



How Stress Affects Your Body



Everyone experiences stress. Many health problems are related to stress, but not all stress is bad for health. Some types of stress can be healthy and increase alertness, memory, and efficiency.

Many people are exposed to chronic stress, which is bad for health. Chronic stress is experienced for a prolonged period. Too much stress and experiencing stress for too long can negatively affect physical and mental health.

Health issues linked to stress include obesity; asthma; depression; anxiety; heart attacks; stroke; hypertension; immune system disturbances that increase risk of infection; viral disorders, including the common cold and herpes; and autoimmune diseases, like rheumatoid arthritis and multiple sclerosis.

Stress can affect the skin. Rashes, hives, and eczema may be induced by stress. Stress can also affect the gastrointestinal system and result in gastroesophageal reflux disease (GERD), stomach ulcer, irritable bowel syndrome, and ulcerative colitis. Stress may contribute to insomnia and neurological disorders like Parkinson's disease.

Effect of Stress on Body Systems

Stress can affect emotions, mood and behavior. Stress also affects each body system.

Nervous System

The body shifts into "fight or flight" when confronted with a threat or sudden stressor. Threats can be physical or psychological, and may be real or perceived. The "fight or flight" response causes the body to release adrenaline and cortisol. These hormones make the heart beat faster, raise blood pressure, and increase glucose in the bloodstream. Body systems usually return to normal after the crisis passes.



Musculoskeletal System

Muscles tense up when the body is under stress. Tension headaches, migraines, and other musculoskeletal conditions may be triggered when muscles are contracted or "tense" for a long time.

Respiratory System

Stress can make you breathe harder. Rapid breathing can lead to hyperventilation and trigger panic attacks in some people. Stress can also worsen asthma.

Cardiovascular System

Acute stress increases heart rate and makes the heart work harder. Blood vessels expand to increase blood supply to the heart and large muscles. Arteries that supply blood to the heart can become inflamed when acute stress happens too often. This may lead to heart attack.

Endocrine System

Stress hormones, cortisol and epinephrine, are released by the adrenal glands when the body is stressed. The liver produces more glucose when cortisol and epinephrine are released. This glucose, or “blood sugar,” would provide energy needed to deal with a true “fight or flight” emergency.

Gastrointestinal System

Stress can cause you to eat more or less than usual. Eating more or eating different foods, or increased use of tobacco or alcohol, can cause heartburn or acid reflux. Stress can affect your stomach and cause “butterflies,” nausea, or pain. Severe stress can even cause vomiting. Stress can affect digestion and cause diarrhea or constipation. Stress can affect nutrient absorption by the intestines and affect how quickly food moves through the digestive tract.

Reproductive System

For women, stress can cause menstrual cycles to be irregular or stop. It can also cause periods to be more painful and reduce sexual desire. For men, excess cortisol produced while under stress can affect normal functioning of the reproductive system. Chronic stress can impair testosterone and sperm production and cause impotence.

References

American Institute of Stress. Stress Effects. Retrieved from <http://www.stress.org/stress-effects/>.

Griffin, R. M. (2010). Stress Management Health Center. 10 Health Problems Related to Stress That You Can Fix. Retrieved from <http://www.webmd.com/balance/stress-management/features/10-fixable-stress-related-health-problems>.

Signs and Symptoms of Stress	
Frequent headaches, jaw clenching or pain	Insomnia, nightmares, disturbing dreams
Gritting, grinding teeth	Difficulty concentrating, racing thoughts
Stuttering or stammering	Trouble learning new information
Tremors, trembling of lips, hands	Forgetfulness, disorganization, confusion
Neck ache, back pain, muscle spasms	Difficulty in making decisions
Lightheadedness, faintness, dizziness	Feeling overloaded or overwhelmed
Ringing, buzzing or “popping” sounds	Frequent crying spells or suicidal thoughts
Frequent blushing, sweating	Feelings of loneliness or worthlessness
Cold or sweaty hands, feet	Little interest in appearance, punctuality
Dry mouth, problems swallowing	Nervous habits, fidgeting, feet tapping
Frequent colds, infections, herpes sores	Increased frustration, irritability, edginess
Rashes, itching, hives, “goose bumps”	Overreaction to petty annoyances
Unexplained or frequent “allergy” attacks	Increased number of minor accidents
Heartburn, stomach pain, nausea	Obsessive or compulsive behavior
Excess belching, flatulence	Reduced work efficiency or productivity
Constipation, diarrhea, loss of control	Lies or excuses to cover up poor work
Difficulty breathing, frequent sighing	Rapid or mumbled speech
Sudden attacks of life threatening panic	Excessive defensiveness or suspiciousness
Chest pain, palpitations, rapid pulse	Problems in communication, sharing
Frequent urination	Social withdrawal and isolation
Diminished sexual desire or performance	Constant tiredness, weakness, fatigue
Excess anxiety, worry, guilt, nervousness	Frequent use of over-the-counter drugs
Increased anger, frustration, hostility	Weight gain or loss without diet
Depression, frequent or wild mood swings	Increased smoking, alcohol or drug use
Increased or decreased appetite	Excessive gambling or impulse buying

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