Heart Health by Design Exercise Guidelines

If you are a Stable Cardiac Patient or an HCM Patient, it is **strongly** suggested you read these guidelines to understand what level of participation is encouraged, how to navigate your level of exercise intensity and other important safety considerations.

It is encouraged that most stable cardiac patients participate in the American Heart Association (AHA) "Recommendations for Physical Activity in Adults".

Adults engage in at least 150 minutes of moderate intensity aerobic activity weekly.

Or alternatively, 75 to 150 minutes of vigorous-intensity aerobic exercise weekly.

Cardiac Patients, in particular, patients with HCM who wish to participate at that level are encouraged to discuss their level of participation and Sudden Cardiac Death risk assessment with their Cardiologist or a Cardiologist who specializes in HCM.

AHA Guidelines also encourage 2 sessions of muscular strengthening a week.

Listen to Your Body.

 Stop immediately if you develop shortness of breath, chest pain or light headedness with any of your activities.

For Cardiac Patients and HCM Patients, Be Aware of the additional safety considerations:

- Do not exercise in extreme environmental conditions such as heat, cold or high humidity.
- Ensure you stay well-hydrated before, during and after exercise.
- Avoid the Valsalva maneuver, which is performed by moderately forceful attempted exhalation against a closed airway, usually done by closing one's mouth.
- Keep your exercise program under 60 minutes. A high volume of exercise can increase the fight or flight response.

Determining Level of Intensity for most HCM Patients:

• Exercise intensity can be gauged by level of perceived exertion on the Borg scale. It is suitable for many with HCM to participate in exercises that feel light exertion of 7 to 12, moderate exertion of 13 to 14 or vigorous exertion of ≥15. It is recommended that consultation with an expert physician to determine the risk with activities above 15.

The Borg Scale of Perceived Exertion

20	Maximum Exertion	
19	Extremely Hard	
18		
17	Very Hard	
16		_
15	Hard	
14	Somewhat Hard	
13		
12	Light	Recommended range to stay within.
11		
10	Very Light	
9		
8	Extremely Light	
7		
6	No Exertion	_

- If considering low-intensity sports, the aerobic component would not exceed heart rate would be greater than 50% of maximum, or level of perceived exertion would be no higher than 12 on the Borg scale.
- Some initial period of supervised exercise may be warranted in some patients because of an abnormal blood pressure response to exercise, a history of ventricular arrhythmias triggered by exercise, or heart failure.
- Children with HCM can typically participate in physical education at school, with an exception made that the child not be graded and not be timed or scored for performance. The presence of AEDs near playgrounds and/or facilities can provide a level of reassurance.
- Competitive sports are not suggested for HCM patients with an Implantable Cardioverter Defibrillator (ICD).

Determining if Participation in Vigorous Recreational and/or Competitive Sports is suitable for HCM patients:

As disease expression differs between individuals with HCM and the demand by various sports is extensive, it is best to consult with an expert HCM physician before participation in vigorous recreational and/or competitive sports. It is also advised that consultation be repeated annually.

ICD Safety Considerations:

- It's advised that those with an ICD avoid vigorous recreational or completive sports It's important to avoid activities that could potentially damage the device. You will find "Alternative Exercise Suggestions for Patients with an ICD" listed within each exercise with the Move Well section.
- A general rule of thumb is to avoid exercises on the same side of the ICD, that bring the arm over head or the arm out laterally at shoulder level extending behind the shoulder.

Now Let's Get Moving:

- When beginning your exercise program it is best to start with the <u>Beginner Program</u>, especially if you are new to exercise. The Beginner Program offers a way to connect and work with foundational movements. This program will lead you effectively and safely into more dynamic movement patterns outlined in the Intermediate and Advanced Programs.
- Within each program, on occasion you will be offered a progression exercise
 that can be used when its predecessor is mastered. These progression exercises
 are labeled with a
- It is suggested to complete your fitness program anywhere from three to four times a week until the exercises are mastered (approximately two to four weeks). Upon mastery (when it feels too easy), continue on to the following programs. These programs can be done at home, while traveling and do not require much space.
- Here is our web page of <u>Suggested Equipment</u>.
- Check out our <u>Cardiovascular Fitness Recommendations</u> web page for more information before starting your cardio program.

Customizing your Fitness:

The fitness programs here are focused on developing optimal fitness for those looking to prevent heart disease, stable cardiac patients and HCM patients, while also working on developing functional fitness.

That being said, you may be looking to move beyond these programs or are experiencing unique challenges that are preventing you from exercising comfortably.

Challenges can arise from due to postural challenges, injuries, sitting for long periods of time and from the stresses of daily life. **Either way, here are some additional resources to help you move ahead:**

- If you live in the Toronto area or would be interested in Online zoom personal training sessions, you can consult with the creator of this *Heart Health by Design* website, **Sarah Harris** owner and personal trainer at *Wellness by Design*. Sarah is a highly skilled personal trainer who an expert in postural correction and developing safe and effective functional fitness.
- The book, "How to Eat, Move and Be Healthy" by Paul Chek is a comprehensive guide to holistic fitness and will help you further customize your workouts, enhance nutrition and optimize other healthy lifestyle considerations.
- Also check out our Resources web page.
- If you experience pain and/or muscular discomfort with this program, consult
 your physician to rule out any heart health concerns. Thereafter, consulting with
 a physiotherapist or chiropractic doctor, could help with diagnosis and elevate
 muscular discomfort.

Start the Move Well Program



Get Moving Now