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## Patient Education Kit for Migraine

### AHS Complementary and Integrative Medicine Special Interest Section

#### Exercise

Regular exercise reduces headache frequency, severity, and duration.<sup>1,2,3,4</sup> There are positive effects on neuroinflammatory, neurovascular, and psychological systems during exercise, which contribute to improvements in headache.<sup>5</sup> Exercise is beneficial when performed on its own, however it may have even more impact when used in combination with other preventive treatments, such as medication.<sup>6,7</sup> Evidence-based suggestions to consider are as follows:

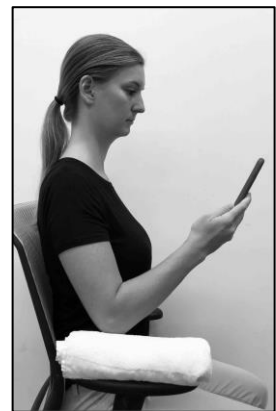
- **Sustainable exercise:** Be kind to yourself. Develop an exercise program that is sustainable, enjoyable, and convenient. A combination of aerobic exercise (e.g., brisk walking, running, swimming) and resistance training (e.g., yoga, Pilates, weight-lifting) is recommended.<sup>4,8,9</sup> Choose exercises you can tolerate, such as low-impact exercise that are gentle on your body. Vary your exercise routine to keep it fun; this can help you stick with a regular exercise plan over time.<sup>10</sup> Be patient and stick with it. Most programs typically take 8 weeks to impact headaches positively.<sup>11,12</sup>
- **Exercise Parameters:** Start with slow, gentle exercise, and increase the intensity, frequency, and duration of exercise over time as endurance improves. Higher-intensity training has increased benefit for headache prevention.<sup>3</sup> Strive to exercise for 30 minutes per day, at least 3-5 days per week.<sup>8,9</sup> Include muscle-strengthening activities at least two days per week using your own body weight, free weights, resistance machines or bands to train the entire body.<sup>8,9,11</sup>

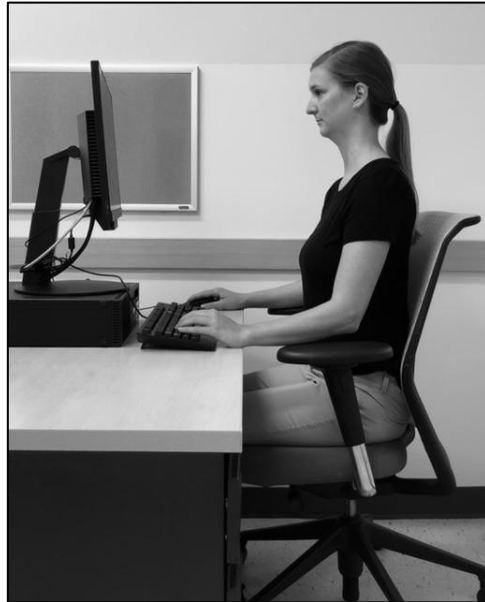
**Methods for Determining Exercise Parameters:**

| Exercise Parameters   | Light                 | Moderate               | Vigorous                            |
|---|-----------------------|------------------------|-------------------------------------|
| <b>Duration</b> <sup>8,9,11</sup>                                   | Below symptoms onset  | 150-300 minutes a week | 75-150 minutes a week               |
| <b>Frequency</b> <sup>8,9,11,12</sup>                               | 3 or more days / week | 3 or more days / week  | 3 or more days / week               |
| <b>Intensity (based upon Talk Test parameters)</b> <sup>13,14</sup> | Can talk easily       | Can talk, not sing     | Difficulty maintaining conversation |

- **Food and Liquid Intake:** Maintain good hydration before, during, and after exercise. Even mild dehydration can trigger headaches.<sup>15</sup> Eat a balanced snack (including protein, fat, and carbohydrates) before exercise.
- **Neck pain:** Many individuals with headache also have neck pain. Aerobic exercise has been shown to reduce neck pain, as well as migraine and tension-type headache.<sup>16</sup> Be mindful of the positioning of your head and neck during exercise. If you need additional support with neck pain, speak with your physician.
- **Postural Recommendations:** Below are simple recommendations to consider during daily activities to improve your posture and assist with headache management <sup>17,18,19</sup>

- Switch positions frequently by scheduling timed breaks. Stand up to reset your body
- Consider adjusting your workstation by modifying computer equipment and furniture when possible.
  - When using a laptop, position the monitor at eye level. An external keyboard and mouse can help provide appropriate set up.
  - When using books or smaller electronic devices bring the object to eye level.
- Position frequently used objects within easy reach to limit repetitive stretching or twisting.





- **Exercises for Postural Reset:** Complete exercise throughout the day to improve upright posture and self-awareness.<sup>4,11,20, 21</sup>

- While sitting or standing, bend both elbows to 90 degrees with palms facing up.
- Relax your shoulders and gently move your hands out to the sides while keeping your elbows close to your body. Only move within your available/comfortable range.
- Return to the starting position.
- This can be done a few times a day.
- This should not be irritating or heightening your headache, discontinue if that occurs.



- **Relaxation Training:** The practice of yoga has been shown to decrease headache frequency, intensity, disability, and use of rescue medications, when used in combination with standard migraine treatments, such as medications and lifestyle changes. The practice of yoga, when practiced 60 minutes per day, on 3-5 days per week, has been shown to decrease headache frequency.<sup>22</sup> Yoga can be performed in the home or in a teaching center.

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