Pilates and a Healthy Heart

With heart health at the forefront of our minds this month, Master Instructor Zoey Trap looks at the potential cardiac benefits that Pilates has for our clients.

Heart disease is the leading cause of death for both men and women in the United States, being responsible for one out of every four deaths (1). February is American Heart Health month, and it's a great time to educate yourself and your students about the specific benefits of Pilates for their hearts. There are many factors that contribute to heart disease; some are controllable, while some not. These include age, sex, family history, poor diet, high blood pressure, high blood cholesterol levels, diabetes, obesity, physical inactivity, stress and even poor hygiene (2).

When we think of heart health, often the first thing that jumps into our minds is cardiovascular training. A minimum of 20-60 minutes of aerobic activity, 3-5 days a week is recommended. Although there is not a lot of strong scientific research connecting Pilates with heart health, let's look at three studies that explored this relationship.

Does Pilates Offer Heart Healthy Benefits?

One recent study sponsored by the American Council on Exercise (ACE) posed the question "Does Pilates Offer Heart Healthy Benefits?" It examined the cardiovascular training response of

healthy young women (18-26 years old) in a Pilates program. These women all had Pilates experience and worked out in 50-minute classes that were primarily focused on advanced exercises. While heart rates rose 62 percent over their average resting heart rate, and oxygen consumption increased 43 percent, those levels fall below the recommended 64-94 percent rise for heart rate training, and the recommended 50-85 percent rise in oxygen consumption.

In looking at this study, it is certainly useful to learn the limitations of Pilates for healthy young women. But heart disease more proportionally affects older women who do not work out at a high level regularly. The bottom line is that any exercise is better than none. Also this study did not examine Pilates' many benefits for stress reduction, which positively affects heart health.

How Does Pilates Help Students At Risk of Heart Disease?

Another study published in 2015 in the International Journal of Cardiology (3) did examine older women at a greater risk for cardiovascular disease. The participants in this study worked out twice weekly for 16-weeks, performing Pilates mat. At the end of the study, it was determined that Pilates was useful in helping women reshape their bodies and their lower blood pressure levels. By the end of the study, women had trimmed an average of 1.25 inches off the waist and an inch from their hips, indicating improved body composition levels as well. Additionally, participants increased their flexibility, reduced their average systolic blood pressure by 7 points, and curtailed their diastolic by an average of 3 points.

A 2012 study compared traditional cardiac rehabilitation with Pilates exercise and the impact on functional capacity in patients at risk of heart failure (4). Over the course of 16

weeks, results showed that patients who combined Pilates training with 30 minutes of aerobic activity had greater increases in ventilation, peak oxygen consumption and oxygen pulse than the participants who were assigned to aerobics and conventional cardiac rehabilitation.

The Pilates group also had greater increases in measurements of exercise duration, improving from 11.9 to 17.8 minutes versus the non-Pilates group, who progressed from 11.7 to 14.2 minutes. Only the Pilates group exhibited significant increases from baseline in ventilation and peak oxygen consumption, and peak VO2 improved in the Pilates group to an average of 24.8, whereas the average improved to 18.3 in the non-Pilates group.

How Can We Add Heart-Healthy Benefits to Our Practice?

As you know, Pilates is about more has a myriad of benefits, many of which can positively impact heart and overall health. Pilates performed regularly can:

- Improve balance, control, coordination
- Improves circulation
- Strengthens core postural problems which can alleviate pain
- Heightens body awareness
- Be a great addition to any type of training
- Uplifts the spirit
- Reduce mental stress and improve concentration
- Benefit everybody from the most deconditioned to the elite athlete

But how can you maximize heart-healthy benefits for your students? Here are just a few tips to give your students a cardiac boost:

- Do what you can to ensure they enjoy their sessions,

that Pilates is their happy time. Completing mindful movements that appeal to the senses will help us to open our minds and become more creative, resilient and – yes – happier.

- Employ imagery that appeals to your students to take sessions from routine to "sense-ational"!
- Guide students to connect breath, movement and mind. Our emotions and breathing are closely connected. Several studies suggest that controlled breathing has immediate and profound positive effects on blood pressure, heart rate and state-of-mind.
- Be patient. Encourage students and you help them to build their self-esteem and confidence by focusing on what they can do – not what they can't!
- Bring a light touch. Teach students to take the work seriously, but not themselves seriously.

Take the opportunity to help your students get more 'heart' from their Pilates… it's a valentine that keeps on giving!

Ready to test your knowledge of heart-healthy practices? Take the quiz and earn 1 CEC toward your recertification!

TAKE THE CEC QUIZ

This article was contributed by Zoey Trap, MS.

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(1) U.S. Dept. of Health and Human Services. *February: American Heart Month*. Found at: https://healthfinder.gov/NHO/FebruaryToolkit.aspx
(2) Mayo Clinic. *Heart Disease: Symptoms & Causes*. Retrieved October 6, 2017. Found at: https://www.mayoclinic.org/diseases-conditions/heart-disease/symptoms-causes/syc-20353118

(3) Martins-Meneses DT, et al. “Mat Pilates training reduced clinical and ambulatory blood pressure in hypertensive women using antihypertensive medications.” International Journal of Cardiology. 2015; 20:262-268.
(4) Veiga Guimaraes G et al. Cariovasc Ther. 2012; 30 (6): 351-356