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Health Tips

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CHAPTER 3

Managing Stress: Restoring Mind–Body Harmony

Learning Objectives

1. Define the terms stress, stressor, eustress, and distress.
2. Describe the environmental, mental, and emotional components of stress.
3. Describe the physiological components of stress.
4. Describe four ways that stress causes illness.
5. Define problem-focused and emotion-focused coping.
6. Explain how college students can manage overload and practice time management and test management.

Health Instructor (to class): What stresses you?

Student 1: Not enough money.

Student 2: My relationship. It's like a 5-unit class.

Student 3: Econ pop quizzes.

Student 4: No, all tests.

Student 5: All of that!

College students are very familiar with stress and its associated feelings of being overwhelmed, anxiety, frustration, anger, and depression, and the sleeplessness, fatigue, gastrointestinal upset, headache, muscular tension, increased susceptibility to infections, and the invitations to engage in unhealthy behaviors (e.g., smoking, drinking) stress can engender.

> She would rather light a thousand candles than curse the darkness.
>
> *Adlai Stevenson (Eulogy for Eleanor Roosevelt)*

Stress is a disruption in one's psychobiological balance and sense of harmony within oneself and/or with the social and physical environments. The experience of stress is unpleasant, so when we become stressed, we try to regain psychological and physical balance. If we are successful, not only do we feel better, but we also gain confidence in our ability to handle stress in the future. If we are not successful, however, and stress is prolonged or severe, we may feel helpless and become fatigued, worn out, and sick (Table 3.1).

In this chapter we discuss stress and suggest ways to reduce it.

How Stress Occurs

Stress results from the interplay of environmental situations and life events and the mental (cognitive), emotional, and physical reactions to those occurrences (Figure 3.1). Stress experts define stress as "a relationship between the person and the environment that is appraised by the per-

Table 3.1

Disorders That Can Be Caused or Aggravated by Stress

Gastrointestinal disorders	*Musculoskeletal disorders*
Constipation	Rheumatoid arthritis
Diarrhea	Low back pain
Duodenal ulcer	Migraine headache
Ulcerative colitis	Muscle tension
Respiratory disorders	*Metabolic disorders*
Asthma	Hyperthyroidism
Hay fever	Hypothyroidism
Tuberculosis	Diabetes
Colds	Overweight
Flu	Metabolic syndrome
Skin disorders	*Cardiovascular disorders*
Eczema	Coronary artery disease
Pruritus	Essential hypertension
Urticaria	Congestive heart failure
Psoriasis	*Menstrual irregularities*
Eating disorders	*Cancer*
Depression	*Accident proneness*

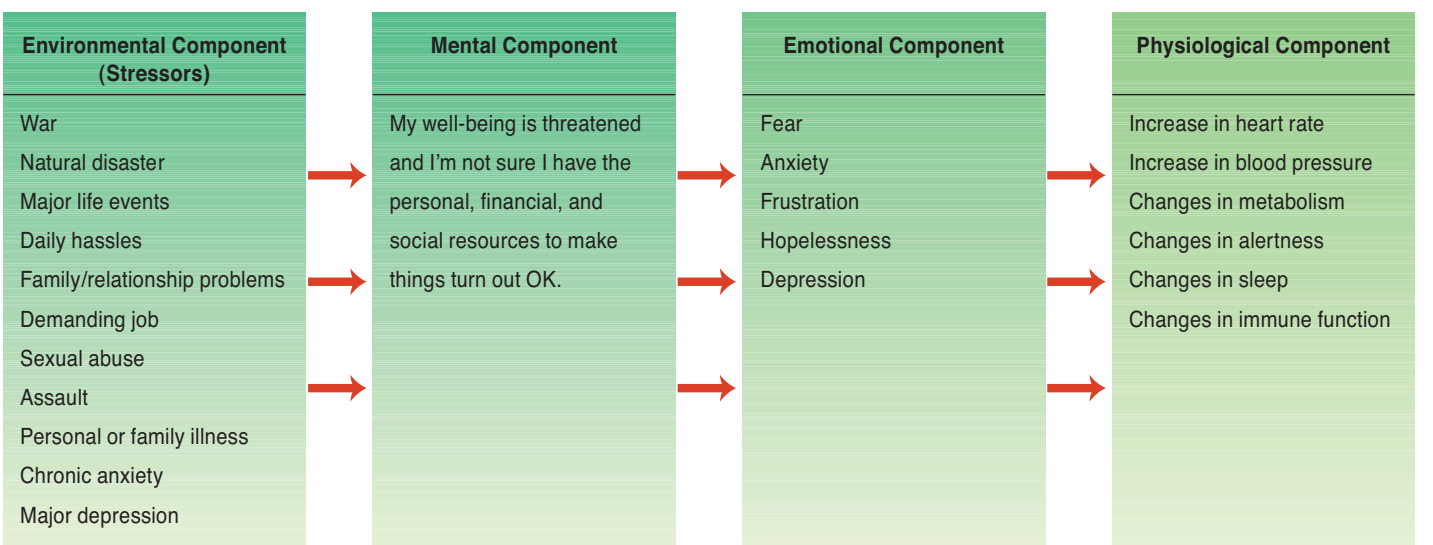

Figure 3.1

The Components of Stress

Stress results from the interplay of potentially stressful environmental situations and life events and the mental (cognitive), emotional, and physiological reactions to those occurrences.

son as taxing or exceeding his or her resources and endangering his or her well-being" (Folkman, 1984). In other words, stress comes from thinking, "This situation puts my well-being at risk and I'm not sure I have the personal, social, economic, or physical resources to meet this challenge and come out OK."

The Environmental Component of Stress

The environmental component of stress consists of situations and events that bring about stress, which are called **stressors**. They can be the day-to-day hassles and complexities that block the efficient and timely accomplishment of daily life tasks, family problems, unpleasant interactions with other people, job/school problems, major external events (war, flood, famine), and major life changes and events (see the Wellness Guide feature "Assessing Life Changes") that become obstacles to achieving desired life goals. Positive experiences, such as starting a new love relationship or graduating from college, although positive, can also be taxing. In general, stressful situations can be classified into these types:

Harm-and-loss situations, which include death of a loved one, theft or damage to one's property, physical injury or loss of a body part, physical assault, or loss of self-esteem.

Threat situations, which are perceived as likely to produce harm or loss whether any harm or loss actually occurs. The experience is one of continually watching for and warding off potential dangers.

Challenge situations, which are perceived as opportunities for growth, mastery, and gain. The stress that comes from challenging situations is called **eustress** (positive stress), as opposed to **distress** (negative stress) that accompanies harm, loss, and threat.

The Mental Component of Stress

The mental component of stress consists of (1) the appraisal of a situation as absolutely or potentially damaging to one's physical or psychological well-being or a threat to one's survival, and (2) believing that one's personal resources are insufficient to ward off or overcome the threat to one's well-being. The situation can be real, such as breaking up in a relationship, or imagined, such as the possibility of a pop quiz that may or may not happen.

The degree to which a situation is appraised as stressful depends on an individual's psychological makeup. Everyone interprets the world and events differently. Thus, a situation that is upsetting and stressful to one person may not even bother another.

The Emotional Component of Stress

The emotional component of stress consists of unpleasant emotions that arise from one's appraisal of a situation as harmful or threatening and that one's resources for protection are limited or uncertain. These emotions are anxiety, fear, frustration, anger, and depression.

Warning Signs of Stress

Although stress is pervasive in the life of a college student, it is not always easy to recognize when stress has become a threat to physical or mental health. If you experience any of these signs of stress, it's time to make some changes in your life, and perhaps seek professional help to reduce the stress.

- Trouble falling asleep
- Difficulty staying asleep
- Waking up tired and not well rested
- Changes in eating patterns
- Craving sweet/fatty/salty ("comfort") foods
- More headaches than usual
- Short temper or irritability
- Recurring colds and minor illnesses
- Muscle ache and/or tightness
- Trouble concentrating, remembering, or staying organized
- Depression

Factors Affecting the Experience of Stress

Several factors influence the degree of stress a person experiences. Among them are predictability, personal control, belief in the outcome, and social support.

Predictability Knowing when a stressful situation will occur produces less stress than not knowing. This is because knowing when a stressful event will occur (like taking an exam) allows a person to relax in the interim and prepare to face the challenge, whereas not knowing puts a person on constant alert (like having to face pop quizzes). For example, people whose employment status is secure have less stress than people who must worry

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challenge situations: positive events that may involve major life transitions and may cause stress

distress: stress resulting from unpleasant stressors

eustress: stress resulting from pleasant stressors

harm-and-loss situations: stressful events that include death, loss of property, injury, and illness

stress: the sum of physical and emotional reactions to any stimulus that disturbs the harmony of body and mind

stressor: any physical or psychological situation that produces stress

threat situations: events that cause stress because of a perception that harm or loss may occur

Assessing Life Changes

Stress researchers have developed methods to identify and measure the potential for life experiences to cause stress. One such method is the Recent Life Changes Questionnaire (RLCQ), which contains a list of 74 life events that are common stressors among Americans (Table 3.2). Each life event on the RLCQ is associated with a number of life change units (LCUs), which represent the relative amount of psychological and physiological adjustment required to meet the challenge of the particular life event. Accumulation of 300 LCUs within six months or 500 LCUs within one year indicates a high degree of recent life stress and an increased risk of illness or injury.

Table 3.2

The Recent Life Changes Questionnaire

	Life change units			Life change units	
Life event	Women	Men	Life event	Women	Men
Death of son or daughter	135	103	Moderate illness	47	39
Death of spouse	122	113	Loss or damage of personal property	47	35
Death of brother or sister	111	87	Sexual difficulties	44	44
Death of parent	105	90	Getting demoted at work	44	39
Divorce	102	85	Major change in living conditions	44	37
Death of family member	96	78	Increase in income	43	30
Fired from work	85	69	Relationship problems	42	34
Separation from spouse due to marital problems	79	70	Trouble with in-laws	41	33
Major injury or illness	79	64	Beginning or ending school or college	40	35
Being held in jail	78	71	Making a major purchase	40	33
Pregnancy	74	55	New, close personal relationship	39	34
Miscarriage or abortion	74	51	Outstanding personal achievement	38	33
Death of a close friend	73	64	Troubles with coworkers at work	37	32
Laid off from work	73	59	Change in school or college	37	31
Birth of a child	71	56	Change in your work hours or conditions	36	32
Adopting a child	71	54	Troubles with workers whom you supervise	35	34
Major business adjustment	67	47	Getting a transfer at work	33	31
Decrease in income	66	49	Getting a promotion at work	33	29
Parents' divorce	63	52	Change in religious beliefs	31	27
A relative moving in with you	62	53	Christmas	30	25
Foreclosure on a mortgage or a loan	62	51	Having more responsibilities at work	29	29
Investment and/or credit difficulties	62	46	Troubles with your boss at work	29	29
Marital reconciliation	61	48	Major change in usual type or amount of recreation	29	28
Major change in health or behavior of family member	58	50	General work troubles	29	27
Change in arguments with spouse	55	41	Change in social activities	29	24
Retirement	54	48	Major change in eating habits	29	23
Major decision regarding your immediate future	54	46	Major change in sleeping habits	28	23
Separation from spouse due to work	53	54	Change in family get-togethers	28	20
An accident	53	38	Change in personal habits	27	24
Parental remarriage	52	45	Major dental work	27	23
Change residence to a different town, city, or state	52	39	Change of residence in same town or city	27	21
Change to a new type of work	51	50	Change in political beliefs	26	21
"Falling out" of a close personal relationship	50	41	Vacation	26	20
Marriage	50	50	Having fewer responsibilities at work	22	21
Spouse changes work	50	38	Making a moderate purchase	22	18
Child leaving home	48	38	Change in church activities	21	20
Birth of grandchild	48	34	Minor violation of the law	20	19
Engagement to marry	47	42	Correspondence course to help you in your work	19	16

Source: Adapted from Miller, M. A., and Rahe, R. H. (1997). Life changes scaling for the 1990s. *Journal of Psychosomatic Research,* 43, 279–292, with permission from Elsevier Science.

The Powerful General and the Monk

The powerful general and his army arrived at the border of a neighboring country. Scouts were sent into the countryside to reconnoiter. After a time a scout returned. Throwing himself off his horse, he knelt at the powerful general's feet and bowed his head.

"What is your report?" barked the powerful general.

"Master," replied the scout. "Hearing that your magnificent and powerful armies have landed, all for miles around have fled."

The powerful general stood proudly and smiled. The scout looked up ever so meekly and continued, "Except the monk."

"What?!?"

"Yes, sire, except the monk. He has not fled."

"Where is this foolish monk?" bellowed the powerful general.

The scout looked up. "In the village, sire, not 15 minutes' ride from here. He is in his hut at the top of the hill."

The powerful general, by now enraged, strapped on his sword and armor, mounted his massive white horse, and galloped south along the coast road. At the village he sped up the hill and quickly dismounted in front of the monk's hut. Drawing his sword from its scabbard, the powerful general burst into the hut. There, a small man in clean but tattered robes, with a shaved head, was sitting on a cushion, meditating.

The powerful general placed the tip of his sword at the monk's throat, and in his deepest, most commanding voice said, "You dare not flee before my powerful armies? Do you realize I could run you through with my sword without blinking an eye?"

The monk opened his eyes, looked at the general, and said, "Do you realize that I could let you run me through with your sword without blinking an eye?"

The powerful general thought for a moment. Then he put the sword back in its scabbard, bowed to the monk, and rode away.

constantly about losing their jobs (Scott-Marshall, 2011). During World War II, London was bombed every night, but the London suburbs were not. Londoners had fewer ulcers than suburbanites, presumably because they knew when bombings would occur.

Personal Control Individuals who believe they can influence the course of their lives are likely to experience less stress than are individuals who believe that their fate is determined by factors outside of their control. The crucial factor is belief in one's ability to control situations and not whether control is actually possible. For example, people who have jobs that involve a lot of pressure to perform but allow them little opportunity for deciding how the tasks are to be accomplished have more stress than workers who have more control over decisions (Backé et al., 2011).

Belief in the Outcome People who believe that things are likely to improve (optimists) experience less stress than do people who believe that things will get worse (pessimists).

Social Support Having someone to talk to and believing that the person can help manage a stressor by providing physical, emotional, or intellectual help lessens stress (Taylor, 2011). For example, heart attack patients experience less stress if they have social support (Albus, 2010). Also, patients who talk to their surgeons about their fears of an impending surgery have a smaller stress response than patients who go through such procedures feeling uninformed and unsupported do.

The Physiological Component of Stress

The physiological component of stress consists of automatic physiological responses to real or imagined situations that are considered damaging or threatening. One physiological response to stress is called the **fight-or-flight response** (**Figure 3.2**). Its purpose is to prepare an individual to deal with a stressor by confronting it (fight) or running away or avoiding it (flight). The fight-or-flight response involves the coordinated activation of the autonomic nervous system and the release of adrenaline (also called epinephrine) from the adrenal glands (located in the thorax above the kidneys). Stress activation of the autonomic nervous system elevates the heart rate and blood pressure (to provide more blood to muscles), constricts the blood vessels of the skin (to limit bleeding if wounded), dilates the pupil of the eye (to let in more light, thereby improving vision), increases activity in the reticular formation of the brain (to increase the alert, aroused state), liberates glucose and free fatty acids from body storage sites (to make energy available to the muscles, brain, and other tissues and organs), and activates certain immune cells to prepare to defend the body if it is wounded.

A second physiological response to stress is activation of the **hypothalamo-pituitary-adrenal (HPA) axis** (**Figure 3.3**). The thought that one is in a stressful situation causes the hypothalamus of the brain to release a hormone called corticotrophin releasing factor (CRF). This hormone stimulates the pituitary gland (located at

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fight-or-flight response: a defensive reaction that prepares the organism for conflict or escape by triggering hormonal, cardiovascular, metabolic, and other changes

hypothalamo-pituitary-adrenal (HPA) axis: a coordinated physiological response to stress involving the hypothalamus of the brain and the pituitary and adrenal glands

Figure 3.2

The Fight-or-Flight Response

All humans display this response when confronted with challenges they interpret as frightening or threatening.

Heart
Increases in heart rate and force of contractions

Blood
Constriction in abdominal viscera and dilation in skeletal muscles

Eye
Contraction of radial muscle of iris and relaxation of ciliary muscle

Intestines
Decreased motility and relaxation of sphincters

Skin
Contraction of pilomotor muscles and contraction of sweat glands

Spleen
Contraction

Brain
Activation of reticular formation

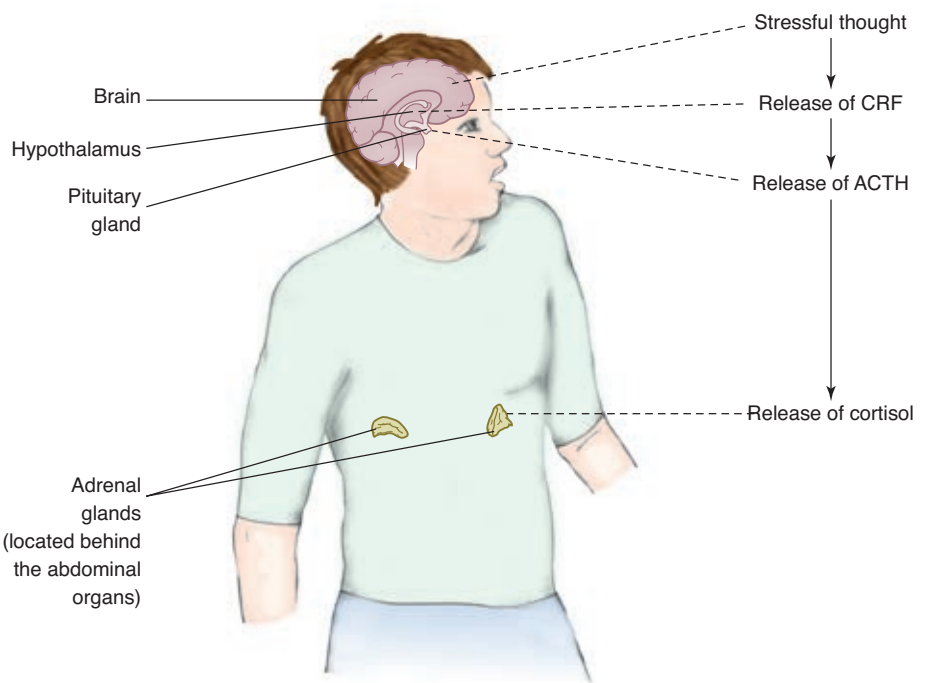
the base of the brain) to release a hormone called ACTH into the bloodstream. ACTH circulates in the blood and stimulates the pair of adrenal glands to release into the blood yet another hormone called cortisol. In the immediate (acute) response to stress, this hormone circulates in the blood, causing tissues to respond to the stressor, generally by providing energy for confrontation (fight) or avoidance (flight), for fighting infection, and for healing wounds. However, in the extended (chronic) response to stress, this hormone alters metabolism, contributing to overweight and type 2 diabetes; suppresses the immune system, thereby increasing susceptibility to infections and cancer; weakens bones; impairs memory; and worsens depression (Dhabhar & McEwan, 2007).

The fight-or-flight response and activation of the HPA axis are designed for short-term (minutes to hours) management of a stressful situation. If the individual can think differently or do something to change the perception that the situation is overwhelmingly threatening, stress activation of the nervous system and the secretion of stress hormones stop and the person's mind and body return to balance. This can be accomplished by attempting to change the stressful situation, changing one's interpretation of it, or thinking that the situation is manageable rather than overwhelming. If nothing changes, however, and the stress response continues, then a person can feel anxious, depressed, irritable, fatigued, and burned out, and the risks of becoming both mentally and physically ill increase.

Figure 3.3

The Hypothalamo-Pituitary-Adrenal Axis

Stressful thoughts trigger the release of a hormone called corticotrophin releasing factor (CRF) from the hypothalamus of the brain. CRF flows in the bloodstream to the pituitary gland, where it **stimulates** the release of the hormone ACTH. ACTH circulates in the bloodstream to the adrenal glands, where it stimulates the release of cortisol and other stress hormones. In acute stress, cortisol helps prepare the body for fight, flight, wound healing, and infection. In chronic stress, cortisol unbalances metabolism and suppresses the immune system.



Overwork Causes Death in Japan

Stress not only can increase a person's susceptibility to infections and sickness, but also can cause death, as recognized in Japan. Many people in Japan work long hours and sometimes are asked to take on more work than they can handle. The stress from overwork can raise blood pressure, lower immune system functioning, and cause changes in some people's bodies that result in sudden death. In Japan, sudden death from overwork is called karoshi.

In 1987 the Japanese Labor Ministry officially recognized karoshi (overwork) as a cause of death. The ministry estimates that about 100 people die each year from overwork and about 60 more are suicide victims. However, the actual number of deaths from overwork is thought to be about 10,000 annually. In 2011, a jury awarded the parents of a Japanese car factory worker $700,000 in damages after a court ruled their son committed suicide because he was overworked.

Stress can cause unhealthy behaviors, such as smoking.

Worry, Worry, Worry: How to Stop Stressful Thoughts

If you have the same worrisome thought over and over, try this:

1. Stop the thought when you realize you are having it. Say to yourself, "There's that worry again. Stop!"
2. Replace the thought with a more positive thought.

Here's an example: A student realizes that when he looks at his watch to see how much time remains on a test, he immediately has the thought "There's not enough time." This thought comes over and over again, stressing him and disrupting his focus. He learns thought-stopping. The next time this occurs, he stops. He puts down his pencil, closes his eyes, takes a deep breath, and says to himself, "There's that thought again. I can do this test if I focus." A few seconds later the thought is gone, his mind is clear, and he returns to the exam.

How Stress Contributes to Illness

Stress contributes to illness by (1) causing the mind and body to become exhausted, worn down, and damaged, (2) weakening immunity, and (3) motivating unhealthy behaviors in an attempt to deal with stress (**Figure 3.4**). Some people who have been exposed to a life-threatening, traumatic experience, such as a car crash or combat, can develop posttraumatic stress disorder (PTSD), unpleasant and often debilitating symptoms that persist for months and years after the traumatic experience (discussed later in this chapter).

> Heavy thoughts bring on physical maladies; when the soul is oppressed so is the body.
>
> *Martin Luther*

The General Adaptation Syndrome

Continual physiological response to stressors can bring about a three-stage biological response called the **general adaptation syndrome (GAS)** (**Figure 3.5**).

1. *Stage of alarm:* A person's ability to withstand or resist any type of stressor is lowered by the need to deal with the stressor, whether it is a burn, a broken arm, the loss of a loved one, the fear of failing a class, or losing a job.
2. *Stage of resistance:* The body adapts to the continued presence of the stressor by producing more epinephrine, raising blood pressure, increasing alertness, suppressing the immune system, and tensing muscles. If interaction with the stressor is prolonged, the ability to resist becomes depleted.
3. *Stage of exhaustion:* When the ability to resist is depleted, the person becomes ill. Because many months or even years of wear and tear may be re-

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general adaptation syndrome (GAS): a three-phase biological response to stress

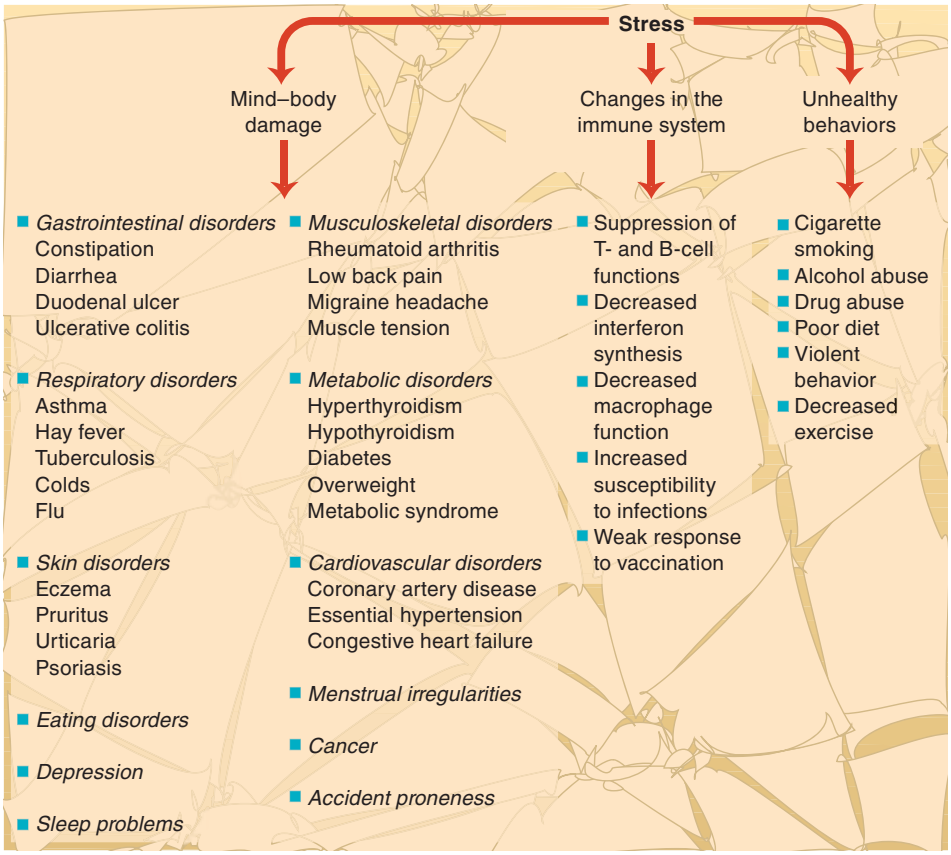

Figure 3.4
The Stress–Illness Relationship
Stress contributes to illness by causing the mind and body to become exhausted, worn down, and damaged; by weakening immunity; and by fostering unhealthy behaviors.

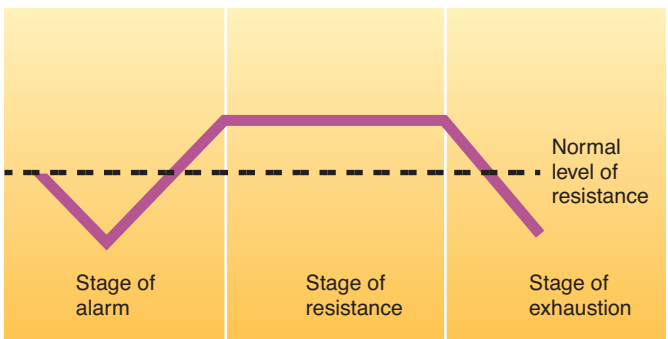

Figure 3.5
The General Adaptation Syndrome
In the stage of alarm, the body's normal resistance to stress is lowered from the first interactions with the stressor. In the stage of resistance, the body adapts to the continued presence of the stressor and resistance increases. In the stage of exhaustion, the body loses its ability to resist the stressor any longer and becomes exhausted.

quired before the body's resistance is exhausted, illness may not appear until long after the initial interaction with the stressor.

Stress Weakens Immunity

A variety of studies have shown that stress can impair the functions of the immune system (Dhabhar, 2011). For example, students who experience considerable stress prior to taking exams show reduced blood levels of immune system cells (e.g., natural killer cells, T-cells; see Chapter 12), thus making exam stress a risk factor for colds and flu. Stress also slows the body's ability to mount an immune response to a vaccine. Furthermore, stress impairs immune functioning in people who have lost their jobs, recently experienced the death of a loved one, or are unhappily married, never married, or recently divorced.

> The man who fears suffering is already suffering from what he fears.
>
> *Montaigne*

Stress-related impairment of the immune system is mediated by stress hormones, particularly cortisol, which bind to immune system cells and alter their functions. Stress activation of sympathetic nervous system fibers that connect to immune system tissues also alters immune functioning.

Unhealthy Behaviors

Stress can contribute to ill health by fostering unhealthy behaviors. To manage stressful feelings, some people smoke cigarettes, overeat, undereat, overwork, or drink alcohol and use other drugs. Among U.S. college students, for example, overconsumption of alcohol is often employed to reduce stressful feelings (Aldridge-Gerry et al., 2011). Furthermore, people with high levels of stress may not engage in health-promoting activities, such as

Several heart attacks occur every year on the floor of the New York Stock Exchange, making it one of the highest-density heart attack zones in the United States. The exchange has installed a defibrillator near the bank of phones used to place orders for stock trading, and it has trained workers to use the defibrillator and perform CPR when a heart attack occurs.

exercising regularly, eating properly, or getting enough sleep.

Posttraumatic Stress Disorder

Some forms of stress are so severe that they produce a serious, long-lasting condition called **posttraumatic stress disorder (PTSD)**. This condition can result from witnessing or being confronted with events that involve death or serious injury or a threat to the physical or psychological integrity of oneself or others. In such traumatic situations, the person experiences intense fear, helplessness, or horror. The most common source of PTSD in American men is combat in war; in American women, rape and sexual molestation (see Chapter 23). Other sources of PTSD are living through a natural disaster, experiencing a severe car or plane crash, physical assault, repeated psychological abuse, or a life-threatening illness. About 4% of the U.S. population is estimated to have PTSD.

Some of the diagnostic criteria for PTSD include (1) flashbacks to the traumatizing event(s) or recurrent unbidden thoughts and dreams of the experience; (2) persistent avoidance of cues that symbolize the traumatizing event(s); (3) difficulty sleeping, outbursts of anger, and being hyperalert and easily startled; and (4) having little interest in daily activities, feeling cut off from others, and a sense of having a limited future.

Although not known by its current medical name, the symptoms of PTSD were long recognized as an outcome of exposure to combat in war. The Vietnam war ushered in the current concept of PTSD because a large number of returning soldiers had clinically significant symptoms of PTSD. About 10% of military personnel returning from the Iraq war have a diagnosis of PTSD (Richardson et al., 2010).

How the traumatic stress of combat, natural disasters, and physical and sexual assault produces the symptoms of PTSD is not understood. Because not everyone exposed to a traumatic situation develops PTSD, researchers suspect that some people are more susceptible, perhaps because of some aspect of temperament, prior stressful experiences, or a history of anxiety or depression. For example, children

TERMS

posttraumatic stress disorder (PTSD): physical and mental illnesses resulting from severe trauma

Image Visualization Reduces Stress

Image visualization is telling yourself a story and "seeing" the images in your mind's eye. An attorney in Los Angeles uses image visualization once in a while during the first few minutes of her lunch break. She closes the door to her office, takes off her shoes, and sits on the floor with her back against a wall. She closes her eyes and takes a few deep breaths. Then she imagines . . .

. . . that she is standing at the edge of a meadow that is filled with golden wildflowers. The sun is shining and the air is a very pleasant temperature. On the far side of the meadow is a hill. She imagines herself slowly walking across the meadow toward the hill on a path that has been worn down by previous walks through the flowers. When she reaches the hill, she begins to walk on a gently winding path toward the top. As she walks, she hears the sounds of birds and a nearby stream. Along the side of the path she sees bushes, small trees, a few flowers, and a few stones. Finally, she reaches the top of the hill, where there is a lovely stand of tall trees. There's a clearing in the trees, and on one side of the clearing there's a fallen log. She sits on the log and enjoys the warm sun filtering through the branches of the tall trees. She closes her eyes and rests. After a few minutes, it's time to return, so she opens her eyes, rises, and walks across the clearing to a very large, smooth, white boulder. She looks on the top of the boulder and there's a private message written just for her. She reads the message and then begins to walk down the path to the meadow, still hearing the sounds of the birds and the stream, and still feeling the warm sun. Eventually she reaches the meadow, retraces her path through the golden flowers, and then . . .

. . . she opens her eyes and embarks on the rest of her work day.

born to some New York women who were pregnant during the 9/11 attacks, and developed PTSD because of them, show PTSD stress hormone patterns, indicating a possible susceptibility to PTSD later in life (Yehuda et al., 2005). Treatment of PTSD includes psychological therapy and one of a variety of drugs that stabilize mood.

> If you don't learn to laugh at trouble, you won't have anything to laugh at when you are old.
>
> *Will Rogers*

Managing Stress

The best ways to manage stress are to replace stressful ways of living with beliefs, attitudes, and behaviors that promote peace, joy, and mind–body harmony. That does not mean you must become reclusive or try to eliminate all sources of conflict and tension in your life. People need challenges to be creative and grow psychologically and spiritually. It may mean, however, changing some self-harming ways of thinking and behaving.

Taking time to relax helps eliminate stress.

Living healthfully is fundamental to limiting stress. By eating properly, stretching and exercising regularly, getting sufficient sleep, limiting consumption of tobacco, caffeine, alcohol, and other drugs, and taking "quiet time" to be contemplative, creative, and joyful, you establish a strength of mind–body–spirit that can help buffer the twists, turns, and pulls of stress. When very busy, it's tempting to put off taking care of oneself ("There isn't time; I'll do it later."), so if you must, schedule time for healthful living as you do a class or other regular activity.

Besides living healthfully, managing stress also involves **coping**, which refers to efforts to manage a stressful situation regardless of whether those efforts are successful. In general, there are three types of coping processes (Folkman et al., 1986).

Problem-Focused Coping The stressful situation is appraised as changeable and a plan for changing something to improve things is devised and attempted. The key feature of **problem-focused coping** is the belief that one can change things for the better (optimism). Even if it turns out that change is not possible, believing it to be so lessens stress. Believing that one cannot change a *changeable* situation for the better (pessimism) creates a sense of helplessness, which can lead to giving up and depression.

Some ways to practice problem-focused coping include the following:

- Limit or eliminate interaction with the stressor. Be assertive with an annoying roommate, say "no" to unreasonable requests, use earplugs to block out noise, change jobs, change your major.
- Alter your perception of a stressful situation (called cognitive reappraisal). By perceiving a situation as less challenging, you lessen the chance of feeling overwhelmed. Ask yourself: "Am I seeing this situation realistically? And even if I am, is it really that threatening?"
- Set attainable goals. Winning may be an athlete's highest goal, but worrying about losing can make one sick. The solution is not to give up sports but to change priorities, perhaps by emphasizing the joy of participation rather than the outcome of competition.
- Focus on your personal strengths, values, and positive qualities. Have confidence in your ability to lessen stress. Give yourself credit for things you have done to lessen stress rather than believing that it was blind luck. This enhances the belief and confidence that you can master many situations that you encounter. Remember that stress is a function of one's belief about managing a challenging situation.
- Seek social support. Talk to friends, family members, counselors, teachers—anyone who you believe can understand, lend a sympathetic ear, and offer sound feedback and advice if you request it (see Chapter 4). Remember: A problem shared is a problem halved.
- Reduce physical tension. Take a walk, ride a bike, jog, or do yoga, progressive muscle relaxation, or t'ai chi—any physical activity that can release muscle tension and focus your mind on something other than your problems.
- Keep your sense of humor. Laughter and joy are beneficial to the spirit and immune system (Hasan, & Hasan, 2009). (see Chapter 2).
- Engage in sensory experiences, such as art, music, or a walk in a garden, through the woods, or along the beach or lake shore.

Emotion-Focused Coping The stressful situation is appraised as not immediately changeable and one decides to accept and work with the reality of the situation, perhaps by waiting for an opportunity to take action or by looking for the good in the bad ("a learning experience"). To facilitate acceptance, one might seek solace and comfort in religion, social contact, being with Nature, or perhaps becoming more involved in helping others.

Some ways to practice **emotion-focused coping** include the following:

- Ease your mind. Employ any of a variety of methods that can stop the physiological stress response and produce instead the "relaxation response" (see Chapter 2). These include meditation, image visualization, guided imagery, journal writing, and prayer. Making one of these methods work for you requires practice and persistence. After learning about the methods, choose one to experiment with almost daily over the course of a week. When you find one or two that you like, make doing them a regular part of your life.
- Let go. Even if only for a few minutes, stop carrying problems in your mind. Give yourself a break from stress by "leaving it at the river" (see the Managing Stress feature: "Two Monks and the River").

Denial/Distancing/Giving Up The stressful situation is appraised as not amenable to change, and rather than accepting that reality, one chooses not to think about it (denial), to undertake escapist activities (oversleeping, overeating, using drugs and alcohol, or increased TV watching, Web surfing, and videogame playing), or to become fatalistic and helpless (give up).

In general, problem-focused coping is best for dealing with practical problems and situations that can be resisted or overcome with one's personal efforts. Emotion-focused coping is best for dealing with situations not amenable to change but which must be faced, such as the death of a loved one, illness, or coping with a natural disaster. Denial and avoidance tend to be ineffective coping strategies.

College Student Stress

Being in college can be both rewarding and intense. In college you get the opportunity to learn a variety of interesting things, meet new people, prepare yourself for a rewarding job/career, become an honorable person and good citizen, and identify your values, abilities, and preferences. On the other hand, college life has the potential to be stressful (**Table 3.3**). Students are challenged daily to perform academic tasks, some of which are new (that's why it's called learning) and thus raise doubts about oneself and one's abilities. The college experience is rife with change and unfamiliarity: new classes, new teachers, new

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coping: efforts to manage a stressful situation regardless of whether those efforts are successful

emotion-focused coping: appraising and accepting a stressful situation as not immediately changeable and adopting an attitude that lessens anxiety and brings comfort

problem-focused coping: appraising a stressful situation as changeable and making and attempting a plan for changing something to improve things

Table 3.3

Examples of College Student Stressors

Academic
Competition
Schoolwork (difficult, low motivation)
Exams and grades
Poor resources (library, computers)
Oral presentations/public speaking
Professors/coaches (unfair, demanding, unavailable)
Choosing and registering for classes
Choosing a major/career

Time
Deadlines
Procrastination
Waiting for appointments and in lines
No time to exercise
Late for appointments or class

Environment
Others' behavior (rude, inconsiderate, sexist/racist)
Injustice: seeing examples or being a victim of
Crowds/large social groups
Fears of violence/terrorism
Weather (snow, heat/humidity, storms)
Noise
Lack of privacy

Social
Obligations, annoyances (family/friends/girl-/boyfriend)
Not dating
Roommate(s)/housemate(s) problems
Concerns about STDs

Self
Behavior (habits, temper)
Appearance (unattractive features, grooming)
Ill health/physical symptoms
Forgetting, misplacing, or losing things
Weight/dietary management
Self-confidence/self-esteem
Boredom

Money
Not enough
Bills/overspending
Job: searching for or interviews
Job/work issues (demanding, annoying)

Tasks of daily living
Tedious chores (shopping, cleaning)
Traffic and parking problems
Car problems (breaking down, repairs)
Housing (finding/getting or moving)
Food (unappealing or unhealthful meals)

people, new living situations. Because college is not home and the people are not family, there may be little support. And, to top it off, rather than getting paid for all their hard work, students do the paying. Furthermore, college students are on their own, and they may not always make the wisest, safest, and healthiest choices.

A healthy lifestyle—eating properly, exercising regularly, getting sufficient restful sleep, having daily quiet time and regular creative relaxation (reading, socializing, art, music)—is fundamental to dealing with college stress. Unfortunately, with so many demands and time pressures, it is tempting to put off choices for living healthfully.


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Academic pressures and test taking can produce anxiety and stress.

Overload

If they were to occur sequentially, individual stressors in college, such as taking a test, going through a rough time with a romantic partner, or moving to a new residence, although unpleasant, would be generally manageable. However, in college, many challenges and changes occur virtually simultaneously. For example, at the end of a semester, a student could face having to write two final papers, take five finals, deal with a bad cold, and move to a new apartment. And the next semester, there would likely be a new set of challenges (an ill parent, a course that makes no sense) along with some of the usual ones (final papers and exams and problematic social relationships).

Being confronted with too many challenges and changes can lead to **overload**—the feeling that there are too many demands on your time and energy. Your life consists of zipping from here to there to attend to all of your tasks, but what you really want is a week off to

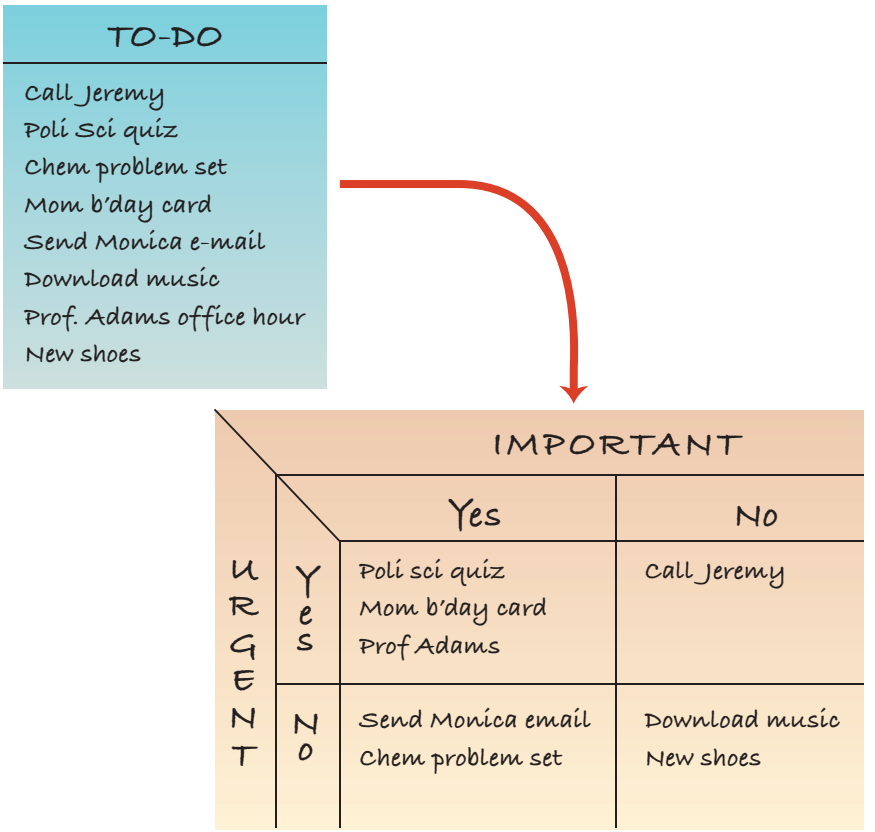

Figure 3.6

Prioritizing Tasks

Classify tasks from your to-do list according to their urgency and importance and do them in this order: (1) urgent and important; (2) not urgent and important; (3) urgent but not important; and (4) not urgent or important. Move tasks labeled "urgent and not important" to other categories because urgency is a state of mind and makes things seem important even if they are not.

hang with your friends and "veg." And if overload grows to feeling overwhelmed, a student might drop a class or two, drop out of school, get depressed, or use alcohol or drugs.

At the heart of overload is the sense of lacking personal control. Individuals who believe they can influence the course of their lives (internal locus of control) are likely to experience less stress than individuals who believe that their fate is determined by factors outside of their control (external locus of control) (Skinner & Zimmer-Gembeck, 2011). Thus, although it is tempting to focus on things outside of yourself to explain feelings of overload and overwhelm, it is more productive to look at yourself. Which is good, because you have more control over yourself than you do over things in your environment.

Here are some antidotes to overload:

1. *Plan ahead.* Knowing when a stressful situation will occur produces less stress than not knowing does. For example, most of the time, you will know at the beginning of a semester when major assignments are due. Plan for them.
2. *Keep a to-do list.* At the beginning of each day, or the night before, write down all the things you have to do.
3. *Clarify intentions.* Before you begin each day, take a few moments to be quiet and still and clarify your intentions. Ask yourself, "What do I want/need to make happen today?" "What do I need to do to keep my mind, body, and spirit healthy and well?" Don't think only of accomplishing tasks but also the effects your behaviors will have on yourself and others.
4. *Prioritize tasks.* First things first. Classify tasks according to their urgency and importance (**Figure 3.6**), and do them in this order: (1) urgent and important; (2) not urgent but important; (3) urgent but not important; and (4) not urgent or important. Distinguishing the urgent/important tasks from the urgent/not important ones is often difficult because urgency is a state of mind and makes everything seem important. Before prioritizing items on your to-do list, take a few minutes to become mentally and physically quiet. This will allow you to place truly urgent and important items at the top of your to-do list.
5. *Don't sweat the small stuff.* Eliminate unimportant tasks from your list. Don't do, think about, or worry about anything that doesn't match your most important values and long-term goals. "Keep your eyes on the prize."
6. *Schedule downtime.* Even if it's only a few moments a day, take time for activities that you find meaningful and fun, or just chill.
7. *Sleep.* Not sleeping enough reduces performance and efficiency on tasks by as much as 50%, which makes tasks take longer and contributes to the sense of overload.
8. *Don't "Just do it."* "Just do it" is a slogan for selling sports shoes, not living a life. Students often

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overload: the feeling that there are too many demands on one's time and energy from being confronted with too many challenges

Two Monks and the River

Two monks set out on their last day's journey to their monastery. At midmorning they came upon a shallow river, and on the bank there stood a beautiful young maiden.

"May I help you cross?" asked the first monk.

"Why, yes, that would be most kind of you," replied the maiden.

So the first monk hoisted the maiden on his back and carried her across the river. They bowed and went their separate ways.

After an hour or two of walking, the second monk said to the first monk, "I can't believe you did that! I just can't believe it! We take vows of chastity, and you touched a woman. You even asked her! What are we going to tell the abbot when we get home? He's going to ask how our journey was, and we can't lie. What are we going to say?"

Another couple of hours passed and the second monk erupted again. "How could you do that? She didn't even ask. You offered! The abbot's going to be incredibly angry."

By late afternoon the two were nearing their home, and the second monk, now filled with anxiety, said, "I can't believe you did that! You touched a woman. You even carried her on your back. What are we going to tell the abbot?"

The first monk stopped, looked at the second monk and said, "Listen, it's true that I carried that maiden across the river. But I left her at the river bank hours ago. You've been carrying her all day."

Table 3.4

Time Diary

Time	Activity
6:00 A.M.	Wake up
6:15 A.M.	Shower/dress/eat
7:00 A.M.	Go to school
8:00 A.M.	Chem lecture
9:30 A.M.	Hang out in library/snack
10:30 A.M.	Psych lecture
12:00 P.M.	Work
5:00 P.M.	Go home

Directions: Record your activities for three representative days. Enter data two to three times a day. For example, at noon, record your activities since awakening; at 5:00 P.M., record your activities since noon; at bedtime, record your activities since 5:00 P.M. Calculate the average daily hours awake, asleep, at school, studying/schoolwork, at work, with family, with friends, with self, commuting, other.

erroneously believe that the solution to overload is to put in more effort ("just do it"). Because they already are maxed out, putting in more effort cannot succeed, although a list of undone tasks can contribute to a loss of confidence and self-esteem.

Time Management

A major cause of college student stress is the sense that there's too much to do and not enough time to do it. Because you can't make more time, the way to ease this pressure is to make the best use of the time you have. Here are some tips for time management:

- *Perform a time audit*. For at least three representative days in your week (a whole week is better), write down everything you do during each of the 24 hours. Make a chart (**Table 3.4**). Identify windows of time that could be put to better use and alter your activities accordingly.
- *Be energy efficient*. Schedule important activities for the times of the day when you are most alert and attentive. For example, if you're a morning person, take morning classes and study in between them. Schedule exercise and socializing for the afternoon. Night people might do the opposite.
- *Resist multitasking*. Try to do only one thing at a time. Multitasking appears to be time efficient, but it also creates a sense of urgency, which produces anxiety and stimulates the secretion of stress hormones, thus contributing to stress.
- *Control interruptions*. Discourage drop-in visiting; don't answer texts, the phone, or instant messages (if it's important, the person will try again); stay away from TV, computer games, and the Internet.
- *Tame any tendencies toward perfectionism*. Don't waste time trying to make everything perfect. Every task has a point of diminishing returns—when the time and energy you put in is out of proportion to what you can reasonably hope to get back.
- *Understand any tendencies to procrastinate*. Procrastination often grows out of the fear of failure or exposure (people seeing you or your work and judging it harshly). When you hear your litany of excuses for not working at a task, ask yourself what you fear. Be your own best friend and encourage yourself to move ahead. Rather than focus on the end product of your efforts, do *one thing* that will move you ahead. If you have not begun to study for an upcoming exam, don't think about the exam. Instead, promise yourself that you will take your textbook out of your backpack today. That's all. Tomorrow, promise yourself you will open it. Remember: "The journey of a thousand miles starts with the first step."

Test Anxiety

It is a rare college student who does not get nervous when taking tests. People in American society equate educational success, academic degrees, and professional licenses with the attainment of important life goals, particularly financial ones. As a consequence, competition among students at all levels is intense. Students believe that grades and exam scores will determine how successful their lives will be in terms of jobs, careers, and money.

Many students experience health problems because of academic pressures and anxiety about exams. They may suffer from headaches, stomach and bowel problems, disordered eating, recurrent infections, and other symptoms of stress. Students whose exam anxiety affects their health need to make personal adjustments to reduce the anxiety while they pursue their goals.

Test anxiety is a sense of unease and apprehension—frequently accompanied by physiological symptoms such as upset stomach, restlessness, sleep problems, irritability, and "nervous" eating—that precedes the taking of an exam. Besides creating physical illness, test anxiety can make it difficult to concentrate, which increases the likelihood of forgetting (blocking) and making "careless" errors.

Test anxiety is a form of performance anxiety, which can occur in any activity in which someone cares about the outcome of her or his performance. (If the person didn't care about the outcome, then he or she would not be nervous about it.) Students, athletes, musicians, actors, and people who interview for jobs are all familiar with performance anxiety.

Being somewhat nervous about how well you are going to do leads to performing well. Unfortunately, being too nervous reduces performance on the task (**Figure 3.7**). With regard to tests, being a little nervous can motivate you to study prior to the test and to focus your attention while taking the test. Being too nervous prior to the test can lead to procrastination and during the test can distract you from the test.

Whenever you are performing a task (and you care about the outcome), your goal is to be just nervous enough to be at peak performance but not so nervous that you panic. The only way to know where this peak is for you is by experience. This is why, after having taken dozens of tests, students become expert test-takers. And this is why during the first couple of years of college, many students are petrified of tests.

Test anxiety is caused by a test-taker's internal mental messages, or self-talk, which focus on imaginary "terrible" outcomes of doing poorly on the exam. Some examples include the following:

- *Exaggerating the importance of the test:* "If I do poorly on this test, I'll do poorly in the class. If I do poorly in the class, I won't get into law school. If I don't get into law school, I'll be a failure and die of shame."
- *Fear of autonomy and exposure:* "If I do well, everyone will notice me and I will be embarrassed."

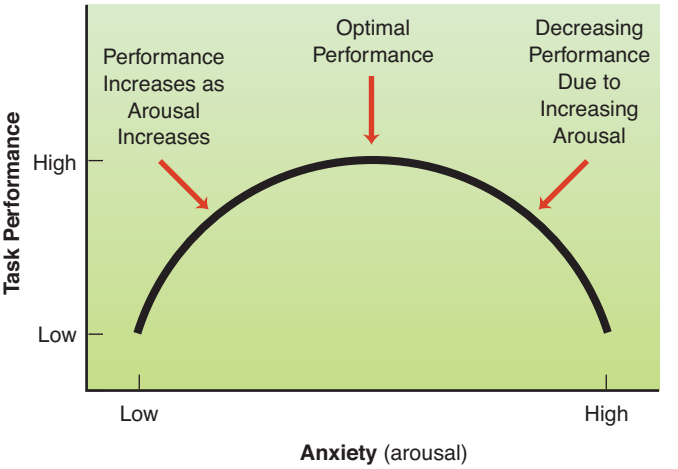


Figure 3.7

Performance Is Affected by Anxiety/Arousal

Performance on a task is affected by how anxious a person is about how well she or he is going to do. Being somewhat anxious leads to better performance until an optimum level of performance is reached. Being too anxious distracts the mind and reduces performance.

- *Fear of abandonment:* "If I do poorly, my friends and family will dislike me."
- *Confusing one's performance on an exam with one's self-worth:* "If I do poorly on the exam, it will prove that I'm worthless."

Solutions to Text Anxiety Acknowledge that you get nervous before tests and try to become aware of the roots of your test anxiety. Keep a journal of pretest feelings and symptoms. Be attentive for the images and negative messages in your internal self-talk. If you tell yourself, "You're not smart enough to do well," perhaps respond by saying to yourself, "That's your opinion. Mine is that I know I can do this." Remember: If you don't prepare adequately for the exam by studying, and you care about your performance, then it's realistic to feel anxious about the possibility of doing poorly.

Here are some other suggestions for managing test anxiety:

- Realistically appraise the importance of an exam. Remind yourself that a test is only a test and not a measure of your self-worth.
- Remind yourself that focusing on the grade will distract you from learning the material.
- As part of test preparation, give yourself periods of quiet time in which to relax and visualize yourself taking the test (see the Health Tips features "Image Visualization Reduces Stress" and "Visualization Reduces Exam Anxiety"). In your image, see yourself taking the exam confidently and masterfully. See yourself coming across a difficult question and taking that experience in stride and moving on to another question that you can respond to with confidence.

- Focus your awareness on the test by getting your test-taking materials together before test time. Sharpen your pencils and get your Scantron or blue book and write your name on it. Arrive at the exam 5 to 10 minutes early and let yourself relax.
- Don't get into a frenzy before the test. Don't cram. That only increases anxiety.
- Get a good night's sleep. Eat a balanced meal (protein and complex carbohydrate; not sugary/fatty snacks) one or two hours before the exam.
- Once in the test situation, stop worrying. Try to flow. If you block, put down your pencil, put your feet flat on the floor, close your eyes, and focus your awareness on your breathing. After 20 to 30 seconds, when you're ready, go back to the exam.
- Realize that test-taking is a skill only partially related to how much one knows and understands. Like any skill, one improves with practice.

What You Can Do About Stress

In the fast-paced, competitive world we live in, it's almost impossible not to experience stress and its many physiological and psychological manifestations. When stressed, we generally identify its causes as the hassles, obstacles, time pressures, unpleasantness in generally pleasant relationships, interactions with unpleasant others, and other situations that disrupt our feelings of inner harmony. What we often fail to recognize, however, is that we often contribute to our stress by how we think about and respond to what we experience. It is not always possible to avoid or escape stressful situations. Neither is it generally possible to change others so that they behave in ways we desire. In the face of stress, a wise course is to become mindful of how your thoughts contribute to feeling stressed. Becoming increasingly aware of how your mind works can help you decrease the time your mind swirls around in the throes of stress.

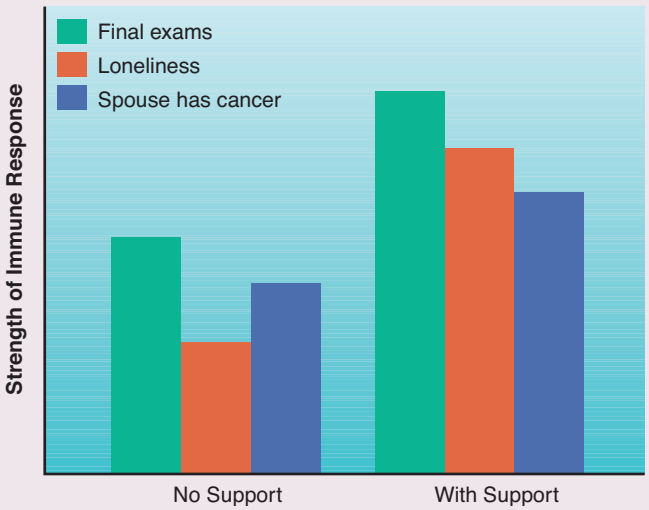
Visualization Reduces Exam Anxiety

The following exercise can reduce the stress and anxiety of taking exams. It can result in improved scores and a reduction in symptoms produced by stress.

1. Find a comfortable place in your house or room and a time when you will not be disturbed by other people. Sit in a comfortable chair or lie down on a couch or floor. The main thing is to get physically comfortable. If music helps you relax, play some of your favorite music softly.
2. Close your eyes and ask your mind to recall a place and time where you felt contented. It might be a vacation time, being with someone, or being alone in a beautiful environment. Use your imagination and memory to reconstruct the scene where you felt happy and healthy. Notice that you had no concerns there at that time. Let yourself become involved with the scene. The process is similar to having a daydream or a fantasy. While your mind is focused on pleasurable memories, your body automatically relaxes.
3. When you feel quite relaxed, refocus your mind on the upcoming exam. See yourself taking the exam while feeling relaxed and confident. Because your mind and body are relaxed and comfortable, your mind automatically associates the same feelings with the image of taking the exam. Visualize the exam room, the other students, yourself answering the questions; let your mind focus on as many details as possible.
4. Now project your mind into the future to the actual day and place of the exam. Notice how relaxed you feel as you take the exam; the anxiety you used to experience seems to have vanished. Continue with the visualization until you see yourself turning in the exam and feeling confident and pleased with your performance.
5. Do this exercise for several days prior to any exam that causes anxiety. You will be surprised at the absence of nervousness and stress on exam day. You will be even more pleased at the improvement in your grades.

Critical Thinking About Health

1. Three groups of people were vaccinated against a test substance (one that could not make anyone sick). Group 1 consisted of students during final exams; group 2, people complaining of loneliness; group 3, people whose spouse had cancer. Each group was further subdivided into two subgroups. One subgroup in each major group was given six weeks of weekly support group meetings plus education about reducing the stress of their circumstance. The other subgroup in each major group was given no support or education. The accompanying figure shows the results of the strength of the immune response to the test vaccine.



   a. Explain the results of the experiment.
   b. Suggest a hypothesis to explain the results of the experiment.
   c. What do the results suggest about how you can better deal with stress in your life?
2. Johann Wolfgang von Goethe (1749–1832), the German author of *Faust* and other literary works, once wrote: "Things which matter most must never be at the mercy of things which matter least."
   a. What is your interpretation of Goethe's idea?
   b. How does letting things which matter most be at the mercy of things which matter least contribute to stress?
   c. How susceptible are you to stress from letting things which matter most be at the mercy of things which matter least? What could you change to reduce that stress?
3. Offer an explanation for the following: In the 1980s, researchers studied the health of adults living in two communities that were separated by a river. North River was a prosperous suburb, and South River was an industrial region in which the major employer, an auto plant, had shut down. The research showed that after the auto plant closed, children living in South River had many more doctor visits for infections and allergies than did children in North River. Also, adults in South River had more motor vehicle accidents and colds and flu during winter months than adults in North River did.
4. On the Recent Life Changes Questionnaire, the death of a child, spouse, sibling, or parent carry the highest LCU values.
   a. Offer a hypothesis to explain that result. In your hypothesis, take into account the nature of those kinds of relationships and what is lost when someone dies.
   b. Given that the loss of a loved one is associated with the highest LCU values, how should someone who experiences that kind of loss navigate life so as to reduce his or her stress and the risk of becoming ill?
   c. What is the best way to cope with the loss of a loved one?
5. Do you experience test anxiety to such a degree that you become physically or emotionally upset before or after taking an exam? If so, describe your symptoms and feelings. If you have an exam that makes you anxious coming up in the next few weeks, try the exercise described in the Managing Stress box entitled "Visualization Reduces Exam Anxiety" for at least a week before taking the exam. After the exam, describe your experience in detail and indicate whether you performed better than you expected on the exam.

Health in Review

- Stress is the disruption of mind–body harmony brought about by trauma, threats to life, or obstacles to carrying out daily tasks, accomplishing life goals, or achieving desired changes in life.
- Stressors are situations and circumstances that cause stress.
- The mental component of stress consists of the interpretation of a situation as threatening and the appraisal that one's personal resources are insufficient to meet the demands of dealing with the stressful situation.
- The physiological components of stress are the fight-or-flight response and activation of the hypothalamo-pituitary-adrenal axis, with consequent secretion of stress hormones, especially cortisol.
- Stress contributes to illness by wearing down the mind and body (general adaptation syndrome), impairing immunity, and fostering unhealthy behaviors.
- Posttraumatic stress disorder is a serious medical condition resulting from exposure to traumatic events and near-death experiences.
- Stress can be reduced by disengaging from stressors and/or by altering perceptions and goals, thereby reducing the potential for stress-related illness.
- Stress can be reduced by techniques that produce a peaceful state of being, such as image visualization, meditation, exercise, yoga, and just taking it easy.
- College student stress includes overload, time pressures, and test anxiety.

Health and Wellness Online

The Web contains a wealth of information about health and wellness. You can gain a new perspective on many topics presented in *Health & Wellness, Eleventh Edition* by accessing the Jones & Bartlett Learning website at **go.jblearning.com/Edlin11eCWS.**

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Davis, M. (2008). *The relaxation and stress reduction workbook*. Oakland, CA: New Harbinger. Offers many self-assessment tools and calming techniques to help overcome anxiety and promote physical and emotional well-being.

Folkman, S. (2011). *The Oxford handbook of stress, health, and coping*. Oxford, UK: Oxford University Press. Thorough and most up-to-date information that science has to offer on stress, health, and coping.

Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Delta. In this venerable book, the founder of the Stress Reduction Clinic at the University of Massachusetts Medical Center presents a sound introduction for anyone who has considered meditating but was afraid it would be too difficult or would include religious practices they found foreign.

McEwan, B., & Lasley, E. L. (2003). *The end of stress as we know it*. Washington, DC: John Henry Press. A world-famous neurobiologist explains stress and offers suggestions for reducing it in one's life.

Recommended Websites

Please visit **go.jblearning.com/Edlin11eCWS** for links to these websites.

Anchoring
An online tutorial on how to quiet your mind, by Eric Golanty, PhD, coauthor of *Health and Wellness* and professor of health at Las Positas College.

College Student Stress
The University of Chicago's list of online resources.

Health Psychology Resources: Stress-Related Links
A compilation of many authoritative Web resources on stress, maintained by health psychologist Fuscia M. Sirois.

Mind/Body Health Stress
Explains stress and offers methods for lessening it; from the American Psychological Association.

Stress Resources
U.S. National Library of Medicine.