Racquet Sports

A guide for people with heart conditions



Racquet sports such as badminton and tennis are good ways of maintaining and improving health and fitness and are fun ways to keep active.

When you have a heart condition, there are some important things to consider before you participate in any of these activities. Some racquet sports are classed as strenuous activities and therefore it is essential that you have the stamina and fitness to perform at the necessary level. The competitive nature of racquet sports can make you underestimate how hard you are exercising and therefore may cause you to overexert yourself. It is important to be aware of this and choose opponents and doubles partners that you can play comfortably with.



Squash is particularly strenuous due to the intensity and nature of the game and is generally not recommended for heart patients. The main reason for this activity is the stop/start nature of the game and the short bursts of high intensity.

When can I start playing?

Returning to racquet sports should be discussed on an individual basis with your doctor or your cardiovascular rehabilitation (CR) team, especially if you wish to take this up as a new activity. The information from your exercise assessment can be used to determine if you have the right level of fitness to play racquet sports. When you can start will depend on your own circumstances and specific cardiac condition.

If you have had open-heart surgery you should wait at least twelve weeks to ensure good healing of the breastbone.

If you have a pacemaker or implantable cardioverter device (ICD) you may need to wait at least six weeks to allow the leads to settle. If your device is implanted on the same side as you hold your racquet this may cause problems with repetitive straining of the device leads. It is recommended you discuss your individual circumstance with a member of your CR team, cardiac technician, cardiologist or GP as it will depend on the type of device and racquet sport and/or your technique. Certain racquet sports may be considered unsuitable based on medical or clinical reason for the device.

How fit do I need to be?

Racquet sports potentially demand a high level of exertion but this will depend on how you play, the level of your game, and the ability of those you are playing against. If you can run up a flight of stairs, briskly walk up an incline or are able to run short distances comfortably, you are probably sufficiently fit to play. You will also need good agility to be able to change direction and turn at speed.

Should I warm up and cool down?

It is essential to perform a warm up and cool down. You should start by gradually increasing movements and actions that mimic those of actual play before starting your game. At the end of your game it is important not to stop abruptly - you should spend time gradually cooling down and include gentle walking and stretching.

How should I feel whilst I am playing?

You should feel comfortable and able to continue with your game. It is okay to be slightly out of breath as long as you can still talk in full sentences. If you are struggling to keep up with the pace of play you should reduce the intensity of the game.

Try to ensure your partner/opponent plays at your skill level. If you are exhausted after the game or the following day, you have probably overdone it and need to reduce the pace or how long you play for next time.

If you have attended CR think about how you feel compared with how you felt in the exercise sessions. Your level of exertion should feel similar.

How can I get into shape?

Attend your local CR sessions and tell the team of your wish to play a particular racquet sport so they can advise you and help you to prepare as appropriate. This may involve work on flexibility, muscle strength and endurance, balance and coordination.

As with any activity 'start low, go slow'. Build up your stamina and fitness gradually by walking regularly and incorporating inclines, as well as working on your ability to jog or run comfortably.

Start by playing gently for short periods maybe against opponents you know you can play very comfortably. Consider the amount of players on the court and the court boundaries you want to play within to make it easier or harder.

If you intend to return to high level competitive racquet sports for example at local, regional or national level you may need referral to a sports cardiologist for further assessment. Please speak to your CR team.

Other things to consider

- Keep your legs moving in between play to prevent lightheadedness.
- Reduce the intensity of your game in an environment that is hot and humid, consider playing in cooler parts of the day.
- Make sure you have taken your medications, as prescribed, prior to exercise.
- If you have a GTN spray, make sure it is available to use if needed
- Don't exercise immediately after eating a large meal.
- Remember to drink more water when you are playing and afterwards.
- · Only play when you are feeling well.
- Ensure you are wearing appropriate footwear.
- Make sure you have an appropriate racquet to use, you may be able to rent or borrow one.
- Ensure you are holding the racquet correctly to prevent injury.



Stop exercising if you experience any chest discomfort, palpitations, dizziness or light-headedness. If the symptoms do not go away promptly with rest and/or your GTN spray/tablets, seek medical advice as soon as possible.

This guidance is based on available evidence and expert opinion.

Produced by the Association of Chartered Physiotherapists in Cardiovascular Rehabilitation.

This leaflet is not intended to replace the advice that your doctor or CR team give you based on their expert knowledge of your condition.

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