The Link Between Stress and Illness

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"There is a clear link between stress and illness, a link so strong that it is possible to predict illness based on the amount of stress in people's lives." These are the words of O. Carl Simonton, M.D. author of *Getting Well Again* and founder of the world-famous Cancer Counseling and Research Center in Texas.

Stress is an everyday fact of life that we must all deal with. It comes in all shapes and sizes: problems at work, with finances or relationships, deadlines, noise, traffic, bad weather, aging, child rearing, accidents, poor nutrition, poor sleep, even our thoughts can cause us stress and make the human body more susceptible to illness. In spite of the fact that everyone experiences stressful situations, it isn't the situations themselves that cause stress. It's our way of *reacting* to the situations that makes a difference in our susceptibility to illness and our overall well-being. Here's how it happens.

When real or imagined events occur that threaten our physical or psychological safety, an alarm is sent to the hypothalamus located in the mid brain. The hypothalamus has an important influence over many of the body's functions including the uptake of sugar, regulation of appetite, temperature, sleep and sexual behavior. It is also in charge of the "fight or flight" response. When threats occur, the hypothalamus stimulates a number of bodily changes to occur in order to assist the body to "fight or flee." These changes include, increased heart rate, blood pressure, breathing and muscle tension as well as increased blood flow to the large muscles of the arms and legs in order to help the body "fight or flee." Additionally it signals digestion, tissue repair and the protective effects of the inflammatory and cell mediated immune responses to be curtailed while the body is busy handling the threat.

One can only wonder what would happen to the body if it remained in the flight or flight response indefinitely or chronically. What would happen to the body's ability to metabolize sugar? Would bodily tissues repair and wounds heal? Would the appetite and body temperature be affected? Might there be problems with sexual dysfunction? What about the toll on the heart? Would it affect sleep patterns? What would happen to muscles that remain tense? And how would the body be affected if the inflammatory and cell mediated responses were chronically inhibited?

Fortunately, under normal circumstances, three minutes after a threatening situation is over and the real or imagined danger is removed the "fight or flight" response subsides and the body relaxes and returns to its normal status. During this time heart rate, blood pressure, breathing, muscle tension, digestion, metabolism and the immune system all return to normal.

The human nervous system is designed to handle threatening situations as long as the bodily changes created by them are released and the body is then allowed to rest and recover. Primitive man, facing lions, tigers and bears, was able to "fight or flee" and then rest and recover. But the modern world places different demands on the human body.

In the modern world instead of lions, tigers and bears, we face the frustration of traffic, the downsizing of our organization, a poor review at work, a nagging boss, a policeman giving us a speeding ticket, waiting in long lines at the bank and grocery store, family problems, marital arguments, financial difficulties, the uncertainty of world situations etc. etc. (Remember too, it isn't what happens to us in life, it's *how we react* to what happens that matters.) The pent up anger we hold inside ourselves toward any of these situations, or the guilt and resentment

we hold toward others and ourselves, all produce the same effects on the hypothalamus.

Social consequences in the face of modern day stressful situations make it seemingly impossible for us to choose to “fight or flee”. Nevertheless, all of the bodily changes created by the hypothalamus still occur. Instead of discharging this stress, however, we hold it inside where it’s effects become cumulative. The critical factor associated with stress is its chronic effect over time. When chronic stress goes unreleased, it suppresses the body’s immune system and ultimately manifests as illness.

Research shows that almost every system in the body can be affected by chronic stress. For some it manifests as suppression of the reproduction system. For others it manifests as heart disease, hypertension, depression, insomnia and anxiety. For others, chronic stress affecting the body’s uptake of sugar produces the onset of adult diabetes. Suppression of tissue repair caused by stress leads to decalcification of the bones. Chronic stress creates muscle tension, fatigue, migraine headaches, diarrhea, constipation, arthritis, asthma, gastrointestinal disorders, chronic pain and a whole host of immune system disorders. Dr. Simonton’s mind body model demonstrates the clear link between psychological stress and the ultimate production of cancer cells in the body.

The good news is that there are a number of practices that can counteract the negative effects of stress on the body. Meditation, deep breathing, yoga, T’ai Chi, exercise, or the regular practice of anything that requires concentration and deep focused relaxation such as playing an instrument, drawing, chanting, knitting, or gardening etc. All of these practices have healing affects. The key is that they produce what Dr. Herbert Benson, founder of the Harvard-affiliated Mind/Body Institute and author of *The Wellness Book,* identified as the “relaxation response.” The “relaxation response” gives the body the all-important

period of rest it needs to recover. It produces a state of “alert mind, relaxed body” and returns the metabolism, heart rate, breathing, muscle tension, blood pressure, body temperature, and sleeping patterns to normal. The hypothalamus can then return to its job of mediating the immune system and warding off disease.

Dr. Simonton uses progressive relaxation exercises to produce the relaxation response. He combines this with positive visualizations of the future and positive visualizations of forgiveness. This allows his patients to release pent up emotions from the past, let go of anger, fear, guilt and resentment and replace them with acceptance, hope, love, joy and anticipation of a positive outcome. The release of the inner tension combined with positive visualizations unburdens the hypothalamus and restores the proper functioning of the body’s immune system.

So, is there a link between stress and illness? Clearly. So what do we do about it? Do we take medication? (That is certainly a question for our individual health professional to answer.) Do we treat the symptoms only? Or do we work at removing the cause of our stress? Knowing how important our reaction to what is happening to us in life is, perhaps we could learn to judge circumstances differently. Perhaps we could see our neighbors differently. Perhaps we could come to accept people and things as they are. Perhaps we could forgive our parents and let go of the past realizing that everything happens for a reason in life. Perhaps we could learn to compassionately confront our boss, our spouse, and our co-workers in a non-judgmental way? What if we stopped trying to control things that are outside of our control anyway? What if we decided to just be kind instead of being right? What if we experienced the inner peace that all of these practices bring? Would there still be a link between stress and illness? Of course. Would we be experiencing it? I don’t think so.