

Stress and the Family

11. Learning How to Relax

COOPERATIVE EXTENSION SERVICE • MICHIGAN STATE UNIVERSITY

BY GAY G. LUCE and ERIC PEPER

Almost all of us have been told—by a doctor, friend or family member—that we really must relax. But what does it mean to relax? Most of us, including doctors, have only a vague notion.

We understand relaxation as a nap, a hike in the woods, a balmy vacation, a hard game of tennis, a lazy afternoon of reading, puttering in the garden, baking or fixing the boat. But many businessmen are mentally working while on the beach; and you can slouch back in your favorite recliner, watch TV, yet still be tense.

Basically, if you really want to relax, you must learn to counteract some of the biological “coping” mechanisms that readied early human beings for fight or flight when their lives were threatened. Among these are a racing pulse, a spurt of adrenal hormones and a bracing of the neck and back muscles, the emptying of the bowels and bladder. Today, our lives are rarely threatened, but we react in these same ways to changes in pay scale, social encounters, the sound of the telephone, the cry of a baby, a summons to the boss’ office or other stressful situations.

The body is ready, and we feel the quickened pulse as palpitations, the elimination of wastes as diarrhea, and we have that “keyed up” feeling, often accompanied by indigestion. There is no physical outlet. Instead the person usually maintains the appearance of being calm, while hiding suppressed fear, rage or other pressure that has no outlet except against himself.

Because we encounter so much change in modern life, so many social demands, we too often tense our bodies, clench our teeth, breathe shallowly, tense our necks, and set in motion a physical chain reaction that can lead to a headache, backache, or chronic fatigue. Furthermore, the physical tensions set up a vicious circle. They cause worry about the discomfort they induce, and fears about their harmfulness, which perpetuate the tension.

A shocking number of people seek relief by drinking or taking pills. Prescriptions for tranquilizers and sedatives run over \$200 million a year, while alcoholism is considered a major national problem. Sometimes doctors prescribe drugs because they do not know how else to help calm the lives of their patients, and popular diversions or recreations give only temporary relief.

A few professionals have been trying to counteract the trend by teaching systems of relaxation as precise as ballet or tennis, and making sure that people are indeed relaxed by testing them with special electrical instruments.

Since the early 1920’s, for example, the physiologist, Dr. Edmund Jacobson, has been teaching progressive relaxation. By tensing and releasing different muscles in the body, a person slowly contrasts the sensations of tension with that of letting go. Eventually, the subject learns to tense and release body muscles from head to toe like a “ripple” down the whole body.

Another method, known as Autogenic Training, has been used by doctors throughout Europe since about 1910. The procedure, developed by the physician, Dr. Johannes Schulz, is based on autohypnotic methods that induce certain types of body changes that occur when we get very quiet—such as a heavy feeling, warmth, regular heart beat, regular breathing, warmth in the diaphragm and coolness in the forehead.

The first step in learning to relax is a very short exercise—only 30 seconds.

- Sit on the edge of a straight wooden chair, your knees about 12 inches apart, your legs slanting forward at an angle greater than 90 degrees. (To relax, it is important not to be distracted by tight clothing, and to set aside your watch and glasses.) Sit up very straight. Now let yourself collapse like a rag doll, your head forward, your spine rounded, your hands coming to rest on your knees. Check yourself to be sure you are comfortable and then talk to yourself: “My right arm is heavy, my

right arm is heavy. . .” Repeat this for about 20 seconds while concentrating on your arm from the armpit to the fingertips. Then make a fist, flex your arms, take a deep breath and open your eyes. Repeat the procedure three or four times a day. After you become adept at making your right arm heavy, you can extend the heaviness to legs and the whole body until you can relax from head to toe.

The only way to relax is to begin to reverse your habits of reacting tensely, and recognize what causes your automatic reactions. It is not easy. However, there are some exercises and guidelines that can help, as well as a spate of new books (such as *Breathe Your Tensions Away*, by Bruno Geba, Random House, 1974) that can help you develop new habits to replace old tensions.

How do you breathe? Do you involuntarily tense up before speaking, and find yourself taking hurried, shallow breaths? As a baby you breathed naturally, allowing your stomach and ribs to expand. But as you learned to stifle unwanted crying by holding the abdomen, or to puff up your self-confidence by pushing out your chest, you not only took on unnatural postures, but interfered with your breathing.

It is in childhood that we develop largely unconscious reactions to fear, pain, loss or yearning. Later in life we may be amazed to learn that unexpressed fear constricts the blood vessels in our ever-cold hands and feet, or causes us to make our neck and back muscles rigid, leading to headaches and backaches. In childhood, nobody ever taught us how to breathe correctly—even though breath is the essential energy of life since oxygen must be sent to every cell.

Breathing can stop tension. If you are serious about changing the tension-creating habits of a lifetime, you will need to introduce relaxed breathing into all of your daily life, practicing for several months.

In the following exercises, give your full attention to the sensations and sound of breathing; try not to think of other things. Since you breathe all the time, it might as well become a pleasure. And nobody else will notice anything unusual.

Do these exercises at least twice a day with a loose belt and a relaxed stomach.

- Lie on your back on the floor with your head slightly raised on a pillow so that your spine is straight, your knees bent and your feet on the floor about eight inches apart. Put one hand on your stomach, the other on your chest. Draw deep breaths into the stomach and let it rise. The chest should hardly move at all. When this becomes easy, smile slightly, breathe in through your nose and out through your mouth, whispering a sound “Haaaaah” that will sound like the wind, while the jaw, tongue and mouth are dropped slightly open without strain. Think about the sound and the feeling of the breathing, taking long, slow breaths “into your stomach.” Do this for five to ten minutes at a time.

- Sigh deeply, making a sound of deep relief. Let all of the air out of your lungs. Then simply permit the air

to come back in. You do not have to force yourself to inhale; it will happen naturally. Do this 10 times.

When it becomes natural and pleasant to breathe “into your stomach,” practice it at odd moments during the day, taking three or four deep breaths and putting all your attention into the relaxation of breathing. When you have learned to get that relaxed feeling from the breathing, you can practice it every time you start to feel tense. When your throat tightens as you are driving and you have to stop at a red light, use this time to breathe. When something upsetting happens at the office or at home, stop and breathe.

These simple, natural breaths, given some attention, have a potent effect as circuit breakers for tension. We have seen a man who complained of tension headaches for 20 years cut his tension by breathing, so that his headaches virtually evaporated in a period of three weeks.

Breathing is, of course, vital to your entire metabolism. It is wise never to force breathing—not to breathe so hard that you hyperventilate and feel dizzy—but rather to discover your natural rhythm of breathing. Sometimes it helps to follow the breath mentally as if you could see it, entering at the nose and flowing down the throat into the lungs and diaphragm. When you inhale, the energy of oxygen is carried by the blood to all parts of your body. When you exhale, you can feel the air going out the nose with a pleasant sound like wind.

Relaxed breathing and relaxed thinking have a healing quality. Some people have taken up meditation in order to quiet the daily Niagara of trivial thoughts and distractions.

Dr. Joe Kamiya, of the University of California medical school in San Francisco, has found that brain-wave tracings of individuals in meditation indicate deep relaxation. He found an increase in the brain waves known as alpha waves, which are seen during sleep and the approach to sleep and during moments of relaxation.

Since that time there have been some studies indicating that pain is diminished when you experience alpha waves. Studies also provide evidence that in deep meditation, you may be more relaxed than you are in much of your nightly sleep.

Meditation is a word with a mystical connotation, but many people meditate naturally as they work, or as they sit and contemplate. There are many ways to meditate. You needn't be seated cross-legged on the floor, but can be comfortable in a chair, lying down or even moving.

- Walking can be a form of meditation. Start in your living room, barefoot or in your stocking feet. For 20 minutes, walk as slowly as you can. Imagine that there is a weight inside you about four inches below your navel—as if that were your center of gravity. Keep your knees bent and relatively close together and take small steps. Breathe “into the stomach.”

Pay attention to how you walk, what parts of you are moving and how they feel. Feel your shoulders, knees, thighs, calves, heels, ankles and toes. Feel your heart beat. Now, when you walk anywhere, concentrate on how your body feels and balances as you walk.

- Enjoy 20 minutes of uninterrupted quiet. Sit comfortably with your eyes closed. Chant aloud the word "calm" or any other soft word until you hear your own voice. Then let yourself chant mentally. Simply sit, hearing that mental repetition of the chant. If you daydream, or have thoughts, gently guide your attention back to the chant. Stay with it, daily, and in a few months you may notice a new kind of relaxation in your life.

You might also enjoy a form of meditative exercise known as "one-pointing": twice a day, for 10 minutes at a time, contemplate some favorite object (a flower is particularly pleasant) without having any thoughts. If you find your attention straying, gently bring it back. Just caress the object with your eyes: you do not need to talk to yourself about it. Just enjoy it. When you still your mind, it focuses upon the object, which becomes endlessly interesting and pleasant. A few minutes of such contemplation, even during lunch hour at a desk, can provide more refreshment than a nap.

Modern people cherish the myth of themselves as restless, aggressive and pioneering; words like "tranquility," "serenity" and "calm" are rare in our vocabulary, in our schooling and in our lives. For most of us, this means that we have paid an unconscious price that we generally start to feel in middle age—and which we accept as the dues of growing older. Some of this toll, the headaches, insomnia, stiff neck, lower back pain and so forth can be helped by learning to relax.

When practicing by yourself, you may wonder whether you are really doing the various exercises correctly: "Am I really letting go or am I just kidding myself?" With good observation, you can sense the results pretty well.

But precisely because most people cannot sense subtle internal changes that occur when they tense their

muscles, change their hand temperature, alter their blood pressure or begin to show a particular pattern of brain waves, some clinicians have been teaching people to listen to their own bodies through electronic amplifiers known as "biofeedback" instruments. For example, a sensitive electrode placed on the forehead relays the changing tension of the forehead muscle—which the person may hear as a series of clicks. With repetition he can begin to feel the relaxing of his forehead or other areas, and many slowly learn to gain voluntary control over his body patterns.

In some cases temperature feedback has been used to encourage people to increase relaxation of the blood vessels, change blood flow, and quiet the autonomic nervous system, and some persons have learned to increase hand temperature from 74 to 95 degrees in a single session. This change has been used to treat certain headaches, for in some people headaches are due to a tightening of blood vessels in the scalp. In these instances relaxation of the blood vessels by temperature feedback can stop the headaches. Dr. Seymour Diamond of the University of Chicago Medical School has used this form of training successfully with over a hundred headache patients.

We have also seen two young girls, aged 9 and 13, raise hand temperature 11 degrees in one training session. Both girls had suffered from severe headaches, and with some practice at home, learned how to eliminate their headaches. They also learned something more important, which should be taught to all children. They learned that they could be responsible for their own health, that they could control headaches, pain and their own reactions to common problems. Commonly children are taught many facts about health, but nobody teaches youngsters how to prevent tension and reduce stress responses. Children who learn self-awareness and deep relaxation at an early age are not likely to become drug-dependent adults. Even in adulthood, such training, and a shift in life style toward the needs of health, can become the door to a new way of being, a transformation.

Cooperative Extension Service Programs are open to all without regard to race, color, creed, or national origin. Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824. 1P-10M-8:76-UP, Price 10 cents, Single Copy Free

Reprinted with permission from *Stress*, copyright 1974, Vol. 25, No. 1, by Blue Cross Association, Chicago, Illinois.

Adapted by David R. Imig, Ph.D., Family Life Specialist, Michigan State University

Michigan State University Printing

