

## The 5 Senses of Stress Reduction

Soothe Away Chronic Stress and Pain with Brain-Friendly Remedies

By Dr. Linda Karges-Bone

“If you are distressed by anything external, the pain is not due to the thing itself, but to your estimate of it; and this you have the power to revoke at any moment.”

*Marcus Aurelius*

What did the Roman emperor *Marcus Aurelius* know about stress? Hmmmm. He had 13 children, a wife who was known to frolic frequently with gladiators and to poison her enemies, an addiction to opium, and a few large-scale skirmishes such as the Parthian Wars. Stress. Yes indeed! But this emperor was also known as *Marcus Antoninus Philosophus*, "Marcus Antoninus the Philosopher." (<http://www.roman-emperors.org/marcaur.htm>) He spent a great deal of time studying, thinking about, and applying his knowledge of philosophy. This quote reflects his belief that stress is not simply a **product**, it is a **process**. Stress is undeniable, largely unavoidable, and for those who deal with chronic pain, illness, or dysfunction, a daily consideration. However, it is our personal estimation of the stress and willingness to confront and shape it that make the difference.

If you or a client, friend, patient, or loved one lives life with the company of a chronic illness such as arthritis, cancer, insomnia, MS, chronic fatigue syndrome, lupus, respiratory disorders, or pain from a surgery or injury, then it is critical to find ways to modify and manage one's perception of stress.

Let's begin with a definition. "Stress is defined as an organism's total response to environmental demands or pressures."

(<http://www.mindbodypro.com/learningcenter/stress.htm>)

A "total response" suggests that the body's reaction to the stressor, that which introduces or causes the stress, is *systemic*. All the body systems react: the heart, the lungs, the muscle groups, and the brain. Therein lies the key.

The brain is made up of multiple systems that coordinate and control the body. One of these systems, and indeed one that is considered to be operating at a more simplistic level, is the *limbic system*. The *limbic system* filters and screens environmental information and can help to persuade the brain to perceive or process a situation in a more palatable or preferable way. The *limbic system* allows colors, scents, tastes, sounds, and textures to become healing

buffers against the harsh reality of negative stress associated with chronic pain and illness.

How can one apply the research on stress reduction and the brain to making daily living more pleasant, healthful, and productive? Let's consider some strategies for involving the *5 Senses* in Stress Reduction.

### Color Me Relaxed

Color is a powerful tool in improving mood and modifying the impact of stress on the body and brain. In fact, there is an entire field called "color therapy" devoted to the task. According to author Brian Greenfield, "Color therapy is based on the ancient art of using color and light to treat disease. Practitioners believe that by altering the colors that surround us, it is possible to enhance health and well-being. "A consultation with a color therapist might be a bit far reaching for most folks, but there are some practical applications of color therapy that one could incorporate with ease.

\*Use cooling, calming *blue tones* in the bath or spa area. Some researchers refer to a *cardiac blue* that actually lowers blood pressure.

\*Break *blue tones* up with a color such as cream or white. Too much blue is thought to be depressing

\**Indigo or purple* is a color associated with muscle strength and tone. One might want to wear warm-ups of this color for a boost during a workout or therapy session.

\*Bottle of colored water or clear vases filled with colored marbles in tones of *blue or indigo* would be soothing when placed in the line of vision in a room or office where one spends a great deal of time.

\**Red* is a color associated with stimulation and energy. If one is having trouble keeping a healthy appetite, consider eating off a red plate or setting the table with red napkins and glasses.

\**Color the palette* as well. Researchers investigating antioxidants, those powerful agents that stop free radicals from destroying or “pillaging electrons from healthy cells in the body” ( The Doctor’s Book of Food Remedies), tell us that antioxidant-rich foods are one of the best ways to prevent, slow down, or reverse chronic illness. In fact, up to 30% of all cancers could be prevented by changes in diet. Dr. Keith Block, medical director of the Cancer Institute at Edgewater Hospital in Chicago says: “We’re discovering that there are compounds in food that can actually both prevent and help fight cancer at the cellular level.” What are the colors of a healing palette?

\*Plan every meal to include at least 5 colors, with emphasis on rich, deep colors including greens and oranges.

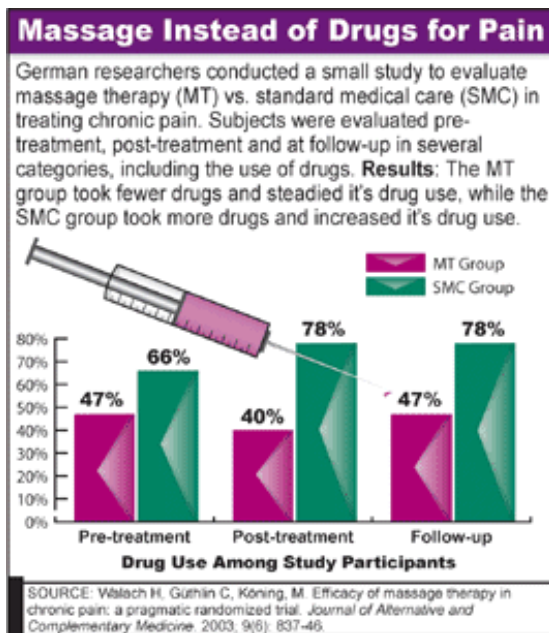
\*Avoid black and white colors in meals. That means reducing the amount of meat and simple carbs.

\*Choose fresh, organic, colorful foods and use herbs to zing things up. As one ages, foods may lose appeal. A variety of sensory experiences, including generous applications of color help to make foods a medicine against stress.

### Touch and Texture Tame Stress

There is a Chinese proverb that says: “Tension is who you think you should be. Relaxation is who you are.” During a chronic illness or time of stress, it is dangerous to try to deny the fact that you need

more rest, more touch, and more soothing. Massage is one way to boost the body's natural immunities, yet a lot of folks deny themselves the healing opportunities of massage because it seems frivolous or decadent. They miss a marvelous opportunity to employ the proven healing opportunities of touch as they deal with chronic stress. Massage can help one to rely less heavily on pain medication and to become more flexible and energetic in the face of chronic stress. Here's the result of one study that looked at how massage could reduce one's reliance on pain medication:



What if you can't make it to the massage therapist today? Here are some simple strategies provided by the McKinley Health Center, Office of Student Affairs, a part of the University of Chicago.

## **Slow-Down Techniques**

### **10-SECOND BREATHING**

In an acute situation, when your mind or body is racing out of control, slow down your breathing to a 10-second cycle, 6 breaths a minute. Find a clock or watch with a second hand and inhale for 5 seconds (odd number on clock face) then exhale for 5 seconds (even number). Keep it up for 2-5 minutes, or until your pace slows down.

### **60-SECOND BREAK**

Close your eyes and take a deep breath. Visualize yourself lounging on a sunny beach or watching the sunset or relaxing in the shower or sauna.

### **5-MINUTE VACATION**

Close your eyes and take a few deep breaths. Then visualize a favorite place or activity. Let your imagination carry you away to a special spot that's refreshing and relaxing.

### **CHEST MASSAGE**

Relax your chest muscles and open up your breathing with a vigorous massage along the midline and across the chest below your collarbone.

### **BOTHER LIST**

Write down a list of all the worries, pressures and concerns that are crowding your mind and clamoring for attention. Then burn the list or tuck it in your wallet for later attention.

### **PEACEFUL FOCUS**

Focus on something pleasant and beautiful in your immediate environment (a blade of grass, a painting, a color). Concentrate on the beauty you see and breathe it in. Allow that beauty to slow you down.

Massage isn't the only way to ease pain and alleviate stress.

Arne Dietrich, professor of social and behavioral sciences at the American University of Beirut studied participants who engaged

in 50 minutes of moderate exercise and found that their blood levels shows a 200% increase in ***cannabinoid anandamide***, a chemical that reduces the sensation of pain. This is the same family of cannabinoid as marijuana, but a lot safer!

### Scent-sational Stress Reducers and Tasty Tonics

Color, touch, and now scent and taste should be considered as methods for reducing the stress and hence the pain and fatigue associated with chronic illness. Which scents and tastes show promise in reducing stress?

\*The scent and taste of *ginger* is potent. Researchers in Denmark cite the blocking of prostaglandins as the reason.

\*The scent and taste of *coffee* can be energizing. Those with heart problems would want to take care, but the aromatic brew is known for boosting thinking and energy.

\**Peppermint* has a strong track record for decreasing fatigue. Try a peppermint infuser to tuck into one's pocket during a walk or therapy session. <http://www.athletegift.com/about.htm>

\*Water is unscented and taste-free, yet it is perhaps the most powerful cleanser and healer in our arsenal of natural remedies. Clearly, H<sub>2</sub>O deserves its own story, but it is interesting to note that researchers at *NutriSystem* are marketing a new product called "Aquaescents", water bottles with "fruit scented" tops that "trick the brain into thinking that one is filling up on fruity punch." [Nutrisystem.com](http://Nutrisystem.com)

\*Green tea. The scent and chemical punch of green tea are powerful. NIH studies are underway now, investigating the potential for green tea to diffuse lymphoma cells. Subjects who drank four cups of green tea a day showed increased *alpha wave activity*, associated with a calm state.

\*Vanilla is useful in reducing anxiety. Vanilla on a cotton ball is often given to patients as they go through an MRI scan to calm them down.

\*Orange. The scent and taste of orange boost energy and creativity.

More information on scent and taste as it impacts behavior can be found in Differentiated Pathways of the Brain by Dr. Bone.

### The Sound of Stress Washing Away

All five of the senses should be tapped to prepare a holistic response to stress, in the same way that stress affects all systems of the body. The auditory response, in the form of music and sound can be a useful tool in stress reduction. In one government study, bone marrow transplant patients who received a *music therapy intervention* showed a significant reduction in both pain and nausea.

<http://www.clinicaltrials.gov/show/NCT00032409>

Music changes our reaction to stress. It is interesting to note that: “Scientists in Florida have found that just 20 minutes a day of music was enough for patients to report more than a 50% reduction in pain levels. Over the 14-day listening period, the amount of natural pain relief continued to increase. The research was published in the Journal for Advanced Nursing. It



was based on tests on 66 older people with chronic osteoarthritis. Osteoarthritis is the most common degenerative disease in humans. Previous studies have shown that music can improve motivation, elevate mood, and increase feelings of control. It is thought to release endorphins, which reduce pain, decrease blood pressure, the heart rate, respiratory rate and oxygen consumption.”

<http://altmedicine.about.com/b/a/047381.htm>

## Closing

Each person reacts to stress in a unique way. Of course, it may be easy to say that one should approach stress in a certain fashion of one has never dealt with a particular stressor. Still, it is likely that each of us will have need at some point to draw on the strategies discussed in this piece. Can one completely alleviate the impact of stress? One researcher sums it up nicely: “The prognosis for recovery from a stress-related illness is related to a wide variety of factors in a person's life, many of which are genetically determined (race, sex, illnesses that run in families) or beyond the individual's

control (economic trends, cultural stereotypes and prejudices). It is possible, however, for humans to learn new responses to stress and, thus, change their experiences of it. A person's ability to remain healthy in stressful situations is sometimes referred to as stress hardiness. Stress-hardy people have a cluster of personality traits that strengthen their ability to cope. These traits include believing in the importance of what they are doing; believing that they have some power to influence their situation; and viewing life's changes as positive opportunities rather than as threats.”

<http://www.mindbodypro.com/learningcenter/stress.htm>

How “stress hardy” are you? Perhaps the tools and techniques described in this discussion will help you, a client, patient, or loved one to become more “stress hardy” a valuable attribute in a stressful world! Marcus Aurelius the philosopher seemed to know that well, and now you can become just as wise, healthy, and hardy.

