

Arthritis Answers Podcast #3

Guidelines 101: What to do, how much to do, and how hard to work when exercising with arthritis

Karen: Welcome to *Arthritis Answers* podcast. *Arthritis Answers* is presented as part of *Interact with ENACT*. *Interact with ENACT* is part of a series from Boston University's ENACT, which stands for Center for Enhancing Activity and Participation among Persons with Arthritis. I'm Karen Jacobs, an occupational therapist, and I'm a Clinical Professor of Occupational Therapy at Boston University. Last time, we brought you tips to help you get started with exercise. I'm back today with Sara Crandall, a candidate for the Doctorate of Physical Therapy degree at Boston University. We're here to bring you a podcast about the exercise guidelines for people with arthritis.

Karen: So Sara, what organizations address exercise for people with arthritis?

Sara: We looked at guidelines from four well-respected groups: the Centers for Disease Control, the Arthritis Foundation, the American College of Sports Medicine, and the US Department of Health and Human Services. Most of these guidelines agree. Some even build off of each other. But sometimes one group points out something that another left out, or goes into a little more detail about it.

Karen: Well you certainly have done some great investigative work by going to these four respected groups.

Karen: Some of the information about guidelines is pretty long. What are the key components to any recommendation that people should focus on? Can you help make it simple for us?

Sara: Well first, you want to know what to do- so what type of exercise the guideline is suggesting. Next, you want to know how long one bout of that exercise should last, and how many times per week to do it. Finally, you should pay attention to how hard you want to work. On one hand, over-doing exercise can lead to injury and joint damage for people with arthritis. On the other hand, you need to be working at a certain intensity to get the full benefit from any type of exercise.

Karen: Well thanks Sara. Alright, now, let's jump right into the recommendations. What's recommended for aerobic exercise for people with arthritis?

Sara: So all of the guidelines we looked at recommend low impact aerobic exercise such as walking, cycling, swimming, gentle aerobics, or water aerobics classes. Any activity that gets your heart rate up is good, but keep the activity 'low impact.' Yoga, tai chi, dancing, and doubles tennis are also aerobic activities to consider.

Karen: Oh that's great. I love doing yoga, and I'm sure there's lots of other people that do too. So, how hard should a person work at these activities?

Sara: So during aerobic activity, you should aim to reach a moderate intensity. That means that you'll breathe faster and your heart will beat faster. You'll probably start to sweat. It's sometimes compared to a brisk walk, or exercise when you sweat but can still talk to a friend. Most people reach a moderate intensity when they walk at about 100 steps per minute. To get the health benefits of exercise, you need to get up to a moderate level no matter what activity you're doing.

Karen: Oh that's interesting. So how often and for how long should people do aerobic exercises?

Sara: The ideal amount of time for aerobic exercise is 150 minutes per week, or about 30 minutes per day, 5 times a week. Some guidelines stick to 30 minutes per day. Each day's exercise can be done over the course of the day with small periods. Each period of exercise must last at least 10 minutes if you're going to do it this way. You may also decide to do more exercise on one day and less on another, or spread out 150 minutes over the course of 6 or 7 days instead of 5. In general, be careful about doing too much on one day or in one period of exercise. It's generally better to spread the activity out over time.

Karen: Sara that's really good advice. So, another type of exercise that's recommended for people with arthritis is flexibility exercises, which is also called 'stretching'. So what types of exercises count as stretching?

Sara: Stretching exercises can take many forms, but all have the goal of making the muscles less tight. Some people prefer to stretch before or after a workout, or both. Yoga and tai chi are also great ways to gain flexibility.

Karen: Boy I know that firsthand from doing yoga. So how often and for how long should people with arthritis stretch?

Sara: Three of the guidelines address frequency for stretching. They all recommend daily flexibility exercise, which should take between 10-15 minutes. Hold each stretch for about 30 seconds, and repeat several times. Aim to stretch both sides of your body, arms, legs, and trunk. Some links to specific stretches will be available in the show notes.

Karen: Oh thank you but, how hard should the stretch feel?

Sara: Flexibility exercises should be done until your muscle feels tight. Some tension is okay, like a tight pull, like a light pull, as long as the muscle or joint isn't painful. You should feel a gentle tugging sensation but never pain.

Karen: That's really helpful. I think that's really important for us to understand how hard the stretch should feel.

Karen: How about balance exercises? I know I'm asking you a lot of questions but balance exercises... what about them?

Sara: So the Centers for Disease Control and US Department of Health and Human Services recommend balance exercises 3 days per week for older adults. Balance exercises can be incorporated into strengthening or a flexibility routine. For example, try some strengthening exercises done on one foot or with feet close together, but always put safety first. Yoga and tai chi are also types of aerobic exercise, and they include positions that will challenge your balance. Most arthritis-specific guidelines do not specifically talk about balance. However, there is increased awareness that balance exercises are important to prevent falls for everyone. Balance exercises can prevent or reverse the worsening balance generally associated with aging.

Karen: Well thank you for that information on balance exercises.

Karen: Let's move on to another topic. Let's about strength training for a little bit. What exactly is strength training?

Sara: Strength training, also known as resistance training, can be done with different types of weights, machines, elastic bands, or with your own body weight.

Karen: So with this, how often and for how long should people do these strength training exercises?

Sara: In general, guidelines suggest doing 8-10 exercises per session, at least 2 days per week. In general, you want to do 8-12 repetitions of each exercise, 2-3 times (many use the terminology 'for 2-3 sets'). The strengthening exercises will probably take between 20-30 minutes per session. They may take longer if you need rest breaks or do multiple sets of the exercises.

Karen: So in this case, I'm going to ask you a similar question from before. How hard should strengthening exercises be?

Sara: Well the key to doing strengthening with arthritis is to have enough resistance to stress the muscles but not the joints. So if you feel like your joints are painful during these exercises, you want to stop, chose a lower weight, and try again. You should also make sure that you are using a machine

it is adjusted to match the size of your body, if you chose to use a machine. You can ask a trainer for help if you have questions. If the exercise is still painful with some adjustments, you should talk to a health professional before trying again. You may need to adjust your form or choose a different exercise for those same muscles.

Karen: Yeah that's really helpful. And you just mentioned muscles, so which muscles should people stretch and strengthen?

Sara: So the guidelines often use the term "major muscle groups." "Major muscle groups" refers to about ten general areas of muscles. There are four groups in your upper body: chest muscles, shoulder muscles, and the muscles that bend and straighten your elbow. There are also four groups in your legs: the buttocks muscles, the muscles that bend and straighten your knee, and your calf muscles. The last two muscle groups are back muscles and stomach, or abdominal, muscles. People with arthritis often ask why they should exercise muscles far away from their joint or joints with arthritis. This is recommended because it will make daily activities easier, and can help take stress off of your arthritic joints. Postural exercises can help decrease pain by putting you in the ideal position for many activities, from walking to lifting a box. Back and abdominal muscle strength can improve balance and decrease the stress going into your hips, knees, and ankles. For most joint problems, you should at least consider the muscles around the joint, the joint above, and the joint below. For example, people with knee arthritis should exercise the muscles around the knee, hip, and ankle. Doing a variety of areas can also be a chance to get some rest--so try alternating arm exercises with leg exercises.

Sara: Alright, so that wraps up our guidelines, and we hope we've given you some good ideas of what to think about when you plan your exercise. As we mentioned in our last podcast-- even if you can't meet the guidelines, the more you do, the better. And if you're just starting out, it's okay to slowly build up to the amount of activities in the guidelines.

In our show notes for today, we'll have links to the exact guidelines that we reviewed. We'll also have links to videos and websites that show specific strength and flexibility exercises. If you're not sure how to do any type of exercise, make sure to consult a health professional, physical therapist, or certified personal trainer.

Karen: Sara, boy, did you provide us with interesting and informative information today, thank you so much. And to our audience, thank you for

joining us! If you'd like to give us feedback, ask questions, or let us know of topics that you're interested in, please send an email to enact (e-n-a-c-t) @ bu.edu. On our website, which is- www.bu.edu/enact, we have a copy of the show notes, information about the center, and a list of online resources. Please make sure to subscribe to our podcast so you can receive episodes as they're produced. In our next podcast, we'll address one of the major barriers to exercise that people with arthritis face: how can they find the time to exercise? Check back in soon for some great tips that work into your schedule and your lifestyle. Until then, stay active!