

Cardiac Rehab Handout – Relaxation

- A stressful situation sets off a chain of events. Your body releases adrenaline, a hormone that temporarily causes your breathing and heart rate to speed up and your blood pressure to rise. These reactions prepare you to deal with the situation — the "fight or flight" response.
- If you repeatedly feel anxious and stressed or it lasts a long time, your body never gets the signal to return to normal functioning. This can weaken your immune system, leaving you more vulnerable to viral infections and frequent illnesses. Also, your regular vaccines may not work as well if you have anxiety.
- Anxiety causes rapid, shallow breathing. If you have chronic obstructive pulmonary disease (COPD), you may be at an increased risk of hospitalization from anxiety-related complications. Anxiety can also make asthma symptoms worse.
- Cortisol works to suppress nonessential-in-an-emergency functions, like your immune response and digestion. The hormone also fuels the production of glucose, or blood sugar, boosting energy to the large muscles, while inhibiting insulin production and narrowing arteries, which forces the blood to pump harder to aid our stressor response.
- Another hormone, adrenaline, is also released, which tells the body to increase heart and respiratory rate, and to expand airways to push more oxygen into muscles. Your body also makes glycogen, or stored glucose (sugar), available to power muscles. In addition, stress decreases lymphocytes, white blood cells that are part of the immune system, putting you at risk of viruses like the common cold.
- While helpful for the occasional high-stress event, long-term exposure to stress hormones can be more harmful to your physical health in the long run. For example, long-term exposure to cortisol can contribute to weight gain.

Techniques to deal with Stress:

- Meditators regularly had lower levels of cortisol, as measured after a social-stress test. Meditators also had a less-pronounced inflammatory response in their bodies.
- Journaling
- Talking with a friend
- Walking in the park or forest

- Breathing in lavender or scented candles
- Exercise lowers your body's stress hormones — such as cortisol — in the long run. It also helps release endorphins, which are chemicals that improve your mood and act as natural painkillers.
- Green tea contains many polyphenol antioxidants which provide health benefits. It may lower stress and anxiety by increasing serotonin levels
- While recording what you're stressed about is one approach, another is jotting down what you're grateful for.
- Chewing gum causes brain waves similar to those of relaxed people. Another is that chewing gum promotes blood flow to your brain.
- Social support from friends and family can help you get through stressful times
- Find the humor in everyday life, spend time with funny friends or watch a comedy show to help relieve stress.
- Try not to take on more than you can handle. Saying no is one way to control your stressors.
- Prioritize what needs to get done and make time for it. Staying on top of your to-do list can help ward off procrastination-related stress.
- Mindfulness describes practices that anchor you to the present moment. It can help combat the anxiety-inducing effects of negative thinking
- Deep breathing exercises can help activate your parasympathetic nervous system, which controls the relaxation response.