

Stress, Depression and Heart Disease

What is the relationship between stress and heart disease?

- Factors such as stress, depression, anger, anxiety, and social isolation affect both our body and our behavior. Stress may also increase your risk of developing heart disease.
- Stress may affect the body by increasing blood pressure and heart rate.
- Research suggests that people with excess stress may be more likely to engage in unhealthy behaviors. They may overeat, not exercise, and start to smoke to cope with feelings. These behaviors are risk factors for heart disease.

What is the role of cortisol in heart disease?

Cortisol: is a hormone produced by the adrenal gland that helps to regulate cardiovascular function such as blood pressure. It can also regulate the body's use of proteins, carbohydrates and fats. Cortisol secretion increases in response to physical and psychological stress.

When there are prolonged periods of stress or chronic stress cortisol levels have been associated with negative effects on the body such as:

- Blood sugar imbalances such as hyperglycemia.
- Lowered inflammatory responses in the body.
- Increased *abdominal* fat, which is associated with a greater risk of developing heart disease and health problems.

How can I manage stress?

- Discuss stress management strategies with your health care provider.
- Monitor how you respond to stress and learn to manage it in a positive way. If you respond to stress in an unhealthy way (such as by smoking) try to replace that behavior with a healthy behavior (such as by jogging).
- Allow yourself more personal time during the day to reflect and relax. Many of us live hectic, busy lives and neglect ourselves of personal time. This can lead to stress. Everyone needs some downtime.
- Try to identify people who can support you and whom you can talk to when you feel stressed, depressed, angry, anxious, or isolated.
- Try yoga, meditation or journaling
- Learn about support groups in your area.

This resource was developed by NewYork-Presbyterian Hospital's Preventive Cardiology Program for educational purposes. It does not take the place of the instructions you receive from your health care providers. Discuss the risks and benefits of therapies with your doctor.