What is Arthritis?

There are more than 100 forms of arthritis currently identified. The common thread among these 100-plus conditions is that they all affect the musculoskeletal system and specifically the joints. Arthritis-related joint problems include pain, stiffness, inflammation and damage to joints. This damage often leads to joint pain, weakness, and instability that can interfere with the most basic daily tasks such as walking, climbing stairs, or brushing your teeth.

Together, arthritis and related conditions are a major cause of disability in the United States, costing the U.S. economy more than $124 billion per year in medical care and indirect expenses such as lost wages and production - and costing millions of individuals their health, their physical abilities and, in many cases, their independence.

But there is good news: advancing research has found many new ways to combat the pain and symptoms of arthritis. Many valuable support systems exist to help patients and their families deal with the pain and other symptoms and effects of this condition.

Get the Facts About Arthritis

Arthritis is a complex disorder with numerous different forms. It is the leading cause of disability in people age 55 or older, and it is estimated that more than 40 million Americans suffer from some form of arthritis.

This guide is designed to give you information about arthritis - its causes, its symptoms, and the treatments available - to assist you in conversations with your health professional. You will also find information about where to get help and support, whether you have been diagnosed with arthritis or if someone you love is suffering from it.
Causes and Risk Factors of Arthritis

The cause of arthritis depends on the type of arthritis diagnosed. The two most common forms of arthritis are osteoarthritis and rheumatoid arthritis. Although there are many theories about what causes arthritis, for most forms the exact cause is still not known.

Some forms of arthritis can be caused by injury to the joint affected, while others seem to be brought on by an infection. Still others seem to be caused purely by aging.

What Are the Risk Factors of Arthritis?

Some risk factors for arthritis are things that you can control, while other risk factors are things that you cannot change.

Risk factors that you cannot control include:

- Age. The risk of developing most types of arthritis increases with age.
- Gender. Most types of arthritis are more common in women; 60% of all people with arthritis are women.
- Genetics. Specific genes are associated with a higher risk of certain types of arthritis, such as rheumatoid arthritis (RA), systemic lupus erythematos (SLE), and ankylosing spondylitis.

Risk factors that are within your control include:

- Weight. Excess weight can contribute to both the onset and progression of knee osteoarthritis.
- Injury. Damage to a joint can contribute to the development of osteoarthritis in that joint.
- Infection. Many microbial agents can infect joints and potentially cause the development of various forms of arthritis.
- Occupation. Certain occupations involving repetitive knee bending and squatting are associated with osteoarthritis of the knee.

Who is affected by arthritis?

- Arthritis sufferers include men and women, children and adults.
- Approximately 350 million people worldwide have arthritis.
- Nearly 40 million people in the United States are affected by arthritis, including over a quarter million children.
- More than 27 million Americans have osteoarthritis.
- Approximately 1.3 million Americans suffer from rheumatoid arthritis.
- Nearly 60% of Americans with arthritis are women.
Symptoms Of Arthritis

The symptoms of arthritis can differ depending on the type of arthritis the patient is suffering from. Symptoms of arthritis include pain and limited function of joints. Inflammation of the joints from arthritis is characterized by joint stiffness, swelling, redness, and warmth. Tenderness of the inflamed joint is also common.

Because some of the forms of arthritis are rheumatic diseases, they can cause symptoms affecting various organs of the body that do not directly involve the joints. Therefore, symptoms in some patients with certain forms of arthritis can also include fever, swelling of the glands, weight loss, fatigue, and even symptoms from abnormalities of organs such as the lungs, heart, or kidneys.

How is Arthritis Diagnosed?

There is no one single test to diagnose arthritis. If your doctor suspects you may be suffering from arthritis, he or she will perform a series of tests and assessments to diagnose the condition.

Some tests your doctor may recommend are:

- Physical examination to check for tenderness, redness, warmth, stiffness or fluid in a joint
- Personal and family medical history
- Blood tests
- Urine tests
- X-rays and other imaging tests
- Removal of fluid from a swollen joint for examination (joint aspiration)

If you have pain, stiffness, swelling, or difficulty moving a joint or doing everyday activities, talk with your healthcare professional. These may be signs and symptoms of arthritis, and there are a number of options available to treat your pain and other symptoms.
Treating Arthritis

Although there is currently no cure for arthritis, there are several treatments available to treat the symptoms and chronic pain often found with the condition. These treatments can significantly improve quality of life for those suffering from arthritis.

Depending on the type of arthritis, your treatment goals may differ.

Some of the goals of treatment can include:

- Decreasing and managing the pain and other symptoms
- Slowing the progression of the condition
- Preserving mobility and range of motion
- Preventing or minimizing joint damage or physical deformities

Some of the most common treatments for the symptoms of arthritis include:

**Medications.** Often, individuals with early symptoms of arthritis will self-treat with over the counter medications such as ibuprofen or acetaminophen. Other over the counter options are available as well, including topical creams.

Depending on the severity of the arthritis, your healthcare professional may choose to prescribe one or more medications. There are several drug classes for treating arthritis.

**Alternative Pain Management.** Many patients prefer to manage their pain without the use of drugs. Alternative options exist that can help you to manage your pain as a replacement or supplement to a drug regimen.

Some of the options available to you include muscle stimulators, which can help ease the pain of arthritis by sending small electrical impulses through the skin to the underlying motor units (nerves and muscles) to create an involuntary muscle contraction.

Another category of alternative pain management options is heat and cold therapy. Systems are available that allow you to target specific areas of your body for pain relief by using hot or cold water to help relax tight muscles or ease the pain of arthritis.

**Complementary Medicine.** There are many things you can do in addition to your other treatment options. Your healthcare professional can determine whether any complementary actions are right for you.

Some of the complementary options available include:

**Regular exercise.** Strongly recommended for arthritis patients. Exercise can reduce pain and improve physical function, muscle strength, and quality of life for people with arthritis.

**Staying active with osteoarthritis**

There is no cure for osteoarthritis but staying active helps sufferers to protect joints, reduce pain and maintain independence. Osteoarthritis will get worse over time but that does not mean that you cannot do things today that can protect your joints in the future. It can be difficult to use joints when they feel painful and are swollen and inflamed, but not using joints means they will become weak over time. Weakness of joints results in stiff muscles and that will make it even harder for you to get around. When you are not moving, the cycle of pain starts all over again. Discussing pain control with doctor can help you to stay active and to keep moving.

**Benefits of Exercise**

Exercise is the best way to remain active and to improve health. Exercise helps you with pain management and maintaining and improving balance, joint function, posture and overall energy levels. Moreover, exercise improves flexibility and promotes muscle and bone strength. Another benefit is the promotion of joint lubrication, which allows bones to move freely with less pain and stiffness. In addition, exercise, combined with a healthy diet, promotes weight loss, and less stress on joints means less pain.
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<tr>
<th>Type of Medication</th>
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<tr>
<td><strong>NSAIDs</strong> (nonsteroidal anti-inflammatory drugs)</td>
<td>A large class of medications used to treat arthritis pain and inflammation. Three are three categories of NSAIDs - Salicylates (acetylated, such as aspirin, and non-acetylated), traditional NSAIDs, and COX-2 selective inhibitors.</td>
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<tr>
<td><strong>COX-2 Inhibitors</strong></td>
<td>COX-2 selective inhibitors are a subset of the NSAIDs (nonsteroidal anti-inflammatory drugs) that are used to treat the pain and inflammation of arthritis.</td>
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<td><strong>Pain Medication</strong> (analgesics)</td>
<td><em>Pain Medication</em> (analgesics) Analgesics (also called painkillers, pain killers, pain medications, pain relievers) are drugs designed to suppress the pain mechanism. Pain relief is a significant part of arthritis treatment.</td>
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<tr>
<td><strong>Corticosteroids</strong></td>
<td>Corticosteroids, also called glucocorticoids or just “steroids”, are powerful drugs that can quickly reduce inflammation and pain. To maximize benefits, but minimize potential side effects, corticosteroids are usually prescribed in low doses or for short durations.</td>
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<tr>
<td><strong>DMARDs</strong> (disease-modifying anti-rheumatic drugs)</td>
<td><em>DMARDs</em> (disease-modifying anti-rheumatic drugs) and immunosuppressants are medications used to treat arthritis and other rheumatic conditions. DMARDs and immunosuppressants are drugs that help reduce inflammation and slow disease progression.</td>
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When deciding on an exercise routine, consider exercises that put the least amount of stress on your joints. In addition, you can avoid injuries by exercising in short increments of time and resting in between. Less strenuous exercises include low impact activities such as walking, water exercises and light weight lifting.

**Walking**

Walking provides many benefits including the toning of muscles and joint protection of the spine, hips, knees, and feet. The benefits to the spine include providing back pain relief and strengthening the muscles of the back and abdomen to reduce back pain. Benefits to hips include the reduction of fractured, the strengthening of muscles and bones, and the shifting of pressure on joints to strong muscles to reduce pain in the hip area. The knees benefit because movement increases production of synovial fluid to keep joints lubricated. When joints are properly lubricated, pain and stiffness decreases. Lastly, the feet benefit from walking because body weight is lowered thereby reducing the load on other joints and stress on the feet.

**Aquatic Exercise**

Water exercise can include activities such as water walking and swimming. For arthritis sufferers who are hesitant to exercise because of pain, water exercise offers a good starting point. In the water, your body is less stressed and it is easier to move when joints are less stressed. Many types of aquatic programs and water exercises can benefit people with osteoarthritis and you can check with your local YMCA or locate a program through your local Arthritis Foundation office. Water-walking offers an alternative to walking in particular during the summer months. In fact, it is an activity has been increasingly popular for those suffering from arthritis. Again, your local YMCA or Arthritis Foundation office is a good resource for locating a water-walking program.

**Resistance Exercise/Weight Lifting**

Light weight lifting can help relieve pain from sore joints of the arms, hands, wrists, and fingers. Many people believe that strength training can make arthritis worse but this is not the case. In fact, lifting weights can help arthritis sufferers to function better and help to reduce pain, swelling and stiffness in your arms, hands, wrists and fingers. Lifting weights helps to strengthen muscles and strong muscles can take the burden off joints. It is best to check with your doctor before starting a strength-training program and to seek the guidance of a professional to learn proper strength training techniques. A trained professional can also teach correct positioning to avoid muscle tears and increased swelling and pain of joints.
Yoga
Another well-liked and effective exercise option for people with arthritis is yoga. A popular misconception is that yoga focuses merely on increasing flexibility. Yoga also emphasizes postural alignment, strength, endurance and balance. Early scientific studies of patients with arthritis participating in yoga have shown promising results with some improvement in joint health, physical functioning, and mental/emotional well-being.

If you want to try yoga to see if it will be a good fit for your exercise needs, here are a few key questions to ask:

1. **What style of yoga is offered in the class?**
   There are many styles of yoga and not all are appropriate for people with arthritis. Anusara, Integral, Iyengar, and Viniyoga are good options.

2. **Is the instructor certified?**
   Certification ensures that your instructor has a minimum level of training and practical experience.

3. **Are beginner classes offered?**
   It is most helpful to be grouped with students of similar experience and ability.

4. **Does the instructor have experience teaching students with arthritis?**
   If you can, find a teacher who is familiar with your condition and can help you make proper adjustments.

Don’t Overdo It
Research has shown that staying active is vital to reducing joint pain and slowing the progression of arthritis. Your doctor can help you with pain management but you can help yourself by resting as necessary, by not overusing joints, losing weight, eating healthy, and making use of hot and cold compresses before and after exercises. You can also avoid foods that cause inflammation and contain high water content. Most importantly - stay positive and keep moving.

**Eating well.** Eating a nutritious diet is important for maintaining ideal weight and for bone health too. There is no known diet which can cure arthritis, but eating well is important.

What to Eat and NOT Eat If You Have Arthritis

**1- Eat more omega 3 fatty acids.** Studies suggest that you need to get 3 grams of omega-3 fatty acids per day. Eating fish twice a week is a good habit to get into because it is full of eicosapentaenoic and docosahexaenoic which are two very potent anti-inflammatory omega 3 fatty acids. Fatty fish such as salmon, trout, and tuna are good sources for these acids.

**2- Include more fruits and vegetables in your diet.** Antioxidants found in many fruits and vegetables may protect against tissue damage around the joints. The brighter fruits and vegetables such as blueberries, spinach, and peppers have more antioxidants.

**3- Cut back on foods that are high in saturated fats** such as red meat, cheese and ice cream. Saturated fats can increase prostaglandin E2 which contributes to inflammation.

**4- Avoid nightshade plants** such as eggplant, tomatoes and potatoes. Those with arthritis tend to be extra-sensitive to nightshade plants. Eliminating them from their diet may bring relief. Nightshades contain high levels of alkaloids which cause the bones to excrete various minerals from the body.

**5- Consume more calcium and vitamin D.** The lack of calcium can cause bone loss, muscle cramping and hypertension. Inflammatory arthritis tends to accelerate bone loss, and calcium needs vitamin D present in order to work correctly. Several studies suggest that adequate vitamin D intake may decrease the risk of autoimmune diseases such as Rheumatoid Arthritis.