

## Physical activity

This is the lay version of the EULAR recommendations for physical activity in people with inflammatory arthritis or osteoarthritis. The original publication can be downloaded from the EULAR website: [www.eular.org](http://www.eular.org).

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## Introduction

EULAR recommendations give advice to doctors, health professionals – such as nurses, occupational therapists, physiotherapists or psychologists – and patients about the best way to treat and manage diseases.

EULAR has developed new recommendations for physical activity in people with inflammatory arthritis or osteoarthritis. Doctors, health professionals and patients have worked together in a taskforce to develop these recommendations. The patients that have been working on the team ensured that the patient point of view was integrated in the recommendations.

There are already international recommendations about the minimal requirements for physical activity to provide health benefits. EULAR set up the taskforce to see if these general recommendations could be used for people with inflammatory arthritis or osteoarthritis as well.

Types of inflammatory arthritis include rheumatoid arthritis (which may cause inflammation in different joints, for example, the fingers, toes, hips, shoulders, or elbows) and spondyloarthritis (which mainly affects your back). Osteoarthritis is a degenerative condition that often affects the hip or knee joints. Both types of disease are a major cause of pain, fatigue and disability.

## What do we already know?

Although many people with inflammatory arthritis or osteoarthritis take part in supervised or unsupervised exercise programmes, a lot of them do not meet public health recommendations for health-enhancing physical activity. This is a shame, as sensible physical activity can help to reduce the symptoms of disease and also has general health benefits – for example, physical activity can decrease the risk of developing cardiovascular disease. As with medicine, exercise will work best when taken at the right level and frequency. Frequency, duration and intensity are all important.

## Definitions

Physical activity is any movement of the body that needs more energy than just resting. This includes exercise and sport, as well as physical activities that are part of daily life – for example, as part of a person's job, chores or hobbies, or when actively moving from one place to another.

Exercise is a subcategory of physical activity. Exercise is planned, structured and repetitive, with the aim of maintaining or restoring physical fitness. The World Health Organization (often referred to as the WHO) and the American College of Sports Medicine (ACSM) recommend that moderate cardiorespiratory exercise is done every day. Types of moderate cardiorespiratory exercise include brisk walking, taking the stairs, cycling or gardening.

Moderate cardiorespiratory exercise should get your breathing up, and intensive cardiorespiratory exercise will also raise your heart rate and cause you to sweat. Every week, you should aim for a minimum of 150 minutes of moderate cardiorespiratory exercise, or 75 minutes of intensive cardiorespiratory exercise, or any

combination (intensive exercise counts double – and is more effective!). As well as intensive cardiorespiratory exercise, you need to do at least two sessions a week that aim to build strength, and increase your flexibility, balance and coordination.

In the following recommendations, when we say ‘physical activity’ we always also mean the more specific term ‘exercise’.

## What do the recommendations say?

Overall there are four overarching principles and ten recommendations. The overarching principles stress that physical activity is part of a healthy lifestyle and a general concept that can improve quality of life, and that physical activity has health benefits for people with inflammatory arthritis or osteoarthritis. Importantly, the recommendations for the level and frequency of physical activity that were developed for the general population, are effective, safe and feasible for people with these types of arthritis. Before beginning an exercise programme, each person’s physical activity plan should be worked out with their healthcare provider, and should take into account personal preferences, needs and abilities.

**Each recommendation is based on available scientific evidence and expert opinion. The more stars a recommendation has the stronger the evidence is and the more important it is that you and your doctor should follow it.**

Recommendations with one or two stars are based on expert opinion and less rigorous study designs, and cannot be backed up by effectiveness studies. However, these may be as important as those with three or four stars, which are backed up by appropriate effectiveness studies. It is important to understand that the absence of evidence for effectiveness does not imply that a statement is not applicable.

One star (\*) means it is a weak recommendation with limited scientific evidence.

Two stars (\*\*) means it is a weak recommendation with some scientific evidence.

Three stars (\*\*\*) means it is a strong recommendation with quite a lot of scientific evidence.

Four stars (\*\*\*\*) means it is a strong recommendation supported with a lot of scientific evidence.

- Promoting general physical activity should be an integral part of standard care throughout the course of the disease for people with inflammatory arthritis or osteoarthritis.\*\*\*\***

If you have inflammatory arthritis or osteoarthritis, it is beneficial and safe to exercise and increase your physical activity. Given the risk of cardiorespiratory disease for people with inflammatory arthritis, it is especially important to increase your cardiorespiratory fitness, preferably by doing some intensive cardiorespiratory exercise. Physical activity can also improve muscle strength and flexibility, as well as relieve some disease symptoms. All healthcare providers involved in your care should work with you to promote and encourage physical activity.
- All healthcare providers working with people with inflammatory arthritis or osteoarthritis should take responsibility for promoting physical activity and cooperate to ensure appropriate physical activity interventions.\***

Your healthcare providers should encourage you to increase or maintain your physical activity. They should cooperate with each other, including referring you to a specialist if needed – for example, to see a physiotherapist.
- Physical activity interventions should be delivered by healthcare providers who are competent to do so\***

The healthcare providers treating you should understand the general principles of physical activity <sup>2</sup>

and be competent in their delivery. They should have general knowledge of inflammatory arthritis and osteoarthritis.

- **Healthcare providers should check the type, intensity, frequency and duration of people's current physical activity and identify targets for improvement.\*\***

There are four general types of physical activity: cardiorespiratory fitness (endurance, condition), muscle strength, flexibility, and coordination and balance (sometimes summarised as 'neuromotor performance'). Your healthcare providers may ask questions to check what types you are doing, and to offer advice or targets.

- **Any general or specific limitations for physical activity should be identified.\***

There may be general or disease-specific reasons why you can't do certain types of physical activity. Your healthcare providers will advise on these depending on the general recommendations in your country.

- **Each person should have clear aims for their physical activity, and these should be evaluated over time.\***

Performance-based tests, questionnaires or monitoring tools may be used to check the progress of your physical activity. You may find it useful to track your progress yourself with an electronic device such as a pedometer, or through an app on your phone.

- **Each person's barriers and facilitators to physical activity, especially knowledge, social support, symptom control and self-regulation should be identified and addressed.\*\***

It is important that you understand your disease and how to exercise safely. Talk to your healthcare providers if you are worried about how physical activity may affect your pain levels, or if you are afraid of flare-ups or causing damage. Your healthcare providers will inform you about how exercise can impact your disease symptoms or disease control. They will also talk to you about correct exercising, the use of pain medication prior to exercising, using self-motivation techniques, and a supportive social background.

- **Individual adaptations to general physical activity recommendations should be based on the evaluation of physical, social and psychological factors including fatigue, pain, depression and disease activity.\***

Many people with inflammatory arthritis or osteoarthritis can meet the requirements for health-enhancing physical activity as formulated for healthy people. However, based on the evaluation, there may be a need to modify the exercise plan according to your health status, for example when you have acute pain or local joint inflammation.

- **Physical activity plans should include behavioural change techniques, self-monitoring, goal setting, action planning, feedback and problem solving.\*\*\*\***

Building physical activity into your daily routine requires lifestyle changes. Important behavioural change principles include self-monitoring, goal-setting and action planning to achieve individual targets. If needed, your healthcare providers should help to plan this with you, give feedback and support problem-solving related to your physical activity.

- **The type of physical activity delivery should be in line with people's preferences.\***

Every individual has specific preferences regarding how a sufficient amount of physical activity can be achieved throughout the week. Planned physical activities or exercises can be performed supervised or alone, undertaken as an individual or in a group. It may be done face-to-face or online. What works best for you will depend on your individual preferences. You may find it useful to have 'booster interventions'. This might be an individual or group 'refresher' on physical activity, having <sup>3</sup>

someone phone you to check on your progress, or using a wearable electronic device to track your physical activity.

## Summary

Overall, these recommendations highlight the feasibility and usefulness of the general physical activity recommendations for people with inflammatory arthritis and osteoarthritis. These recommendations provide you guidance on what to expect from healthcare providers, and what advice or support may be offered.

If you have any questions or concerns about your disease or its treatment, you should speak to a healthcare provider involved in your care.