Cardiac Conditions:
Safe Exercise for People with Heart Disease

There is almost no disease that exercise doesn't benefit. As such, just because you've had a heart attack, a weak heart (congestive heart failure) or other heart disease, doesn't mean that you have to sit around and do nothing. In fact, with regular exercise (greater than 150 minutes a week), you may hasten your recovery, improve heart function and even get off of some of the medications you're on.

Cardiovascular benefits of exercise include:
- Strengthening your heart and cardiovascular system
- Improving your circulation and helping your body use oxygen better
- Improving your heart failure symptoms
- Lowering blood pressure
- Improving cholesterol.

It's never too late to increase your physical activity or start an exercise program. Get an "OK" and some guidelines from your doctor before you start.

Getting Started: Things to Discuss with Your Doctor
Always check with your doctor first before starting an exercise program. Your doctor can help you find a program for your level of fitness and physical condition.

Here are some discussion questions:
- How much exercise can I do?
- How often can I exercise each week?
- What type of exercise should I do?
- What type of activities should I avoid?
- Should I take my medication(s) at a certain time around my exercise schedule?
- Do I have to take my pulse while exercising?
Your doctor may decide to do a stress test or an echocardiogram, or to modify your medications. Always check with your doctor first before starting any exercise.

**General Workout Tips and Caveats for People with Heart Failure**

- Avoid too much isometric exercises such as pushups and situps. Isometric exercises involve straining muscles against other muscles or an immovable object.
- Don't exercise outdoors when it is too cold, hot or humid without checking with your doctor first. High humidity may cause you to tire more quickly. Extreme temperatures can interfere with circulation, make breathing difficult and cause chest pain. Better choices are indoor activities such as mall walking or a treadmill.
- Make sure you stay hydrated – within reason. It is important to drink water even before you feel thirsty, especially on hot days. But, be careful not to drink too much water. Check with your doctor first!
- If your exercise program has been interrupted for more than a few days (for example, due to illness, vacation or bad weather), make sure you ease back into the routine. Start with a reduced level of activity, and gradually increase it until you are back where you started.

**Warnings During Exercise**

There are some precautions you must keep in mind when developing an exercise program:

- Stop the exercise if you become overly fatigued or short of breath. Discuss the symptoms with your doctor, or schedule an appointment for evaluation.
- Do not exercise if you are not feeling well or were very recently ill. You should wait a few days after all symptoms disappear before restarting the exercise program. If uncertain, check with your doctor first!
- If you have persistent shortness of breath, rest and call your doctor. The doctor may make changes in medications, diet or fluid restrictions.
- Stop the activity if you develop a rapid or irregular heartbeat or have heart palpitations. Check your pulse after you have rested for 15 minutes. If it's above 120 beats per minute at rest, call your doctor.
- If you experience pain, don't ignore it. If you have chest pain or pain anywhere else in the body, do not allow the activity to continue. Performing an activity while in pain may cause stress or damage to the joints.
- If you pass out, call your doctor or seek urgent care as soon as you awake.

**Stop Exercising and Rest if You Have Any of the Following Symptoms:**

- Chest pain
- Weakness
- Dizziness or lightheadedness
- Unexplained weight gain or swelling (Call your doctor right away.)
- Pressure or pain in your chest, neck, arm, jaw or shoulder, or any other symptoms that cause concern.
- Never exercise to the point of chest pain or angina. If you develop chest pain during exercise, call 911 right away.
Exercise: Only One Part of the Equation
In order to maintain optimal cardiovascular health, eating a heart healthy and mostly plant-based diet, along with stress reduction, in combination with exercise as outlined above is critical for success.

Frequently Asked Questions
What Type of Exercise Is Best?
There are several forms of exercise that you should incorporate into every workout.

- **Stretching:** Stretching arms and legs before and after exercising helps prepare the muscles for activity and helps prevent injury and muscle strain. Regular stretching increases your range of motion and flexibility.

- **Cardiovascular or aerobic activity:** This means continuous (ideally non-stop) physical activity using large muscle groups. This type of exercise strengthens the heart and lungs and improves the body's ability to use oxygen. Aerobic exercise has the most benefits for your heart. In fact, aerobic exercise can help decrease your heart rate and blood pressure and improve your breathing (by making it more efficient). Aerobic exercise includes anything that gets your heart rate up and challenges you:
  - Walking
  - Jogging
  - Jumping rope
  - Biking (indoor or outdoor)
  - Cross-country skiing
  - Ice and roller skating
  - Rowing and low-impact aerobics
  - Water aerobics

- **Strengthening exercises:** These are repeated muscle contractions (tightening) until the muscle becomes tired. NOTE: For some people with heart failure, many strengthening exercises are not recommended.

How Often Should I Exercise?
To achieve maximum benefits, you should gradually work up to an aerobic session lasting 20 to 30 minutes, at least three to four times a week. The goal would be 150 minutes per week of aerobic exercise. Exercising every other day will help you start a regular aerobic exercise schedule. The American Heart Association recommends working up to exercising on most days of the week. While the more exercise you can do the better, any amount of exercise is beneficial to your health.

What If I Can't Do 20 or 30 Minutes of Exercise?
Everyone has to start somewhere. As such, even if you walk for 5 minutes, take a break for 5 minutes, and it takes you 60 or even 90 minutes to complete 30 minutes of exercise, this is a good way to start. Over time, string the exercise together and have less and less break time. Some exercise is better than no exercise.

What Should I Include in My Program?
Every exercise session should include a warmup, conditioning phase and a cool down.
• **Warmup:** This helps your body adjust slowly from rest to exercise. A warmup reduces the stress on your heart and muscles, slowly increases your breathing, circulation (heart rate) and body temperature. It also helps improve flexibility and reduce muscle soreness.

• **Conditioning:** During the conditioning phase, the benefits of exercise are gained, and calories are burned. Be sure to monitor the intensity of the activity (check your heart rate). Continuous nonstop exercise is the goal. Don't overdo it.

• **Cool-down:** This is the last phase of your exercise session. It allows your body to gradually recover from the conditioning phase. Your heart rate and blood pressure will return to near resting values. In fact, do not sit, stand still or lie down right after exercise. This may cause you to feel dizzy or lightheaded or have palpitations. Ideally, slowly decrease the intensity of your activity (often with low-paced walking). Stretching is a great way to end your exercise routine.

**How Do I Know if I Am Working Hard Enough?**

Your goal is to challenge yourself. Everyone's level to start is different. As such, you should be breathless, sweating and unable to complete a full sentence when you're working in the conditioning phase. Obviously if you develop chest pain, feel faint, turn pale or feel close to passing out, stop right away and sit down.

As time goes on, what you're doing will become easier and then too easy. If you're not challenged (i.e., breathless, sweating and unable to complete a full sentence), walk or do your activity faster or at an incline.

Challenge is the key to growth and recovery. But don't overdo it! Always check with your doctor first.

**How Can I Avoid Overdoing It?**

Here are a few guidelines:

**It Takes Time:**
- As such, gradually increase your activity level, especially if you have not been exercising regularly. Don't run a marathon on day one!
- Wait at least 60 – 90 minutes after eating a meal before exercising.
- When drinking liquids during exercise, remember to follow your fluid restriction guidelines.
- Warm up and cool down!
- Exercise at a steady pace. Keep a pace that allows you to still talk during the activity. Keep an exercise log.

**Stick with It:**
- Have fun! Add variety; make it enjoyable!
- Do it daily! Plan to exercise at the same time every day. Add a variety of exercises so that you do not get bored. Make it part of your lifestyle and daily routine.
- Get an exercise "buddy." This will help you stay motivated.

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