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A Guide to Coping with Health Problems and Stress

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What is stress?
How does stress affect the body?
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What is stress?

Most people consider stress as problems, worries, tension or pressure. It is valuable and practical to see stress relating to change. Stress can come from any change that one must adjust to. Health problems can cause change in many dimensions of life! Stress can be an everyday fact of life for many. Some thrive on stress. A stressor, something that causes stress, can be pleasant, unpleasant or neutral. Christmas, the holidays, a wedding, buying a house, or having a child all can be very positive but stressful.

Stress, according to Hans Selye, MD, is the wear and tear on our body, mind, and spirit brought about by our reactions to the events of life. The stress response is the end result of the complex interaction between the individual and his or her world.

STRESSOR + INDIVIDUAL MAKEUP = THE BODY'S RESPONSE TO STRESS

Stressors are things, events or people that cause us to change or adapt:

- Physical: Personal illness, noise, heat, cold, weather, smoke, pollution.
- Social: Illness in the family, relationships with family members, friends, neighbors, loved ones or coworkers, a stressful work situation, success, money problems, a major change in family life like getting married or divorced.
- Mental: Being in limbo, waiting and not knowing what will happen, choices in general, not being able to meet a goal, frequently having to be perfect, quick temper, control issues, or addictions
- Strong emotional reactions can come from or cause more stress.

Individual make-up (mind-body-spirit):

- Each person is different genetically and has unique strengths and weaknesses.
- These differences include our age, sex, physical fitness, places where tension may build or react in our bodies, illness and health habits.

• We all have attitudes, beliefs and personalities. Each person interprets and responds to stressors distinctly. This is in part due to what we have learned in the past. Learning can come from family, peers, society, church, school, movies and TV.

How does stress affect the body?

Stress triggers the fight or flight response within the body. Stress related hormones are released into the blood: heart rate increases, blood pressure goes up, breathing becomes quicker and shallower, perspiration increases, muscles tense, stomach acid level goes up, blood sugar increases, cholesterol levels rise and more.

Originally the stress response helped us survive by increasing the ability to fight or the ability to flee from an enemy. As men and women have become more "civilized" we have learned to control these powerful responses (see Signs of Stress, next page). Over time, chronic stress can lead to disease, a worsening of health problems and even death.

Does stress cause wear and tear on the body?

Yes! Dr. Hans Selye describes this in his three stages of the stress response, the General Adaptation Syndrome.

- **1. Alarm stage:** Prepares the body for the fight or flight response.
- 2. Resistant stage: The body tries to adjust to chronic stress.
- **3. Exhaustion stage:** The body wears down and becomes prone to disease. 50%-80% of all diseases are stress related. Illness gives you stress!

What are the stress hormones?

Catecholamines (adrenaline and noradrenaline) cause the body to ready for action. The heart rate increases, blood vessels constrict, blood clots easier, muscles tense, breathing rate increases, pupils dilate, the nerves are stimulated, and perspiration increases. Long-term overproduction of these chemicals can lead to ulcers, headaches, increased pain, diabetes, asthma, heart disease, sleeplessness and high blood pressure.

Cortisone causes the blood pressure to increase, blood cholesterol to rise, slowing of Vitamin D, weakening of the immune system, increased glucose production, and slowed digestion. Long-term overproduction of this chemical can lead to hardening of the arteries, osteoporosis, sugar diabetes, ulcers, rashes, migraine or tension headaches and other diseases.

Signs of Stress

General irritability, hyperactivity or depression

Pounding of the heart

Dryness in the mouth and throat

Emotional instability; strong urges to run or fight

Inability to concentrate; confusion

Accident proneness

Feelings of weakness or dizziness

Fatigue

Floating anxiety or panic feelings for no known reason

Emotional tension, alertness or feelings of being keyed up

Trembling, nervous tics

High pitched, nervous laughter

Sleeping problems

Nightmares

Grinding teeth

Frequent need to urinate

Stomach and bowel problems, indigestion, pain, nausea, constipation or diarrhea

Loss of or excessive appetite

Migraine or tension headaches

Neck or lower back pain

Increased smoking

Alcohol or drug problems, including abuse or excessive use of tobacco (nicotine), tranquilizers, sleeping pills and/or caffeine

From: The Stress of Life by Hans Selye, MD

Life Management Skills: Coping with health problems or stress

Ineffective coping strategies may help us temporarily feel better or buy time but seldom solve a stressful situation. We all learn ways to cope. Some are less effective than others.

Ineffective coping strategies:

- Denial: "Everything's fine, no problem," but obvious evidence points to real sources of conflict or concern
- Wanting to retreat to a happier, simpler time in the past
- Complaining: Can be a release of energy but unless we are talking to the right person our problems are not being resolved. Figure out what you need and whom you need to talk to.
- Alcohol, mood altering drugs, overeating, or isolating oneself
- Working harder and harder
- Helping others too much at an ongoing cost to oneself

The stressors and the stress are still there (and sometimes made worse!) when the effects of the chemical or behavior wear off. When we are Hungry, Angry, Lonely or Tired, we are vulnerable to ineffective coping strategies. "HALT" and consider this next list . . .

Effective coping strategies that can be adapted for individual use

- 1. Take a break. A change of scenery can clear the mind. Go for a walk, call a friend, count to ten.
- 2. "One day at a time." Action or acceptance. Face stressors by acting directly when possible. Problem solve. Dwelling on issues without action or acceptance adds to stress. Acceptance at times is difficult because powerful feelings are involved. With loss can come: Shock, anger, peace of mind, sadness and hope. Working with your honest feelings is a way to take it one day at a time.
- 3. Use positive calming thoughts and decrease worried ones. This can be difficult because to worry is easy. Worrying about yesterday or tomorrow adds to stress today. Positive thinking takes practice. We can change our physical state with our thoughts.
- 4. Nourish the spiritual part of yourself. Religion, beauty, nature, science and even painful life experiences have been used by people to deepen their sense of spirituality.
 - ♦ If religion is important to you, what part(s) of your religious practice brings you closer to God? Take the time to do it! Be here now. God is user friendly.
 - ♦ Experience, strength and hope can be gained through painful life experiences.
 - ♦ The beauty found in nature, art, music and poetry can provide deep inspiration and peace.
 - Science, with the elements of wonder and open-mindedness and the goals of relieving suffering and serving humanity, provides a method to seek what is Truth.
- 5. Learn to use a relaxation technique. There are many types. Conscious relaxation reverses the physical stress response. See next section for details.
- 6. Establish clear and realistic goals for your personal and professional lives. Manage time; don't let it manage you.
- 7. Pace your activity. In managing pain, recovery or a chronic health problem, it is useful to have an activity-rest schedule. This allows you to rest before you get too tired. Over-activity causes a corresponding increase of symptoms and down time. Activity means feet on the floor including standing, moving about or sitting with your feet on the floor. Resting means the feet are up off the floor, including lying down or feet up in a recliner. Have a "sick day" plan for less activity and more rest.
- 8. Delegate responsibilities. It is OK to ask for help. Also it is OK to say no and not feel guilty if no is the truth.
- 9. Be involved with people, family, friends or support groups. Many communities have support groups that are free of charge.
- 10. Therapeutic massage, from a professional, a trained friend or a family member can be very beneficial for your body-mind-spirit. Neck and shoulder massages and foot massages are examples. Healing Touch techniques are relaxing.
- 11. "Talking it out" is a very good stress buster. It is helpful to share your thoughts and feelings with a family member or friend who is willing to listen. Some also find speaking with a professional provides objective support and encouragement. Locate someone you can trust! Some people find writing in a diary, journal or letter a good way to "get it out."

- 12. Allow your vacation time to be a complete break from routine. Rest a day before you return to work.
- 13. Regular exercise improves the body's ability to respond to stress. Stretching and walking are easy, safe ways to release tension.
- 14. Good nutrition. Follow your prescribed diet. Try to include more whole foods. Drink plenty of water.
- 15. Stop smoking. Even though people smoke to relax, it actually increases the long- term stress responses in the body.
- 16. Heat, warm water. Hot baths and hot water bottles can work like magic on tired muscles.
- 17. Sleep provides relaxation and rest. Avoid regular use of sleeping pills.
- 18. Remember to have fun! Humor and simple fun are surefire stress reducers. Hobbies, music or creative activities give your mind and body a break. Pets can also provide companionship and pleasure for people. For information on humor and healing visit the Carolina Health and Humor Association website at www.rtpnet.org/~cahaha/.
- 19. Assertive communication skills. Passive and aggressive communication styles tend to draw more stress to people. Be "open, honest, direct and respectful." Be respectful both to yourself and other people. See below for everyone's communication rights. Exercising these rights may cause stress to rise at first but it is a good stress that can over time greatly improve your stress management.
- 20. Service. Consider increasing compassionate action in your life. Compassion is touching pain with love.
- 21. Create a beautiful and relaxing place to spend time. Include aromatherapy, candles, water, meaningful objects.
- 22. Non-drug pain management.

Relaxation Techniques

(also known as Mind/Body Self-Regulatory Skills)

People tell others to relax but not effectively how to do it. Unfortunately the word "relax" has been abused. Shouted as an order, guilt-fully implored or pleadingly requested, "RELAX!" can increase tension.

Learning to relax is an art. Regular practice can yield many benefits. Be gentle and keep pointed to your goal. Begin with 10-20 minutes. Practice any of the techniques below once or twice a day. If one doesn't work try another and another. One can work for you!

Relaxation techniques are exercises done that reverse the physical stress response. The belly softens, the breathing deepens, muscles ease, digestion improves, the heart slows and blood pressure lowers. Pain can be decreased or the duration of a severe pain flare-up can be lessened. It is important to note that tranquilizing medications and sleeping pills should only be used temporarily, under medical supervision. Relaxation techniques involve concentration or mindfulness and differ from day-dreaming and watching TV. There have been 2,500 research studies suggesting the effectiveness of mind/body self-regulatory skills.

The four key common elements to learning most of the relaxation techniques

- ♦ Comfortable position
- Quiet environment
- ♦ Object of concentration
- ♦ Passive attitude

Work with what you are presented with in life. Relaxation can even be learned in the hospital! It is a great place to practice it.

Effective simple relaxation practice examples

- The Relaxation Response: Focus on a word or phrase that has meaning to you. As the mind wanders notice "thinking," and kindly and gently return to the phrase or word. I encourage people to combine this with soft abdominal breathing, or an awareness of the breath at the tip of the nose. See exercise below.
- **Biofeedback (BFB):** BFB uses machine feedback that helps a person learn that he or she is relaxing. BFB is available for in and outpatients at Duke. It trains you to systematically relax your muscles.
- **Prayer:** Most religions teach this practice. It can bring physical and mental benefits, as well as the spiritual ones.
- **Meditation:** A practice that emphasizes soul awareness while sitting, standing, moving about or lying down. Concentration points like the breath, repetitive thought or prayer, physical sensation, sound or God or Higher Power are utilized to quiet the mind and open the heart.
- **Visualization or imagery:** Use your imagination to bring on a calm peaceful feeling.
- **Positive thinking or affirmations:** Use calming thoughts to reverse the body's stress response.
- Guided relaxation: Nature and music CD's are available.
- Lamaze and Bradley breathing and point concentration: Help to release the body's natural pain medicine and promote muscle relaxation.
- **Progressive muscle relaxation:** Slowly go through the body head to feet or feet to head relaxing muscle groups. With illness or chronic pain, unless supervised by a skillful teacher, do not tense then relax muscles. Simply soften and relax them. Let them be warm and heavy.

Let's try a relaxation technique . . .

A simple exercise begins with abdominal breathing. Sit or lie comfortably and let your abdomen gently rise with the inhale and fall with the exhale. With sitting it is easier to stay awake! Repeat "Easy" with the inhale and "does it" with the exhale, silently to yourself. Each time the mind wanders, make a mental note "thinking, thinking" and gently return. Even if the mind is very restless and must wander, be patient, returning again and again. This quiets the mind and brings on the positive physical effects.

Assertive Communication Rights

You have the right to act in ways that promote your dignity and self-respect so long as others' rights are not violated in the process. By assertively expressing your beliefs and needs, you increase the chances of: control through decision making, greater self-esteem, more respect from others and enhancing relationships. Overly passive or aggressive communication styles can affect one's body, mind and friendships in negative ways.

Your Assertive Communication Rights are:

The right to be treated with respect.

The right to say no and not feel guilty.

The right to experience and express your feelings.

The right to take time to slow down and think.

The right to change your mind.

The right to ask for what you want.

The right to do less than you are humanly capable of doing.

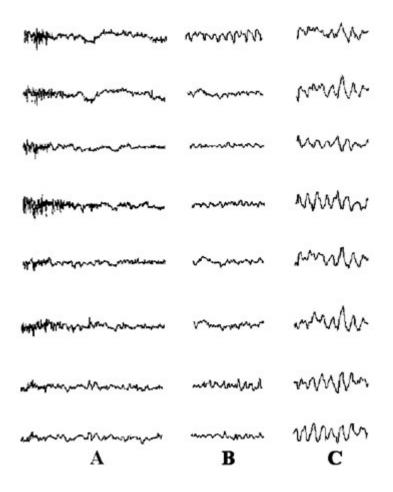
The right to ask for information.

The right to make mistakes.

The right to feel good about yourself.

Jacubowski, P. and Lange, A. (1978) The Assertive Option: Your Rights and Responsibilities.

How does relaxation look to an EEG (electroencephalogram)?



A: Beta brain waves (13-22 cycles). Normal waking state. The pattern changes as abdominal breathing and the relaxation practice begins.

B: Alpha brain waves (8-12 cycles). This reflects the Relaxation Response, a calm peaceful state of mind with many physical benefits.

C: Theta brain waves (4-7 cycles). Deeply relaxed state, but alert.

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