

James L. Holly, M.D.

Stress and Health
By James L. Holly, MD
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It has long been known that stress contributes to disease and health problems. Stress and its solution are important parts of healthcare. Most often we think of post traumatic stress syndrome as a malady which befalls men and women who have experienced the horrors of combat, but the reality is much more pervasive than that. Most people do not stop to think of the stress related to a natural disaster such as our recent hurricane. Yet, chronic condition are made acute, health is invaded by illness and we all get sicker easier in times of crisis than in times of calm.

The health consequences of stress are seen in all systems of the body. Once it was thought that only stomach ulcers and heart disease were the consequences of stress, but now we know that immune disorders, arthritis, depression, headaches, other gastrointestinal disorder and a myriad other illness are worsened and often precipitated by stress.

The Epidemic of the Eighties

Time magazine's June 6, 1983 cover story called stress "The Epidemic of the Eighties" and referred to it as our leading health problem; there can be little doubt that the situation has progressively worsened since then. Numerous surveys confirm that adult Americans perceive they are under much more stress than a decade or two ago. A 1996 *Prevention* magazine survey found that almost 75% feel they have "great stress" one day a week with one out of three indicating they feel this way more than twice a week.

In the same 1983 survey only 55% said they felt under great stress on a weekly basis. It has been estimated that 75 - 90 percent of all visits to primary care physicians are for stress related problems. Job stress is far and away the leading source of stress for adults but stress levels have also escalated in children, teenagers, college students and the elderly for other reasons, including:

- increased crime,
- violence
- other threats to personal safety;
- pernicious peer pressures that lead to substance abuse
- other unhealthy life style habits
- social isolation
- loneliness;
- the erosion of family and religious values and ties
- the loss of other strong sources of social support that are powerful stress busters.

Psychological Threats

René Dubois said, "What happens in the mind of man is always reflected in the disease of his body." Contemporary stress tends to be more pervasive, persistent and insidious because it stems primarily from psychological than physical threats. It is associated with ingrained and immediate reactions over which we have no control that were originally designed to be beneficial such as:

- heart rate and blood pressure soar to increase the flow of blood to the brain to improve decision making,
- blood sugar rises to furnish more fuel for energy as the result of the breakdown of glycogen, fat and protein stores,
- blood is shunted away from the gut, where it not immediately needed for purposes of digestion, to the large muscles of the arms and legs to provide more strength in combat, or greater speed in getting away from a scene of potential peril,
- clotting occurs more quickly to prevent blood loss from lacerations or internal hemorrhage.

Diseases of Civilization

These and myriad other immediate and automatic responses as life saving measures to facilitate man's ability to deal with physical challenges. However, the nature of stress for modern man is not an occasional confrontation with a saber-toothed tiger or a hostile warrior but rather a host of emotional threats like getting stuck in traffic and fights with customers, co-workers, or family members, that often occur several times a day.

Unfortunately, our bodies still react with these same, archaic fight or flight responses that are now not only not useful but potentially damaging and deadly. Repeatedly invoked, it is not hard to see how they can contribute to hypertension, strokes, heart attacks, diabetes, ulcers, neck or low back pain and other "Diseases of Civilization".

Many of these effects are due to increased sympathetic nervous system activity and an outpouring of adrenaline, cortisol and other stress-related hormones. Certain types of chronic and more insidious stress due to loneliness, poverty, bereavement, depression and frustration due to discrimination are associated with impaired immune system resistance to viral linked disorders ranging from the common cold and herpes to AIDS and cancer.

Stress can have effects on other hormones, brain neurotransmitters, additional small chemical messengers elsewhere, prostaglandins, as well as crucial enzyme systems, and metabolic activities that are still unknown. Research in these areas may help to explain how stress can contribute to depression, anxiety and its diverse effects on the gastrointestinal tract, skin and other organs.

Guidelines for Reducing Stress

Perhaps the best general approach for treating stress can be found in the elegant prayer: "Grant me the courage to change the things I can change, the serenity to accept the things I can't change, and the wisdom to know the difference." The process of learning to control stress is life-long, and will not only contribute to better health, but a greater ability to succeed in one's own agenda.

Stress Reduction and Effects on Health

Treating stress cannot cure medical problems. Any stress management program is not a substitute for standard medical treatments, but it can be a very important component in a medical regimen. Some studies have reported the following:

1. A 2001 study reported that treatments that reduce psychological distress after a heart attack appeared to improve long-term outlook. Some evidence exists that stress management programs may reduce the risk of heart events (eg, heart attack) by up to 75% in people with heart disease. One study found that stress management programs are more effective than exercise in reducing heart risks (although exercise is also protective).
2. A 2001 study reported that stress management techniques along with methods for coping with anger were associated with lower blood pressure.
3. In one 2001 study, patients with chronic daily tension headache who were given tricyclics reported greater improvement after a month than those who were taught stress management techniques. The combination of the two approaches worked even better. And at six months, stress management was as effective as the antidepressants in improving headaches.

Specific Stress Reduction Methods

Healthy Lifestyle

Healthy Diet. A healthy lifestyle is an essential companion to any stress-reduction program. General health and stress resistance can be enhanced by a regular exercise, a diet rich in a variety of whole grains, vegetables, and fruits, and by avoiding excessive alcohol, caffeine, and tobacco.

Exercise. Exercise in combination with stress management techniques is extremely important for many reasons:

- Exercise is an effective distraction from stressful events.
- Employees who follow an active lifestyle need fewer sick and disability days than sedentary workers.
- And most importantly, stress itself poses significantly less danger to overall health in the physically active individual. The heart and circulation are able to work

harder for longer stretches of time, and the muscles, ligaments, bones, and joints become stronger and more flexible.

Usually, a varied exercise regime is more interesting, and thus easier to stick to. Start slowly. Strenuous exercise in people who are not used to it can be very dangerous and any exercise program should be discussed with a physician. In addition, half of all people who begin a vigorous training regime drop out within a year. The key is to find activities that are exciting, challenging, and satisfying. The following are some suggestions:

- Sign up for aerobics classes at a gym.
- Brisk walking is an excellent aerobic exercise that is free and available to nearly anyone. Even *short* brisk walks can relieve bouts of stress.
- Swimming is an ideal exercise for many people including pregnant women, individuals with musculoskeletal problems, and those who suffer exercise-induced asthma.

As in other areas of stress management, making a plan and executing it successfully develops feelings of mastery and control, which are very beneficial in and of themselves. Start small. Just 10 minutes of exercise three times a week can build a good base for novices. Gradually build up the length of these every-other-day sessions to 30 minutes or more.

Humor in Dealing with Stress

Happy people are healthier people. In fact, there currently is a great deal of interest in laughter and humor as aids to health and living longer. Historically, this association is well known:

- Voltaire wrote, “The art of medicine consists of keeping the patient amused while nature heals the disease.”
- The Bible states, “A merry heart doeth good like a medicine.”
- Jonathan Swift said, “The best doctors are Dr. Quiet, Dr. Diet and Dr. Merry-Man.”
- Lord Byron recommended, “Always laugh when you can. It is cheap medicine.”

Faith and Stress

Those who have an active faith which they practice and from which they derive peace and hope have lower incidences of stress-related illnesses than those who do not practice their faith. The foundation of most faiths is hope and love, both of which contribute to contentment and peace. If laughter is “cheap medicine,” prayer and meditation are even less expensive and more effective.

Effects of Natural Disasters and Stress

It is noteworthy to observe how people dealt with stress during the recent hurricane. Those who remained in the area found themselves congregating in neighborhoods with people they hardly knew but who became touch points of hope in the midst of a crisis. Those who reached out to others, either in service or in seeking solace, reduced the effects of stress. Those who focused on their own predicament internalized and magnified the stress. This illustrates the pivotal point of stress management: you don't have to be the victim of stress. You have a choice. You can choose to decrease the effect of stress on your life and health by laughter, giving, reaching out to others and serving other, or you can let stress destroy you.

Stress is best overcome head on. But it is also best overcome by sharing the burdens of others and by allowing others to share your burdens. It is in giving and receiving that we experience the ultimate acts of being human. It is laughing and crying together that we face the future with joy, peace and hope. And, as we are "more human," we are less subject to the ills of stress.

Remember, it is your life and it is your health.