



Healthy Joints Matter

What exactly is a joint?

A joint is where two or more bones are joined together. Joints can be rigid, like the joints between the bones in your skull, or movable, like knees, hips, and shoulders. Many joints have cartilage (KAHRT-līj) on the ends of the bones where they come together. Healthy cartilage helps you move by allowing bones to glide over one another. It also protects bones by preventing them from rubbing against each other.

Keeping your joints healthy will allow you to run, walk, jump, play sports, and do the other things you like to do. Physical activity, a balanced diet, avoiding injuries, and getting plenty of sleep will help you stay healthy and keep your joints healthy too.

What can go wrong with my joints?

Some people get arthritis (ar-THRY-tis). The term arthritis is often used to refer to any disorder that affects the joints. Although you might think arthritis

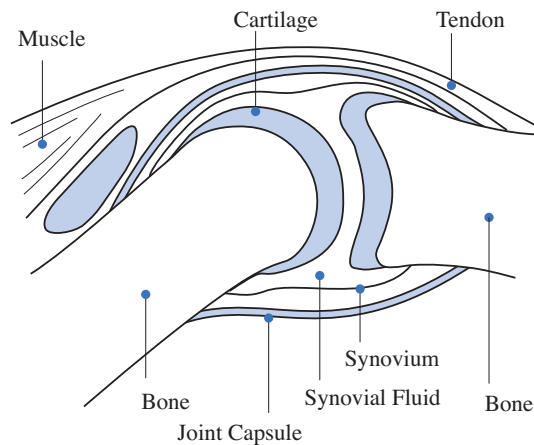
affects only older people, it can affect young people, too. There are many different forms of arthritis:

- **Osteoarthritis** (AH-stee-oh-ar-THRY-tis) is the most common type of arthritis and is seen especially among older people. In osteoarthritis, the surface cartilage in the joints breaks down and wears away, allowing the bones to rub together. This causes pain, swelling, and loss of motion in the joint. Sometimes, it can be triggered by an injury to a joint, such as a knee injury that damages the cartilage.

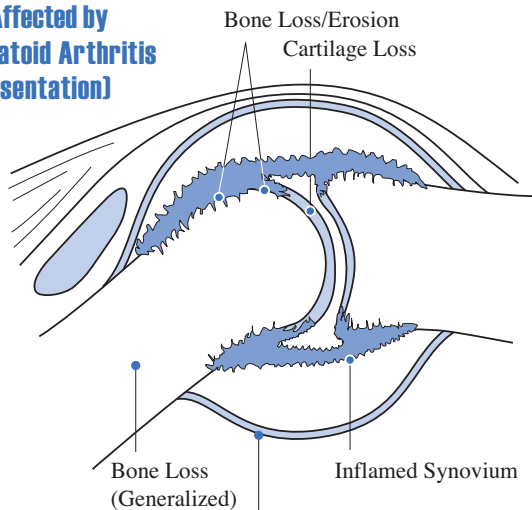
Although you might think arthritis affects only older people, it can affect young people, too.

- **Rheumatoid arthritis** (ROO-muh-toid ar-THRY-tis) is known as an autoimmune (aw-toh-i-MYOON) disease, because the immune system attacks the

Normal Joint (Representation)



Joint Affected by Rheumatoid Arthritis (Representation)



tissues of the joints as if they were disease-causing germs. This results in pain, swelling, stiffness, and loss of function in the joints. People with rheumatoid arthritis may also feel tired and sick, and they sometimes get fevers. It can cause permanent damage to the joints and sometimes affects the heart, lungs, or other organs.

- **Gout** (gowt) is a form of arthritis that is caused by a buildup of uric (YOOR-ic) acid crystals in the joints, most commonly in the big toe. It can be extremely painful. There are several effective treatments for gout that can reduce disability and pain.
- **Juvenile arthritis** is a term often used to describe arthritis in children. Children can develop almost all types of arthritis that affect adults, but the most common type that affects children is juvenile idiopathic (id-ee-uh-PATH-ik) arthritis.

- **Other forms of arthritis** may be associated with diseases like lupus (LOO-puhs), fibromyalgia (fi-bro-my-AL-juh), psoriasis (suh-RYE-uh-sis), or certain infections. In addition, other diseases might affect the bones or muscles around a joint, causing problems in that joint.

How can I keep my joints healthy?

Physical activity

Being physically active is one of the most important things you can do to keep your joints healthy. Regular activity helps keep the muscles around your joints strong and working the way they should. Even people who already have arthritis can benefit from regular physical activity, which will help reduce disability and keep the joints working well. Children and teenagers should get 60 minutes or more of physical activity each day. When exercising or playing sports, be sure to wear the proper protective equipment to avoid injuring your joints. Remember that injuries to your knee early in life can lead to osteoarthritis later on, so be sure to



wear protective pads and shoes that fit well. It's also important to warm up and stretch before exercise. If you have any concerns about your health, talk to your doctor or a physical therapist to find out what kinds of activities are right for you.

Kim's dad is only 43, but he already has arthritis in his knees. He played football and ran track in high school and had a few knee injuries. These are likely to have caused arthritis at a pretty young age. So he reminds Kim to warm up and never to "play through the pain"—no matter what anyone says—and to take care of injuries as soon as they happen.

Eat a healthy diet

Physical activity, along with a balanced diet, will help you manage your weight. Avoiding excess weight puts less stress on your joints, especially in your knees, hips, and feet. This can help reduce the wear and tear that may lead to arthritis later in life.

Speaking of diet, no specific diet will prevent or cure arthritis. However, eating a balanced diet will help manage your weight and provide a variety of nutrients for overall health. A balanced diet:

- Emphasizes fruits, vegetables, whole grains, and fat-free or low-fat dairy products like milk, cheese, and yogurt.
- Includes protein from lean meats, poultry, seafood, beans, eggs, and nuts.
- Is low in solid fats, saturated fats, cholesterol, salt (sodium), added sugars, and refined grains.
- Is as low as possible in *trans* fats.
- Balances calories taken in through food with calories burned in physical activity to help maintain a healthy weight.

For more information on a healthy diet, see www.choosemyplate.gov/ food-groups.



What about dietary supplements?

Many people take dietary supplements such as glucosamine (gloo-KOH-suh-meen) and chondroitin (chon-DROI-tin) for joint health. Current research shows that these supplements may not have much benefit for people with osteoarthritis. However, they do seem to reduce moderate or severe osteoarthritis pain in some, but not all, people. There is no evidence that they can prevent any form of arthritis.

Scientists are also researching the effects of other dietary supplements, such as green tea and various vitamins, to see if they can help keep your joints healthy. Check with your doctor before taking dietary supplements.

Definitions

Arthritis (ar-THRY-tis). A term often used to refer to any disorder that affects the joints.

Autoimmune (AW-toh-iH-MYOON) **disease**. A disease in which the immune system attacks healthy parts of the body.

Cartilage (KAHRT-līj). A hard slippery tissue that covers the ends of bones where they meet to form a joint. It also gives shape and support to other parts of your body, such as your ears, nose, and windpipe.



Fibromyalgia (fi-bro-my-AL-juh). A condition that causes tiredness and painful “tender points” on the body. It may cause headaches, trouble sleeping, and problems with thinking and memory.

Glucosamine (gloo-KOH-suh-meen) **and chondroitin sulfate** (chon-DROI-tin SUHL-feyt). Natural substances found in and around the cells of cartilage. Some people take these dietary supplements to relieve osteoarthritis pain. More research is needed to find out if they work.

Gout (gowt). A form of arthritis that is caused by a buildup of uric acid crystals in the joints, most commonly in the big toe.

Idiopathic (id-ee-uh-PATH-ik). From unknown causes.

Joint (joynt). Where two or more bones are joined together.

Lupus (LOOP-us). An autoimmune disease that can cause joint and muscle pain, fever, extreme tiredness, rash, and sensitivity to the sun.

Osteoarthritis (AH-stee-oh-ar-THRY-tis). The most common type of arthritis. It is seen especially among older people.

Psoriasis (suh-RYE-uh-sis). A skin disease that causes itchy or sore patches of thick, red skin with silvery scales. Some people with psoriasis get a form of arthritis called psoriatic (sore-ee-AT-ic) arthritis.

Rheumatoid arthritis (ROO-muh-toid ar-THRY-tis). An autoimmune disease in which the immune system attacks the tissues of the joints as if they were disease-causing germs.

Uric acid (YOOR-ic acid). A waste product that is normally flushed from the body in urine but may build up in crystals in the joints to cause gout.

For more information:

For more information on arthritis and related conditions, contact:

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) Information Clearinghouse

National Institutes of Health

Toll free: 877-22-NIAMS (226-4267)

Email: NIAMSinfo@mail.nih.gov

Website: www.niams.nih.gov

Check out these websites:

For information about healthy joints, visit:

- **Handout on Health: Sports Injuries:** www.niams.nih.gov/Health_Info/Sports_Injuries/default.asp
- **Questions and Answers about Sprains and Strains:** http://www.niams.nih.gov/Health_Info/Sprains_Strains/default.asp

For information about juvenile arthritis, visit:

- **Questions and Answers about Juvenile Arthritis:** www.niams.nih.gov/Health_Info/Juv_Arthritis/default.asp

For information about physical activity, visit:

- **Centers for Disease Control and Prevention: Physical Activity Guidelines:** www.cdc.gov/physicalactivity/everyone/guidelines/children.html
- **Healthfinder.gov: Physical Activity:** www.healthfinder.gov/prevention/ViewTopic.aspx?topicID=22&areaID=5&TopicContentID=258
- **President’s Council on Fitness, Sports, & Nutrition:** www.fitness.gov
- **Kids.gov: Health, Fitness, and Safety:** www.kids.usa.gov

For information about a balanced diet, visit:

- **ChooseMyPlate.gov:** www.choosemyplate.gov/food-groups
- **Healthfinder.gov: Eat Healthy:** www.healthfinder.gov/prevention/ViewTopic.aspx?topicID=21&areaID=5&TopicContentID=106

For information about how much sleep you need, visit:

- **Centers for Disease Control and Prevention: Sleep and Sleep Disorders:** www.cdc.gov/Features/Sleep

This fact sheet was made for you by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), a part of the U.S. Department of Health and Human Services' National Institutes of Health. For more information about the NIAMS, call the information clearinghouse at 301-495-4484 or toll free at 877-22-NIAMS (226-4267) or visit the NIAMS website at www.niams.nih.gov.



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