

Osteoarthritis – the most common and costly arthritis in Canada

Osteoarthritis (OA), the most common type of arthritis, is a progressive joint disease that occurs when damaged joint tissues are unable to normally repair themselves, resulting in a breakdown of cartilage and bone. OA—particularly knee OA—is one of the fastest growing chronic conditions worldwide, due to rising numbers with obesity and knee injury and increasing lifespan. In Canada, OA affects 1 in 8 (13%) Canadians and has a significant impact on long-term disability and the Canadian labour force.



The Human Burden of Osteoarthritis

Findings from the Arthritis Alliance of Canada's The Impact of Arthritis in Canada: Today and Over the Next 30 Years indicate that the burden of osteoarthritis in Canada is expected to have significant consequences in terms of health and costs on Canadians today and over the next 30 years.

There are currently more than 4.5 million people living with OA. Within a generation (in 30 years), more than 10 million (or one in four) Canadians are expected to have OA. There will be a new diagnosis of OA every 60 seconds, resulting in almost 30% of the employed labour force (one in three workers) having difficulty working due to OA. In addition, approximately 500,000 Canadians will be suffering with moderate to severe disability due to OA.

A recent study found the rising rates of OA will cost the Canadian economy an estimated \$17.5 billion a year in lost productivity by 2031, as the disease forces greater numbers of people to stop working or work less.*

“Although effective therapies exist, the high prevalence of other medical conditions in people with OA makes management challenging. As many as 90 per cent of people with OA have at least one additional chronic condition—most often diabetes, heart disease, and high blood pressure.”

According to Dr. Gillian Hawker, Rheumatologist and Professor of Medicine, University of Toronto: “Although effective therapies exist, the high prevalence of other medical conditions in people with OA makes management challenging. As many as 90 per cent of people with OA have at least one additional chronic condition—most often diabetes, heart disease, and high blood pressure.”

Currently, there are no medications that effectively treat the underlying disease process of osteoarthritis, only medications to treat the symptoms associated with the disease such as pain and inflammation. For this reason, non-medication treatments such as physical activity are often considered the “best medicine” to treat osteoarthritis.

* Sharif B, Garner R, Hennessy D, Sanmartin C, Flanagan WM, Marshall DA. Productivity costs of work loss associated with osteoarthritis in Canada from 2010 to 2031. *Osteoarthritis Cartilage* 2017;25(2):249-258.

A guide to living with osteoarthritis

What are the signs and symptoms of osteoarthritis?

- Joint pain following activity and which gets better with rest
- Short-lived stiffness in the morning or after rest
- Reduced range of movement of the joint or joints
- Swelling in joints, especially in hands and feet

What should I know about osteoarthritis?

- OA is a condition of the whole joint, not just the cartilage, and is probably the result of the joint trying to repair itself.
- For the majority of people with OA, joint pain will not get progressively worse.
- The amount of pain in a joint does not necessarily relate to the amount of joint damage. In other words, severe pain does not necessarily mean severe damage.
- Joints need to be exercised regularly to keep them healthy.

What should be part of my self-care plan for managing OA?

1. Exercise

Research has shown that exercise can effectively ease joint pain and increase mobility. There are two types of exercises that are recommended for managing OA:

1. aerobic activity (activity that causes your heart rate to increase), such as walking, cycling, and swimming; and,
2. joint strengthening and range of motion exercises, such as straightening your knee while sitting in a chair



For maximum benefit, physical activity has to be ongoing. It may be hard to stay motivated to exercise. Here are some strategies to make exercise easy, convenient, and enjoyable:

- doing activities that can be easily incorporated into everyday life, such as taking the stairs rather than the elevator, walking instead of driving, or getting off the bus a couple stops early
- doing range of motion exercises while watching TV or reading
- exercising with another person, or multiple people, such as in an exercise class, can be more enjoyable and more motivating



Patients with hip and/or knee osteoarthritis should consider enrolling in the GLA:D® Canada program.

GLA:D® is an 8-week exercise and education program that is based on the latest OA research and is proven to reduce pain and loss of joint function for participants. To learn more about the program and how to participate, please visit their website: <http://gladcanada.ca>

2. Weight loss if you are overweight

Recent research has shown that weight loss in people living with knee osteoarthritis who are overweight significantly decreased their pain, increased their knee joint function, and ultimately, improved their quality of life. Researchers identified healthy eating and increased levels of activity as the best ways for weight management.



Many people find it difficult to get started on an exercise program because of their pain. In this case, many doctors recommend taking a pain reliever (such as acetaminophen or Tylenol®) about 30 minutes prior to starting exercise. Depending on a person's joint complaint, using ice or heat, according to one's preference, is a non-medical treatment that may be effective at helping people with osteoarthritis exercise effectively-and with enjoyment.

3. Suitable footwear

Research shows that shoes with the following features are most suitable for people with osteoarthritis:

- Thick shock-absorbing sole
- Low heels and wide fronts (so toes aren't cramped when walking)
- ones that fasten rather than slip on
- the shoes that most often fit this description are running or training shoes but you can also buy cushioned insoles to put into ordinary soles

4. Pain relief

- Using ice, heat, and complementary therapies are common ways that people with OA relieve pain. The following sections will cover these topics.

Common complementary therapies used by people with OA

Therapy	Description	Function
Chiropractic	<ul style="list-style-type: none">• a wide range of manipulative techniques may be used in this treatment to bring about proper alignment of the body's musculoskeletal structure• may also include ice, heat or massage treatment	<ul style="list-style-type: none">• this therapy is designed to improve joint function and therefore relieve pain and muscle spasm
Osteopathy	<ul style="list-style-type: none">• this therapy emphasizes manual readjustments and physical manipulation of muscles, joints and bones• the osteopath conducts the therapy using their hands	<ul style="list-style-type: none">• osteopathy aims to increase the circulation and drainage from joints with OA• this is supposed to reduce inflammation and stress placed on the joints and improve joint function
Alexander Technique	<ul style="list-style-type: none">• focused on identifying posture problems in the body and teaching appropriate ways of standing, sitting and moving	<ul style="list-style-type: none">• this movement therapy is supposed to reduce strain and muscle tension as well as increase body awareness and help movement

For arthritis awareness month, we teamed up with physiotherapist and knowledge translation specialist Alison Hoens to learn some effective, at home techniques to help you move more, manage pain and feel better with osteoarthritis. Here are 3 fabulous facts from Alison:

3 fab facts for happy joints

for people living with osteoarthritis (OA)

1

Move them before you use them

- before you get up to walk, swing your legs while seated
- before you garden or clean, swing your arms
- **WHY?** This “oils” your joint with natural fluid that lubricates and provides nutrition. It’s a great way to avoid the pain and stiffness often experienced when we start to move again after sitting.



2

If your joints are tight, warm them and stretch them before using

- warm up your joint tissue with mild moist heat (I.e. use a warm wet towel, take a warm shower or soak in a tub) before stretching.
- **WHY?** Sitting or lying can cause the tissues surrounding your joints to get tight. In addition, parts of the tissues can get stiffer when cold. Therefore, warming up your joints makes it easier to stretch tissues, particularly after you’ve been sitting for a while.
- **Exceptions:**
 1. don’t use heat on your joints if they are warm and red and/or if you have numbness in the area; and
 2. be careful not to burn the skin with the hot-pack; your skin should be slightly pink, not red.



3

Move little bits often - even when you’re sore

- try to walk every hour during the day for 3-5 minutes
- find reasons to get up and move around: get a drink of water, unload the dishwasher, walk around while speaking on the phone, ask your colleague to have a ‘walking meeting’
- **WHY?** movement lubricates and strengthens joints and stops connective tissues from getting tight. Movement also helps release natural pain-relieving substances from our brains.



Back-to-school with inflammatory arthritis

Returning to school in the fall, whether it be elementary school, high school or university, can be stressful enough without the added complexities of living with an inflammatory arthritis (IA). One of the most challenging times of the year for students living with IA is the start of the school year. Based on surveys with students living with IA and their parents, ACE is sharing some of their strategies, learned through trial and error, that help balance student life with the complexity and unpredictability of IA. Below is a “checklist” to help prepare for the school year.



Checklist

1. Speak to the accessibility department at your school to arrange for accommodations

Most universities and colleges in Canada have an accessibility department (sometimes referred to as a disability resource center). To register for these types of programs, students need to provide some medical documentation to show that their IA affects their school performance, and then they can request accommodations to help you through the school year. For example, being able to write exams and in-class essays on a computer is a helpful accommodation if a student experiences pain in their hands when hand-writing for a long period of time. Students can also request assignment extensions when they need it. Though they may not use all of these accommodations, students living with IA should be reassured to know there's likely a solution in place if and when they get flare ups.

2. Choose a class schedule that allows you to conserve energy

Whenever possible, students choose courses based on the times that they are held. However, students living with IA are aware of how their fatigue works in a daily cycle. They may have lots of energy in the morning, but by late afternoon, they might need to lie down and rest. For this reason, students living with IA may want to schedule classes in the morning, and close together so they don't have to stay on campus for hours between classes. Students may also try to space their classes out evenly over the week to conserve energy and ensure that if they do need to miss a day, they don't miss a number of classes at once.

3. Have a simple phrase prepared to quickly explain your disease and limitations without going into too much detail

At school, there are often social moments or situations that require students to quickly explain their IA to someone new. For example, when doing a group project, they may have to explain why they can't meet late at night or do the whole project in one long 12-hour day. Inflammatory arthritis isn't something that's widely understood and sometimes might not be taken seriously due to public misperceptions of what arthritis is. To make social situations less awkward and to ensure people understand the on-campus challenges of living with IA, students should have a short script in their head that they can easily use when necessary: "I have an autoimmune disease that really limits my energy so afternoon study sessions work better for me...".

"I have an autoimmune disease that really limits my energy so afternoon study sessions work better for me".

Another source of frustration living with IA is it can be hard to make plans. You don't know how you'll feel days, weeks, or months ahead. That makes it hard on a student's social life. A simple strategy if a student has to turn down an invitation to go out is simply ask for a rain check and then follow up when you're feeling better.

4. Learn stress management skills before things get stressful

Stress levels can directly impact a student's IA, which is why flare-ups tend to happen at the most high-stress, inconvenient times, such as final exams. For this reason, stress management skills such as slow breathing, meditation and mindfulness can be an important aid during the school year. Try to work on developing these skills during a low-stress time, so that when things do get stressful, you are prepared to manage the stress and avoid any additional pain and fatigue.

Back-to-school with juvenile arthritis

Juvenile idiopathic arthritis (JIA) affects approximately 24,000 infants to teens in Canada, or 3 in every 1,000, making it one of the most common causes of chronic disability in children. Approximately 60% of children will have active disease into adulthood.

According to Cassie&Friends Society, a national charity working to save and change the lives of children with arthritis, for a parent of a child with juvenile arthritis, September's approach means far more than just the buying of school supplies and new clothes. It also requires some special preparation for a child's new teachers, daycare providers, coaches and more. Despite being such a common disease in children, many teachers are still unaware that kids can get arthritis and most will have had limited, if any, experience teaching children with this disease.

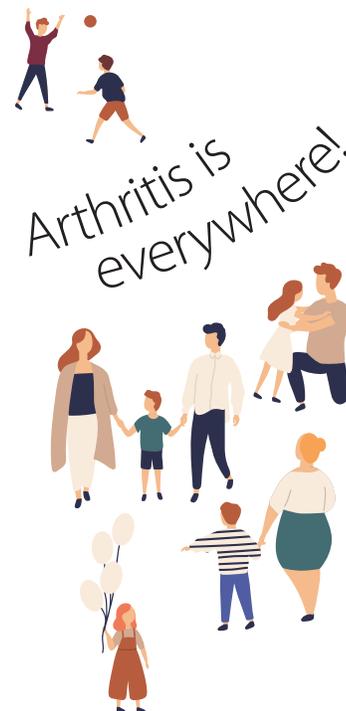
Cassie&Friends suggest parents set up a meeting with their child's teacher(s) within the first couple weeks of the school year. Depending on the age of their child and the severity of their disease, what parents choose to discuss may differ. Some topics Cassie&Friends suggest as important to cover include:

- Which joints are affected and how the joint pain or stiffness may limit performance in schoolwork

or participation in classes such as physical education. Try to emphasize that symptoms may fluctuate over the course of the day, week or month.

- Which medications your child is taking and the side effects she experiences as a result.
- Expectation of absences due to doctors appointments and late arrivals due to morning stiffness.
- Asking the teachers to report any symptoms that they observe during the school day
- Awareness of sadness or embarrassment as a result of your child being "different" from their peers.

Remember, teachers will be spending several hours each day with child. They may notice physical or emotional changes that parents haven't seen at home. An open line of communication will be important for a child's success during the school year.



Arthritis Awareness Month in Canada: Arthritis Consumer Experts' #WhereIsArthritis social media campaign

Arthritis Consumer Experts is celebrating **Arthritis Awareness Month in Canada** with the **#WhereIsArthritis** social media campaign. **#WhereIsArthritis** is a fun way for you to familiarize yourself with ACE's online resources, which are designed to help you live a better life with arthritis. By participating, you are creating awareness about arthritis while educating yourself and others about the many different types of diseases, and showing your support for people living with it.

Every day in September, you will:

- Find a **#WhereIsArthritis** question and hint on ACE's Twitter (**@ACEJointHealth**) and Facebook (**@ACEJointHealth**) account
- Find and tweet, Facebook post or email the answer to us – Be sure to include the **#WhereIsArthritis** hashtag!

Sample #WhereIsArthritis question and answer:

Question: Q1: What are four non-medication treatments listed on the ACE website? Hint: See "About Arthritis"

<http://bit.ly/2xs5lk5> #WhereIsArthritis

Answer: Hey @ACEJointHealth, the answer is: vitamins and minerals, diet and nutrition, physiotherapy, occupational therapy! #WhereIsArthritis

To participate, please follow #WhereIsArthritis on our Twitter account **@ACEJointHealth** and Facebook account **Arthritis Consumer Experts**. Help us drive arthritis awareness in September:

- like, retweet, and reply on Twitter using #WhereIsArthritis; or,
- like, comment, and share on Facebook using #WhereIsArthritis; or,
- email your answers to feedback@jointhealth.org with subject heading #WhereIsArthritis

Each time you do any of the above from your personal social media account, your name will be entered into a draw for a \$50 Amazon gift card. The draw will take place on Wednesday, October 3, 2018 and the winner will be notified by direct message or email.

Let's find #WhereIsArthritis resources together!



Arthritis Consumer Experts (ACE)

Who we are

Arthritis Consumer Experts (ACE) provides research-based education, advocacy training, advocacy leadership and information to Canadians with arthritis. We help empower people living with all forms of arthritis to take control of their disease and to take action in healthcare and research decision making. ACE activities are guided by its members and led by people with arthritis, leading medical professionals and the ACE Advisory Board. To learn more about ACE, visit www.jointhehealth.org

Guiding Principles

Healthcare is a human right. Those in healthcare, especially those who stand to gain from the ill health of others, have a moral responsibility to examine what they do, its long-term consequences and to ensure that all may benefit. The support of this should be shared by government, citizens, and non-profit and for-profit organizations. This is not only equitable, but is the best means to balance the influence of any specific constituency and a practical necessity. Any profit from our activities is re-invested in our core programs for Canadians with arthritis.

To completely insulate the agenda, the activities, and the judgments of our organization from those of organizations supporting our work, we put forth our abiding principles:

- ACE only requests unrestricted grants from private and public organizations to support its core program.
- ACE employees do not receive equity interest or personal "in-kind" support of any kind from any health-related organization.
- ACE discloses all funding sources in all its activities.
- ACE identifies the source of all materials or documents used.
- ACE develops positions on health policy, products

or services in collaboration with arthritis consumers, the academic community and healthcare providers and government free from concern or constraint of other organizations.

- ACE employees do not engage in any personal social activities with supporters.
- ACE does not promote any "brand", product or program on any of its materials or its website, or during any of its educational programs or activities.

Thanks

ACE thanks Arthritis Research Canada (ARC) for its scientific review of JointHealth™.



Acknowledgements

Over the past 12 months, ACE received grants-in-aid from: Amgen Canada, Arthritis Research Canada, AstraZeneca Canada, Canadian Biosimilars Forum, Canadian Institutes of Health Research, Celgene, Eli Lilly Canada, Hoffman-La Roche Canada Ltd., Merck Canada, Novartis Canada, Pfizer Canada, Sandoz Canada, Sanofi Canada, St. Paul's Hospital (Vancouver), UCB Canada, and the University of British Columbia.

ACE also receives unsolicited donations from its community members (people with arthritis) across Canada.

ACE thanks funders for their support to help the nearly 6 million Canadians living with osteoarthritis, rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis and the many other forms of the disease. ACE assures its members, academic and healthcare professional collaborators, government and the public that the work of ACE is free from influence of its funders.

Disclaimer

The material contained in this or any other ACE publication is provided for general information only. It should not be relied on to suggest a course of treatment for a particular individual or as a substitute for consultation with qualified health professionals who are familiar with your individual medical needs. If you have any healthcare related questions or concerns, you should contact your physician. Never disregard medical advice or delay in seeking it because of something you have read in any ACE publication.

ACE Arthritis™
Consumer
Experts

#210 - 1529 West 6th Avenue
Vancouver BC V6J 1R1
t: 604.974.1366

feedback@jointhehealth.org
www.jointhehealth.org

ACE does not promote any "brand", product or program on any of its materials or its website, or during any of its educational programs or activities.

© Arthritis Consumer Experts 2018