



The stress response is initiated from the pituitary gland, located in the middle of the brain, which automatically sends a chemical signal to the adrenal gland. The adrenal gland produces stress hormones, which are sent out to every cell in the body. The body is put into a state of 'high alert' and ready for action.

HOW STRESS EFFECTS THE BODY

BODY SYSTEMS	ACUTE REACTION (occurs within 8 seconds)	CHRONIC RESULT
Immune System	Temporary decrease in immune function.	Decrease immune system function. Increase chance for cancer and immune system malfunction.
Circulation System	Heart beats harder and faster and blood vessels constrict. Blood pressure increases which increases blood flow to muscles and brain. Thought processes quicken. Muscle tension increases to result in increased strength. Blood clotting factors in blood increase in case there is a bleeding injury.	Blood pressure and pulse consistently runs high which puts stress on the heart and damages the blood vessels. Damaged blood vessels increase risk for heart attack, peripheral vascular disease and stroke. More prone to developing blood clots that can block important blood vessels in the heart, brain, lungs or legs.
Endocrine System	Liver releases extra glucose into blood stream, which increases the blood sugar and more energy is available for body and brain for increase thinking. Stress hormones change the way we produce and use cholesterol.	Liver constantly releasing extra sugar into the blood stream that is not needed. This puts extra stress on the pancreas which has to work harder to keep blood sugars within normal limits. Increases cholesterol in the blood stream.

BODY SYSTEMS	ACUTE REACTION (occurs within 8 seconds)	CHRONIC RESULT
Endocrine System (continued)		Fat is more prone to be stored on the abdomen. Plaque formation increases in blood vessels.
Digestive System	Blood is diverted from stomach and intestines so it can be available for the muscles. Digestion slows considerably.	Digestive upset related to poor blood supply. Increase acid production which contributes to ulcer formation. Constipation related to slowed digestive function.
Senses	Hearing becomes more acute. Pupils dilate and increase visual sensitivity.	

Chronic stress increases risk of developing health conditions. The follow lists are common conditions which can be initiated and/or intensified by chronic stress:

Allergies Anxiety Cancer Colitis Constipation Depression Diabetes	Gastritis Heart attack Headaches Hypertension Autoimmune disease Immune suppression Infections	Insomnia Menstrual irregularities Rashes Rheumatoid arthritis Spastic colon Stroke Ulcers
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