

Self-Care for Arthritis

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What is Arthritis

The word arthritis means inflammation of a joint. The term can be confusing because some forms of arthritis do not manifest as hot, swollen inflamed joints, but rather as stiff and achy joints. Technically, chronic degeneration is called “arthrosis” but the term is not commonly used so “arthritis” is used to describe both the visibly inflamed joints as well as the chronic stiff joints.

The joints are the places where two bones meet and can be thought of as hinges. At the ends of the bones are slippery cushioning material called cartilage, which acts like a sponge that squeezes out lubricating fluid when your muscles and joints move. Arthritis may develop from seven common causes:

- (1) Prior Injury – The cartilage of a joint has been damaged from a prior injury.
- (2) Repetitive stresses – Cartilage progressively wears down due to repetitive stresses, such as on the knees of runners.
- (3) Cumulative stresses on the joint – Over time this leads to degeneration, such as forward head posture leads to degeneration of the joints of the neck.
- (4) Misalignment – Spinal vertebrae that are misaligned or fixated, i.e., “stuck” in an abnormal position, cause imbalance forces to move through the spine resulting in a wearing down of the cartilage.
- (5) Sedentary life-style – As the phrase “use it or lose it” implies, if the joints do not have regular and full movement, they dry out and degenerate.
- (6) Obesity – Being severely overweight is linked to half of all cases of osteoarthritis of the knee and about a quarter of cases in the hip.
- (7) Genetics – Auto-immune diseases such as rheumatoid arthritis or lupus cause the immune system to attack the cartilage.

One third of the U.S. population suffers from some type of arthritis. There are over 100 different types of arthritis. Approximately 20 million American adults over 40 have the most common form of arthritis called osteoarthritis (OA), also called degenerative joint disease (DJD). The less common types of arthritis include the auto-immune types such as rheumatoid arthritis and lupus.

Keys to Managing and Improving Arthritis

Exercise

Movement is essential to maintain the health of the joint and to prevent further degeneration of an arthritic joint. Unlike other areas of the body, joints do not have blood that is pumped inside them but receive their nutrition and oxygen from muscle action and movement of the joint. Even if the joint is inflamed, very slow, pain-free micro-movements help reduce swelling and bring nutrition and oxygen into the joint to promote healing. **The benefits of regular exercise for OA are as powerful as a drug.** Many people find it helpful to get some instruction from a physical

therapist or personal trainer in designing a home program that shows exactly which exercises would be most helpful and exactly how to perform those exercises. I encourage all of my patients to walk 30 minutes a day, and stretch for 15 minutes. The key is to move.

Diet

Two factors in the relationship of diet to arthritis are: (1) the amount you eat; and (2) what you eat. If you are overweight, don't go on a diet. Instead, incorporate more exercise into your life and follow these dietary guidelines:

- Eat plenty of fresh fruits, vegetables, whole grains and beans. These foods are excellent sources of complex carbohydrates, which should represent about 50-60% of your daily calories.
- Avoid refined carbohydrates, foods made with sugar and refined flour, such as cookies, pastries and cakes.
- Drink water. Several glasses a day is recommended not only for total health but to keep the joints lubricated. Avoid diet-sodas and sugary drinks.
- Avoid artificial sweeteners and trans-fats. Trans-fats are oils that are made solid by a process called hydrogenation, such as turning corn oil into margarine. Avoid foods that have "partially hydrogenated" on the label. Manufacturers use them to extend the shelf life of cookies, crackers, potato chips and other snacks, but these trans fats can damage the heart as well as promote inflammation.
- Avoid polyunsaturated vegetable oils, such as safflower, sunflower and corn oils, which contain omega 6 fatty acids. The U.S. diet includes far too much of this form of fatty acid and the imbalance with the omega 3s causes inflammation. More omega 3s and less omega 6s.
- Limit your intake of animal protein. Protein should represent only about 10-20% of your daily calories, and should be mostly from grains and beans.

Anti-Inflammatory Diet (For more information, see my "Dietary Guidelines" handout)

Certain foods reduce inflammation, such as salmon and other cold-water fish, flaxseed, walnuts and olive oil. These foods contain omega-3 fatty acids. These fats are called "essential fatty acids" because the body doesn't make them and so they must come from our food.

Other dietary keys to reduce inflammation:

- Fruits and vegetables (preferably organic), which contain antioxidants and lots of vitamins, minerals and phytochemicals. Phytochemicals are biologically active compounds in plants which have powerful cancer prevention properties.
- Olive oil. This is a "healthy fat" and contains an anti-inflammatory compound called squalene. Use virgin olive oil for cooking and in making your salad dressing.
- Water. Cartilage is 70% water so drinking water regularly helps maintain healthy joints. Water helps carry oxygen and other nutrients to all the other parts of the body promoting cellular vitality.

Supplements

As most of my patients know, I am a big believer in supplements. There are many reasons why supplements are a good idea. First, studies show that even small deficiencies in the essential vitamins and minerals can cause cellular damage. Why would we have any deficiencies?

- (1) Many people do not eat enough fresh fruits and vegetables, whole grains and beans.
- (2) Our foods are typically filled with pesticides and herbicides that cause cellular damage (thus, the importance of eating organic).
- (3) Our soils are depleted of the vitamins and minerals of our grandparents generation due to modern farming methods.
- (4) Our air is filled with pollution that creates free radicals in the body which causes cellular damage.

For these reasons I take a daily regimen of supplements, including a multi-vitamin and mineral formula, extra B, C, Omega 3, and E, as well as several other supplements. They are made by Shaklee, which guarantees that they do not have any residues of pesticides, herbicides or contaminants of any kind.

- Vitamins C, D and E. These vitamins are powerful antioxidants that fight free radicals, compounds that can damage your cartilage. Studies show that patients with OA who supplement with vitamins C and E have less pain and a slower progression of their arthritis. Vitamin D is essential for good bone strength and healthy cartilage.
- Glucosamine sulfate(hydrochloride). This compound is naturally produced in the body and helps to stimulate the production of cartilage. Studies show that glucosamine supplements help relieve pain and improve mobility in osteoarthritis patients. The formula I take is made by Shaklee and is called Joint Health. It also includes an herb called cat's claw, which works synergistically with the glucosamine. As with all supplements, buy the best quality you can afford. Unfortunately, the supplement industry is not well regulated and some low-end brands have artificial colors and binders, as well as being contaminated with pesticides, herbicides or heavy metals. If the glucosamine you are taking doesn't seem to be working, try a different brand.
- Omega-3 fatty acids(Shaklee's Omega Guard). Fish oils provide powerful anti-inflammatory properties and help lubricate the joints.
- Ginger and tumeric. These herbs are both powerful antioxidants and anti-inflammatories. They may be used as spices, or taken as supplements. At the office we carry one made by Pure Encapsulations called "AI" that has both these herbs. Another popular formulation is called "Zyflamed" which you can get at most health food stores.