



Welcome to Arthritis Consumer Experts' special three-part series of JointHealth<sup>TM</sup> insight in celebration of Arthritis Awareness Month in Canada! We are publishing three issues of JointHealth<sup>TM</sup> insight with a focus on osteoarthritis and joint surgery. This current issue, and part one of the series, will cover important new research about osteoarthritis and increased risk of cardiovascular deaths. We will then cover evidence-based strategies for improving heart health and osteoarthritis. Stay tuned for part two and three of the series, where we take an in-depth look at joint surgery including decisions about surgery and preparation for surgery, followed by what to expect in the recovery process.



## Research on osteoarthritis and cause-specific mortality

Osteoarthritis is by far the most common type of arthritis. It is estimated to affect more than 3.2 million individuals across Canada, or about 1 in 10 Canadians. In February of 2019, important new findings on the topic of osteoarthritis and mortality were published in the *Journal of Osteoarthritis and Cartilage*. The [“Cause-specific mortality in osteoarthritis of peripheral joints” study<sup>1</sup>](#) was conducted by researchers from the clinical Epidemiology Unit at Lund University in Sweden.

The purpose of the study was to find associations between osteoarthritis and deaths from a specified cause (or *cause-specific mortality*) compared to the general population.

This was a large, population-based study that used register data for the entire town of *Skåne*, located in the southern most region of Sweden. The researchers identified all residents who were between 45 and 84 years old in 2003. Then, using data from the *Skåne* Healthcare Register, they identified over 29,000 individuals with doctor diagnosed osteoarthritis (OA). The researchers tracked the health data of all these patients from 2004 until death, relocation or 2014 when the study ended.



The researchers studied the type of osteoarthritis (i.e. hip, knee, hand, or another peripheral joint), and the underlying cause of death, as written on the death certificate.

They found that for most causes of death, there were no differences between mortality rate in people with OA and the rest of the population. This means that both groups (OA and Non-OA) were experiencing an equal number of mortalities for most causes of deaths. However, residents with hip or knee OA had a higher rate of cardiovascular deaths compared to the general population, specifically in relation to chronic heart diseases and heart failure. It was also observed that this gap in mortality increases over time, meaning the longer an individual has OA of the hip or knee, the greater risk for cardiovascular mortality.

Importantly, these findings do not extend to cases of OA in the hand or other peripheral joints. This could support the idea that mobility limitation is behind the increased risk of cardiovascular death in hip and knee OA, as mobility is not nearly as limited in OA of the hand or other peripheral joints.

The researchers conclude that, ["our results call for improved implementation of osteoarthritis treatment guidelines, with major focus on interventions to address mobility limitations and maintaining or increasing physical activity level."](#)

<sup>1</sup>Cause-specific mortality in osteoarthritis of peripheral joints, Turkiewicz, A. et al. *Osteoarthritis and Cartilage*, Volume 27, Issue 6, 848 – 854

# What does this mean for Canadians living with OA?

While these findings may cause concern for Canadians living with osteoarthritis, the good news is that there are tried and true strategies for improving heart health and improving your arthritis at the same time.

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## Strategies for improving heart health and osteoarthritis

### 1. Talking to your physician

The Arthritis Alliance of Canada (AAC) has produced [The Talk to Your Doctor About Joint Pain Handout](#) to improve the quality of life for people with arthritis, including their physical activity, sleep, mental health (like mood or depression), relationships and work life, specifically by:



- Assisting those with or at risk of OA, in having better conversations with their doctors or other health care professionals, by informing them about the care they can expect to receive. Good communication between patients and doctors is very important in reaching an accurate diagnosis and building effective treatment plans.
- Helping patients identify the causes of their joint pain and loss of mobility.
- Informing them of the basics of primary prevention strategies and self-care methods.

The Talk to Your Doctor About Joint Pain Handout is a patient version of the Osteoarthritis Tool for Family Physicians that was launched by the AAC and the College of Family Physicians of Canada in 2017 to provide primary care providers who are managing patients with new or recurrent joint pain from osteoarthritis in the hip, knee or hand, with a standardized guideline to assist with assessing and triaging patients with OA symptoms.

As one of the patient collaborators on the development of the Handout, Ms. Louise Crane, OA Patient Representative, and Aboriginal Patient Representative commented: “Good communication between patients and doctors is very important in reaching an accurate diagnosis and building effective treatment plans. The Handout will help people with OA or at risk of getting it have better conversations with their family doctors or other health care providers. Knowing what to expect during your physical examination and what questions to ask is key.”

## 2. Exercise



Exercise is a very effective way of improving heart health. Living with osteoarthritis can certainly make exercising more challenging, but it is actually an important part of an OA treatment plan since it has been shown to effectively ease joint pain and increase joint mobility. There are two types of exercises that are recommended for managing OA: aerobic activity (activity that causes your heart rate to increase), such as walking, cycling, and swimming; and, 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

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.

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>.

## 3. Healthy Eating

Eat healthy by adding more vegetables and fruits to your diet and cutting back on processed foods. Healthy foods that are low in sodium and sugar and high in vitamins and minerals will nourish your body and protect your heart. Healthy eating is also one of the best techniques for weight management; this is important because people with osteoarthritis who are over-weight may experience more severe symptoms, due to the extra pressure on joints. For example, 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.



#### 4. Stress reduction



Stress reduction is an important part of preventing heart disease and managing arthritis symptoms. Those living with arthritis may experience more stress than healthier people due to reduced life quality, disability, and inability to work as much or at all, or take part in their usual activities. A [previous issue of JointHealth™ insight](#) covers the complex relationship between mental health and arthritis. Some strategies for managing stress are listed below:

- Take care of yourself first. Rest when you are feeling exhausted to avoid added stress and anxiety. Learn to say no. Get lots of rest and exercise regularly.
- Ask family and friends to help out with your chores to reduce your workload.
- Try mindfulness – paying close attention to events as they occur in a dispassionate, or non-emotional way. This is a Buddhist concept that is rapidly being taken seriously in the scientific community, particularly in the area of neuroplasticity. Neuroplasticity is the brain’s ability to reorganize itself by forming new neural pathways, which means that our thoughts can change the structure and function of the brain no matter what age we are.
- Try breathing techniques such as this one: rest one hand on your lower abdomen and your other hand on your chest. Take a deep breath by inhaling for 3 seconds and then exhaling for three seconds. Focus on the way your hand rises and falls according to your inhales and exhales. Try to repeat this at least 5 times.
- Consider getting support from a counsellor, social worker, or other mental health professional. The Canadian Mental Health Association provides a [directory of crisis support lines](#) you can call.

### Arthritis Awareness Month JHI Series: Part 2

For some individuals with severe osteoarthritis or different forms of inflammatory arthritis, their family doctor or rheumatologist may recommend a joint replacement if other forms of treatment have not improved function or failed to prevent further joint damage. In **part-two** of this three-part series, we will focus how to know if joint surgery is the right option for you, as well as how to prepare if it is.



## Arthritis Consumer Experts (ACE)

### Who we are

Arthritis Consumer Experts (ACE) operates as a non-profit and provides free research based education and information to Canadians with arthritis. We help (em)power 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, scientific and medical experts on the ACE Advisory Board. To learn more about ACE, visit [www.jointhealth.org](http://www.jointhealth.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 amount remaining from our annual budget at year end remains with ACE and is used to support the following year's core programs to continue helping Canadians living with arthritis.

For its past 20 years, ACE has consistently honored a commitment to its members and subscribers, academic and healthcare professional

colleagues, collaborators, government and the public that its work is free from the influence of its funders.

To inform ACE employees and our stakeholders, members, subscribers that we will operate our organization with integrity and abide by the highest standards of lawful and ethical behaviour, ACE has adopted this strict set of guiding principles:

- ACE requests grants from private and public organizations to support its core program and plans and allocates those funds free from influence;
- ACE discloses all funding sources in all its activities;
- 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.
- ACE employees do not receive equity interest or personal "in-kind" support of any kind from any health-related organization;
- ACE identifies the source of all materials or documents used;
- ACE develops positions on health policy, products or services in collaboration with people living with arthritis, academic research community, health care providers and governments free from concern or constraint of its funders or other organizations; ACE employees do not engage in personal activities with its funders;
- Cheryl Koehn does not own stock or any financial interest in any of its private or public funders.

### Scientific Review

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



### Disclosures

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ACE also received 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.

### Disclaimer

The material contained in this publication 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. Please contact your physician for your own health care related questions.

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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.

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