

## The Effects of Stress on The Body

**Increased cortisol production:** Associated with weight gain (especially in the belly), inability to lose weight or gain muscle, and premature aging.

**Decreased nutrient absorption:** Due to decreased digestive enzyme production; decreased bile flow from the gallbladder, as well as decreased oxygenation and gastrointestinal blood flow.

**Increased nutrient excretion:** Stress increases the urinary excretion of calcium; magnesium; potassium; zinc; chromium; selenium; and various trace minerals.

**Decreased gut flora populations:** Stress destroys healthy intestinal bacteria, which can lead to immune problems, skin disorders, nutrient deficiencies, and digestive distress.

**Increase in sodium and fluid retention:** Can lead to high blood pressure (hypertension).

**Decrease in thermic efficiency:** Ability to burn calories is diminished.

**Decrease in thyroid hormone:** Can decrease the body's metabolic activity.

**Increase in blood cholesterol:** Stress raises LDL cholesterol levels.

**Increase in blood platelet aggregation:** A major risk factor in heart disease.

**Decrease in sex hormones:** Can lower sex drive, energy, and decrease muscle mass.

**Increase in inflammation:** The basis of many ailments including brain and heart disease.

**Decrease in gastric emptying time:** Can lead to constipation and can be a risk factor in diseases of the colon.

**Increase in gastric emptying time:** Can lead to diarrhea, and food particles prematurely entering the small intestines—a probable factor in food sensitivities, and various disease conditions.

**Increased food sensitivities:** Most likely due to decreased immunity and leaky gut.

**Decreased hydrochloric acid production:** The majority of people will experience a reduction of stomach acid in the presence of stress as the nervous system diverts blood flow away from digestive organs.

**Decrease in growth hormone:** A key hormone in growing, healing and rebuilding tissues; helps burn fat and build muscle.

**Increase in insulin resistance:** Chronic low-level stress may cause target cells to become unresponsive to insulin—a factor in diabetes, weight gain, heart disease and aging.

**Increase in erratic function of LES:** Lower esophageal sphincter opens inappropriately, causing gastric reflux (heartburn).

**Increase in oxidative stress:** Prematurely ages the body; a precursor to many diseases.

**Increased risk of osteoporosis:** Bone density has been shown to decrease in stressed and depressed women; stress increases the urinary excretion of calcium, magnesium and boron.