## How to stay active during COVID-19

Exercises – CSA/SPARCC Webinar

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## Combating physical inactivity during the COVID-19 pandemic

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Increased inactivity and sedentary behaviour



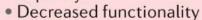
 Worsened disease activity and symptoms



 Poor cardiovascular risk profile



Decreased physical capacity





Increased symptoms of mental distress



Poor overall quality of life

Maintaining and/or increasing physical activity level



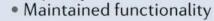
 Controlled disease activity and symptoms



Controlled cardiovascular risk profile



Maintained physical capacity





Attenuated symptoms of mental distress



 Improved overall quality of life

Nat Rev Rheumatol (2020).

### Key Resources





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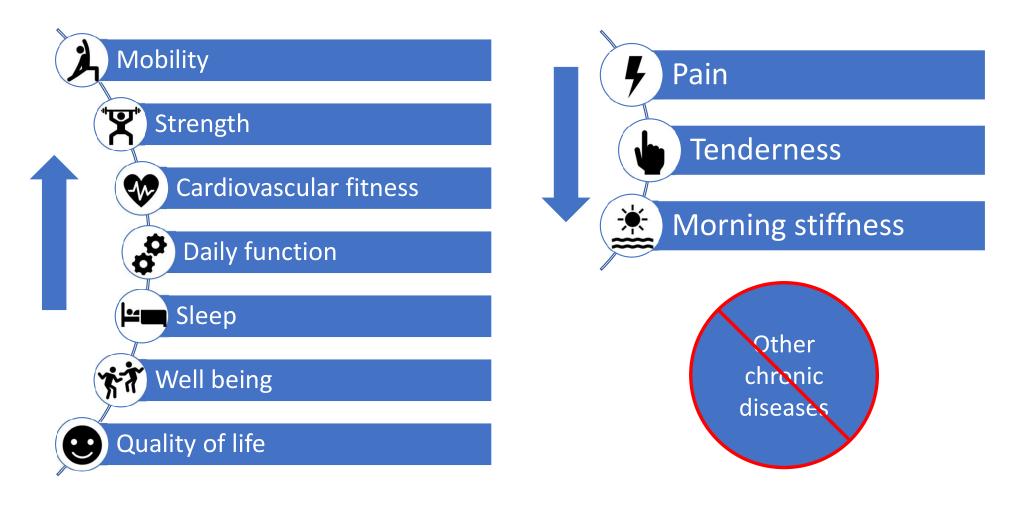


## 2018 EULAR recommendations for physical activity in people with inflammatory arthritis and osteoarthritis

Rausch Osthoff A-K, Niedermann K, Braun J, et al. Ann Rheum Dis 2018;77:1251–1260.

- 1. PA is a part of a general concept to optimise health related quality of life
- 2. PA has health benefits for people with RA/SpA/HOA/KOA
- 3. General PA recommendations, including the four domains (cardiorespiratory fitness, muscle strength, flexibility and neuromotor performance) are applicable (feasible and safe) to people with RA/OA/SpA.
- 4. The planning of PA requires a shared decision between healthcare providers and people with RA/**SpA**/HOA/KOA, which takes people's preferences, capabilities and resources into account

### Benefits of exercise...





### Stretching



Strengthening



Physical Activity (cardiovascular)

### Disclaimer

- If you have a history of cardiac disease, high blood pressure, respiratory disease, or other medical condition, or are pregnant, experiencing a flare of your arthritis, or are not used to exercise, it is important to check with your health care provider before starting an exercise program.
- If you are beginning to exercise for the first time, or it has been a
  while since you have participated in regular exercise, expect mild
  muscle discomfort. This is normal and should reduce within hours or
  a few days after starting. If your discomfort persists for than 48 hours
  and is not improving, hold off on your exercise routine and contact
  your health care provider.



### Physical Activity

• ≥ 150 minutes moderate intensity aerobic physical activity/week

OR

• ≥ 75 minutes high intensity aerobic physical activity/week

OR

Equivalent combination of above

#### **PLUS**

Muscle strengthening activities ≥ 2 days per week



## Aerobic intensity

Moderate Intensity	Vigorous Intensity
Brisk walking	Race walking, jogging, running
Water aerobics	Swimming laps
Doubles tennis	Singles tennis
Ballroom dancing	Aerobic dancing
General gardening	Heaving gardening
	Hiking up hills/with pack



#### Posture

Posture is the foundation of optimal function and appropriate exercise.

Good posture: Imagine a straight line that extends from your ear, through the centre of the shoulder, hip, knee and ends at the ankle bone. You can check your posture up against a wall or door with your head back in a neutral position, buttocks and heels against the wall. Be sure to relax and keep your shoulders down.







START: Lie flat, with your knees bent and feet flat on the floor.

EXERCISE: Gently bring your right knee towards your chest, then lower this leg back to the starting position. Repeat with the left leg.

HOLD: 3 seconds (approximately one exhale)

REPETITIONS: 10-15 per leg

NOTE: You may bring both knees to the chest at the same time. You may experience mild discomfort with this exercise, but it should not be painful.











START: Lie flat on the floor, or bed, with or without a pillow.

EXERCISE: Reach both arms above your head. Reach with your fingers and extend your legs.

HOLD: 30 seconds, remember to breath

deeply

**REPETITIONS: 3** 









START: Lie flat on the floor with your knees bent and feet flat on the floor. Arms are resting at your side.

EXERCISE: Lift your buttocks off the floor high enough to create a diagonal line from your knee to your arm pit.

**HOLD:** 5 seconds

**REPETITONS: 10-15** 

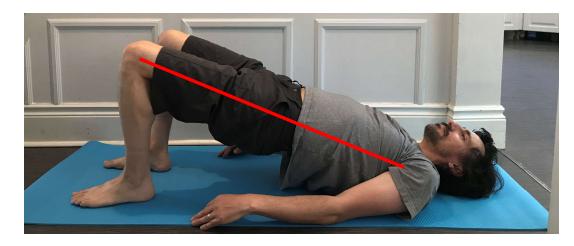
SETS: 2-3

NOTE: Keep your legs hip width apart (knees should not be touching). Keep thighs

parallel.







# Hamstring stretch

START: Lie flat on the floor with your knees bent and feet flat on the floor. Loop a towel or belt around your forefoot.

EXERCISE: Keeping your knee straight and your ankle flexed, gently lift your straight leg using the towel or belt as "arm extenders". Lift your leg high enough that you start to feel a gentle burn/stretch in the back of your knee.

HOLD: 20 seconds (remember to breath)

REPEAT 3 x per leg





# Hip flexor stretch

START: Kneel on your left knee. Place your right foot flat on the floor in front of you, with your right knee bent.

EXERCISE: Lean forward and squeeze your buttocks until you feel a gentle burn/stretch in the front of your hip.

**HOLD: 20 seconds** 

REPEAT: 3x per leg





## Bird dog

START: Position yourself on all fours with your hands directly under your shoulders and your knees directly under your hips. Head and neck in neutral position.

EXERCISE: Tighten your abdominals. Reach your left arm forward, extending the elbow. Lift your right leg back, straightening your knee. Return to the start position, with your hands and knees on the floor. Repeat on the other side.

**HOLD:** 5 seconds

REPEAT: 10-15 x per side

SETS: 2-3

NOTE: Do not allow your pelvis to rock from side to side as you lift your leg. Do not let

your stomach sag







## Dead bug

START: Lie on your back. Lift your arms up, with elbows straight. Arms should be 90 degrees from your chest. Lift your legs so your hips and knees are bent at 90 degree angles.

EXERCISE: (Exhale) Slowly lower your right arm and left leg until they are just about the floor. (Inhale) Bring your right arm and left leg back to the starting position. Repeat on the other side.

**HOLD:** 5 seconds

REPEAT: 20 x per side

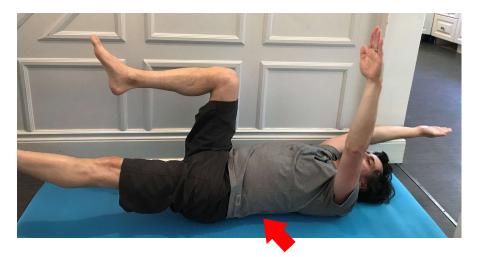
**SETS: 2-3** 

NOTE: Keep your back flat against the floor for the duration of the exercise. Do not let

your back arch.









START: Place elbows directly under your shoulders, forearms flat on the floor and in parallel. Ground toes on the floor and squeeze your buttocks. Keep your head, neck and torso in a neutral position and in line with your ankles. Keep eyes focused on your wrists. Do not look forward.

EXERCISE: Hold position. Remember to breath.

HOLD: 20-30 seconds

**REPEAT 2-3 times** 

NOTE: Do not let your abdomen sag towards the floor. Do not flex at the hips. Maintain a neutral position.







START: Stand with feet shoulder-width apart, toes pointing forward.

EXERCISE: Squat down, as if you are going to sit on a chair. Only go as far as is comfortable and you can maintain your balance. Hold position for 5 seconds. Slowly stand up, pushing through your heels.

**HOLD:** 5 seconds

REPEAT: 10-15 times

SETS: 2-3

NOTE: Keep knees aligned over the first and second toes throughout the exercise.









## Single leg stance with overhead shoulder press



START: Stand on your right leg holding a weight in your left hand.

EXERCISE: (EXHALE) Press the weight over head. (INHALE) Slowly lower weight to

starting position.

**HOLD:** 5 seconds

REPEAT: 10-15 x per side

SETS: 2-3

NOTE: If you do not have a dumbbell, you can improvise with canned food, water bottles, etc. Be sure to keep your knee slightly bent, with your weight going through your heel. Try not to wobble.







START: Find a hard back chair. Sit tall with your feet flat on the floor, buttocks to the back of the chair.

EXERICSE: Rotate your body and your head to look over your shoulder as far as you can without lifting your buttocks off the chair. You may use the arm rests or back of the chair to increase your rotation.

HOLD: 20-30 seconds

REPEAT 2-3 x per side

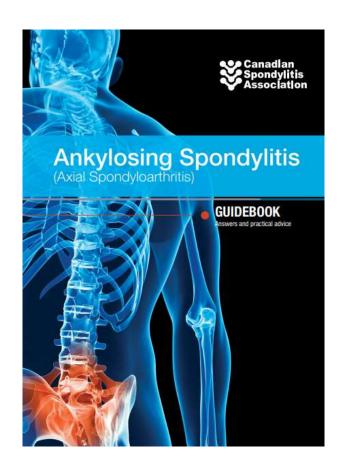
NOTE: Keep shoulders down in a neutral

position.





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#### **NECK ROTATION**

Sit upright in good posture and with both feet flat on the floor.

Hold the sides of your chair seat.

Turn your head to the right as far as possible without letting your shoulders turn. Repeat to the left.

This is an exercise we'd recommend you try to do every day, especially if you sit at a desk.



#### **CAT STRETCH**

Kneel on all fours. Keep your hands shoulder width apart and directly under your shoulders. Keep your knees hip width apart and directly under your hips.

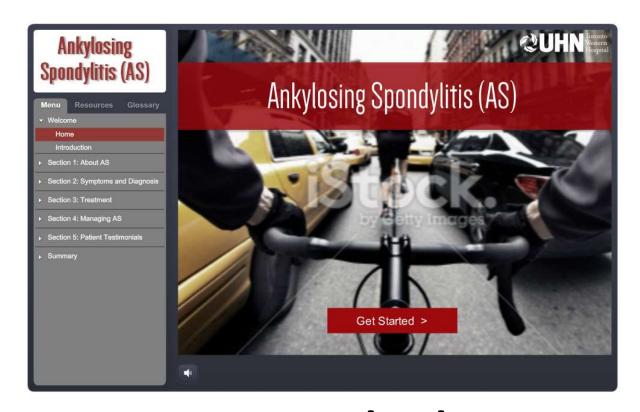
Keeping your elbows straight throughout, tuck your head down between your arms and slowly arch your back as high as possible.

Now lengthen your neck, keeping your nose parallel to the floor, and hollow your back as much as possible.









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