



## STRESS AND HEART DISEASE



## Adaptation and Damage

Stress is a response that prepares the mind and body to deal with challenges. The response is commonly called fight or flight and can be helpful in dangerous situations and even improve performance, but if prolonged can cause damage to the heart, mind, and body.

During a stress response, two hormones are released. Cortisol that your brain releases to increase energy levels, Epinephrine and Norepinephrine which raise the metabolism increasing heart rate, blood pressure, breathing rate, blood flow, and energy supplies, while decreasing bodily functions.

When Stress is chronic or long-lasting, studies have shown the effects to increase the risk for cardiovascular disease, coronary artery disease, stroke, and progressive diseases such as cardiomyopathy. Most negative effects of stress are direct risk factors for heart disease.

Ongoing stress can not only take an emotional and psychological toll, but also produce physical symptoms such as headaches, upset stomach, sore muscles, and sleeplessness.

Studies have also linked stress to how blood





clots in ways that can increase the risk for heart attack and stroke. Increased inflammation can also be caused, affecting factors that can harm your heart and arteries, blood pressure, and cholesterol levels, all leading to heart disease.

Stress can be perceived, work-related, or caused by social isolation. Regardless of the cause, the natural physiological responses can cause an individual to be up to 50% more likely to develop cardiovascular diseases.

Illness, lack of sleep, or negative emotions can cause the same natural responses making it hard for anyone to control the presence of stress within their own life.

Protecting the heart and body from damage caused by stress can be done by managing how stress is dealt with.





Even when stress is not completely avoidable, Regular Exercise, Sleep, Relaxation, Hobbies, Social Interaction, and Professional Help are all great ways to manage stress and its effects.

Research suggests that stress can also cause depression and anxiety making it more difficult to function properly while encountering life's challenges. These resulting symptoms can be dangerous to a person's life and health and often require stress-reducing activities such as walking, meditation, and professional treatment.

Keeping a level state of mind while facing challenges can help those facing stressful situations and result in better health and quality of life. Stress can also be used as motivation, by turning stress into a reason to exercise and go out for lunch, maybe even with friends. These responses can change the way situations are perceived and better overall health, reversing many of the negative effects that can occur as a result of stressful situations.





Stress can exert real physiological effects on the body and heart. This is most evident when a person encounters severe or sudden (acute) stress caused by instances such as receiving traumatic news. In these cases, doctors have found the response to be often more than an anxiety attack, arteries even in the heart can close due to these physiological responses.

"A Full 12 Lead ECG will show if there are any signs of heart disease, define, and locate it. That information will help you identify the current cardiovascular state of your patient's heart, and affect what diet or exercise program you may recommend to your patient. You will want to monitor your patient's heart alongside any programs you may recommend to your patient over time." - Roger E. Nasiff Ph.D.



## **Resources Linked**

Stress Can Increase Your Risk for Heart Disease

**How Stress Increases Your Risk of Heart Disease** 

Chronic stress can cause heart trouble

**Don't Underestimate Stress** 



