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# Ways to ease painful joints caused by osteoarthritis

A woman practices tai chi. Many of the medications used for pain relief are not recommended for regular use by older adults, but a number of lifestyle strategies, including exercise, can help.

As the years pass, many of us may begin to notice various aches and pains in our joints. One increasingly common cause of chronic discomfort is osteoarthritis, or OA, which is marked by a progressive loss of the cushioning material that keeps the ends of joints from rubbing together.

While this form of arthritis can get in the way of daily tasks and activities, it may have other bad effects: A <u>study</u> <u>published in 2019 in the journal Osteoarthritis and</u> <u>Cartilage</u> found that knee and hip OA was associated with an increased risk of dying from heart disease.

"OA may lead to increased sedentary behavior and as a result, increase a person's risk for other chronic issues, such as obesity, diabetes, high blood pressure, or heart disease due to decreased activity," says Eric K. Holder, assistant professor of clinical orthopedics and rehabilitation at Yale School of Medicine in New Haven, Conn. OA may also increase inflammation in the body, which itself is linked to heart disease. And a study published in 2020 in the Journal of the American Geriatrics Society found that the condition can lead to social isolation, which can also be harmful to health.

#### Osteoarthritis affects 32.5 million U.S. adults

**Good news:** While many of the medications that are used for pain relief aren't recommended for regular use by older adults, a number of lifestyle and <u>other nondrug</u> <u>treatments</u> can help ease symptoms — and prevent OA from progressing, says Heidi Prather, a physiatrist at Hospital for Special Surgery in New York. Here's what experts advise.

## Why being calm matters

Reducing stress and getting a better night's sleep may not seem like they would help with OA. But some evidence suggests that they may. A <u>study published in the journal PLOS One in 2020</u>, for instance, found that people 50 and older who got six or fewer hours of sleep a night were 20 percent more likely to be diagnosed with OA than those who got between seven and eight hours. They were also about 30 percent more likely to experience significant joint pain.

"Sleep is crucial to pain perception," says Prather.
Insufficient snooze time can reduce the levels of
neurotransmitters — feel-good brain chemicals that can help
blunt pain, she explains. Stress, for its part, can worsen
sleep, thus altering the way that we perceive pain.

#### Meditation for people who think they can't meditate

To address both issues, you can try a mindfulness technique such as meditation. One small <u>study published in the journal Alternative and Complementary Therapies</u>, for example, found that women with knee OA who meditated for 15 to 20 minutes twice a day for eight weeks reported significant improvements in pain and quality of life, and better knee function.

Dealing with mental health concerns such as depression and anxiety also is important. A <u>study published in 2019 in the journal Pain</u> found that people who reported symptoms of anxiety were 70 percent more likely to report knee pain over the next year. "There may be an association between these emotions and inflammation," Prather says. Talk with your doctor about therapies that can help.

## Losing weight can help

If you are overweight, shedding as little as five to 10 pounds may help with pain and mobility. And a <u>study published in</u> <u>2021 in the International Journal of Obesity</u> found that overweight and obese people who lost more than 7.5 percent of their body weight were less likely to require a total knee replacement compared with those who didn't lose weight or who gained weight.

Weight loss may also reduce your risk of Type 2 diabetes or, if you already have the condition, help you get it under control. "We know uncontrolled diabetes triggers inflammation that worsens osteoarthritis," says Eliana Cardozo, a sports medicine physician at Mount Sinai Hospital in New York.

Losing weight could help protect your knees from arthritis

## Benefits of a plant-based diet

A <u>2018 study published in the journal Complementary</u>
<u>Therapies in Medicine</u> found that people who followed a plant-based eating style for eight weeks reported significant improvements in musculoskeletal pain — even if they did not lose weight. "A whole food, nutrient-dense diet that's low in processed products and sugar is key, since it helps reduce inflammation that contributes to pain," Holder says.

One good option: a Mediterranean-style diet, which is rich in produce, whole grains, seafood, beans and nuts. A high-sugar diet may negatively affect the gut microbiome, according to a study published in the journal PLOS One in 2021. And "your gut makes most of your body's serotonin, a brain chemical that boosts mood and makes it easier for you to tolerate pain," Prather says.

The best foods to feed your gut microbiome

## **Exercise in the right ways**

"In my opinion, exercise — including physical therapy — is the most important nonsurgical treatment out there to treat osteoarthritis," says orthopedic surgeon Timothy Gibson, medical director of the MemorialCare Joint Replacement Center at Orange Coast Medical Center in Fountain Valley, Calif. "It not only strengthens surrounding muscles, to take pressure off joints, but it improves overall function and provides a mental benefit, which can make coping with pain easier."

In terms of exercise, the most helpful for OA is a combination of aerobics, strength training, and flexibility exercises, says Elaine Husni, vice-chair of Rheumatic and Immunologic Diseases at Cleveland Clinic. But it's important to tailor workouts to your fitness level. "If a patient has been sedentary, I start them with water-based therapy, like pool aerobics," she says. "And once they tolerate that, they switch to low-impact, land-based therapy, like walking or biking."

Husni also recommends <u>tai chi</u>. A <u>2021 study published in</u> <u>the journal BMC Geriatrics</u> found that older adults with knee OA who engaged in this gentle activity twice a week for 12 weeks performed much better on actions such as single leg stands than those who did not. Another good option is chair

yoga. "It's especially good if you've been sedentary, because it takes away the fear of falling, and doesn't require as much core balance," Husni says.

If it hurts too much to exercise, ask your doctor whether a course of physical therapy might be warranted. A physical therapist can teach you how to strengthen the muscles around your joints with little or no pain, along with techniques to make daily activities easier, such as going up and down stairs.

#### What about medication?

For OA flare-ups, you can apply an over-the-counter topical to a painful joint. These include nonsteroidal anti-inflammatories such as Voltaren, and products with capsaicin, such as Zostrix.

For more relief, you may be able to use OTCs such as ibuprofen (Motrin IB, generic) for a short time if you have well-controlled blood pressure, and a healthy liver and kidney, Husni says. Ask your doctor. Otherwise, acetaminophen (Tylenol, generic) may be best.

There are also injectables: steroids, hyaluronic acid and platelet-rich plasma (PRP) — an experimental treatment that uses a patient's own platelets.

Hyaluronic acid, similar to a substance in the joints, may work for some people, but American Academy of Orthopaedic Surgeons guidelines do not advise it for routine use in OA. PRP has shown some promise for tendon, muscle, and ligament injuries in younger people, but not for moderate to severe OA, Husni says.

"For some people, a certain injection can help their pain for a while," says Cardozo, who also advises an individualized approach based on factors like the degree of arthritis.