



## What you need to know about Juvenile Idiopathic Arthritis (JIA)

In the United States alone, almost 300,000 children suffer from some form of arthritis. Juvenile Idiopathic Arthritis (JIA) is the term most often used by specialists to describe a child with chronic arthritis. JIA may also be called Juvenile Rheumatoid Arthritis (JRA). It is an autoimmune disorder in children ages 16 years old or younger with joint inflammation and stiffness for more than six weeks. The inflammation causes symptoms of swelling, redness, warmth, and pain; however, many children do not complain of joint pain.<sup>1</sup> The cause of JIA is “idiopathic” which means “of unknown origin.”

<sup>1</sup> Questions and Answers about Juvenile Rheumatoid Arthritis. Found at: [www.kidneeds.com](http://www.kidneeds.com). Accessed: November 15, 2016.

### What you can do

JIA treatment depends on a number of factors. Not all treatments work the same. Your doctor may switch treatments if you have a bad reaction or if a treatment is no longer working. It's important to:

- **Get the best care possible.** Talk with your doctor about the treatments available.
- **Learn about the disease.** The more informed you are the better.
- **Find support.** Consider joining a support group or play group.
- **Don't become discouraged.** Finding the right combination may take time.
- **Adhere to prescribed therapy.** Some medications take time to work.
- **Exercise.** Increased activity can improve general health and help maintain joint function.

### Current JIA/JRA treatments

JIA is treated with a variety of therapies which may or may not include medication. One of the main goals of treatment is to make sure your child can remain physically active. It is important for them to stay involved with friends and normal childhood activities in order to have a good quality of life. Depending on your child's symptoms and severity, most doctors usually begin with drugs called non-steroidal anti-inflammatory drugs (NSAIDs). These include ibuprofen (Motrin or Advil) or naproxen (Naprosyn). Disease modifying anti-rheumatic drugs (DMARDs) may be added later. DMARDs include methotrexate, leflunamid, and newer medications called biologics. Steroids may be used in some cases as well.

In addition to the joints, JIA may affect other areas of the body. Additional treatments may include eye care to reduce the chance of vision loss due to eye inflammation; dental care, especially if the child's jaw is affected; splints and orthotics to relieve pain and maintain their optimal position. Surgery is not common, however it is an option in severe cases to address deformed joints or to correct a leg length discrepancy.<sup>2</sup>

### Adherence

More than likely, your child's doctor will prescribe a blend of treatments. It is important that you follow their instructions in order to help your child find relief from pain and inflammation. Most treatment plans consist of medication and exercise.

Studies show that many parents will change or stop the medications because they don't think it's working well enough. Be patient. Talk to your doctor before deciding to stop any treatment on your own. Some medications take four to six weeks to start working. Any disruption will prolong this time. Stick with it!

You may not want to encourage your child to go out and play or ride their bike when they are uncomfortable, but exercise is an important part of treatment, and will help them. The stronger your child is the better.

Following your doctor's instructions closely will give you the best chance for your child to start feeling better.



<sup>2</sup> Juvenile Idiopathic Arthritis Treatment. Found at: <http://www.arthritis.org/about-arthritis/types/juvenile-idiopathic-arthritis-jia/treatment.php>. Accessed December 14, 2016.



### Nutritional education

JIA can make it tough for kids to eat. They might not have an appetite due to pain or side effects from medication. They may have temporomandibular joint disorder (TMJ), which causes pain or difficulty when chewing. Or they might have issues holding a fork or trying to open a milk carton. Regardless, nutrition is still very important for these kids.

There is no published JIA diet. Many are being studied right now. However, the Academy of Nutrition and Dietetics provides a list of foods that are known to decrease and also worsen inflammation. The goal of nutrition is to create a balanced food plan, which helps lower the risk for heart and bone disease.

### Recommended foods

- Follow the guidelines given in MyPlate (<http://www.choosemyplate.gov/>).
- To help protect bones, choose foods high in calcium. Choices include dairy (like low-fat or fat-free milk, cottage cheese, or yogurt), spinach, cooked greens (like kale), broccoli, soy milk, tofu, or orange juice with added calcium.
- To help reduce the risk of heart disease, choose foods that are low in bad fats (saturated fat and trans fats) and high in good fats (monounsaturated fats). Choices include fish (especially oily fish like salmon and mackerel); olives, nuts, and seeds; and olive and canola oils.

### Foods not recommended

- Limit or avoid foods that are high in saturated fats. These include red meat, processed meats, sausage, bacon, and high-fat dairy foods (like cheese, butter, cream cheese, ice cream).
- Avoid trans fats, which are found in many processed foods, such as commercial pastries, cakes, cookies, and doughnuts.
- Go to MyPlate for more details and specific information for limited saturated fat and trans fats.

According to the Johns Hopkins Arthritis Center, long-term use of many of the drugs used to treat JIA may compound nutritional problems.<sup>3</sup> Nutritional deficiencies may develop. Some common vitamin and mineral deficiencies are folic acid, vitamin C, vitamin D, vitamin B6, vitamin B12, vitamin E, folic acid, calcium, magnesium, zinc, and selenium. Talk to your doctor to find out if supplements are appropriate.

<sup>3</sup> John Hopkins Arthritis Center. Nutrition & Rheumatoid Arthritis. Cheryl Koch, CNSD, updated by Rebecca Manno, MD, MHS 05/11/15. Found at: <https://www.hopkinsarthritis.org/patient-corner/disease-management/rheumatoid-arthritis-nutrition/>. Accessed December 15, 2016.

### Exercise

All children should be encouraged to be physically active. Obesity can worsen the strain on joints and cause pain, and children who are active are known to have lower obesity rates. However, pain sometimes limits what children with juvenile arthritis can do. As a result, many children with JIA have reduced vigorous physical activity levels, sports participation, and decreased fitness.<sup>4</sup> But exercise is key to reducing the symptoms of arthritis and maintaining function and range of motion of the joints.

Most children with arthritis can take part in physical activities and certain sports when their symptoms are under control. Research suggests that children with JIA can participate in aquatic or land-based weight-bearing exercise programs without making their disease worse.<sup>5</sup> Water exercise encourages range of motion, strength, and fitness, with less stress on joints. Weight-bearing activity helps promote bone health. Studies show that sports participation does not appear to worsen the condition.<sup>5</sup> The 2002 Exercise and Physical Activity Conference Arthritis Working Group guidelines recommend moderate fitness and strengthening exercises for children with JIA.<sup>6</sup>

During a disease flare, your child may be advised by their doctor to limit certain activities. It will depend on the joints involved. Once the flare is over, your child may likely return to normal activities. Ask your health care provider for exercise guidelines.



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<sup>4</sup> Klepper SE. Exercise and fitness in children with arthritis: Evidence of benefits for exercise and physical activity. *Arthritis Rheum.* 2003;49:435–43. [PubMed]

<sup>5</sup> Kirchheimer JC, Wanivenhaus A, Engel A. Does sport negatively influence joint scores in patients with juvenile rheumatoid arthritis. An 8-year prospective study. *Rheumatol Int.* 1993;12:239–42. [PubMed]

<sup>6</sup> Session V: Evidence of benefit of exercise and physical activity in arthritis. *Arthritis Rheum; Work group recommendations: 2002 Exercise and Physical Activity Conference; St Louis, Missouri.* 2003. pp. 453–4. [PubMed]