

## Analgesic

A type of medication used to treat pain.

## Antibody

A type of immune cell that attacks foreign or damaging substances called antigens in the body, such as a virus.

## Anti-CCP

An antibody directed against cyclic citrullinated protein (CCP) in the body. The presence of anti-CCP in the blood is a strong indicator of rheumatoid arthritis; however, its absence does not rule out the diagnosis. It is detected by a blood test.

## Antigen

A foreign or damaging substance that begins an immune reaction in the body.

## Antinuclear antibody (ANA)

An immune cell directed against a cell's nucleus (the "control center"). Some healthy people have ANA. High levels of "autoantibodies"—antibodies that attack the body's own cells as if they were foreign—may indicate a connective tissue disease, such as lupus. ANA is detected through a blood test.

## Aspiration

The withdrawal of fluid from the body, such as synovial fluid from a joint.

## Autoimmune disease

A disease in which the immune system, the body's natural system of defense from foreign invaders (such as viruses and bacteria), turns against the "self" and causes damage to the body's healthy tissues.

## Biologics

A subset of disease-modifying antirheumatic drugs (DMARDs) used to treat autoimmune or inflammatory types of arthritis. Biologics are unique in that they are derived from living sources rather than created with chemicals, like traditional DMARDs. Biologics must be injected or infused. They treat the signs and symptoms of disease and slow or stop progression in order to prevent or minimize permanent joint damage.

## Body mass index (BMI)

A measure to assess weight status—underweight, normal, overweight or obese—which is calculated by dividing weight (in kilograms squared) by height (in meters squared).

## Bouchard's nodes

Knobby bone growths that may appear on the middle knuckles of people with osteoarthritis.

## Cartilage

Smooth, rubbery tissue that covers the ends of the bones that make up a joint; cartilage acts as a shock absorber and its slick surface allows the joint to move smoothly. Loss of and damage to cartilage are key features of osteoarthritis.

## Chronic illness

An illness that lasts for a long time—sometimes a lifetime. (In contrast, an acute illness comes on suddenly and is over within a relatively short period of time.)

## Complementary therapy

Any practice, therapy, or substance used in conjunction with conventional treatment.

## Computed tomography (CT) scans

An imaging technique that produces a 3-dimensional picture of bone or internal tissues and organs.

## Corticosteroids

A group of powerful anti-inflammatory drugs (also called glucocorticoids).

## C-reactive protein

A protein that is measured through a blood test to assess the level of systemic inflammation.

## Cytokines

Immune system proteins that are involved in the inflammatory response.

## Disease-modifying antirheumatic drugs (DMARDs)

A diverse class of medications used to treat the signs and symptoms of autoimmune and inflammatory forms of arthritis, and to slow or stop (“modify”) the progression of these diseases in order to prevent or minimize permanent joint damage.

## Endurance (or aerobic) exercise

Exercises—such as swimming, walking, and cycling—that require a large amount of oxygen to fuel the body’s large muscles. Aerobic fitness can be very effective in maintaining mobility, function, and relieving the pain of arthritis.

## Enthesis

(plural: entheses) The place where tendons attach to bones.

## Erosion

The wearing away of cartilage and bone in a joint, caused by inflammation of the joint lining.

## Erythrocyte sedimentation rate (“sed rate”)

A test measuring the rate at which red blood cells (erythrocytes) clump together and fall to the bottom of a test tube, like sediment falling to the bottom of a glass of water. A high (fast) sedimentation rate signals higher than normal inflammation.

## Fatigue

A general worn-down feeling or state of low energy. Fatigue can be caused by excessive physical, mental or emotional exertion, lack of sleep, or inflammation and disease.

## Flare

A term used to describe a period of high disease activity, as measured by lab tests, and seen in increased signs and symptoms.

## Genetic predisposition

Being at high risk for a disease or health factor due to genes. Family health history can reveal potential genetic risk.

## Heberden's nodes

Knobby bone growths that may appear on the knuckle nearest the nail of people with osteoarthritis.

## Hyaluronic acid

A natural substance in the synovial fluid of joints that gives the fluid thickness and shock-absorbing properties. Injections of synthetic hyaluronic acid are sometimes used to treat the symptoms of knee osteoarthritis.

## Immune system

The body's complex biochemical system for defending against bacteria, viruses, or other foreign invaders. Among the immune system's many components are a variety of cells (such as T cells and cytokines), organs (such as lymph glands), and chemicals (such as histamine and prostaglandins).

## Immunosuppressant drugs

Drugs that suppress the immune system. Types of immunosuppressive drugs include disease-modifying antirheumatic drugs (DMARDs), including the biologic DMARDs and corticosteroids.

## Inflammation

A response to injury or infection that involves a sequence of biochemical reactions. Inflammation can have general effects, causing fatigue and fever; affect organ systems (called systemic), causing cardiovascular or lung disease; or occur in a specific location, for example in joints where it causes redness, warmth, swelling, and pain.

## Joint count

A physical examination done by a doctor to determine the number of joints that are affected by arthritis.

## Ligaments

Tough bands of connective tissue that attach bones to bones and help keep them together at a joint.

## Magnetic resonance imaging (MRI)

A procedure in which a very strong magnet is used to create clear, detailed images of cross-sections of the body.

## Methotrexate

A prescription drug that treats several kinds of cancer, rheumatoid arthritis, and psoriasis.

## Nonsteroidal anti-inflammatory drugs (NSAIDs)

A class of medications that works to reduce pain, fever, and inflammation by blocking inflammatory substances called prostaglandins. Some NSAIDs are available over-the-counter. About a dozen others are available with a prescription.

## Obesity

The state of being at least 20 percent over ideal body weight or having above a body mass index (or BMI) above 30. Obesity is a risk factor for some forms of arthritis, including osteoarthritis, gout, and inflammatory types of arthritis, as well as other chronic diseases, such as diabetes and cardiovascular disease.

## Occupational therapist (OT)

A licensed healthcare professional trained to evaluate the impact of a disease, such as arthritis, on daily activities. OTs can help devise easier ways to perform activities that reduce stress on joints and can prescribe splints and braces to protect and stabilize joints and assistive devices to help with daily activities.

## Opioid

A type of prescription analgesic (pain relieving) drug that reduces pain by blocking signals as they travel from the central nervous system to the brain.

## Pain

A sensation or perception of hurt, ranging from mild to severe, that usually occurs in response to injury, disease or functional disorder. Acute pain, like from a stubbed toe, stems from nerve endings stimulated by tissue damage, is temporary and improves with healing. Chronic, or persistent, pain can occur when the central nervous system becomes overly sensitive after an extended period of pain.

## Physical therapist (PT)

A licensed healthcare professional trained to treat medical conditions with exercise and movement and guide rehabilitation, or physical recovery, after loss of function (like after surgery or injury).

## Range of motion

The distance and angles at which joints can be moved, extended, and rotated in various directions. Range-of-motion exercises improve mobility and function.

## Remission

A state of very low or no disease activity, when signs and symptoms of inflammatory arthritis disappear. People can experience remission while on medication or off medication. In some cases, remission off medication is permanent.

## Rheumatoid factor

An autoantibody that attacks the body, or "self," as if it is foreign. It is present in some people with rheumatoid arthritis.

## Rheumatoid nodules

Lumps of tissue form under the skin, often over bony areas exposed to pressure, such as on fingers or around elbows, in people with rheumatoid arthritis.

## Rheumatologist

A doctor who specializes in diagnosing and treating arthritis and related diseases.

## Sedentary

A state of getting very little to no physical activity on a regular basis. Sedentary people lose muscle mass and strength, becoming "deconditioned" due to inactivity.

## Self-efficacy

A person's belief that with self-management, smart behaviors and actions, one can improve one's symptoms and ability to cope and manage the effects of a disease.

## Self-management

The set of behaviors and actions that a person with chronic illness takes to improve health and well-being, including adhering to a treatment plan, staying physically active, losing weight (if needed), and balancing rest and activity.

## Seronegative

Characterized by a negative blood test for the autoantibodies rheumatoid factor or anti-CCP. Doctors consider whether a patient is seronegative or seropositive when considering a rheumatoid arthritis diagnosis.

## Seropositive

Characterized by a positive test for the autoantibodies rheumatoid factor or anti-CCP. The majority of people with rheumatoid arthritis test positive for rheumatoid factor, making the test result useful when making a diagnosis.

## Strengthening exercises

Exercises that help maintain or increase muscle strength.

## Stress

A high-alert state in the body, fueled by physical and mental reaction to frightening, exciting, dangerous, or irritating circumstances.

## Stressors

Factors, situations, and events that cause personal, family, or relationship stress.

## Synovial fluid

A slippery liquid secreted by the synovium (the membrane that lines a joint) that lubricates the joint, reducing friction between bones and making movement easier.

## Synovitis

Inflammation of the synovium, the membrane that lines a joint. Synovitis is a common feature of inflammatory forms of arthritis, such as rheumatoid arthritis.

## Systemic disease

Refers to a disease that affects organ systems of the body. An example is rheumatoid arthritis, in which inflammation can occur not only in joints, but also in the heart and blood vessels of the cardiovascular system and the lungs of the respiratory system.

## Tendons

Thick bands of connective tissue that attach muscles to bones.

## Topical rubs

Ointments, gels, or creams that are rubbed on the skin over joints or muscles to ease pain. Some contain active ingredients such as capsaicin, menthol, camphor, or salicylates.

## Uric acid

A bodily waste product excreted through the kidneys. When the body produces too much uric acid or doesn't excrete it efficiently, excess uric acid occurs. In some people, uric acid can deposit as crystals in joints and other tissues and set off painful attacks—a condition known as gout. Uric acid can be measured by a blood test.

## Viscosupplements

A synthetic substance injected into joints affected by osteoarthritis to replace the natural hyaluronic acid that gives joint fluid its ability to lubricate joints for ease of movement. This process is known as viscosupplementation. Viscosupplements are currently approved only for osteoarthritis of the knee but are being tested on other joints.

## X-ray

A 2-dimensional image of the body's tissues. X-ray images can reveal bone deformities, indicating arthritis damage, and the narrowing of joint space, indicating arthritis damage. X-rays can help diagnose arthritis and monitor its progression.