

## How to Begin Exercising

What are your primary obstacles to exercising? This will help you figure out ways to overcome those obstacles:

1. Too tired \_\_\_\_ general fatigue, \_\_\_\_ fatigue from POTS (Postural Orthostatic Tachycardia Syndrome)
2. Just don't enjoy exercise: \_\_\_\_
3. Too much pain: \_\_\_\_ upper body, \_\_\_\_ lower body \_\_\_\_ spine \_\_\_\_ overall achiness
4. Afraid that exercise will hurt
5. Bad experiences with exercise in the past: \_\_\_\_\_
6. Other: \_\_\_\_\_

### Fatigue:

- General fatigue: Start by doing 5 minutes of breathing exercises to prepare your body (and mind) for more exercise. Belly breathing, slow breathing, alternate nostril breathing, or right nostril breathing. (see [www.webspace.clarkson.edu/~lrussek/docs/hypermobility/RussekBreathing.pdf](http://www.webspace.clarkson.edu/~lrussek/docs/hypermobility/RussekBreathing.pdf)) for more info on breathing). You can also try (loud) singing; for people who are out of shape, loud singing can be as aerobic as brisk walking. It is okay to just work on the breathing for 1-2 weeks before trying more vigorous exercise. Then, keep doing 1-2 minutes of breathing at the beginning to prepare your body for exercise.
- There are gentle exercise routines designed to help energize you:
  - Morning yoga: [https://youtu.be/V29hE0\\_oBE](https://youtu.be/V29hE0_oBE)
- POTS-related fatigue: Start exercising in a more horizontal position, such as lying down, recumbent bicycle, or swimming. Consider wearing compression stockings; athletic compression leggings can be comfortable – [www.cw-x.com](http://www.cw-x.com) are popular. More info about POTS at [www.webspace.clarkson.edu/~lrussek/docs/hypermobility/RussekPOTSchecklist.pdf](http://www.webspace.clarkson.edu/~lrussek/docs/hypermobility/RussekPOTSchecklist.pdf).
- Start with sitting exercise, so you don't need to fight against gravity so much. Sitting yoga or Tai Chi can be a good way to start. Modify any movements that are painful or too difficult.
  - Chair Yoga with Sherry Zak Morris: A lively 3 minute routine to the tune of 'Staying Alive': <https://youtu.be/vZJ02gfp0o>.
  - Sitting qigong (breathing-based movement): <https://youtu.be/ppM9FRRX-Uo>
  - Sitting Tai Chi (breathing-based movement): [https://youtu.be/V29hE0\\_oBE](https://youtu.be/V29hE0_oBE)
- You can even do gentle exercises that start lying down. A bed-yoga program for people with POTS: [https://youtu.be/V29hE0\\_oBE](https://youtu.be/V29hE0_oBE)



### Just don't enjoy exercise:

- These ideas are also good for dealing with fatigue, making movement more fun.
- Use music to help energize you. Dance around your house, dance with your kids, your partner, or your friends.
- Use movement games. Augmented reality games, such as "Active Arcade"



provide movement games at a variety of challenge levels, and many can be done sitting. While there is not yet research evidence, theoretically, this type of exercise could improve proprioception and body awareness by providing visual feedback, motor control training from aiming for targets, and stability from side to side movements. (Picture Credits: Active Arcade / NEX Team Inc.)



For more info on augmented reality:

[http://www.webspace.clarkson.edu/~lrussek/docs/hypermobility/RussekJTeen\\_Zebras22.pdf](http://www.webspace.clarkson.edu/~lrussek/docs/hypermobility/RussekJTeen_Zebras22.pdf)

- Use a Rate of Perceived Exertion (RPE) to adjust exercise difficulty. When starting a new exercise, target a difficulty of 2-3/10 on the RPE scale. When the exercise is consistently below 3/10, you can make it a bit more challenging (e.g., more time, more effort). If RPE is 6/10 or greater and you have increased discomfort, decrease the challenge.

RPE SCALE	RATE OF PRECEIVED EXERTION
10 /	<b>MAX EFFORT ACTIVITY</b> Feels almost impossible to keep going. Completely out of breath, unable to talk. Cannot maintain for more than a very short time
9 /	<b>VERY HARD ACTIVITY</b> Very difficult to maintain exercise intensity. Can barely breathe and speak only a few words
7-8 /	<b>VIGOROUS ACTIVITY</b> Borderline uncomfortable. Short of breath, can speak a sentence
4-6 /	<b>MODERATE ACTIVITY</b> Breathing heavily, can hold a short conversation. Still somewhat comfortable, but becoming noticeably more challenging
2-3 /	<b>LIGHT ACTIVITY</b> Feels like you can maintain for hours. Easy to breathe and carry a conversation
1 /	<b>VERY LIGHT ACTIVITY</b> Hardly any exertion, but more than sleeping, watching TV, etc

**Too much pain**

- Use your pain management self-care strategies before or during exercise. This may be using a TENS machine, applying a topical such as Biofreeze, Tiger balm, heat, etc. Starting with a few minutes of meditation with slow breathing can also ‘turn down the volume’ on pain. If you don’t have a *Pain self-care plan*, you can create one using the form at <https://webspace.clarkson.edu/~lrussek/research.html>.
- If your pain is localized to a region of your body, you may be able to start exercising by moving parts of your body that don’t hurt so much. For example, if your hips, knees and ankles are the most painful, consider sitting exercise, such as the sitting yoga or Tai Chi discussed above. If your shoulders are worst, try dance footwork.
- Exercise can be a powerful pain management strategy, as it activates neural circuits that inhibit pain. This is especially true for overall achiness pain often associated with a sensitive nervous system. You are likely to feel better once you start moving, as long as you start slowly and choose movements that are not too stressful.

**Afraid that exercise will hurt:**

- Start with very gentle movement in parts of your body that don’t hurt as much, so that you can learn to trust your body again. Modify movements so you feel safe, and gradually progress as you become more confident.
- Start with visualization – just imagining you are moving. This prepares your brain for movement without pain.
- Do something distracting and fun, such as dancing to music or doing the augmented reality games.
- It is normal for exercise to sometimes increase discomfort a little. However, if exercise increases your pain by more than 2 units on a 0-10 scale, and that increase remains for more than 2 hours, you are either doing too much exercise, an inappropriate exercise, or doing it incorrectly. Reconsider and revise your program.

**“Start low, go slow.”** The grid, below, shows a potential 6 week program that progresses very slowly. It starts by using diaphragmatic (belly) breathing or singing for aerobic conditioning. Any day you don’t feel well enough, return to a previous week’s schedule for that day, and gradually work back up to your schedule

- Singing for Lung Health: <https://www.blf.org.uk/support-for-you/singing-for-lung-health/what-happens-in-a-singing-for-lung-health-session> (Kaasgaard, 2022)

Wk	5 min	5 min	5 min
1	Diaphragmatic breathing Or Singing (2-3/10 RPE)	Diaphragmatic breathing Or Singing (2-3/10 RPE)	Diaphragmatic breathing Or Singing (2-3/10 RPE)
2	Diaphragmatic breathing Or Singing (2-3/10 RPE)	Diaphragmatic breathing Or Singing (2-3/10 RPE)	Postural/alignment correction, motor control (2/10 RPE)
3	Diaphragmatic breathing Or Singing (2-3/10 RPE)	Diaphragmatic breathing Or Singing (2-3/10 RPE)	Motor control, (2-3/10 RPE) Posture strengthening
4	Diaphragmatic breathing Or Singing (2-3/10 RPE)	Posture strengthening Or gentle aerobics (3/10 RPE)	Core control/strengthening (2-4/10 RPE)
5	Aerobic exercise (2-3/10 RPE)	Posture strengthening (3-4/10 RPE)	Core or other strength (3-4/10 RPE)
6	Aerobic exercise (2-4/10 RPE)	Aerobic exercise (3-5/10 RPE)	Strengthening (3-5/10 RPE)