A re you slowed or hampered by the pain of arthritis? An estimated 54.4 million U.S. adults (23 percent) have doctor-diagnosed arthritis, and this number is projected to rise to 78.4 million in the next 20 years. The percentages diagnosed vary widely by location, with 17 percent in Hawaii and up to 43 percent in the Appalachian states. Areas with higher rates have a higher population of older adults and obesity, both risk factors for arthritis. There are several types of arthritis, but for this article, osteoarthritis and rheumatoid arthritis, two of the most common forms, will be discussed.

**Osteoarthritis** (OA) is the most common form of arthritis, affecting over 30 million people in the United States. OA is the fastest-growing cause of disability worldwide. It is sometimes called degenerative joint disease or “wear and tear” arthritis. It most frequently occurs in the hands, hips, and knees. With OA, the cartilage, or the slippery tissue that covers the ends of bones in a joint, begins to break down. With less cartilage, the bones rub together, causing pain and stiffness. OA can also cause swelling and result in disability. Family history and joint injury are also risk factors for OA.

**Physical Activity and OA**
Exercise and routine daily physical activity is recommended as tolerated, as it often improves joint pain and mobility. Consult your doctor first; 150 minutes of moderate physical activity per week is recommended for adults, including those with OA. Walking, biking and swimming are all typically well tolerated. Yoga and tai-chi improve balance and flexibility, while yoga also improves strength. These exercises help maintain our ability to perform activities of daily living, such as lifting groceries and walking up steps, thus decreasing disability and pain. Regular physical activity improves mood, decreases risk for depression, and improves sleep. It also helps with weight loss and weight control, which is significant for those with OA, as obesity is common and further degrades joints and impairs mobility.

**Nutrition Recommendations for OA**
In terms of nutrition research, the bulk of studies have looked at individual nutrients or foods and their role with inflammation. However, this approach has many limitations since our diet is made up of many foods, with many individual food components and interactions. Here is a summary:

1. **Follow a Mediterranean eating pattern.** A very large, cross-sectional study of 4,470 adults with OA analyzed diet scores compared to the Mediterranean diet (high amounts of vegetables, fruits, whole grains, fish, olive oil, and nuts; limited meat, poultry, and full-fat dairy). Higher Mediterranean diet scores were significantly associated with a better quality of life and less pain, stiffness, disability, and depression. Since 2015, this eating pattern has been recommended by the Dietary Guidelines for Americans for everyone.

2. **Lose weight if overweight.** Studies show even a 5 percent weight loss (typically 10 to 12 pounds) will help reduce pain and increase mobility. Losing weight also reduces inflammation. Following a Mediterranean eating pattern may help control weight, although it is not a formal weight loss diet. Ask your physician for a referral to a registered dietitian nutritionist for the best individual recommendations.

3. **Omega-3 fatty acids.** Several studies in the past decade have shown the beneficial effects of omega-3 fatty acids and reducing knee cartilage loss and inflammation. Fatty fish, such as salmon, tuna, and trout, are recommended at least twice a week.

4. **Reduce intake of saturated fats.** Some studies show an association with high blood cholesterol levels and cartilage degradation. Other studies implicate saturated fat in increasing inflammation. A separate study showed significantly higher risk for OA and rheumatoid arthritis with increased consumption of total and processed meats in the United Kingdom. Consume red meats and full-fat dairy foods fewer than one to two times per week.
5. **Vitamin D.** Studies have shown low vitamin D blood levels are strongly associated with OA progression and cartilage loss. Our bodies can make vitamin D with 20 minutes of face and arm sun exposure. However, consuming vitamin D fortified low-fat milk, yogurt, or supplements of 25 mcg per day has been recommended for consistent blood vitamin D levels.

6. **Vitamin K.** When deficient, one large study indicated more knee OA and cartilage lesions since vitamin K is important in cartilage metabolism. Green leafy vegetables are excellent sources and should be consumed often.

**Rheumatoid arthritis** (RA) is the most common form of autoimmune arthritis. It affects more than 1.3 million Americans. About 75 percent of RA patients are women, most often diagnosed between age 30 and 50. It is caused when the body’s immune system is not working properly and mistakenly attacks the joint tissues. RA causes pain and swelling in the wrist and small joints of the hand and feet, fevers, and fatigue. Prolonged morning stiffness can be one indication of RA.

**Exercise and Nutrition Recommendations for RA**

Exercise and nutrition recommendations for RA are the same as those discussed above for OA since symptoms are similar for stiffness, pain, and mobility. However, since RA is an autoimmune disorder, there are several additional diet recommendations:

1. **Fiber.** C-reactive protein (CRP) in the blood is a marker of inflammation associated with RA. Several studies have reported that a high-fiber diet helps reduce CRP levels. Oatmeal, brown and wild rice, beans, barley, and quinoa are excellent sources of whole grains and fiber. Nuts, seeds, and whole fruits and vegetables are also good sources of fiber.

2. **Probiotics.** The gut bacteria are altered with RA, and it is theorized some food components, like proteins, are erroneously passing through the intestinal membrane and causing inflammation as our bodies attack it. Probiotics, or bacteria from food like yogurt or supplements that are good for the gut, have been shown in some studies to help with RA symptoms. More studies are needed; consult a physician before taking any probiotic supplements.

3. **Cranberry juice.** Several studies have shown that 2 cups of cranberry juice daily provides antiinflammatory and antioxidant effects, decreasing inflammation in RA. More studies are needed.

4. **High-fructose-corn-syrup sweetened (HFCS) soft drinks.** A few studies show an association with RA. Those consuming HFCS soft drinks five or more times per week were three times more likely to have RA.

**Unproven Food and Diet Remedies for Arthritis**

According to the Arthritis Foundation, the following are not scientifically supported; therefore, they are not recommended to relieve arthritis symptoms:

- **Avoiding** citrus foods (due to acidity), dairy (try skim or low fat, or lactose free if lactose intolerant), nightshade vegetables, such as tomatoes, potatoes, eggplants, and peppers (these contain the chemical solanine, which some blame for arthritis pain).

While the number of people with arthritis is growing, the need for accurate information on nutrition and exercise is as well. Following a healthy diet and physical activity recommendations is essential for treatment, to maintain quality of life, and may help with prevention. Always consult your health care provider before beginning any new exercise or diet change. For additional information, check these easy-to-follow websites:

- **Arthritis Foundation:** [https://www.arthritis.org/](https://www.arthritis.org/)

- **National Institute of Arthritis and Musculoskeletal and Skin Diseases:** [https://www.niams.nih.gov/health-topics/rheumatoid-arthritis](https://www.niams.nih.gov/health-topics/rheumatoid-arthritis)

- **U.S. Library of Medicine:** [https://medlineplus.gov/rheumatoidarthritis.html](https://medlineplus.gov/rheumatoidarthritis.html)

**Sources**

American College of Rheumatology: [https://www.rheumatology.org/](https://www.rheumatology.org/)


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