

RESPONSE TO THREAT	SURVIVAL MECHANISM	MODERN CONSEQUENCES
All senses become acute	1. Sight, hearing, touch, taste, smell is enhanced, concentration is focused.	High error rate, less efficient sense after unrelenting stress
Hypothalamus releases endorphins	2. Endorphins block pain similar to morphine, in injuries give "second wind" during run.	Chronic stress reduces levels of endorphins. Aggravates migraines, backaches and pain of arthritis.
Thyroid releases hormones into blood	3. Thyroid hormones speed up metabolism, burning fuel faster.	Intolerance to heat Shaky nerves Weight loss Insomnia Exhaustion/burnout
Heart Races	4. Pumps more blood to the muscles and lungs, fuel and oxygen for action.	High blood pressure leading to strokes, bursting of an aneurysm or fatal heart attack.
Lungs expand	5. Air passages in the lungs dilate, breathing becomes rapid and deeper, providing extra supplies of oxygen to blood stream.	Increases and penetrates the damage to lungs from smoking, situation is made worse by the number of cigarettes per day as a reaction to stress.
Adrenal glands release cortisone	6. Counters allergic reaction from the flying dust during a struggle, preventing asthma or the closing of the eyes.	Impaired immune system, lymph glands shrink. Lower resistance to cancer, infection, and illness. Brittle bones Ulcers
Digestive tract shuts down	7. Blood is diverted to the muscles, heart, and lungs. 8. Stomach stops secretions, digestion 8. Mouth goes dry, to divert fluids away from the stomach 9. Rectum and bladder unload excess weight prior to battle.	A stressed lifestyle of eating on the run forces foods quickly into inactive stomachs, resulting in bloating, nausea, discomfort or diarrhea Public speakers' dry mouth. Soiled underwear
Pancreas releases sugar and insulin into the blood	10. Immediate energy supply (short distance Fuel), for a quick fight or sprint.	Aggravates or initiates diabetes; eating too many sugary foods can cause hypoglycemia.
Liver increases cholesterol	11. Helps carry long-distance fuel, takes over when blood sugar energy is exhausted.	Leaves fatty deposits in the blood vessels, contributing to hardening of the arteries and heart attacks. Production of sex hormone decreases
Production of sex hormone decreases	12. Men's testicles also retract for protection, allows concentration on tasks at hand without distraction from libido	Decreased sexual drive contributes to problems in intercourse, (premature ejaculation, lack of orgasm) may damage relationship.
Blood thickens	13. Increase of red and white blood cells from bone marrow, stored cell, and clotting factors from spleen; more capacity to carry oxygen, fight infections, clot blood.	Strokes, heart attacks, or an embolus can occur.
Skin "crawls", pales, sweats	Hairs bristles, enhancing sense of touch. Sweat glands cool overheated muscles underneath. Skin whitens as blood is diverted to muscles, reducing bleeding from surface lacerations	Clammy hands, pasty skin, stained armpits.

Source: Joy of Stress, Dr. Peter G. Hanson as taken from Mark Matthew Rocky Mountain News