

- College one of the most stressful times in life, generally because of economy/ financial burden:

- rising tuition costs – harder to pay
- jobs not readily available
- means students have to balance work and academics

- What is stress?

- **Stressor** – a physical, social, or psychological event or condition / situation that upsets homeostasis and *produces a stress response* (so the stressor is what triggers stress)
- **Stress** – the experience of a perceived threat (real or imagined) to one's well-being, resulting from a series of physiological responses and adaptations
 - Some reactions to stressors include weight loss, hair loss, high blood pressure, sweaty palms, etc

- Is all stress bad?

- **Eustress** – positive stress triggered by a pleasant stressor or positive event; presents opportunity for personal growth and satisfaction (ex. tackling the stress of an exam in a positive way and ending up doing really well, getting a job or internship)
- **Distress** – negative stress triggered by an unpleasant stressor, or negative event; results in debilitation and/or strain

* people respond differently to dif. stressors (everyone copes w/ stress differently)

- Symptoms of stress

- physical: weight loss/gain, muscle tension, sweating, feeling faint, constipation / stomach issues, insomnia
- behavioral: social withdrawal, drinking or smoking more
- cognitive: irritability, anxiety, lack of creativity
- emotional: depression

- The stress response: a series of physiological changes that occur in the event of a threat

- provide the body with a sudden burst of energy in order to react to a potential threat or possible danger

- The stress response: actions of the nervous system: (brain, spine, nerves)

- autonomic nervous system (the involuntary part of the nervous system unlike the somatic nervous system) controls stress response. Made up of 2 subdivisions
 - sympathetic division: mobilizes body in event of threat
 - arousal, exercise
 - emergencies (pain, anger, fear)
 - initiates the stress response
 - parasympathetic division:
 - in control when relaxed
 - turns off the stress response
- hormones (primarily cortisol, adrenaline – epinephrine and norepinephrine) trigger a physiological change...
 - accelerated heart and breathing (to allow for more blood pumping to large muscles)
 - hearing and vision become more acute
 - liver releases extra sugar (gives you more energy)
 - perspiration increases (to cool the skin) – scalp also tightens
 - brain releases endorphins (pain blockers) (allows to focus on survival instead of pain)
- all of these changes in the body = fight or flight response
- relaxation response – body returned to normal state after event
 - aka homeostasis – body systems operate smoothly and maintain equilibrium

- Acute and chronic stress

- **acute stress**: short-term stress produced by the stress response
 - body is able to deal with this type of stress, as long as there is adequate recovery time
- **chronic stress** – long-term, low-level stress in which the stress response occurs without resolution

- stress occurs repeatedly or occurs without being resolved
- damaging to health

General adaptation Syndrome (G.A.S.) –theory to explain relationship between stress and health

- 3 stages of G.A.S.:
 - alarm (fight or flight) – the immediate reaction – resources taken away from digestive system, etc. in favor of aiding more important systems
 - resistance (adaptation) – long term protection, secretion of more hormones & allows us to sustain energy levels & blood pressure to keep up with the stress
 - exhaustion – like a “reality check” – body cant keep up and the body gives up

Links between stress and specific conditions:

- research = 40% of deaths in u.s. related to stress; 1 in 3 americans have high blood pressure (& don't know it)

- Cardiovascular disease
 - Chronic high blood pressure
 - Atherosclerosis: hardening of arteries; lose their elasticity & cant expand
 - Heart attack
 - Strokes
- Psychological problems
 - Depression and suicide
 - Panic attacks / anxiety
 - Eating disorders
 - Acute stress disorder
 - Ptsd
- Immune system