

Chapter 1

What Is Arthritis?

In This Chapter

- ▶ Discovering how arthritis affects your body
 - ▶ Becoming aware of the various types of arthritis
 - ▶ Recognizing the signs and symptoms of arthritis
 - ▶ Identifying the major causes of arthritis
 - ▶ Discovering who is most likely to get the various forms of the disease
 - ▶ Considering the treatment options
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Ouch! There it goes again! That grinding pain in your hip, those aching knees that make walking from the kitchen to the bedroom a chore, the stiff and swollen fingers that won't allow you to twist the lid off a sticky jar or even sew on a button. Arthritis seems to get to everybody sooner or later — slowing us down, forcing us to give up some of our favorite activities, and just generally being a pain in the neck (sometimes literally!). In more advanced cases, the disease can seriously compromise quality of life as sufferers surrender their independence, mobility, and sense of usefulness while being relentlessly worn down by pain.

The good news is that you can manage your arthritis, if not cure it, with a combination of medical care, simple lifestyle changes, and good old common sense. You don't have to spend your life sitting at home in an easy chair, gritting your teeth from pain, or hobbling around the backyard with a cane. Although you may not be able to run a marathon or do back-flips like you did when you were 13, if you follow the program outlined here, you should be able to do the things you really want to do — such as take a brisk walk in the park, carry a sleeping child upstairs to bed, or swing a golf club with the best of them. Arthritis may affect a lot of people, but thanks to intensive research over the past several years, we now know a lot more about how to handle it.

Understanding How Arthritis Affects Your Joints

So what exactly is arthritis, this disease that brings us so much misery and pain? Unfortunately, we can't provide one easy answer to that question, because arthritis involves a group of diseases — each with its own cause, set of symptoms, and treatments. However, these diseases do have the following in common:

- ✓ They affect some part of the joint.
- ✓ They cause pain and (possibly) loss of movement.
- ✓ They often bring about some kind of inflammation.

As for the causes of these different kinds of arthritis, they run the gamut from inheriting an unlucky gene to physical trauma to getting bitten by the wrong mosquito.

The word *arthritis*, which literally means joint inflammation, is derived from the Greek words *arthros* (joint) and *itis* (inflammation), and its major symptom is joint pain. Although the same group of ailments is sometimes called *rheumatism*, it's usually referred to as arthritis, so that's what we call it in this book. The word *arthralgia*, a term that's used much less frequently, refers to joint pain alone. According to the Arthritis Foundation, arthritis affects some 70 million Americans (one out of every three people). That's a big chunk of the population.

Saying hello to your joints

Before you can understand what's wrong with your joints, you need to understand what a joint is and how it works. Any place in the body where two bones meet is called a joint. Sometimes those bones actually fuse; your skull is an example of an area with fused bones. But in the joints that can develop arthritis, the bones don't actually touch. As you can see in Figure 1-1, a small amount of space exists between the two bone ends. The space between the ends of the bones keeps them from grinding against each other and wearing each other down.

Bones are living tissue — hard, porous structures with a blood supply and nerves — that constantly rebuild themselves. Bones protect our vital organs and provide the supporting framework for the body. Without bones, we would be nothing more than blobs of tissue — like tents without supporting poles!

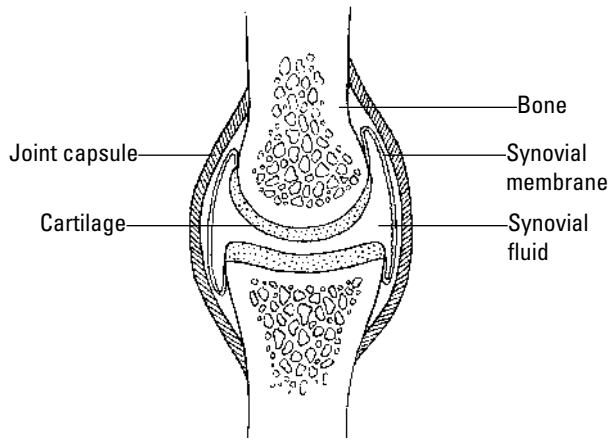


Figure 1-1:
Anatomy of
a healthy
synovial
joint.

But bones are more than broomsticks that prop us up; fortunately, they don't leave us rigid and awkward. The 200-plus bones that reside in our bodies are connected together in some 150 joints, giving us remarkable flexibility and range of motion. If you don't believe it, just watch a gymnast, ballet dancer, or figure skater execute a handspring, arabesque, or triple axel. But you don't have to be an athlete or contortionist to enjoy the benefits of joint flexibility. Just think about some of the things you do regularly — such as twisting around while you sit in the front seat of your car to grab something off the backseat floor. Now imagine how limiting it would be if you had fewer joints or if they didn't move the way they do!



Other structures surrounding the joint, such as the muscles, tendons, and *bursae* — small sacs that cushion the tendons — support the joint and provide the power that makes the bones move. The joint capsule wraps itself around the joint, and its special lining, the *synovial membrane* or *synovium*, makes a slick, slippery liquid called the *synovial fluid*. This liquid fills that little space between the bone ends. Finally, the bone ends are capped by *cartilage* — a slick, tough, rubbery material that is eight times more slippery than ice and a better shock absorber than the tires and springs on your car! Together, these parts make up the joint, one of the most fascinating bits of machinery found in the body.

Cartilage: The human shock absorber

Cartilage is extremely important for the healthy functioning of a joint, especially if that joint bears weight, like your knee. Imagine for a moment that you're looking into the inner workings of your left knee as you walk down the street. When you shift your weight from your left leg to your right, the pressure

on your left knee is released. The cartilage in your left knee then “drinks in” synovial fluid, in much the same way that a sponge soaks up liquid when immersed in water. When you take another step and transfer the weight back onto your left leg, much of the fluid squeezes out of the cartilage. This squeezing of joint fluid into and out of the cartilage helps it respond to the off-and-on pressure of walking without shattering under the strain.

Can you imagine the results if we didn’t have this watery cushion within our joints? With the rough, porous surfaces of the bone ends pitted against each other, bones would grind each other down in no time. One thing is certain: Nobody would be getting around too easily without joint fluid and cartilage.

Types of joints

To accommodate the bends, twists, and turns that we all perform without even thinking, the skeletal system is made up of different shapes and sizes of bones, which connect to form different kinds of joints. The joints are categorized according to how much motion they allow:

- ✓ **Synarthrodial joints** allow no movement at all. You can find these in the skull, where the bones meet to form tough, fibrous joints called *sutures*. Because they don’t move, arthritis doesn’t affect them.
- ✓ **Amphiarthrodial joints**, such as those in the spine or the pelvis, allow limited movement. Generally, these joints aren’t attacked by arthritic conditions as often as others. (A slipped disc is not arthritis.)

Strange-but-true joint points

Here are a couple of things you may not know about your joints:

- ✓ By the time a fetus is four months old, its joints and limbs are in working order and ready to move.
- ✓ A newborn baby has 350 bones, many of which fuse to form the 206 bones of the adult body.
- ✓ Cartilage is 65 percent to 85 percent water. (The amount of water in your cartilage generally decreases as you get older.)
- ✓ When you run, the pressure on your knees can increase to ten times that of your body weight.
- ✓ Not a single man-made substance is more resilient, a better shock absorber, or lower in friction than cartilage.

✓ **Synovial joints** allow a wide range of movement; most of our joints fall into this class. Synovial joints come in all kinds of interesting variations including those that glide, hinge, pivot, look like saddles, or have a ball-and-socket type structure. (For more on these joints, take a look at the section “Looking at the types of synovial joints” later in this chapter.) Because of the synovial joints, you can bend over and pick a flower, kick up your heels while swing dancing, reach for a glass on a high shelf, and turn around to see what’s going on behind you. Unfortunately, these joints are also the ones most likely to be hit with arthritis, precisely because they do move!

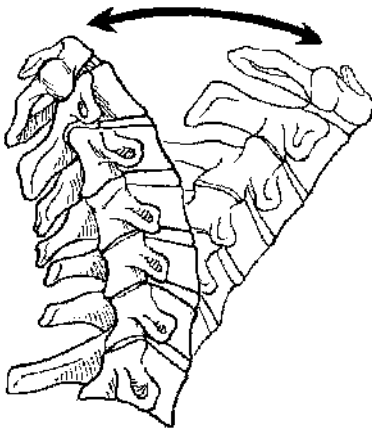
Looking at the types of synovial joints

Because of their tendency to become arthritic, synovial joints are the ones that we discuss the most throughout this book. Synovial joints come in a wide variety of shapes and sizes to accommodate a wide variety of movements.

Gliding joints

A gliding joint contains two bones with somewhat flat surfaces that can slide over each other. The vertebrae in your spine are connected by gliding joints, allowing you to bend forward to touch your toes and backward to do a back-bend (well, maybe!). See Figure 1-2 for an example of a gliding joint.

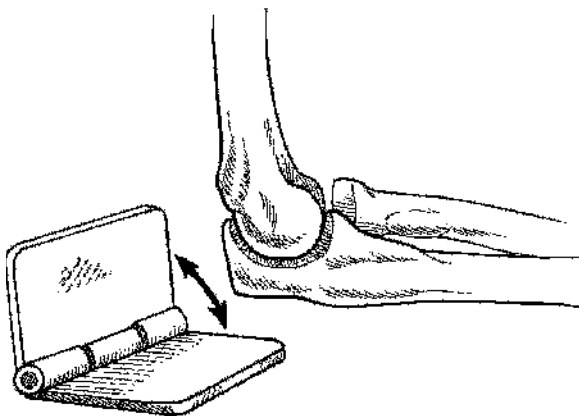
Figure 1-2:
A gliding joint. The gliding joint helps keep your vertebrae aligned when you bend and stretch.



Hinge joints

You can find hinge joints in your elbows, knees, and fingers. These joints open and close like a door. But just like a door, hinge joints only go one way — you can't bend your knee up toward your face, only back toward your rear. See Figure 1-3 for an example of a hinge joint.

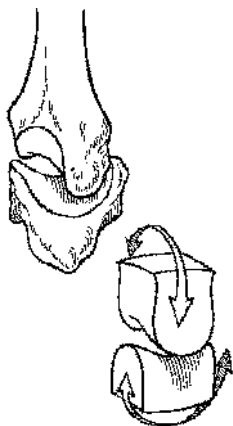
Figure 1-3:
A hinge joint. Hinge joints bend only one way.



Saddle joints

This joint looks like a horse's back with a saddle resting on it. One bone is rounded (convex) and fits neatly into the other bone, which is concave. The saddle joint moves up and down and side to side, but it doesn't rotate. Your wrist and your thumb have this kind of joint. See Figure 1-4 for an example of a saddle joint.

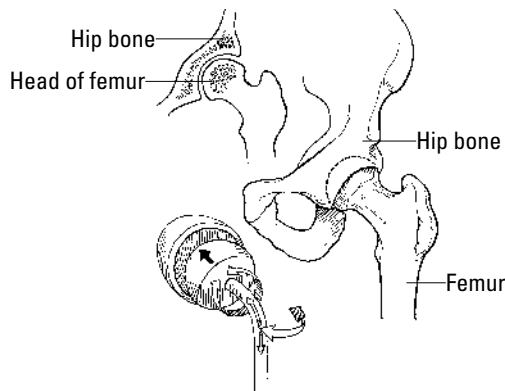
Figure 1-4:
A saddle joint. The saddle joint moves up and down and side to side.



Ball-and-socket joints

This is truly a freewheeling joint — it's ready for anything! Up, down, back, forth, or around in circles. The bone attached to a ball-and-socket joint can move in just about any direction. The end of one bone is round, like a ball, whereas the other bone has a neat little cave that the ball fits into. Your shoulders and hips have ball-and-socket joints. Swimming the backstroke is a perfect example of the kind of range of motion made possible by these joints. See Figure 1-5 for an example of a ball-and-socket joint.

Figure 1-5:
A ball-and-socket joint. These joints can move just about any direction — up, down, back, forth, or around in circles.



Distinguishing Between Arthritis and Arthritis-Related Conditions

Some organizations define arthritis as a group of more than 100 related diseases, ranging from bursitis to osteoarthritis. But in this book, we use the following classifications, which conform to those widely accepted by the medical community:

- ✓ “True” arthritis
- ✓ Arthritis as a “major player”
- ✓ Arthritis as a “minor player”
- ✓ Arthritis as a “companion condition”

In the following subsections, we go over the various types of arthritis and arthritis-related diseases and their classifications. We also discuss each disease in greater detail in Chapters 2, 3, 4 and 5.

Defining “true” arthritis

True arthritis isn’t a medical term; it’s just a convenient way of referring to the group of ailments in which arthritis is the primary disease process and is a major part of the syndrome. Osteoarthritis and rheumatoid arthritis are the best-known members of this group, which can cause problems ranging from mild joint pain to a permanently bowed spine.

The following include conditions in which arthritis is the major part of the syndrome and the primary disease process:

- ✓ **Ankylosing spondylitis:** A chronic inflammation of the spine, this disease can cause the vertebrae to grow together, making the spine rigid. Although the cause is unknown, heredity is a factor.
- ✓ **Gout:** This “regal” form of arthritis is caused by the build-up of a substance called uric acid, which forms sharp crystals that are deposited in the joint. These needlelike crystals cause inflammation leading to severe pain and are most commonly found in the knees, the wrists, and the “bunion” joint of the big toe. Genetic factors, diet, or certain drugs may cause gout.
- ✓ **Infectious arthritis:** Bacteria, viruses, or fungi that enter the body can settle in the joints, causing fever, inflammation, and loss of joint function.
- ✓ **Juvenile arthritis:** This is a catchall term for the different kinds of arthritis that strike children under the age of 16, the most common of which is *juvenile rheumatoid arthritis* (JRA). Pain or swelling in the shoulders, elbows, knees, ankles, or toes; chills; a reappearing fever; and sometimes a body rash are the typical symptoms of JRA. The cause is unknown.
- ✓ **Osteoarthritis (OA):** In this, the most common type of arthritis, the cartilage breaks down, exposing bone ends and allowing them to rub together. The result can be pain, stiffness, loss of movement, and sometimes swelling. Osteoarthritis is most often found in the weight-bearing joints, such as the hips, knees, ankles, and spine, but it can also affect the fingers. It may be the result of trauma, metabolic conditions, obesity, heredity, or other factors.
- ✓ **Pseudogout:** Like gout, pseudogout is caused by the deposition of crystals into the joint, but instead of uric acid crystals, they’re made from calcium. Pain, swelling, and sometimes the destruction of cartilage can result.

Note: This deposition of calcium crystals is not related to the dietary intake of calcium.
- ✓ **Psoriatic arthritis:** This form of arthritis occurs in people who have the inherited skin condition called *psoriasis*, which causes scaly, red, rough patches on the neck, elbows, and knees, as well as pitting of the nails. Often settling in the joints of the fingers and toes, psoriatic arthritis can cause the digits to swell up like little sausages.

- ✓ **Rheumatoid arthritis (RA):** In this, the second-most common form of arthritis, the immune system turns against the body, causing inflammation and swelling that begins in the joint lining and spreads to the cartilage and the bone. It often affects the same joint on both sides of the body (for example, both wrists).

Classifying arthritis as a “major player”

In the following conditions, arthritis is present and is usually a major part of the syndrome but is not the primary disease process:

- ✓ **Lyme disease:** Caused by a certain type of bacteria transmitted to humans via tick bites, Lyme disease brings about fever, a distinctive red skin lesion in the shape of a bull’s-eye, problems with the nerves and/or heart, and arthritis. Antibiotics are the treatment of choice for this disease.
- ✓ **Reactive arthritis:** An inflammation of the joints, reactive arthritis strikes along with or shortly after the onset of a sexually-transmitted or intestinal infection. The three problems generally associated with reactive arthritis are arthritis, conjunctivitis (inflammation of the eyelid’s lining), and urethritis (inflammation of the urethra).
- ✓ **Scleroderma:** The word *scleroderma* means hard skin. When tiny capillaries and blood vessels become inflamed and the body responds by overproducing collagen, the skin, blood, internal organs, and joints can suffer. The joint stiffness in scleroderma is actually due to the hardening of the skin. An autoimmune disease, scleroderma usually attacks adults rather than children.
- ✓ **Systemic lupus erythematosus:** Yet another disease caused by an immune system gone wrong. In lupus, the body attacks its own tissue, causing inflammation, joint pain, stiffness, permanent damage to the joints, and exhaustion. Although lupus most often affects women of child-bearing age, it *does* strike some men and can occur at nearly any age, including childhood and post-menopause.

Describing arthritis as a “minor player”

In these conditions, arthritis may appear but is a minor part of the syndrome.

- ✓ **Bursitis and tendonitis:** Caused by overusing or injuring a joint, *bursitis* is the inflammation of the fibrous sac that cushions the tendons. *Tendonitis* is the irritation of the tendons, which attach the muscles to the bones.
- ✓ **Paget’s disease:** With Paget’s disease, the breakdown and rebuilding of bone speeds up. The resulting bone is larger but also softer and weaker, making it more likely to fracture. These weakened and deformed bones

cause arthritis to develop in their respective joints, which typically include those of the hip, skull, spine, knee, and ankle. The cause is unknown.

- ✓ **Polymyalgia rheumatica:** Seemingly overnight, severe stiffness may strike in the lower back, hips, shoulders, and neck, making it difficult even to get out of bed, a condition known as polymyalgia rheumatica or PMR. The pain is similar to that of RA, but there's no evidence of any active arthritis. PMR can occur by itself or together with a life-threatening inflammation of the blood vessels called giant cell arteritis (GCA). Symptoms of GCA can occur before, after, or at the same time as PMR, and include headaches, scalp tenderness, hearing problems, jaw pain, difficulty swallowing, and coughing. Anyone experiencing these symptoms should be evaluated by a medical professional immediately.
- ✓ **Sjögren's syndrome:** Another autoimmune disease, Sjögren's syndrome brings about inflammation of the tear glands and saliva glands, causing dryness of the eyes and mouth, hazy vision, cracks at the corners of the mouth, and problems chewing and swallowing. Inflammation of the brain, nerves, thyroid, lungs, liver, kidneys, and, of course, the joints may also be present.

Hypersensitive fingers and toes

Raynaud's phenomenon, a condition that can turn the fingers, toes, and other areas blue or red and cause tingling, numbness, burning, or a pins-and-needles sensation, sometimes occurs in conjunction with (or as a result of) certain arthritis-related conditions (lupus, scleroderma, rheumatic arthritis, and polymyositis to name a few). Prompted by arterial spasm, Raynaud's can cause the hands and feet to become extremely sensitive to cold and to emotional upsets.

Raynaud's can be caused not only by an underlying disease or medical problem but also by repetitive trauma or injuries to the nerves serving the hands or feet, smoking, certain medications, or chemical exposure. Typical attacks include tingling, numbness and whitening of the fingers

(without affecting the thumb), and pain or redness when blood circulation returns (usually within 30 minutes to 2 hours).

There's no single blood test to diagnose Raynaud's: Most doctors diagnose this disease based on a description of your signs and symptoms. Your doctor might try to bring about an episode of Raynaud's by putting your hands in cool water or exposing you to cold air. Treatment of the disease generally involves protecting yourself against the elements (wearing gloves and socks and staying warm) and avoiding workplace triggers, such as vibrating tools. In severe cases of Raynaud's, doctors prescribe medication to dilate the blood vessels. See Chapter 5 for more on Raynaud's phenomenon.

Experiencing arthritis as a “companion condition”

These following conditions are linked to arthritis; that is, arthritis may be present, but it constitutes another separate disease process:

- ✓ **Carpal tunnel syndrome:** This syndrome results when pressure on a nerve in the wrist makes the fingers tingle and feel numb. This syndrome is usually caused by overuse of the wrist. Permanent muscle and nerve damage can occur if carpal tunnel isn't treated.
- ✓ **Fibromyalgia:** Also known as fibromyalgia syndrome (FMS), this condition involves pain in the muscles and tendons that occurs without a specific injury or cause. Fibromyalgia can make you “hurt all over,” particularly in certain tender points in the neck, upper back, elbows, and knees. Those with fibromyalgia can suffer from disturbed sleep, fatigue, stiffness, and depression. The cause is unknown. Physical or mental stress, fatigue, or infections may trigger this disease.
- ✓ **Myositis:** This disease causes inflammation of the muscles, which can take one of two forms: *polymyositis* — an inflammation of the muscle that causes muscle weakening and breakdown, as well as pain, and *dermatomyositis* — polymyositis plus rashes that can lead to skin scarring and changes in pigmentation.

Deciding Whether It's Really Arthritis: Signs and Symptoms

With all the different kinds of arthritis, how do you know whether you have one of them? Remember two things: Arthritis can strike anyone at any time, and many times you may find it difficult to tell whether the pain you're experiencing is serious enough to warrant medical attention. Almost everyone has had an ache or pain at some time or has overextended herself physically, but you need to know what is minor and temporary, and what may be serious and long term. Knowing what to watch for can make a difference in your treatment and physical comfort. Typical warning signs of arthritis include:

- ✓ **Joint pain:** This not only includes steady, ever-present pain, but also off-again-on-again pain, pain that occurs only when you're moving or only when you're sitting still. In fact, if your joints hurt in any way for more than two weeks, you should see your doctor.

- ✔ **Stiffness or difficulty in moving a joint:** If you have trouble getting out of bed, unscrewing a jar lid, climbing the stairs, or doing anything else that involves moving your joints, consider it a red flag. Although difficulty moving a joint is most often the result of a muscular condition, it could be a sign of arthritis.
- ✔ **Swelling:** If the skin around a joint is red, puffed up, hot, throbbing, or painful to the touch, you're experiencing joint inflammation. Don't wait. See your doctor.



The warning signs may come in triplicate (pain plus stiffness plus swelling), two together, or one all alone. Or, as you find out in Chapters 3 and 4, you may experience other early signs, such as malaise or muscle pain. But if you experience any of these or other symptoms in or around a joint for longer than two weeks, you should see your doctor.



You may be tempted to read this book's descriptions of various diseases, pick out the one with symptoms most closely matching yours, and make your own diagnosis. Some people may make the right diagnosis. But a lot of people make the wrong one, because the symptoms of many forms of arthritis overlap with those of other forms of the disease — they can even be confused with entirely different ailments. Making the wrong diagnosis can lead to the wrong treatment, which can be dangerous. Do not self-diagnose. No matter how obvious the situation seems, go to a medical doctor, have a complete examination, and get an “official” diagnosis.

Considering the Causes of Arthritis

Just as many different kinds of arthritis exist, many different causes also exist — and some of them are still unknown. But in general, scientists have found that certain factors can contribute to the development of joint problems:

- ✔ **Heredity:** Your parents gave you your beautiful eyes, strong jawline, exceptional math ability, and, possibly, a tendency to develop rheumatoid arthritis. Scientists have discovered that the genetic marker HLA-DR4 is linked to rheumatoid arthritis, so if you happen to have this gene, you're more likely to develop the disease. Ankylosing spondylitis is linked to the genetic marker HLA-B27, and although having this gene doesn't mean that you absolutely *will* get this form of arthritis, you *can* — if conditions are right.
- ✔ **Age:** It's just a fact of life that the older you get, the more likely you are to develop arthritis, especially osteoarthritis. Like the tires on your car, cartilage can wear down over time, becoming thin, cracked, or even wearing through. Bones may also break down with age, bringing on joint pain and dysfunction.

- ✔ **Overuse of a joint:** What do ballerinas, baseball pitchers, and tennis players all have in common? A great chance that they'll develop arthritis due to the tremendous repetitive strain they put on their joints. The dancers, who go from flat foot to *pointe* hundreds of times during a practice session, often end up with painful arthritic ankles. Baseball pitchers, throwing fastballs at speeds of more than 100 mph, regularly develop arthritis of the shoulder and/or elbow. And you don't need to be a tennis pro to develop *tennis elbow*, a form of tendonitis that has sidelined many a player.
- ✔ **Injury:** Sustaining injury to a joint (from a household mishap, a car accident, playing sports, or doing anything else) increases the odds that you may develop arthritis in that joint in the future. Football players are well-known victims of arthritis of the knee, which is certainly not surprising: They often fall smack on their knees or other joints when they're tackled — then have a ton of “football flesh” crash down on top of them. What's most amazing is that they ever walk away uninjured.
- ✔ **Infection:** Some forms of arthritis are the result of bacteria, viruses, or fungi that can either cause the disease or trigger it in susceptible people. Lyme disease comes from bacteria transmitted by the bite of a tick. Infectious arthritis can arise following surgery, trauma, a needle being inserted into the joint, bone infection, or an infection that's traveled from another area of the body.

Arthritis by the numbers

Arthritis affects a surprisingly large number of us, as you can see by the following numbers:

- ✔ Seventy million Americans currently suffer from arthritis, or 1 in 3 of us.
- ✔ Women are nearly twice as likely as men to suffer from arthritis, which currently affects 41 million women and 29 million men.
- ✔ Arthritis is the reason behind 39 million doctor visits and over a half million hospitalizations.
- ✔ Osteoarthritis leads the pack in prevalence, affecting more than 21 million Americans, most of whom develop the disease after the age of 45.
- ✔ Rheumatoid arthritis (RA) and gout are tied for third, at 2.1 million Americans. But RA strikes mostly women, whereas gout tends to favor men.
- ✔ Gout is twice as likely to strike African-American men as Caucasian men, possibly because African-American men are more likely to use medicines to lower blood pressure. Some blood pressure medications increase production of uric acid, which can crystallize and settle painfully in joints.
- ✔ The number of children under the age of 17 who have arthritis is an astonishing 285,000, including 50,000 who have juvenile rheumatoid arthritis (JRA).
- ✔ The lower your income, the more likely you are to develop arthritis. According to the Arthritis Foundation, 20.3 percent of those with an annual income of less than \$10,000 had arthritis, as opposed to 13.4 percent of those who made \$50,000 or more.

- ✓ **Tumor necrosis factor (TNF):** TNF is a substance the body produces that causes inflammation and may play a part in initiating or maintaining rheumatoid arthritis. Although scientists are unsure exactly what triggers rheumatoid arthritis, they have found that drugs that counteract the effects of TNF, called *TNF antagonists*, are often helpful in managing the symptoms of this disease.

Understanding Who Gets Arthritis

Statistically speaking, the typical arthritis victim (if there were such a thing) would be a middle-class Caucasian woman between the ages of 65 and 74 who has a high school education, is overweight, is a city-dweller in the southern United States, and has osteoarthritis.

But arthritis isn't all that picky and doesn't worry too much about statistics. It strikes young and old, male and female, and rich and poor and doesn't seem to care where you live. Arthritis, in one form or another, can affect just about anybody.

However, arthritis does seem to hit women particularly hard. Nearly two-thirds of those who get the disease are women — an estimated 41 million Americans. Some facts about women and arthritis:

- ✓ Arthritis affects about 37 percent of the female population and 28 percent of males.
- ✓ Arthritis limits the daily activities of an estimated 4.6 million women.
- ✓ Some 16 million women are currently affected by osteoarthritis, a disease that strikes women nearly three times more often than men. To make matters worse, women usually develop the disease at a younger age.
- ✓ Seventy-five percent of rheumatoid arthritis patients (about 1.5 million) are women.
- ✓ Ninety percent of those who have either lupus or fibromyalgia are women.
- ✓ Twice as many girls as boys develop juvenile rheumatoid arthritis.

Additionally, arthritis affects some 4 million African Americans, making it the third most prevalent health condition affecting them, topped only by high blood pressure and chronic sinus problems. It was placed ahead of heart disease, diabetes, and asthma, among others. African Americans are also more likely than others to limit their activities due to arthritis.

African-American women are at particular risk for arthritis. There's a higher rate of arthritis reported among African-American women after age 35 than in Caucasian women, and young African-American women are three times more likely to develop lupus than their Caucasian counterparts.

Assessing Your Treatment Options

The good news is that, in many cases, arthritis can be managed. It may take some time and effort to find the right treatment(s) for your particular version of the disease, but answers are out there. Medications and surgery are only a part of the answer. Following an arthritis-fighting diet, exercising, using joint protection techniques, controlling stress, anger, and depression, and organizing your life can offer relief from pain and a new lease on life. And the world of herbs, homeopathy, hands-on healing, and other alternative medicine treatments may offer you additional ammunition in the fight against arthritis pain and other symptoms.

Looking into medications

When you're in pain, your joints are hot or swollen, and you can hardly walk from one end of the house to the other, you want relief *now*. In many cases, the fastest way to relieve arthritis symptoms is to take medication. Arthritis medications fall into five main classes:

- ✓ **Analgesics:** Analgesics fight pain but do not interfere with the inflammation process, so they're easier on the stomach than the NSAIDs. The best-known and most commonly-used analgesic is acetaminophen.
- ✓ **Biologic response modifiers (BRMs):** The BRMs help fight stubborn cases of inflammation by inhibiting or shoring up certain components of the immune system called cytokines. The cytokines play a part in the inflammation seen in rheumatoid arthritis, and BRMs inhibit their inflammatory action. Enbrel, Humira, Remicade, and Kineret fall into the category of BRMs.
- ✓ **Corticosteroids:** These are manmade versions of naturally-occurring hormones in the body that help quell inflammation. Although they're a powerful anti-inflammatory, they can also have powerful side effects, including elevated blood pressure, stomach ulcers, thinning of the bones and skin, and increased risk of infection.
- ✓ **Disease modifying antirheumatic drugs (DMARDs):** The DMARDs are usually used in inflammatory forms of arthritis (like RA, psoriatic arthritis or ankylosing spondylitis) that haven't responded to other medicines. They change the way the immune system works, slowing or stopping its attack on the body. Drugs like sulfasalazine, methotrexate, and anti-malarials fall into this category.

- ✓ **Nonsteroidal anti-inflammatory drugs (NSAIDs):** The NSAIDs help relieve pain and reduce inflammation by interfering with an enzyme called COX (cyclooxygenase). Milder versions (aspirin, ibuprofen) are available over the counter, and the more powerful ones (Anaprox, Feldene, Tolectin) require a prescription.

Chapter 8 gives you the complete lowdown on arthritis medications.

Considering surgery

If pain is interfering with your ability to lead a happy and productive life, you have to take the maximum amount of pain relievers just to get through the day, and you've tried all other pain-relieving methods with no luck, you may want to consider surgery. Although joint surgery is complex and not to be taken lightly, some people have enjoyed excellent results, to the point of feeling that they've gotten a new lease on life. Surgical techniques can involve flushing a joint with water, resurfacing rough bone ends or cartilage, removing inflamed membranes, growing new bone, or putting in a whole new joint. Turn to Chapter 9 to find out more about surgical treatments.

Making lifestyle changes

Chances are excellent that you can do much to ease your arthritis-related pain, stiffness, swelling, and decreased range of motion just by changing certain things you do every day. The following list goes over some options you may want to consider:

- ✓ **Eat an arthritis-fighting diet.** By this diet, we mean one that includes plenty of fish, fresh fruits and vegetables, and whole grains, with a minimum of processed meats and salad oil (corn, safflower, or sunflower). The Mediterranean diet fits the bill, while also warding off both heart disease and certain types of cancer. See Chapter 11 for the skinny on the elements of a good arthritis-fighting diet.
- ✓ **Consider taking joint-saving supplements.** Many supplements can help ease the symptoms of different kinds of arthritis, including antioxidants (beta-carotene, vitamins C and E, and selenium), boron, vitamin B6, niacin, vitamin D, zinc, grapeseed extract, flaxseed oil, green tea, glucosamine sulfate, chondroitin sulfate, SAME, bromelain, and others. We discuss these at length in Chapter 11.
- ✓ **Exercise daily (whenever possible).** Countless studies have shown that exercise can help lubricate and nourish the joints by forcing joint fluid into and out of the cartilage. Underexercised joints don't get much of this in-and-out action, so cartilage can thin out and become dry. Brisk

Stargazing: Famous arthritis sufferers

Does the idea of having arthritis make you feel like you may as well just give up? Well, many people have felt the same, but persevered anyway. Take a look at what some people have done with their lives while coping with arthritis:

- ✔ **Lucille Ball** was diagnosed with rheumatoid arthritis at the age of 17, but she went on to live a long and healthy life, enjoying a top-notch career in movies and television.
- ✔ The famous French artist **Pierre-Auguste Renoir** developed RA in his late fifties, but painted nearly 6,000 pictures during his lifetime, many of them great masterpieces.
- ✔ Actress **Mary McDonough**, best known for her role as Erin on the TV show *The Waltons*, has lupus, yet is a wife and mother and continues a successful career as an actress and spokesperson for the Lupus Foundation of America.
- ✔ **Dr. Christian Barnard** developed rheumatoid arthritis as a youngster but went on to perform the world's first human heart transplant in 1967.
- ✔ **Billie Jean King** has osteoarthritis of the knees, probably the result of a car accident when she was 18 years old. Yet she won the Wimbledon singles title for the sixth time when she was in her early thirties and successfully took on Bobby Riggs in the "Battle of the Sexes" tennis tournament.
- ✔ **Norman Cousins**, editor of the *Saturday Review*, developed ankylosing spondylitis in 1964. As part of his then unheard-of treatment, he watched the Three Stooges, the Marx Brothers, and *Candid Camera* to make himself laugh and keep his spirits up. The book he later penned, called *Anatomy of an Illness*, became a bestseller, and he lived a long and productive life.
- ✔ **Rosalind Russell**, star of the silver screen, suffered from severe RA and did much to garner support for the advancement of research into this disease.
- ✔ **Wayne Gretzky**, possibly the greatest hockey player of all time, suffers from early signs of osteoarthritis.
- ✔ **Grandma Moses** had arthritis in her hands at age 76 when she began painting the folksy, whimsical scenes of American life that made her famous. Despite her condition, she created hundreds of paintings, many of which hang in major museums all over the world.

walking may be one of the best exercises for those with arthritis, because it doesn't put undue stress on the joints and is easy and fun to do. For a rundown of exercises that help ease arthritis symptoms, see Chapter 12.

- ✔ **Watch your joint alignment.** Making sure to stand, sit, walk, run, and lift correctly can help protect your joints from injury or excess wear and tear. We discuss the best joint-saving techniques in detail and describe how to make them a part of your life in Chapter 13.
- ✔ **Control stress, aggression, and depression.** The way you think and feel about your arthritis pain can actually make it worse. So can stress, anger, hostility, aggression, and depression. Luckily, you can reduce

your pain just by reducing your stress levels and tapping into your natural potential for relaxation. In Chapter 14, we tell you all about positive thinking, biofeedback, controlling your breathing, laughter, prayer, and spirituality — all effective ways of improving your mood, easing your pain, and making you feel better all over.

- ✔ **Organize your life for maximum efficiency.** Studies have shown that people who actively manage their arthritis and find new ways to cope with physical problems feel less pain and fatigue. In Chapter 15, we give you helpful tips for managing arthritis on a day-to-day basis. Included are ideas for conserving your energy, getting a good night's sleep, using assistive devices, making household chores easy, and holding on to your sex life. An occupational therapist and a home health caregiver can offer valuable assistance.

Looking at alternative approaches

Because there isn't any one magic bullet that cures arthritis, a great many people are looking to alternative approaches — either as a substitute for traditional medicine or as that extra something that just may do the trick. In Chapters 16 through 19, we discuss the most popular alternative treatments for arthritis — from herbs to homeopathy, from acupuncture to reflexology, from aromatherapy to hydrotherapy. Included are sections describing the therapy, explaining what it can do for you, and giving you tips on how to find a reputable practitioner.