

THE 10 Rules of Exercising with HIGH BLOOD PRESSURE

A PEER-REVIEWED ARTICLE WRITTEN BY B.J. FOX

1 You can't afford NOT to exercise!
If you wait until you have a heart attack, you might not get a second chance...so the best time to start exercising is right now!

"In cardiovascular disease, there is no replacement for lifestyle change. Regular moderate exercise 5-7 times a week for 45-60 minutes is an integral part of that change."

~ DR. NARESH KUMAR, CARDIOLOGIST

Take a moment to consider the benefits of exercise:

- it boosts your daily energy
- heightens mental function
- improves sleep
- reduces stress
- increases strength
- and enhances self-image!

In addition, regular exercise reduces blood clotting¹, and has been shown to decrease risk of dying from heart disease by a staggering 50%⁵. Could anything else give you a better return on your time investment?

2 Get Physician Clearance First
Always have a doctor's consent before beginning an exercise program. A doctor needs to consider your special health considerations and the impact of your medications before making a decision on your exercise readiness. If working with a personal trainer, give them your doctors contact information so that they can discuss the best exercise approach for you, and maintain constant communication throughout.

3 Put the Right Food in the Fuel Tank
Common dietary recommendations for lowering blood pressure are based on the DASH Diet and/or Mediterranean Diet:

- Eat lots of fruits, vegetables, legumes, and grains
- Put an emphasis on unsaturated fats, including extra virgin olive oil, fish, avocado, nuts, and seeds
- Limit your consumption of sweets, margarine, and sodium containing foods such as soup, salty snacks, fast food, and canned foods.
- For best results, the services of a dietitian can be used to formulate a customized plan.

4 Resistance Training is Best
Exercise lowers blood pressure by improving the elasticity of the blood vessels, giving more flexibility and providing less resistance to blood flow.

"The best way to improve flexibility of the vascular system is to use short bursts of elevation followed by sudden recovery, then demanding activity again."

~ IRVING DARDIK, VASCULAR SURGEON¹

The research shows that walking and cardio may help, but resistance training works best:

- **Don't cut the person to fit the coat:** Have a fitness trainer develop you an individualized routine.
- **Use lighter loads:** Lifting heavy weights can elicit a dramatic rise in blood pressure.
- **Perform the exercises in a circuit fashion:** Cycle through the exercises, stopping 3-4 reps before you anticipate muscle failure.

5 Always Warm-Up

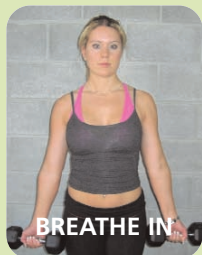
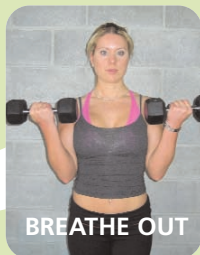
Check your blood pressure before you begin. If the blood pressure is in a relatively safe zone, ease into exercising with a proper warm up. Perform brisk cardio for 5-10 minutes, gradually increasing the intensity until you are on the brink of sweating.

6 Have an emergency plan

Cease exercising if you experience chest pain, dizziness, headache, shortness of breath, or nausea. If you suspect a heart attack, call 911 immediately. The American Heart Association recommends taking Aspirin (if not contraindicated) early in the treatment of a heart attack. 2 chewable baby Aspirins can greatly improve chances of survival by breaking up potential blood clots.

7 Breathe!

It can be common for exercisers to instinctively hold their breath during a specific exercise, creating pressure to cushion and support the spine. But to prevent blood pressure from skyrocketing, hypertensive individuals should never hold their breath. As an alternative, breathing through pursed lips can help maintain the supportive pressure in the trunk.



When exercising:

- Breathe out as you do the work
- Breathe in as you return the weight to the starting position.

For example, if doing a bicep curl, you would breathe out as you curl the weight up, and breathe in and as you lower the weight back down.

8 Stay Away from Harmful Exercises

There are a number of exercises that require extra caution due to their potential to raise blood pressure. These exercises should only be used under a physician's advice, or avoided altogether:

a Avoid exercises with the arms or legs overhead



b Avoid the Leg Press:



c Avoid exercises where you maintain a stationary position:



9 Cool Down at the End

During the exercise, much of the blood may pool in the muscles. A sudden stop in physical activity could cause one to faint as a result of a sharp drop in blood pressure. When finished exercising, incorporate a 10-20 minute cardio cool down to normalize blood pressure, while burning some extra fat in the process. Keep the intensity low enough that you would be able to engage in a conversation if necessary.

10 Take Your Body for a Tune-Up!

People spend many thousands of dollars on a top model car. They do upgrades, take it in for regular maintenance, and make repairs. But at the end of the day they always step out of that “slick looking” car, and find themselves stuck in an “old jalopy” of a body. Why not make the body a top priority?

According to the Canadian Society for Exercise Physiology, inactivity is the most prevalent modifiable risk factor for heart disease⁷. If you continue to defer maintenance on your body, debilitating problems will arise...then how will you get around?

“At around the time I had my heart attack, my blood pressure was 160 over 110, and my resting heart rate was 85 beats per minute. As a result of regular exercise and sensible eating, my blood pressure is now 120 over 70, I have a resting heart rate of 61 beats per minute, and I’ve lost 38 pounds.”

~ ED BUFFETT, CEO⁴



ABOUT THE AUTHOR

B.J. Fox is a Toronto based Kinesiologist with over 16 certifications in the areas of fitness, nutrition, and rehab. B.J. specializes in helping busy people get fit by working smarter, not harder. He provides customized personal fitness training for individuals with special health considerations. For more information, visit www.Foxfitness.ca.

REFERENCES

1. Anderson, Greg. High Intensity Strength Training: More Aerobic Than “Aerobics” Retrieved from www.mikementzer.com on March 17, 2004
2. Baechle, Thomas, and Roger Earle (2000) Essentials of Strength and Conditioning/National Strength and Conditioning Association 2nd Edition. Human Kinetics. Windsor ON.
3. Batmanghelidj, Dr. F (2002) Your Body’s Many Cries for Water 2nd Ed. Global Health Solutions Inc, Vienna VA
4. Buffet, Ed. Testimonial of results while personal training with Brendan Fox. Provided on July 18, 2006.
5. Bryan, Cedric and James Peterson (1996) Endurance Fitness: The Complete Guide 2nd Ed. International Sport Sciences Association.
6. Campbell NR, Burgess E, Choi BC, Taylor G, Wilson E, Cleroux J, Fodor JG, Leiter LA, Spence D. Lifestyle modifications to prevent and control hypertension. 1. Methods and an overview of the Canadian recommendations. Canadian Hypertension Society, Canadian Coalition for High Blood Pressure Prevention and Control, Laboratory Centre for Disease Control at Health Canada, Heart and Stroke Foundation of Canada. CMAJ. 1999 May 4;160(9 Suppl):S1-6. Retrieved from www.Pubmed.com on June. 12, 2006
7. Canadian Society for Exercise Physiology (CSEP)(1997) The Canadian Physical Activity, Fitness & Lifestyle Appraisal. Health Canada, Ottawa, ON.
8. Catanzaro, John Paul (2004). Advanced Strength Training Workshop June 12-13, 2004, Scarborough ON
9. Catanzaro, John Paul (2006) Q & A. Information retrieved from www.bodyessence.ca on July 1, 2006
10. Dickerman RD, McConathy WJ, Smith GH, East JW, Rudder L. Middle cerebral artery blood flow velocity in elite power athletes during maximal weight-lifting. Neurol Res. 2000 Jun;22(4):337-40. Retrieved from www.Pubmed.com on June 29, 2006
11. Elrick, Dr. Harold. (1996) Commentary: Exercise is Medicine. The Physician and Sportsmedicine, Vol. 24, No.2, Feb 96
12. Heart and Stroke Foundation. The Mediterranean Diet. Retrieved from www.heartandstrokefoundation.ca on July 9, 2006
13. Kinakin, Dr. Ken. (2004) Upper Body Functional Muscle Testing Seminar. May 8-9, 2004, CMCC Toronto ON.
14. Kingwell BA, Jennings GL. Effects of walking and other exercise programs upon blood pressure in normal subjects. Med J Aust. 1993 Feb 15;158(4):234-8. Retrieved from www.Pubmed.com on June. 12, 2006
15. Koupaei, Hamid Reza Majlessi. Personal Communication on July 25, 2006
16. Kumar, Naresh. Interview on July 2, 2006
17. Leon AS, Casal D, Jacobs D Jr.Effects of 2,000 kcal per week of walking and stair climbing on physical fitness and risk factors for coronary heart disease. J Cardiopulm Rehabil. 1996 May-Jun;16(3):183-92. Retrieved from www.Pubmed.com on June. 12, 2006
18. Pinto A, Di Raimondo D, Tuttolomondo A, Fernandez P, Arna V, Licata G.
19. Schmid, Ron. Dietary Supplements: What the Industry does NOT want you to know. Retrieved from www.westonaprice.org on July 3, 2006
20. The American Heart Association: Aspirin in Heart Attack and Stroke Prevention. Retrieved from Americanheart.org on July 3, 2006
21. The Weston A Price Foundation: Myths and Truths about Nutrition. Retrieved from www.westonaprice.org on July 3, 2006
22. Twenty-four hour ambulatory blood pressure monitoring to evaluate effects on blood pressure of physical activity in hypertensive patients. Clin J Sport Med. 2006 May;16(3):238-43. Retrieved from www.Pubmed.com on June. 12, 2006
23. Vriz O, Mos L, Frigo G, Sanigi C, Zanata G, Pegoraro F, Palatini P; HARVEST Study Investigators. Effects of physical exercise on clinic and 24-hour ambulatory blood pressure in young subjects with mild hypertension. J Sports Med Phys Fitness. 2002 Mar;42(1):83-8. Retrieved from www.Pubmed.com on June. 12, 2006