

Sound Therapy For Stress

Introduction We cannot exist without stress. Stress is the body's normal response we use to appraise and attempt to cope with emotional threats and challenges; it is meant to protect us. In fact, it is often what provides us with the energy and motivation to meet our daily challenges both at home and at the workplace. Stress in these situations is a positive stress that helps you "rise" to a challenge and meet your goals such as deadlines, promotions, sales or production targets, or finding new clients. Thus, positive stress allows us to perform at higher levels and to face new challenges in life.

Great athletes are created from the use of positive stress! Too much stress, however, can have negative impacts. "The cost of stress to employers is huge," says Russ Newman, PhD, JD, American Psychological Association (APA) executive director for professional practice. "Employers spend an estimated 300 billion dollars a year on stress-related absenteeism, turnover, lowered productivity, and direct medical, legal and insurance costs." Although most everyone has used stress to motivate themselves to move forward, stress can become unmanageable and it becomes difficult to see it as anything other than negative.

Some interesting studies have been published recently that provides evidence to the importance of learning to cope with stress in a healthy way to prevent chronic diseases. A study (August 2006) conducted in the University of California – Irvine has found stress hormones appear to rapidly intensify the formation of brain lesions (plaques and tangles) that are the hallmarks of Alzheimer's disease. This study suggests that not only is stress management an important factor in treating Alzheimer's disease, but physicians may want to pay close attention to pharmaceutical products they prescribe for their elderly patients as some medication contain glucocorticoids that increase stress hormones. The stress hormones may lead to accelerated cognitive decline in patients in the early stages of Alzheimer's.

In another study Robert Spolsky and others at the Stanford University have investigated stress and health. They report a prolonged flood of stress hormones can actually cause shrinking in certain brain areas, particularly in the hippocampus. A major area of the hippocampus constitutes memory. It is not unusual for persons with prolonged stress to report forgetfulness and difficulty learning. A hopeful discovery is that certain portions of the hippocampus can recover once the stress response is reversed. According to an American Psychological Association study printed in New York, February 23, 2006 findings show gender differences in dealing with stress and nearly half of Americans, especially women, parents, and people of working age, are concerned with the amount of stress in their lives. Women say stress affects them more than men do (51 percent versus 43 percent) and are more likely than men to report more things that stress them out. Women also express concern about how stress affects their lives more than men.

About Stress: Stress is the way your body responds or reacts to change, both internal and external and can come from any situation or thought that makes you feel frustrated, angry, or anxious. What is stressful to one person is not necessarily stressful to another.

Whether the change is positive or negative, it will cause stress. Stress keeps us going but stress may build up over time if we experience numerous changes in our lives all at once. Everyone has experienced common stress symptoms such as: anxiety: sweaty palms, fast heart rate, and churning stomach, however, too much stress will cause a person to exhibit some of the following symptoms:

- Increased irritability and fatigue
 - Heightened sensitivity to criticism
 - Signs of tension, such as nail-biting
 - Difficulty getting to sleep and early morning waking
 - Drinking and smoking more
 - Indigestion
 - Loss of concentration
- Chronic Stress

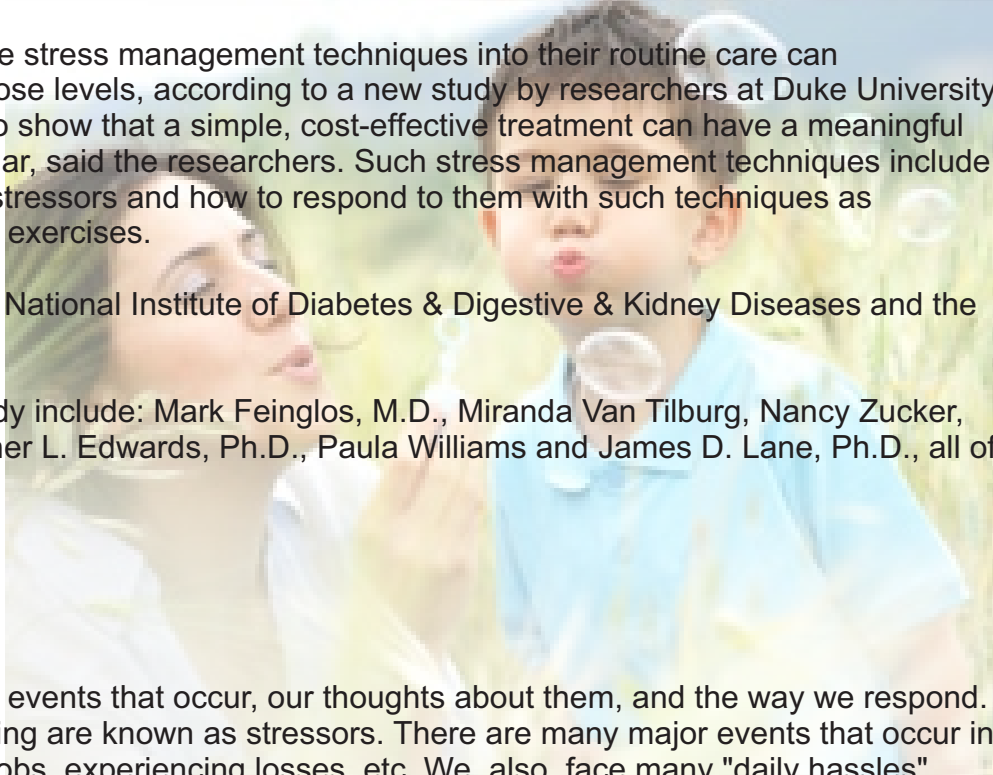
Chronic stress affects our organs and creates a magnitude of health problems. In the United States, researchers have found that 90% of office visits to the doctor can be attributed to some stress related symptoms. Some of the effects of chronic stress are heart attack, high blood pressure, digestive problems, asthma or trouble breathing, ulcers, muscle tension and hair loss in women. An overload of stress in our body basically upsets the balance in our bodies and weakens our immune system. Glucose sugar levels RISE when under stress in people with diabetes, making them more susceptible to long-term physical complications such as eye, kidney or nerve disorders.

Patients with type 2 diabetes who incorporate stress management techniques into their routine care can significantly reduce their average blood glucose levels, according to a new study by researchers at Duke University Medical Center. This is the first large study to show that a simple, cost-effective treatment can have a meaningful therapeutic effect on the control of blood sugar, said the researchers. Such stress management techniques include instructions on how to identify everyday life stressors and how to respond to them with such techniques as progressive muscle relaxation and breathing exercises.

The study was supported by grants from the National Institute of Diabetes & Digestive & Kidney Diseases and the National Institutes of Health.

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Understanding Stress

To understand stress, we need to look at the events that occur, our thoughts about them, and the way we respond. Situations that are considered stress-provoking are known as stressors. There are many major events that occur in our lives: moving, leaving school, changing jobs, experiencing losses, etc. We, also, face many "daily hassles". These are events that occur routinely. They also contribute to the stress that we experience. Daily hassles include events such as being stuck in traffic, deadlines, conflicts with family members, and dealing with busy city life. Between life events and day-to-day hassles, we are faced with many stress-provoking situations each day. Our attitude towards these situations determines our response.

(A) Stress Response

Our bodies are designed, pre-programmed if you wish, with a set of automatic responses to deal with stress. The body's "pre-programmed" response to stress is identified in three stages: alarm-resistance-exhaustion. Exposure to the stimulus results in the release of hormones and chemicals whose purpose is to create appropriate changes. It is cancelled as soon as the stressor is withdrawn. If exposure to the stressor persists the body will adapt by developing a resistance which serves it well at the time. Such resistance takes a toll and will not last forever.

As body resources become depleted a stage of exhaustion takes over. Together these stages make up Selye's "general adaptation syndrome". This system is very effective for the short term "fight or flight" response which provides us with the adrenaline rush we need when faced with an immediate danger. The problem is that our bodies deal with all types of stress in the same way. Experiencing stress for long periods of time (such as lower level but constant stressors at work) will activate this system, but it doesn't get the chance to "turn off" and the following symptoms become pronounced:

Increased blood pressure

Increased metabolism (e.g., faster heartbeat, and faster respiration)

Decrease in protein synthesis, intestinal movement (digestion), immune and allergic response systems

Increased cholesterol and fatty acids in blood for energy production systems

Localized inflammation (redness, swelling, heat and pain)

Faster blood clotting

Increased production of blood sugar for energy and stomach acids

Stress response, often referred to as the "fight-or-flight" reaction, is your body's rapid and automatic switch into "high gear." It's easy to imagine how this reaction helps you deal with a physical threat. You need the energy, speed, concentration and agility either to protect yourself or to run as fast as possible. When you encounter such a threat, the hypothalamus, a tiny region at the base of your brain, sets off an alarm system in your body. Through a combination of nerve and hormonal signals, this system prompts your adrenal glands, situated on top your kidneys, to release a surge of hormones — the most abundant being adrenaline and cortisol.

Adrenaline increases your heart rate, elevates your blood pressure and boosts energy supplies. Cortisol, the primary stress hormone, increases sugars (glucose) in the bloodstream, enhances the brain's use of glucose. The stress-response system is self-regulating. It decreases hormone levels and enables your body to return to normal

once a crisis has passed. As levels of the hormones in your bloodstream decline, your heart rate and blood pressure return to normal, and other systems resume their regular activities.

But physical threats are not the only events that trigger the stress response. Psychological "threats" — such as the stress associated with work, interpersonal relationships, major life changes, illness or the death of a loved one — can set off the same alarm system. The less control you have over these potentially stress-inducing events and the more uncertainty they create, the more likely you are to feel stressed. Even the typical day-to-day demands of living can contribute to your body's stress response.

Many of our modern stressful circumstances, unlike most physical threats, tend to be prolonged. Consequently, you may be running on the fight-or-flight reaction longer than it's intended to operate. What's good for your body in a short-term crisis can be very harmful over long periods.

The long-term activation of the stress-response system — and the subsequent overexposure to cortisol and other stress hormones — can disrupt almost all your body's processes, increasing your risk of obesity, insomnia, digestive problems, heart disease, depression, memory impairment, physical illnesses and other complications.

(B) Stages of Stress

In response to stressful events, you can experience one, two or all of the following stages:

Stage 1: Mobilization of Energy

All bodily activity is increased in response to a stressor that is frightening, such as a near car accident. This starts the body's "fight-flight" reaction, causing the release of adrenalin. You feel your heart pounding and your palms feel sweaty. This is called primary stress.

It can also be the result of situations where you choose to put yourself under stress (e.g. the night before your wedding). This is called secondary stress.

Symptoms:

- Increased heart rate and blood pressure
- Rapid breathing
- Sweating
- Decreased digestion rate, creating butterflies and indigestion

Stage 2: Exhaustion or Consuming Energy

If there is no escape from Stage 1, the body will begin to release stored sugars and fats, using up its bodily resources.

Symptoms:

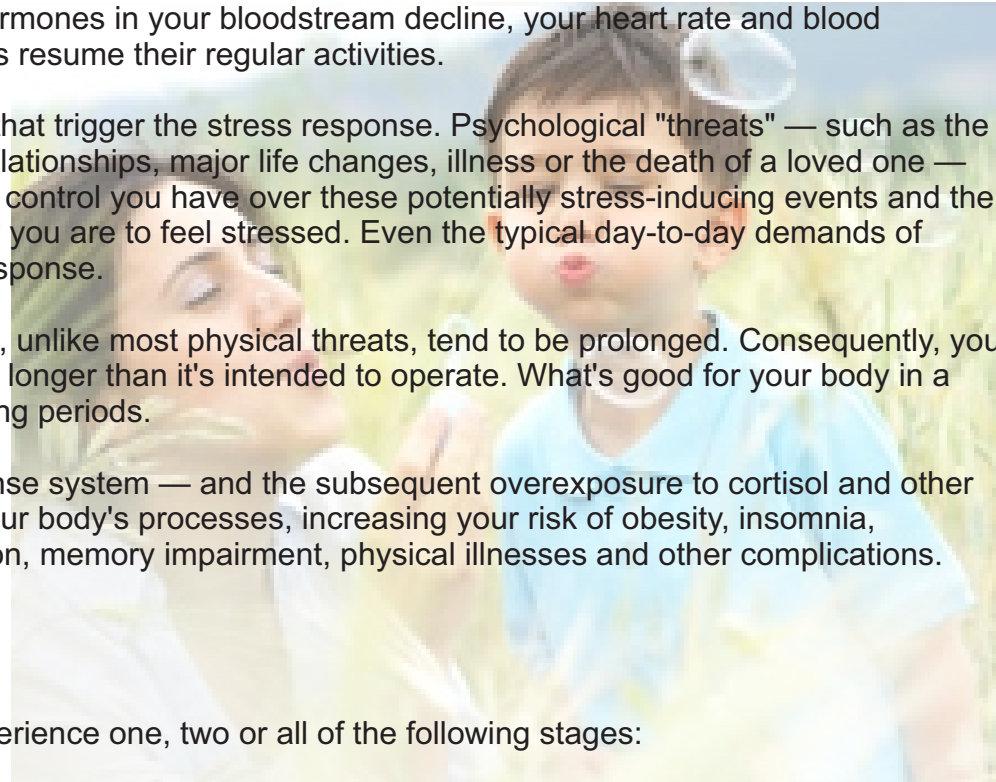
- Feeling driven and pressured
- Insomnia (difficulty sleeping)
- Tiredness and fatigue
- Increase in smoking, coffee drinking and/or alcohol consumption
- Anxiety
- Memory loss
- Acute illnesses such as colds and flu

Stage 3: Draining Energy Stores

If the stressful situation is not resolved, you may become chronically stressed. The body's need for energy resources exceeds its ability to produce them.

Symptoms:

- Heart disease



Ulcers
Mental illness
Sleep deprivation
Judgment errors
Personality changes

Is There Anything I Can Do to Help Myself Deal with the Stress I am Experiencing?

In many cases, the origin of the stress is something that cannot be changed immediately. Finding immediate ways to help maintain good mental health is essential. There are many ways to be proactive in dealing with stress. Some short term examples as suggested by the Canadian Mental Health Association follow:

Laughing is one of the easiest and best ways to reduce stress. Share a joke with a co-worker, watch a funny movie at home with some friends, read the comics, and try to see the humour in the situation.

Learn to relax, take several deep breaths throughout the day, or have regular stretch breaks. Stretching is simple enough to do anywhere and it only takes a few seconds

Take charge of your situation by taking 10 minutes at the beginning of each day to prioritize and organize your day.

Be realistic about what you can change. (From: Canadian Mental Health Association, "Sources of Workplace Stress" Richmond, British Columbia)

Using music and sound to relax

Dr. Susan M. Lark is one of the foremost authorities on women's health issues and is the author of nine books. She has served on the faculty of Stanford University Medical School where she continues to teach in the Department of Family and Community Medicine. She also serves on the Advisory Board of the new Woman's Health Promotion Unit at Stanford- one of the first women's self-care units in the country associated with a major medical center. Dr. Lark is a noted teacher and lecturer and has been featured in magazines such as Mc Call's, New Woman, Mademoiselle, Harper's Bazaar, Redbook, Lear's, Shape, and Seventeen.

Dr. Lark states "Music can have a tremendously relaxing effect on our minds and bodies. For women with anxiety and nervous tension, she recommends slow, quiet music with some classical music. This type of music can have a pronounced beneficial effect on your physiological functions. It can slow your pulse and heart rate, lower your blood pressure, and decrease your levels of stress hormones. It promotes peace and relaxation and helps to induce sleep.

Nature sounds, such as ocean waves and rainfall, can also induce a sense of peace and relaxation". Many of Dr. Lark's patients keep tapes of nature sounds in their cars and at home for use when they feel more stressed. She recommends playing relaxing music often when you are aware of increased emotional and physical tension. This is important for women to note as studies show women say stress affects them more than men do (51 percent versus 43 percent) and are more likely than men to report more things that stress them out.

How Color, Light and Noise Affects Stress Levels Noses, eyes, and ears are very sensitive sense organs.

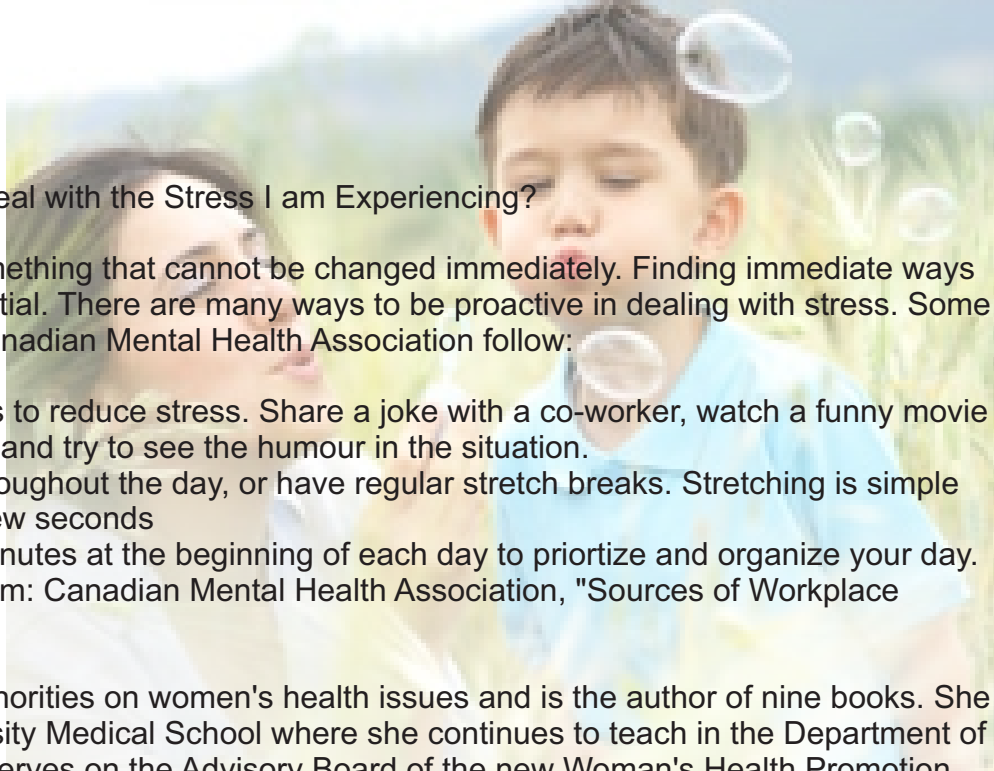
Elements like noises, lighting and colors are always influencing and engaging your senses. They can either work in favor of you by playing the role of a stress reducer or pressure releaser or they may work against you by producing more stress.

(a) How Lighting Affects Stress

The type of lighting where you live, where you work, and where you relax, plays a vital role in strain and stress. Try to use warm-hued bulb colors instead of a cool blue tint which could create stress. Those who are suffering from migraines should strictly prohibit the use of fluorescent tube light. It is thought that the rapid flickering is stressful on the eyes and might trigger a migraine. Use incandescent bulbs instead of fluorescent tube lighting if you can change it.

Using the computer monitor or watching a television also gives one concern for the connection between light and stress. It is best to not put a monitor in front of windows as the strong glow will irritate the eyesight nor in front of any interior light which creates a reflection. Tightening of neck and head muscles will change the path of blood flow. So avoid squinting as much as possible. Rest your eyes as often as possible when you are working. If you work at a computer monitor, pause often and focus your eyes on objects far away and then close up to prevent your eyes from becoming strained which can lead to headaches and eye pain.

(b) How Color Affects Stress



Revolutionary work has been done by researchers in the psychology of color. Some colors are known to be calming in nature and others create discord and stress. Therefore it can be helpful for you to do research into this area when you plan to repaint or decorate your home or office space. Even a neutral pure white space will be far more relaxing than an aggressive red or patterned decor.

(c) How Noise Affects Stress

A noisy surrounding will probably create an environment full of stress. It will not only affect your ears but also your heart beat will escalate. It will definitely change your mood; also reduce your hearing capacity and lack of concentration. On an average, the maximum level of comfortable noise is 70 decibels. Not only loud noise but also the background noise plays a role in affecting the stress level. Low-frequency buzzing of a computer, an air conditioner and also the fluorescent tube light can be the source of an irritating noise. It is pretty obvious that irritating noises, harsh lighting and loud colors and patterns can increase the stress levels. So it is best to avoid these elements as much as possible for prolonged periods of time. To further reduce stress level, one can decorate your living and working space with calming colors and relaxing sounds.

Stress Management

The way we deal with stress has a lot to do with our mental, emotional and physical health.

Tips for Dealing with Stress and Tension

The following are suggestions to get you started on managing the stress in your life:

Recognize your symptoms of stress

Look at your lifestyle and see what can be changed in your work situation, your family situation, or your schedule

Use relaxation techniques like yoga, meditation, music, and deep breathing

Exercise – Physical activity is one of the most effective stress remedies; it helps you release calming chemicals in your brain and promotes better sleep.

Walking – Going for a walk can clear your mind, reduce tension and increase energy

Sleeping – Avoid exercise, caffeine and napping in the evening when you should be winding down. Attempt all forms of natural sleeping solutions before taking prescription medication

Maintain a healthy diet & eat smart – A diet rich in fruits, vegetables and whole grains can give you more energy, plus the fuel to keep stress under control.

Hydrotherapy – For centuries, people have used warm water as a way to calm moods and relax muscles. You can have your own "spa" at home by adding relaxing ingredients to the bath water and soft music.

Massage – Massaging can be extremely therapeutic for those who feel anxious. Gentle touching either by a trained massage therapist or your relationship partner can be relaxing.

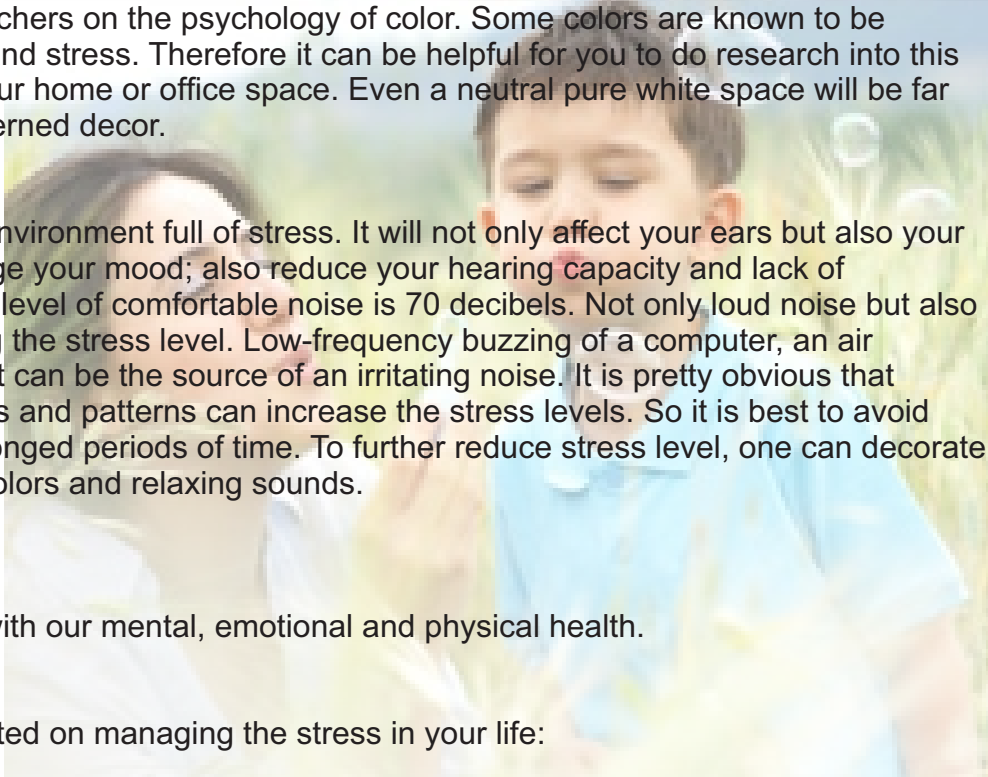
Reiki is a Japanese technique for stress reduction, relaxation, and promoting healing. It is considered an alternative healing modality. It is administered by "laying on hands" and is based on the life force energy or chi flowing through each of us. If one's life force energy or chi is low, then we are more likely to experience disease or feel stress. The body radiates warmth and energy. This energy is the life force energy.

Finally John Tierney, New York Times March 5, 2007 poses the question "Are baby boomers really in bad physical shape?" A study compared boomers aged 50 to 59 with people who are 60 to 65, and 66 to 71. The two younger groups were less likely than the oldest group to have said their health was "excellent or very good" at 51 to 56 years of age. The youngest group reported having more pain, chronic health conditions, drinking problems than people who were the same age 12 years ago.

Baby boomers are an important segment for retailers, not only because of the sheer size of the population segment, but also because people in this age group are typically big spenders. Drugstores, specialty stores and high tech products will be popular for this group. It will be important that this group recognize key healthy lifestyles to keep their stress level at a minimum and avoid chronic stress as much as possible, rather than getting caught up in prescription drugs to improve health and relieve stress.

Coping With Stress

Since you cannot avoid stress, it is obviously best to learn to cope with it. The first thing might be to do a self-evaluation: Do you exercise? How do you think about change? Do you get enough sleep each night? These factors and more will determine how your body handles stress. Needless to say, the healthier you are, physically and mentally, the better you will be able to handle change and stress. To summarize this paper on stress, an article by



Elizabeth Scott provides a positive way to deal with stress and one that everyone can do. Her comments are as follows:

A Healthy Lifestyle Starts Each Morning

The way you spend your morning can add a certain flavor to the rest of your day. Here are some healthy lifestyle habits to incorporate into your morning routine that can leave you better able to handle the stress you experience. Try one or several, and experiment until you find what suits you.

Put on Some Music

Music therapy has been shown to reduce stress and have a positive effect on health. But you do not need a therapist to enjoy some of the benefits music has to offer. Listening to music as you get ready and start your day will create positive energy and a soothing sense of peace (or a sense of fun, if you play party music). Music can compliment other healthy lifestyle habits, adding a sense of peace to a yoga workout, putting a spring in your step on a morning walk, or stimulating your mind as you write in your journal.

Stretch in the Shower

The hot water will loosen up your muscles, so it's easier to get a good stretch. The act of stretching will help to release stored tension and enable you to start the day feeling more relaxed, at peace, and ready to handle what comes your way.

Eat a Balanced Breakfast

For those of you who start the day on a bagel and coffee, be aware that breakfast is known as 'the most important meal of the day' for a very good reason: a healthy meal in the morning can balance your blood sugar levels and give you the nutrition you need to handle physical and mental stress. Without it, you will be less resilient, both physically and mentally. Be sure to have plenty of protein and fruit, not just caffeine and empty calories!

Drink Green Tea

Sipping a warm cup of tea is a soothing activity that will help you prepare for the day ahead and feel nurtured. Green tea is loaded with antioxidants, so it's a delicious and healthy lifestyle choice.

Write in Your Journal

Journaling has many health and stress management benefits, and can also lead to increased self-awareness. Writing once a day can help you feel focused, process negative emotions, and solve problems.

Morning Walk

Walking has so many health benefits, the stress management benefits are practically just gravy! A morning walk can get you ready for your day, help you sleep better at night, lower your stress level, and reduce your risk of numerous health conditions.

Yoga

Combining all the goodness of several stress management techniques, such as diaphragmic breathing, meditation, stretching and more, yoga provides some of the best stress management and health benefits you can find."
(Elizabeth Scott)

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