

Relaxation and stress management techniques

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■ Introduction

Stress affects the body in many ways. Some manifestations of stress are obvious; others might not be noticeable or detectable until they become more severe. People also vary in the ways that they respond to stress. For example, some people who have a more positive temperament might not be as severely affected by stressful events as others. Living in a complex, demanding culture can lead to chronic stress, resulting in physical, psychological, and spiritual distress. (See [The effects of stress.](#))

THE EFFECTS OF STRESS

Stress lowers the immune system response, increasing a person's vulnerability to illnesses and serious diseases. It triggers the release of cortisol, a hormone that's responsible for immune function, blood pressure regulation, insulin release, and inflammatory response. Although this response, known as the *flight-or-fight response*, can be useful in certain situations, chronic activation of this hormone can damage the body, increasing the likelihood of developing diabetes, hypertension, and cardiac disorders.

Common effects of stress include:

- headaches
- sleep disturbances
- frequent bouts of colds or flu
- generalized anxiety (a state of feeling anxious all the time)
- emotional eating
- palpitations
- decreased libido
- impatience
- irritability
- brain fog (fuzzy thinking)
- memory lapses
- depression
- decreased physical energy

- physical, mental, and emotional exhaustion (feeling "burned out")
- disillusionment and hopelessness
- withdrawal from interpersonal relationships.

Increased awareness of the negative impact that stress has on the body has resulted in the use of stress-reduction therapies. A comprehensive treatment program of stress management can help patients cope more effectively with stress and anxiety. One effective method for stress management is relaxation therapy, which aims to decrease a person's autonomic arousal level. Techniques used in relaxation therapy include exercise, yoga, guided imagery, aromatherapy, meditation, music therapy (listening to or playing music), journaling, progressive deep muscle relaxation, autogenic training, and diaphragmatic breathing. Relaxation therapy may also include biofeedback. (See [*Relaxation therapy techniques.*](#))

RELAXATION THERAPY TECHNIQUES

These common relaxation techniques are used to counteract the physical and behavioral effects of stress.

Progressive deep muscle relaxation

Progressive deep muscle relaxation is based on the premise that anxiety and relaxation are mutually exclusive; anxiety can't be experienced when the muscles are relaxed. The procedure contrasts tension with relaxation. A person first tenses a set of muscles *to recognize the tense sensation*. When he lets those muscles relax, he's asked to become aware of the internal feeling and difference between tension and relaxation. The focus of this exercise is gross muscle groups throughout the body, including the forehead, eyes, nose, face, tongue, jaws, lips, neck, right arm, left arm, right leg, left leg, upper back, chest, stomach, buttocks, and thighs.

A person should perform progressive deep muscle relaxation while sitting in a chair with his back straight, his head in line with his back, both feet on the floor, and his hands resting on the lap. He tightens each muscle group and holds that position for 15 to 20 seconds; then he slowly releases the muscle tension, paying attention to the difference between tension and relaxation. He should perform this exercise twice daily for 12 to 15 minutes and can master it in as little as 4 weeks.

Autogenic relaxation

Autogenic relaxation promotes relaxation through mental imagery. Verbal somatic suggestions help a person concentrate on specific parts of the body. Training includes

six psychophysiological exercises that the person should practice several times a day:

- Exercise one focuses on heaviness; the person thinks of parts of his body as heavy and relaxed.
- Exercise two focuses on warmth; the person visualizes parts of his body as warm and relaxed.
- Exercise three uses passive concentration to calm cardiac activity; the person thinks about slowing his heart rate.
- Exercise four focuses on slowing the respiratory rate with controlled, relaxed breathing.
- Exercise five focuses on feeling warmth in the chest and abdomen.
- Exercise six uses passive concentration to cool the forehead.

A person should perform these exercises twice daily for 6 to 8 minutes in a quiet room while sitting comfortably in an armchair with his eyes closed, and can master the technique in 1 to 3 weeks.

Diaphragmatic breathing

The quickest and easiest relaxation technique to learn, diaphragmatic breathing involves breathing slowly and deeply from the belly. It can be done while sitting or lying down, with a pillow placed at the small of the back, forcing the belly out. Students of yoga and Zen know that diaphragmatic breathing effectively slows the heart, lowers blood pressure, and calms the body. Calming begins after just 50 to 60 seconds of this breathing technique.

A person begins by pushing the stomach out during a slow and deep inhalation, which minimizes movement of the chest wall. Then the person slowly breathes out while drawing the stomach in. Ideally, the person should practice diaphragmatic breathing five times a day, performing 10 consecutive diaphragmatic breaths at each sitting, and can master the technique in 1 to 2 weeks.

Biofeedback

Biofeedback uses visual or auditory cues to help a person consciously regulate body functions that are usually controlled unconsciously, such as heart and respiratory rates, blood pressure, and muscle tension. The person begins by imagining the desired effect—for example, visualizing his muscles relaxing or his heart rate decreasing. The effects of biofeedback can vary significantly from person to person.

Although a therapist typically guides a biofeedback program, such a program can also

be done at home. Some are geared toward children, who, like adults, are commonly under a tremendous amount of stress in our culture.

Many people experience stress because of distortions in thinking. Catastrophizing (an irrational thought that something is far worse than it actually is), black-and-white thinking (thinking that a situation or thing is either this way or that way, with no middle ground), "musturbation" (the belief that one *must* act in specific ways or *must* have certain objects to feel fulfilled and happy), and avoiding (not dealing with) situations are distortions in thinking that reinforce anxiety and enhance the stress response. Reframing techniques can change these distortions in thinking, helping to minimize stress and eventually changing the way a person views himself and those around him. By changing the way a person perceives different situations, these techniques can change the meaning that the person associates with them. When the meaning of a situation changes, the person's response to the situation also changes.

Dietary changes, such as decreasing intake of caffeine, nicotine, and alcohol, are nutritional means of minimizing the body's stress response.

■ Equipment

- Quiet room with comfortable seating
- Optional: Soft music (from a compact disc [CD] player, an MP3 player, or another electronic device)

■ Implementation

- Recognize and, if necessary, address your own level of stress.
- Practice at least one relaxation or stress-reduction technique that you're comfortable with *to help reduce your own stress level before teaching the patient.*
- Review the patient's medical record and treatment plan *to ensure that the techniques you plan to teach don't conflict with planned therapies.*
- Perform hand hygiene.¹²³⁴⁵⁶
- Confirm the patient's identity using at least two patient identifiers.⁷⁸
- Teach the patient about the harmful effects of long-term stress.
- Help the patient identify situations or times that increase his stress level.
- Ask the patient what he does when he feels stressed.
- Discuss stress management techniques with the patient, and determine which methods would be most beneficial for him.
- Find a quiet room with comfortable seating and dim lights.

- If you're using music for relaxation, obtain a CD player and CDs of the patient's preferred music or an MP3 player or other electronic device. Keep in mind that not all patients find soft music relaxing or therapeutic.⁹
- Guide the patient through the relaxation exercises slowly, using a calm voice.
- After completing the exercises, advise the patient about nutritional changes that can help him manage stress.
- Identify resources to help the patient change problematic drinking, smoking, and eating patterns, as appropriate. *Most people are unlikely to change problematic habits unless they're motivated to do so.* Have resources readily available to access when the patient is ready.
- Perform hand hygiene.¹²³⁴⁵⁶
- Document the procedure.¹⁰¹¹¹²¹³

■ Special Considerations

- Some people believe that they "thrive" in a stress-filled environment, so that being "on overload" becomes their natural state. However, for most people, high levels of stress eventually have a negative impact on the physical and mental health.¹⁴

■ Patient Teaching

Give the patient handouts that explain in simple terms how to perform various types of stress-reduction techniques so that the patient can practice them at home and determine which techniques are most helpful to him. Also provide a list of other resources for stress management, including names of psychotherapists who specialize in biofeedback. Post information about local classes on yoga, meditation, and tai chi in an area where patients will be likely to see these visual reminders of relaxation and stress management techniques.

■ Documentation

Document, in the patient's own words, what the patient tells you about the stressors in his life and how he handles stress. Describe the relaxation techniques that you practiced with the patient and his response to them. Document any handouts that you gave to the patient for home use and any additional teaching provided.

This procedure has been reviewed by the Academy of Medical-Surgical Nurses.



■ References

[\(Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions\)](#)

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Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions

The following leveling system is from *Evidence-Based Practice in Nursing and Healthcare: A Guide to Best Practice* (2nd ed.) by Bernadette Mazurek Melnyk and Ellen Fineout-Overholt.

- Level I: Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials (RCTs)

- Level II: Evidence obtained from well-designed RCTs
- Level III: Evidence obtained from well-designed controlled trials without randomization
- Level IV: Evidence from well-designed case-control and cohort studies
- Level V: Evidence from systematic reviews of descriptive and qualitative studies
- Level VI: Evidence from single descriptive or qualitative studies
- Level VII: Evidence from the opinion of authorities and/or reports of expert committees

Modified from Guyatt, G. & Rennie, D. (2002). Users' Guides to the Medical Literature. Chicago, IL: American Medical Association; Harris, R.P., Hefland, M., Woolf, S.H., Lohr, K.N., Mulrow, C.D., Teutsch, S.M., et al. (2001). Current Methods of the U.S. Preventive Services Task Force: A Review of the Process. American Journal of Preventive Medicine, 20, 21-35.