls.

Makes it easier to manage weight

Just as muscle mass tends to decline with age, an associated change in body composition takes place, which often leads to increased weight gain. And as weight creeps up, so do the risks for heart disease and chronic illness, particularly in populations considered obese. Cycling and other forms of exercise can help keep weight and other disease risk factors in check. This is partly due to the muscle-protective benefits exercise offers, but also due to the increased calorie burn that occurs during moderate- to high-intensity exercise like cycling.

“Cycling can help seniors maintain a healthy body weight, reduce excess body fat, and prevent obesity-related health issues,” Sabat emphasizes.

Provides social opportunities and community interaction

It’s not unusual for seniors to experience social isolation that can contribute to physical and mental health decline. This is often attributed to a progressively-smaller social circle as family and friends move to health facilities or pass away, but it may also be due to increased difficulty getting out and about. Changes in health, mobility, or driving status can keep seniors at home, limiting their interaction with family, friends, and the overall community. This is unfortunate because strong social connections are positively associated with longevity.

Cycling can provide seniors with an accessible way to get out and about, and to also engage with other people of all ages. “Cycling can be an enjoyable and social activity for seniors. Exploring outdoor trails, participating in group rides, or engaging in community cycling events can foster a sense of camaraderie and connection with others,” says Weight.

And for seniors who want to start cycling, but don’t know how, community cycling clubs offer a great way to learn and connect at the same time.

Boosts mental health and well-being

In addition to the benefits of social interaction, cycling can boost mental health in a number of ways, especially if you’re riding your bike outside. “Cycling outdoors provides an opportunity to connect with nature, which can be therapeutic and stress-relieving,” says White.

In fact, according to a 2022 study published in the *Journal of Affective Disorders*, individuals who participated in outdoor cycling (or other outdoor activities like walking, jogging, or team sports), were less likely to experience depression than those who were inactive. Likewise, there’s evidence that even a single outdoor exercise session (like cycling) can impact mood, more than indoor exercise equivalents.

Even in the absence of an outdoor setting, physical activity as a whole is good for mental health. “Regular exercise releases endorphins which can elevate mood and reduce symptoms of anxiety and depression,” Sabat explains.

Enhances cognitive function

One final benefit of cycling for seniors: It can support cognitive function. “Studies have shown that physical activity can have positive effects on cognition and may help reduce the risk of cognitive decline and dementia in older adults. Exercise promotes better blood flow to the brain, stimulates the release of hormones that support brain health, and improves memory and attention,” Sabat shares.



Okay riders, if that doesn't convince you to keep riding your bike, perhaps nothing will. Next week in Part 2 of "Cycling and Seniors" we'll cover Senior Cycling Tips. In Part 3 we'll talk about High Intensity Interval Training (HIIT) for Seniors for those interested in boosting their performance and fun on their bikes. See you then.....

Make Every Ride Epic,

Darryl