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Do you think of â€œstressâ€• as everything you have to find time for each and every day? Trying to do ten things, when you only have time for seven! Stress has so many different definitions, but most people think of stress as all the events in their life, their activities, or as the fast pace of life.

But this is NOT the definition of stress that helps us understand health risks, like heart attacks. Medical researchers define â€œstressâ€• as the bodyâ€™s response when confronted with danger or cha â€œStressâ€• is a survival reaction wired into the body, NOT the daily background level of activity (even if is very busy activity).

Fifty years ago the father of stress studies, Hans Selye (1), described stress as the cascade of body reactions that follow an â€˜alarmâ€™ signal that your brain gives your body. It is the internal changes IN th body (in situations of â€˜dangerâ€™) that are critical, not your greater activity. Doing more is actually GOOD for your heart, NOT bad: BUT ONLY IF you successfully complete the task(s) and take the time to celebrate your success. When you enjoy your success you turn OFF the alarm signal.

â€œStressâ€• Defined

Stress Reactions: These are all the bodyâ€™s responses to any acute stressor: these are powerful body reactions which occur in a sequence described by Hans Selye (1) and Bruce McEwan (2). The response begins with an alarm signal sent from the brain and results in a surge of activity in the nervous system which alerts all organ systems in the body. This activates stress hormones (adrenalin and cortisol). These hormones switch the body into a â€œbattle stationsâ€• mode. Finally, the immune system is stimulated by stress, resulting in â€˜inflammatoryâ€™ reactions.

Cortisol allows the body to stay in a sustained battle stations mode that can last for months. Your body will automatically seek to take in more energy (do you find yourself munching more when you are stressed?) AND it tells the body to store more fat.

How do stress reactions become damaging to your heart?

What is NOT appreciated is that this stress system was designed to be used IN EMERGENCIES ONLY. It was designed as a backup system in situations of great danger or change. It was NOT meant to be activated on a daily, or even weekly, basis.

The stress response is initially adaptive, and good, for the body and the heart. An example is the boost in blood pressure when the stress system is activated: this gets more blood to all your muscles. But, as Hans Selye pointed out, IF these efforts do NOT accomplish a termination of the stress response, the body systems will reach an â€˜exhaustionâ€™ state and begin to break down.

When stresses shift from occasional â€˜acuteâ€™ challenges to a constant demand, the body bears a burden. Bruce McEwan called this an allostatic â€œloadâ€•, which is an irreversible change in the body. Good examples are chronic high blood pressure, high cholesterol, and blockages in the arteries.

The heart is vulnerable to stress

The key idea in this article is that your body, when stressed, is NOT the same (on the inside) as when it is relaxed. All of the nervous, hormonal and immune changes maintain a DEFENSIVE POSTURE that the brain thinks it needs because of coming dangers. Stress interferes with the

usual â€œrest and digestâ€• response that allows recovery, rebuilding, and rejuvenation of the heart at night (3).

Across years and years, the increased stress load results in irreversible damage to the heart: either buildup of plaque in arteries (heart disease) or electrical problems (arrhythmias). For this reason assessment and management of stress and sleep problems are suggested for management of all patients with heart problems .

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You will get immediately useful information about your personal heart stress risks at: a www.heartstressrisk.com

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