

Stress can affect our physical/mental health and enjoyment of life in profound ways. While many wish to reduce stress in their lives, people today are busier, move at a faster pace, and try to accomplish more professionally and personally than ever before. It became such a part of our culture that for some, unless they are overlooked- they feel they are underachieving. Over 75% of all doctor's office visits are for stress-related complains. If excessive, in a patient that may already have an underlying minor heart condition such as mild blockages in the heart vessels, it can lead to Sudden Cardiac Death.

Some of this increased pace is due to our new technological advances. The advent of smartphones, computers, Internet and email were supposed to make our lives easier and provide us with more leisure time. It has been the opposite. Rather than relaxing during the day or while driving the car, people are making calls, answering calls and returning calls. At work, we try to keep pace with lightening speeds of all our electronic "helpers."

How does stress affect our health? It mainly depends as to the personality type. People respond to stress in a different manner. There are those that let it out- and those that hold it in.

Shouting out is a way to relieve stress, but letting it out by exercising is much better avenue to

## **Overcoming Stress: Moderation in Life**

Written by Dr. Manshadi M.D. Monday, 09 December 2013 17:32

relieve stress. If one does not let it out, then holding onto stress will manifest itself somehow within our body. Our brains will even play tricks on our bodies, as stress can affect our cognitive function. If the brain is stressed, it can perceive pain some place inside the body where nothing is actually occurring but that does not mean you are imagining it. This is a psychosomatic effect of stress (where the soreness appears real). Every part of our body has nerves that eventually go up to the brain. The pain is real. It can shoot off anywhere. There might be nothing at all wrong with the hand but the brain perceives pain coming from there. Same with the foot, elbow... almost anywhere.

What are the effects of stress on our cardiovascular system? There should be an understanding of how our body functions to answer this question. Scientifically, Stress releases stress hormones such as catecholamines which is also known as adrenaline. Excessive or inappropriate amount can lead to increased oxygen demand on the body, spasm of the coronary arteries, and chaotic electrical instability of the heart that can cause a Heart Attack and a Sudden Cardiac Death, respectively. Briefly, our heart is built like a building: it has doors, walls, plumbing, and electricity running through it. Excessive stress can stimulate the electrical part of the heart negatively and cause malignant and chaotic electrical instability. In general, it is the electrical part of the heart that stimulates the heart muscle to contract and thus pump blood to the rest of our body. Clearly, if there is electrical instability then the pump fails and one can pass out. If this is diagnosed quickly and the patient is electrically cardioverted back to normal, he will survive. On the other hand, if it is too late, then one would suffer anoxic encephalopathy (it is a brain damage caused by absence of oxygen) and death will follow. At the vascular level, chronic stress can damage the endothelium or the inner lining of the vessel and decrease the amount of healthy arterial dilating local chemical called Nitrous Oxide leading to arterial constriction. Chronic arterial constriction can lead to hypertension and damaged inner lining of the artery can create more sticky roadways leading the way to development of atherosclerosis or fat buildup in the arteries.

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