

Day 11: Arthritis

- The term arthritis comes from the Greek “arthro” meaning joint and the Latin “itis” meaning inflammation.
- Arthritis refers to more than 100 related conditions affecting people’s joints.
- Arthritis can strike anyone at anytime, regardless of age, physical condition or ethnic background.
- The most common arthritis symptoms include joint pain and swelling, and can interfere with an individual’s ability to manage daily activities.
- There are two main types of arthritis: inflammatory arthritis and osteoarthritis.
- There is no cure for arthritis.
- The majority of people living with arthritis can lead active lives and avoid permanent joint damage if the disease is diagnosed early and an appropriate treatment plan is begun.

INFLAMMATORY ARTHRITIS

Inflammatory arthritis is a group of autoimmune disorders where an individual’s own antibodies attack the lining of the joints and sometimes other organs, causing inflammation, swelling and pain.

The most common form of Inflammatory arthritis is rheumatoid arthritis. Other forms include lupus, juvenile idiopathic arthritis, ankylosing spondylitis, psoriatic arthritis, and gout.

OSTEOARTHRITIS

Osteoarthritis occurs when there is damage in and around the joints which the body cannot repair. It can be triggered by previous joint injury or other factors.

When cartilage, the material covering and protecting the ends of bones, begins to wear away, the eventual result is pain, stiffness, swelling and bone-on-bone movement in the affected joint.

Osteoarthritis is the most prevalent form of arthritis.



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The impact of arthritis in Canada

- Arthritis is a chronic disease that has a devastating and debilitating effect on the lives of more than 4.6 million Canadians.
- The main symptoms of arthritis are joint pain, stiffness and swelling, which can result in significant disability and poor quality of life.
- The impact of arthritis on the Canadian economy in health-care costs and lost productivity is estimated to be \$33 billion each year.
- In a given year, a Canadian living with arthritis is up to one-and-a-half times more likely to be hospitalized, require multiple primary care visits, visit a specialist or require physiotherapy than someone with other chronic conditions, and two to three times more likely than someone without any chronic illness.
- A Canadian with arthritis is twice as likely to report a reduction of activities at home versus a person with other chronic conditions, and 10 times more likely than someone without any chronic illness.
- A Canadian with arthritis is about a third more likely to report having poor mental health or suffering from mood and anxiety disorders (e.g. depression) than a person with other chronic conditions, and three times more than a person without any chronic illness.

Physical activity and arthritis

- Physical activity may help decrease arthritis pain as well as increase your flexibility and overall fitness.
- When you are doing physical activity you are “feeding” your joints. Cartilage depends on joint movement to absorb nutrients and remove waste.
- Maintaining a healthy body weight is another important part of arthritis management. Too much weight placed on the joints can aggravate the pain.
- Physical activity does not have to be difficult. You can gain significant health benefits by just being active in your daily life.
- To keep your joints healthy: move them!
- The 3 main types of physical activity to include with arthritis pain include:
 - Flexibility (stretching)
 - Strength (resistant exercise, weight lifting)
 - Endurance (swimming, cycling, walking)
- Group exercise classes include all 3 types!



Day 11: Building Balance at Home

The Secret of Good Balance: the essential elements of balance

- **Visual Cues**

- Visual cues come from our eyes and tell us all sorts of information about our environment.
- Our eyes help us see and prepare for potential dangers and obstacles which can prevent falls. Have eyes tested annually.

- **The Inner Ear**

- The inner ear also contains a fluid-filled semicircular canal which gives us important information on the position of our head and its movement in space in relation to gravity.
- Have hearing tested annually

- **Internal Spatial Orientation**

- Internal spatial orientation tells us where arms and legs are positioned in space. For example, if you close your eyes and then lift your arm and wave it about your head, you know where your arm is because of your inner sense of feedback. Exercise regularly as it helps to improve internal spatial orientation, also known as proprioception

- **Somatosensory Input from our Feet**

Pressure systems from special receptors on the bottoms of our feet can give us information about the location of our center of gravity as we shift our weight while standing, walking, or reaching.

- When all these systems are working together automatically with our musculo-skeletal system one can stay active and independent, preventing falls and improving their balance.



Day 11: Building Balance at Home

Building “Balance” at Home

You can complete a variety of exercises within your own home to gain balance. Safety always comes first! If you're going to exercise at home, consider inviting a friend over to do the exercises with you.

Always talk to your doctor before starting a new exercise program. Your doctor may approve all of the exercises, or they may give you some modifications or guidelines. If any activity causes pain or shortness of breath, talk with your doctor.

Exercises that can be completed at home: “Exercises at the Kitchen Sink”

Walking on the spot – March on the spot for a count of 30. Bring your knees up high. Gradually increase the duration of the walking to 1 minute. When you're strong enough, you can try walking around your home instead of marching on the spot in front of the sink.

Slow toe taps – one foot at a time, lift your toes off the ground (keep heel planted), hold it for 3 seconds, then lower and relax. Repeat on other foot. Repeat 3-5 times on each foot. Increase to 15 times on each foot.

Up on toes/calf raises – Raise up on the toes of both feet, hold for 1 second then come down slowly. Repeat 3-5 times with the intention to increase to 15 times.

Mini squats – Bend knees slightly while keeping your back straight. Keep your heels on the floor. Hold the squat for a few seconds then stand up tall. Repeat 3-5 times with the intention to increase to 15.

Hip raises (alternate leg out and in) – Keeping your toes pointed forward, lift your right leg/hip out to the side. Hold this for 2 seconds and lower the right leg down. Repeat 3-5 times with the right leg then repeat 3-5 times on the left leg. Work towards 15 times.

Alternate leg behind – extend right leg behind you without bending the right knee. Return right leg to starting position then extend left leg back. Repeat 3-5 times on each leg, work up to 15 times per leg.

