

## Center for Amplified Musculoskeletal Pain Syndrome

### Physical Therapy: Home Exercise Program

Exercise is important for you when you have Amplified Musculoskeletal Pain Syndrome (AMPS). Exercise serves many roles in this diagnosis: it helps to wash out the lactic acid and bring oxygen to your tissues, sends endorphins (feel good hormones) to your brain, it gives you energy during the day and it helps you sleep better at night. The point of this program is to get you moving, even on your worst pain day, and it is specifically targeted toward your pain areas. It may be hard to get started and it may increase your pain at first, but continuing to progress session should ultimately decrease your pain and more importantly increase your function! If you have any questions, we encourage you to speak your physical therapist or physician.

#### 1. Cardiovascular Endurance

*The ultimate goal of cardio is to increase your heart rate and get you hot/sweaty. If possible, doing cardiovascular endurance activities at least 3-5 days/week will be helpful. Remember to work within your limits. You should work at a pace where it is not too hard and not too easy. Try to stay in the range of 5-8 on the RPE scale (below) which is a way to rate how hard you feel you are working during exercise.*

- a. If you have access to equipment (treadmill, bike, elliptical, rowing machine, stepper) you can use it to get in at least 20-30 minutes of endurance.
  - i. A warm up and cool down of at least 2 minutes each should be added to the ultimate goal time.
  - ii. If you have not worked in a long time, you should work up to the above goal; which can be in small increments, starting with 5-10 minutes and increasing every few days to a week.
- b. If you do not have access to equipment, cardio can be in the form of walking or running outside, biking outside. Again working up to at least 20-30 minutes.
  - i. Alternatively repetitions of fast pace step ups on bottom step, jumping jacks, high knees, butt kickers, jump taps, etc. can all be used as a form of cardio.
- c. Interval training with or without equipment:
  - i. 5 minutes of moderate speed of activity and 1 minute slow speed for several repetitions can mix up your cardio routine.

Rate of Perceived Exertion (RPE)	
0-2	Very Easy
3-4	Easy
5-6	A little Hard
7-8	Very Hard
9-10	Hardest Imaginable

## 2. Total Body Strengthening

*Strengthening is just as important as the cardio. If possible, completing some form of strengthening at least 3-4 days/week is beneficial. Remember that strength training can make you sore in the beginning (usually 1-2 days after you exercise), that is okay, and continuing to move will help to decrease that soreness! Exercises should be done slow and steady, using good form to prevent hurting yourself. Keep an eye out on your elbows and knees when doing strengthening to avoid hyperextension of your joints.*




- a. Body-weight exercises are the easiest to complete and require no equipment, however if you have access to weights, a weighted ball or therapy ball, you can use them!
- b. It is okay to complete strengthening on the same day as cardio.
- c. The goal is to work up to 3 sets of 10-12 repetitions, choosing 5-6 exercises each session.
- d. Alternatively, making a game out of strengthening can mix up your routine.
  - i. Exercise card game – pick 4 exercises, flip over a card, the suit represents exercise you have chosen for that suit, the number represents # of reps (face cards = 10; ace = 1 min break)
  - ii. Exercise Candyland – pick 6 exercises, each color represents a different exercise, you choose number of reps
  - iii. Get creative – choose a board game or card game and turn it into an exercise activity!
- e. On the next sheet you will find an individualized strengthening program.




## 3. Sample Exercise Calendar



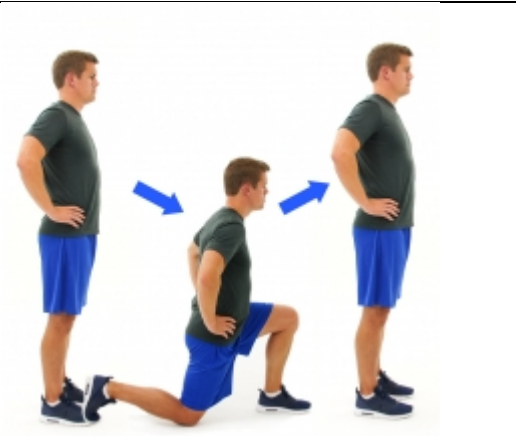
- a. Remember this is just a sample, it can be modified to fit your schedule.
- b. What is important is that you do something every day, even if it is getting up, going to school and helping around the house – this is not meant to be an added stressor to your life.



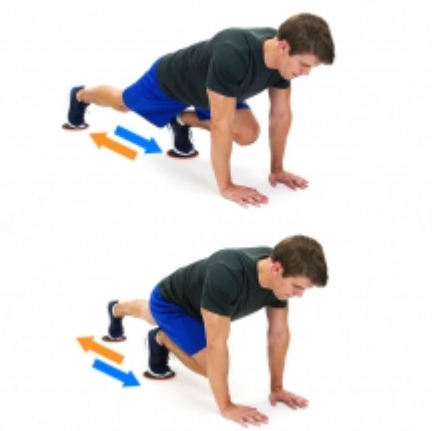
WEEK ONE	Cardio 20 min Warm up Work phase Cool down	Strength	Rest	Cardio 20 min	Strength	Cardio 20 min	Cardio 20 min
WEEK TWO	Cardio 22 min Warm up Work phase Cool down	Strength	Cardio 22 min	Rest	Cardio 22 min	Strength	Cardio 22 min
WEEK THREE	Cardio 25 min Warm up Work phase Cool down	Strength	Cardio 25 min	Rest	Cardio 25 min	Strength	Cardio 25 min
WEEK FOUR	Cardio 28 min Warm up Work phase Cool down	Strength	Cardio 28 min	Strength	Cardio 28 min	Cardio 28 min Strength	Rest

## Strengthening Program

<p><b>Bridges</b></p> <ul style="list-style-type: none"><li>• While lying on your back with knees bent, tighten your core, squeeze your buttocks and lift off the floor, holding for count of 3, then lower to floor.</li></ul>	
<p><b>Single Leg Bridges</b></p> <ul style="list-style-type: none"><li>• While lying on your back with knees bent, extend one knee, tighten your core and squeeze buttocks to lift off the floor, holding for a count of 3, then lower to floor. Repeat on opposite leg. Try to maintain a level pelvis throughout.</li></ul>	
<p><b>Forearm Plank</b></p> <ul style="list-style-type: none"><li>• While lying face down, lift your body up on your elbows and toes, hold for a count 30 seconds. Try to maintain a straight spine throughout (no saggy belly).</li></ul>	

<p><b>Side Plank</b></p> <ul style="list-style-type: none"><li>• While lying on your side with knees bent, lift your body up, pushing through your elbow and knees, hold for a count of 15. Repeat on the opposite side.</li></ul>	
<p><b>Push-Ups</b></p> <ul style="list-style-type: none"><li>• Lying face down, use your arms to push yourself up and down. This can be completed on your knees as well.</li></ul>	
<p><b>Squats</b></p> <ul style="list-style-type: none"><li>• Standing with feet shoulder width apart, bend knees and squat as if you were about to sit in a chair. Your knees should not go in front of your toes, holding a ball with arms outstretched in front of you can help balance your weight to avoid this.</li></ul>	

<p><b>Lunges</b></p> <ul style="list-style-type: none"><li>• Standing with one foot in front and one behind, bend both knees straight down to the floor and then return to standing. Repeat on other leg. Do not allow front knee to go over toes.</li></ul>	
<p><b>Split Squats</b></p> <ul style="list-style-type: none"><li>• Stand with one leg forward and the other leg back on a chair, then bend your knee like you're doing a lunge, then return to standing. Do not allow front knee to go over toes.</li></ul>	
<p><b>Floor to Stands</b></p> <ul style="list-style-type: none"><li>• Starting in standing position, step forward, bending knees (deep lunge) until one knee is on ground, then bring other knee to ground. Return to standing by bringing one knee forward and pushing up to stand.</li></ul>	

<p><b>Step Ups</b></p> <ul style="list-style-type: none"><li>Using a curb, aerobic step, or bottom step of staircase, step up and down without holding on. Complete with opposite leg. Increase speed to increase challenge.</li></ul>	
<p><b>Heel Raises</b></p> <ul style="list-style-type: none"><li>While standing on one leg, raise up on your toes to lift heel off ground and then slowly lower to the ground. Repeat on opposite leg.</li></ul>	
<p><b>Mountain Climbers</b></p> <ul style="list-style-type: none"><li>In full plank position, bend one knee toward chest, jump and switch so that trail leg is up by chest.</li></ul>	



### Functional Activities

There are TONS of things we do every single day that can be counted as activity. Get up and move and make it fun! Take your dog for a walk, stand to cook or bake, help around the house (dust, vacuum, organize), cut the grass, go on a hike, take a bike ride, jump on your trampoline, play outside!

### Online options

Especially during this time of COVID-19, so many premiere athletes, coaches, and fitness instructors are offering free classes. Google a person or a type of exercise and chances are you are going to find something to do with the ability you want to work on - make it easier or harder depending on your current level of activity.

**\*\*For any specific exercise plans needed, feel free to email the below email and we can touch base on what you need. Remember exercise is medicine, and pulling your family into this will likely help out the quarantine blues!**

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