Arthritis, Exercise and Nutrition

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Move More, Hurt Less: Making Exercise and Good Nutrition a Part of Your Life with Arthritis

“Exercise will make my arthritis worse.” It’s a common belief among people with arthritis. But nothing could be further from the truth. In fact, studies show that stretching, strengthening, and aerobic conditioning programs improved symptoms in people with osteoarthritis, and that strengthening and aerobic conditioning exercise programs can improve muscle strength, cardiovascular fitness, and physical function in those with rheumatoid arthritis. So the sooner you get moving, the sooner you’ll feel better.

Exercise and healthy eating can also help you to achieve and maintain a healthy weight if you are overweight. Being overweight places increased stress on your joints and can make your arthritis pain worse. Losing weight is therefore another great way to start feeling better if you have arthritis.

How do you get started on a lifestyle of exercise and healthy eating? Here are some tips:

See a Professional
If you haven’t worked out in a while, don’t jump back into visiting the gym right away or you might hurt yourself. See a physical therapist or your doctor for advice on how to get moving again. Walking is a wonderful exercise because it’s natural and low-impact, and it slowly warms up your joints.

If you’re ready to make healthy changes to your diet, you might consider visiting a nutritionist. A registered dietitian can review with you the amounts and types of foods you’re currently eating, and suggest improvements that will help you lose weight and eat more low-fat, high-fiber fruits, vegetables, and whole grains.
If you have pain in your joints but you don’t know if you have arthritis, see your doctor for a diagnosis.

**Make Sure You Stretch**

While we often think of aerobic activities when we think of exercise, stretching is just as important. Muscles around stiff arthritic joints can stiffen themselves, making it harder to move freely. Marching in place or doing some dynamic stretching before you start walking—such as leg swings while holding onto a chair or banister and making circles with your arms—can help warm up your joints while gently stretching the muscles around them.

**Choose Your Movements Wisely**

There’s no one exercise that is perfect for everyone, but you can find activities that are perfect for you. Finding exercise that you enjoy will make it easier for you to stick with a program. Do you like the park? Then go for a walk. Do you have access to a pool? Consider swimming laps or participating in a water aerobics class. Do you prefer working out with other people? The social nature of an exercise class could be fun for you. There are even classes for people with arthritis, where you can also receive support.

You needn’t avoid high-impact activities like running unless your arthritis is grade 3 or 4, meaning there is bone on bone. If you do have bone-on-bone arthritis, such activities can make your symptoms worse. Instead, consider exercises like yoga, Pilates, walking, or swimming. People with grade 3 or 4 arthritis should also avoid heavy weight lifting, which puts more stress on the joints. But you can build strength through resistance training (such as pulley weights).

**Choose Your Meals Wisely, Too**

Making changes to your diet won’t happen overnight. Set realistic goals, one at a time. You might start with eating three complete meals a day, following the My Plate guidelines (half your plate full of fruits or vegetables, one-quarter with protein, and one-quarter with grains). Watch your portion sizes and use measuring cups or a food scale to determine proper serving sizes.

Eat on a schedule rather than mindlessly snacking. Start adding whole grains, nuts, vegetables, and fruits at each meal and snack. Cook two nights a week if you’re used to eating out. Use herbs and spices to add flavor instead of butter and sauces. And bring your own lunch to work, which is healthier and cheaper than getting take-out.

Certain foods have been blamed for causing inflammation, but that’s not the case for everyone. For example, there’s no need for you to avoid gluten if you aren’t gluten intolerant or you don’t have celiac disease. Many healthy whole grains contain gluten, and you’d be missing out on them if you avoided gluten. Likewise, you should incorporate low-fat dairy products into your diet if you can tolerate dairy; they’re an excellent source of bone-building vitamin D and calcium.

Some foods are known to have anti-inflammatory properties, such as omega-3 fatty acids (found in soybeans and in fish such as salmon, tuna, mackerel, and herring), extra virgin olive oil, cherries and berries, green tea, and beans. Eat a diet low in sugar and avoid saturated fats and trans fats as much as possible.

**Be Patient**

Setting reasonable goals for yourself will make it easier to transition to your new, healthier lifestyle. If you’re trying to lose weight, remember that it took time to gain it—so a loss of one to two pounds a week is realistic. If you’re getting back into exercise, listen to your body and don’t do too much too soon. If you’re changing your diet, make one change at a time. Little by little, your arthritis symptoms will diminish, and you’ll start to feel better!
Is It Growing Pains or Juvenile Arthritis?

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Holding a pencil. Running on a playground. Working with a computer mouse. These are typical movements that children perform each day in school. For children with juvenile arthritis (JA), however, these ordinary tasks can be challenging. If your child is one of the more than 300,000 children in the United States living with JA, understanding the illness and learning what you can do to manage the disease can vastly improve your child’s life and your family’s quality of life.

What Is Juvenile Arthritis?
Juvenile arthritis (JA) includes a spectrum of as many as 30 different diseases with different causes and types of onset. While the exact cause of JA is not known, research suggests that multiple genes may be involved which cause an autoimmune response: the immune system attacks the body’s tissues, causing inflammation and the symptoms associated with JA.

Most types of JA are characterized by joint pain, stiffness, swelling, redness, and warmth. But the age at which these symptoms occur, their severity, and the number of joints affected can vary. Juvenile idiopathic arthritis (JIA) is the most common type of JA, beginning before age 16 and typically causing swelling in one or more joints that lasts at least six weeks. About 10 percent of children with JA experience other symptoms such as a fever, rash, or eye inflammation.

The diagnosis of JA is made through physical examination and assessment of your child’s symptoms. The number of joints affected will ultimately determine what type of JA your child may have, such as:

- **Oligoarthritis**, which involves four or fewer joints. Oligoarthritis usually develops by age 6 and affects one joint, such as the knee or ankle.

- **Polyarthritis**, which affects five or more joints within the first six months of the onset of symptoms. It more frequently affects joints on both sides of the body. Some children with polyarthritis (typically teenagers) test positive for rheumatoid factor and have juvenile rheumatoid arthritis, a disease similar to adult rheumatoid arthritis.

- **Ankylosing spondylitis**, a type of arthritis that affects the spine and is most often found in teenagers. Ankylosing spondylitis often causes inflammation between the vertebrae and in the joints between the spine and pelvis.

When to See a Doctor
It’s normal for many children between the ages of three and eight years to have “growing pains” in the arms or legs, but they typically occur at night and don’t usually interfere with a child’s ability to function during the day. How do you know if your child’s joint aches and pains are growing pains or arthritis? If your child often wakes up with stiff joints or is experiencing pain on a daily basis, you should contact your pediatrician.
If the pain persists, your pediatrician should refer you to a pediatric rheumatologist (a specialist in children’s joint disorders), or you can search for one yourself in your community or insurance network. If there isn’t a pediatric rheumatologist nearby, find an adult-care rheumatologist with training in children’s rheumatology. It’s important not to ignore ongoing symptoms; it’s not unusual for parents to be told their child is experiencing growing pains for years when in fact the cause of the symptoms was JA all along. The earlier your child receives the correct diagnosis, the earlier he or she can begin receiving treatment to feel better and slow the disease’s progression.

**How Is JA Treated?**
Your child’s treatment for JA will depend on the severity of the symptoms. Children with mild JA may take non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen, which reduce swelling and pain. Those with more severe symptoms may receive a class of drugs called disease-modifying antirheumatic drugs (DMARDs), such as etanercept, which works by blocking an inflammatory protein called tumor necrosis factor (TNF). Some children with severe JA may receive methotrexate injections.

Children with systemic JA (affecting other parts of the body beyond the joints) may receive immune therapies such as canakinumab and anakinra, which reduce levels of inflammation-inducing proteins called interleukins. NSAIDs are taken orally (by mouth), while medications used to treat severe or systemic JA are given by injection.

Studies are now under way to determine the best way to treat JA. Research in adults has shown that treating rheumatoid arthritis aggressively from the beginning is more effective for controlling symptoms than ramping up therapy as symptoms become worse. This approach may hold true for children as well: the Trial of Early Aggressive Therapy (TREAT) study has shown that aggressively treating children with polyarthritis using DMARDs within the first year of symptom onset was effective for reducing symptoms and achieving disease remission.

**Your Next Steps**
If your child has juvenile arthritis, it’s time to build a game plan. Many parents think that their child will outgrow JA, but they won’t. Starting treatment early and building your network of support, including your child’s healthcare team and support at school, will go a long way toward creating a life for your child that is as normal as possible.

**Your Healthcare Team**
If you recently learned that your child has JA, you don’t have to handle it alone. Begin building a team of healthcare professionals and other supporters to help take care of your child, your family—and you. Your team may include:

- Your family, including family members who may help you with child care and other duties
- Doctors (pediatrician, rheumatologist), nurses, and other healthcare workers
- Your close friends whom you’ve told about your child’s JA
- Teachers and other school workers
- Sports and activity coaches and instructors
- The Arthritis Foundation (local and national)
- Counselors and people who run JA camps
- Other families you meet who are living with JA

See Resources for Children and Parents on next page.
Is It Growing Pains or Juvenile Arthritis? (continued)

Resources for Children and Parents

When a child has a chronic illness, it affects the whole family. The Arthritis Foundation has many resources and programs available for you, your child, and your family to better understand and cope with the disease and its treatment.

<table>
<thead>
<tr>
<th>Program</th>
<th>What It Is</th>
<th>Learn More</th>
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<tbody>
<tr>
<td>Kids Get Arthritis, Too!®</td>
<td>A website about juvenile arthritis with information about JA, resources for parents and schools, updates on research, and special web pages for children and teens.</td>
<td>Visit <a href="http://www.kidsgetarthritistoo.org">kidsgetarthritistoo.org</a></td>
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<tr>
<td>Juvenile Arthritis Power Pack</td>
<td>A backpack for children and teens newly diagnosed with JA, which includes educational materials, newsletters, and more. The child pack includes a stuffed animal and the teen pack has a hot/cold pack.</td>
<td>Register at <a href="http://www.JAPowerPack.org">JAPowerPack.org</a> or call 800.283.7800.</td>
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<td>Family Fun Days</td>
<td>Full and half-day events for families feature presentations by healthcare professionals, the ability to meet other families, and fun activities for all.</td>
<td>Visit <a href="http://www.arthritis.org">arthritis.org</a> to find your local office and events in your area.</td>
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<td>Juvenile Arthritis Camps</td>
<td>Week-long summer sleep-away camps just for kids enable them to meet other children with JA, learn self care, boost their self esteem, and have fun in a safe environment.</td>
<td>Visit <a href="http://www.arthritis.org">arthritis.org</a> to find camps near you. Camps near the New York metropolitan area are located in upstate New York, Pennsylvania, New Jersey, and Vermont.</td>
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<td>School Success</td>
<td>The Arthritis Foundation has resources and guidance for parents and schools to support children with JA, including drafting of 504 plans for children with disabilities and Individualized Education Plans.</td>
<td>Visit <a href="http://www.kidsgetarthritistoo.org">kidsgetarthritistoo.org</a> to learn more.</td>
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<td>National Juvenile Arthritis Conference</td>
<td>Parents, children, teens, and their families gather to learn about JA, the latest research on how to manage JA at home and in school, and advocacy. Scholarships are available.</td>
<td>Conferences are: July 14-17, 2016 (Phoenix, AZ) and August 11-14, 2016 (Philadelphia, PA). Visit <a href="http://www.arthritis.org">arthritis.org</a> to contact your local office for more information.</td>
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<td>Walk to Cure Arthritis and Jingle Bell Run</td>
<td>These events raise funds and awareness about arthritis.</td>
<td>Visit <a href="http://www.arthritis.org">arthritis.org</a> to find your local office and events in your area.</td>
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<td>Youth Ambassadors</td>
<td>Children ages 10-17 share their stories of life with arthritis.</td>
<td>Visit <a href="http://www.arthritis.org">arthritis.org</a> to learn more.</td>
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<td>Young Adult Connect</td>
<td>Young adults with arthritis socialize and connect in informal settings</td>
<td>Contact 212.984.8730 or <a href="mailto:yac@arthritis.org">yac@arthritis.org</a></td>
</tr>
<tr>
<td>Parent 2 Parent Network</td>
<td>This program helps families of children with JA connect with trained parent mentors</td>
<td>Contact 212.984.8730 or <a href="mailto:yac@arthritis.org">yac@arthritis.org</a></td>
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<td>National Advocacy Summit Washington, DC</td>
<td>Individuals learn about arthritis issues, influencing elected officials, and meeting with legislators.</td>
<td>Visit <a href="http://www.arthritis.org">arthritis.org</a> to learn more.</td>
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People diagnosed with rheumatoid arthritis (RA) today are benefiting from significant advances made in recent decades regarding the disease’s biology, progression, and treatment. We now know more about the molecules related to the inflammation in people with RA. New drugs have been developed that target those molecules. And people with RA can live active, fuller lives. Here are some facts about RA you may not have known:

**Fact 1**

**Today’s RA Is Not Your Grandmother’s RA**

If you ever knew an elderly person who had lived with RA for decades, your mind might recall images of gnarled fingers and twisted, swollen joints. Thanks to biologic drugs developed since the 1990s which target the molecular pathways causing inflammation and joint damage in RA, treatment today is more targeted and more effective. We also know that beginning aggressive therapy early in the course of RA is more effective than waiting for symptoms to get worse. So if you have RA and you begin treatment early, most people wouldn’t even know you have it.

**Fact 2**

**Today’s Medications Actually Slow RA Progression**

Early medications for RA reduce pain and swelling. But today’s “disease-modifying antirheumatic drugs” (DMARDs) actually slow the progression of the disease, limiting joint damage and improving quality of life. You may even hear about some of them in television commercials. Concerned about the serious side effects you hear about in those commercials? They occur in a very small minority of patients. For the vast majority of people with RA, DMARDs such as methotrexate, etanercept, adalimumab, anakinra, and infliximab are safe and highly effective for controlling the progression of RA and managing symptoms. Your doctor can speak with you about the medications that are best for you.
Did You Know...
Studies have shown that exercise can actually make people with RA feel better

**Fact 3**
**Treating Your RA Is Good for Your Heart**
The inflammation that occurs in RA can result in systemic inflammation—that is, inflammation elsewhere in your body, including your blood vessels. High degrees of systemic inflammation have been linked with an increased risk of heart disease and stroke. Ongoing inflammation can also affect the eyes, skin, mouth, and lungs. So following your treatment regimen for RA is important for reducing inflammation throughout your body. Your heart will thank you!

**Fact 4**
**Motion Is Potion**
If you have RA, we understand that moving can sometimes be painful. And exercising may be the last thing you want to do. But studies have shown that exercise can actually make people with RA feel better. We’re not talking about high-impact activities, which can aggravate severely damaged joints. But walking, bicycling, and aquatic exercises (those done in a swimming pool) are safe, low-impact, and very effective for reducing your symptoms. Need help getting started? Talk with your doctor or a physical therapist. (See the article about exercise and arthritis on page 1.)

**Fact 5**
**The Future is Bright**
You may have heard about research finding the molecules driving cancer growth and “precision therapies” being created to target those molecules. The same precision treatment approaches have been occurring in the RA field, and scientists continue to make progress. Investigators are learning how inflammatory proteins such as tumor necrosis factor (TNF) and interleukins are involved in RA inflammation and progression, and medications now exist that target those proteins. New research is deciphering the genes involved in RA and other molecules affected by those genes to drive RA progression. Such research is promising and will lead to innovative therapies to further improve the lives of people with RA.

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**OA or RA: What’s the Difference?**

The most common type of arthritis is osteoarthritis (OA) and is very common as people age. How do you know if your joint pain is due to OA or RA? Here are some guidelines. If you have joint pain, see your primary care physician or a rheumatologist to find out what is causing your symptoms.

<table>
<thead>
<tr>
<th><strong>Osteoarthritis</strong></th>
<th><strong>Rheumatoid Arthritis</strong></th>
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<tr>
<td>Symptoms may include joint pain, stiffness, and swelling</td>
<td>Symptoms may include joint pain, swelling, redness, and warmth; morning stiffness for 30 minutes or longer; and systemic symptoms such as fatigue, loss of appetite, and low-grade fever</td>
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<tr>
<td>Caused by “wear and tear” on joints due to aging, obesity, previous joint injury, or overuse</td>
<td>Caused by autoimmune factors: the body’s immune system attacks its own tissues, causing inflammation</td>
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<tr>
<td>Cartilage and bone may wear away over time</td>
<td>Cartilage and bone may become damaged over time and the spaces within joints may become smaller</td>
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<tr>
<td>Often affects a joint on only one side of the body</td>
<td>Typically affects joints on both sides of the body</td>
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<tr>
<td>Imaging tests such as MRI and x-rays may show evidence of damaged cartilage and bone</td>
<td>Imaging tests such as MRI and ultrasound may show joint damage such as loss of bone within a joint and narrowing of a joint’s space</td>
</tr>
<tr>
<td>Blood tests are not used to diagnose OA</td>
<td>Blood tests may show elevated levels of rheumatoid factor or other proteins commonly increased in RA</td>
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Programs and Resources

Hospital for Special Surgery offers a variety of wellness exercise classes designed to help you gain endurance, strength and flexibility. Meditation, relaxation and general wellness programs are also offered.

Better Balance for Older Adults
Unique exercises selected for individuals who would like to increase their balance control and decrease the risk of falls.

Therapeutic Yoga
The slow, controlled physical movement of yoga can provide pain relief, relax stiff muscles, ease sore joints and help build strength.

Pilates
A series of specific movements designed to strengthen the powerhouse muscles of the abdomen, back and waist.

Yogalates
A popular form of exercise that blends the best of yoga and Pilates.

T’ai Chi Chih®
Simple, rhythmic movements that provide benefits such as improved balance, strength, flexibility and maintenance of bone mass.

Dance for Fitness and Fun
Studies have shown that dance maintains cardiovascular fitness, enhances emotional well-being, strengthens weight-bearing bones and slows loss of bone mass.

For more information on the schedule, location and cost of these classes, visit hss.edu/pped or call 212.606.1613. Additional programs and offerings can be found by visiting hss.edu/pped.

Integrative Care Center (ICC)
The ICC, located in mid-Manhattan and affiliated with Hospital for Special Surgery, offers alternative care services including Pilates, acupuncture, massage therapy, chiropractic medicine and pain management. Please visit hss.edu/icc for more information or call 212.224.7900.

Other Resources
- arthritis.org
- Choose My Plate: choosemyplate.gov
- Children – American Academy of Orthopaedics (AAOS): orthoinfo.aaos.org/menus/children.cfm
- U.S. Centers for Disease Control and Prevention: cdc.gov/physicalactivity/index.html

Health Video Library

Check out our complimentary HSS health video library at hss.edu/health-videos. Featured topics include:
- Active and Aging
- Osteoarthritis
- Bones Health
- Pain and Stress Management
- Inflammatory Arthritis
- Health and Wellness

A short video excerpt on “Meditation for Pain Management” is also available for patients via our YouTube playlist. Education for Public and Patients.

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This recurring publication is a convenient one-page online health education newsletter designed to provide the public with fast, current, accurate musculoskeletal, and general health information.

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2013 National Health Information Merit Award
HealthConnection Newsletter
December 2012, Bone Health issue

2014 National Health Information Bronze Award
HealthConnection Newsletter
Winter 2014 Aging Well issue

2015 Graphic Design USA Health and Wellness Design Award
HealthConnection Newsletter
Summer 2015, Healthy Feet issue

2016 Gold Aster Award
HealthConnection Newsletter
Winter 2016, Keeping Your Children Healthy Issue

Locations

Hospital for Special Surgery
535 East 70th Street
New York, NY 10021

HSS ASC of Manhattan
1233 Second Ave at 65th Street
New York, NY 10065

HSS Ortho Injury Care
1233 2nd Avenue at 65th Street
New York, NY 10065

HSS Long Island Outpatient Center
333 Earle Ovington Boulevard,
Suite 106
Uniondale, NY 11553

HSS Paramus Outpatient Center
140 East Ridgewood Avenue, Suite 175 S
Paramus, NJ 07652

HSS Queens Outpatient Center
176-60 Union Turnpike, Suite 190
Fresh Meadows, NY 11360

HSS Stamford Outpatient Center
1 Blachley Road
Stamford, CT 06902

HSS Orthopedics at Stamford Health
Stamford Hospital
One Hospital Plaza
Stamford, CT 06904

HSS Orthopedics at Stamford Health
Tully Health Center
32 Strawberry Hill Court
Stamford, CT 06902

HSS Westchester
1133 Westchester Avenue
White Plains, NY 10605

HSS Sports Rehab at Chelsea Piers CT
1 Blachley Road
Stamford, CT 06902

Integrative Care Center
635 Madison Avenue, 5th Floor
New York, NY 10022

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