

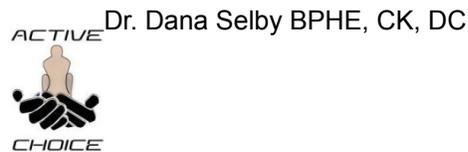
## Ask the Professional – Cardiovascular Fitness

Given that the warm weather is coming (or at least we hope so!), the outdoor activities that winter won't permit for will be on the top of the 'to-do' list for many. It is important to realize that unless you, and your body, are prepared ahead of time, injuries can (and for many will) occur. From raking the lawn and gardening, to hiking and playing sports like baseball and soccer, the forces that we place on our bodies will take their toll. If we are not adequately prepared before initiating a physically strenuous activity we can often pay the price for some time after. Which leads me into my topic for this month....cardiovascular fitness! Given that many injuries and chronic complaints can be avoided by ensuring that you have the appropriate cardiovascular fitness to perform, it makes sense to initiate and stick with a program that works for you. Step one is of course knowing what to do and how to do it. For those who need some cardiovascular re-conditioning, knowing what target zone to work in with respect to heart rate is vital. You will want to be working at a level that you can maintain over an extended duration of time (i.e.: 30-60 minutes), so ideally you should be working at a level that is within 60-70% of your maximum heart rate. Maximum heart rate is roughly calculated by subtracting your age from 220. Thus, a 40 year old person has a maximum heart rate of 180 beats per minute (bpm) [220 – 40 = 180]. Therefore, 50% of 180bpm is 90bpm, 60% of 180bpm is 108bpm and 70% of 180bpm is 126bpm. Within this zone you will still be working aerobically (meaning that you are using oxygen), when you work above this zone, (i.e.: 80%-100% of maximum heart rate), you will be working in an **anaerobic** zone, or without oxygen. Not only will you not be able to maintain this level of intensity for long enough to get the cardiovascular benefit, but a by-product of working **anaerobically** is lactic acid formation, a substance that has been linked with increasing post workout muscle soreness also known as delayed onset muscle soreness or DOMS. A good way to test yourself to see if you're still in an aerobic zone (without taking your pulse rate over and over) is called the 'talk test', if you can still talk, then you are still working aerobically, but if you are working so hard that you need all your air for breathing, then you are more than likely in an **anaerobic** zone. The type of activity you pick is up to you, from walking to swimming, from running to hiking, to riding a bike or rollerblading there are many different activities that can give us the cardio workout we require. However, regardless of the activity you choose or your personal fitness level, it is important to adequately warm up, stretch out and have a cool down following your cardio session. For example if you have 60 minutes per cardio session, a 10 minute warm up, followed by 40 minutes of cardio at 60% - 70% of your maximum heart rate, followed by a 10 minute cool down. Remember to adequately hydrate prior to and after your cardio session. By starting off slowly and progressively increasing the amount of time per session, you'll not only be able to improve your cardio, but will also lower your risk for many heart related diseases. We all lead busy, fast paced lives that don't always leave enough time for physical activity, **specifically** cardio, but as we know with the environment, small changes do make a big difference, so get out there and get active!

Prior to initiating a new exercise program you will want to ensure that is safe for you to do so, the PAR Q (or physical activity readiness questionnaire) will help you to determine your risk factors associated with physical activity.

For more information on the PAR Q please visit –

<http://www.gov.mb.ca/conservation/fire/Fire-Fighter/PAR-Q.pdf>



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