

On the Uptake

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Being active with Juvenile Arthritis!

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What is juvenile idiopathic arthritis?

Juvenile idiopathic arthritis (JIA) is one of the most common chronic conditions of childhood affecting approximately 1 in 1000 Canadian children. Children and adolescents that have arthritis have to cope with swelling in their joints, pain, difficulty walking, going up stairs, using their hands and manipulating objects. These difficulties may interfere with age-

appropriate daily activities such as playing with friends, doing their favorite sport and physical activity, getting dressed, both at home and at school. Sometimes, these difficulties last well into adulthood.

Let's get moving: what happens after diagnosis?

A team of health professionals is often involved in caring for children and adolescents with arthritis. This team often includes: a pediatric rheumatologist, a nurse, an occupational and a physical therapist. Many times, medication will be

prescribed together with an exercise program or splints, or both to help manage the arthritis. Rehabilitation professionals like occupational therapists and physiotherapists will often recommend different exercises to help improve muscle strength and flexibility, in turn helping limit pain and improve activity level. In general, physical activity as tolerated is often recommended by rheumatologists and rehabilitation specialists for children with chronic disease such as juvenile arthritis.





Physical activity can help keep bones strong, improve energy levels, and may help reduce the risk for obesity. It has also shown to have health benefits for those living with arthritis such as improving quality of life, function, joint movement and helping to limit the effects of pain and arthritis. Despite the benefits of physical activity children and adolescents are generally not as physically active as their peers without arthritis. It is well known that engaging children and adolescents in physical activity may be challenging for children and adolescents in general and may be even more so for those living with arthritis. It may at times be counterintuitive to those living with the pain of juvenile arthritis to engage in physical activities that may potentially exacerbate symptoms and cause further discomfort. However, it's important to remember that physical activity is important for the health of all children, including those with unique challenges such as juvenile arthritis.

Having arthritis means that you need to manage pain and fatigue, and often can't participate in physical activity in part due

to activity limitations caused by swollen joints and generally feeling unwell. However, other reasons beyond the arthritis can help explain why children and adolescents with arthritis may not participate in physical activity. In fact, our research has found that age and being a girl or a boy may lead children and adolescents with arthritis to participate in different types of activities. Therefore, it is very important for parents and health care professionals to consider preferences for activities and how best to motivate and encourage them to participate in physical activity.

Finding the right activity for your child

Non-competitive activities such as swimming lessons, and playing in the park may be age-appropriate for younger children (8 to 11 years) with juvenile arthritis. Adolescents with arthritis may be more interested in going to the gym, attending yoga classes or playing organised sports to keep active. Girls and boys may also have different interests when it comes to physical activity. For instance, some girls may be more interested in individual physical activity or

dance classes, whereas boys may want to focus on strength training programs. If the child is motivated to participate, this will help him or her overcome more challenging gross motor tasks needed to take part in a chosen physical activity. Gross motor skills are the abilities required in order to control the large muscles of the body for walking, running, sitting, crawling, and other activities. Proposing physical activities that are just right for the child and adolescent will undoubtedly encourage participation in physical activity.

In general, the long-term benefits of physical activity on their illness are not well understood among children and adolescents with arthritis. An essential component in promoting an active lifestyle among children and adolescents with arthritis is to ensure that they are aware and have access to potentially safe and helpful physical activity alternatives and understand the health benefits. Providing this information to children, adolescents and families may favour family coping, improve participation in physical activity and adoption of healthy



Childhood disability LINK is a bilingual website linking Information and New Knowledge on childhood disability to service providers and families. The website also focuses on enhancing the awareness and understanding of research on a variety of issues in childhood disability. Please visit us at: www.childhooddisability.ca.

Want to learn more on the topic? Suggested readings:

Helpful links:

1. The Arthritis Society:
<https://www.arthritis.ca/support-education/support-for-childhood-arthritis>
2. Arthritis Foundation:
<https://www.arthritis.org/>
3. The Canadian Arthritis Patient Alliance (CAPA):
www.arthritispatient.ca
4. Arthritis Alliance of Canada (AAC): www.arthritisalliance.ca
5. Pediatric Rheumatology – Care and Outcomes Improvement Network (PR-COIN):
<https://pr-coin.org>

behaviours throughout life and well into adulthood.

Overcoming obstacles

We found that practical obstacles such as the lack of affordable and accessible specialised community-based activities may limit opportunity to take part in physical activity. Improving access to safe alternatives to physical activity may be helpful in improving activity levels among those with arthritis. We found that in general children and adolescents living with arthritis may prefer to take part in home-based physical activity possibly to avoid missing scheduled exercise classes or sports practices. Alternatively, exercises adjusted to individual and physical tolerance that can be done from home may be more appealing and practical.

In an effort to inform families and health care professionals, our team and a group of experts in physical activity and pediatric rheumatology compiled information about published studies focusing on structured physical activities and benefits in juvenile arthritis. We found that a number of structured physical activity programs (Pilates, cardio-karate, aquatic and other aerobic activities) were identified as potentially helpful in improving difficulties linked with a child's arthritis. Specifically, participation in Pilates may help to decrease pain and help joint movement, as well as improve physical, emotional, social and school functioning. Cardio-karate which is a physical activity that combines dance and martial arts movements can help improve joint movements. An individual activity program incorporating strengthening, stretching, postural exercises, and functional activities was shown to be beneficial on overall favoring quality of life and function in daily activities (walking, dressing, etc.). Finally, taking part in a water-aerobic program resulted in a decrease in the number of swollen joints.

There are a number of other physical activities that may help children and adolescents with arthritis keep active. The choice of these will depend on the child's preferences, tolerance to activity and their rheumatology team's recommendations. In fact, recent recommendations underline how children can participate in physical activity if the arthritis is being well managed by a team of rheumatologists and health care professionals, and that activity can be performed within pain limits despite the presence of arthritis (swollen joints). Although physical activity can be beneficial to health in general and specifically to help with a child's arthritis, it is important for patients with juvenile arthritis to talk to their rheumatologist and health care professionals before starting a new physical activity or continuing a favorite one.

Take Home Points for Parents

- Ask your child about their preferences in physical activity. Communicate these preferences to your health care team to find appropriate activities.
- Remind them that physical activity is important and can help their symptoms, even if being active may seem difficult at times.
- Encourage them to find activities they like and can practice on their own or with friends and family.

Take Home Points for Clinicians

- Clinicians can encourage participation in physical activity by matching the child's interests with age and symptom appropriate activities
- Closely monitor symptom alleviation or worsening of symptoms when practicing certain types of physical activity. Adapt or recommend new activities when needed.

