

Staying Centered!



In a Stressed-out world!

Dr. John Pellitteri

How did we get in this situation?



What does evolution reward?



Homo Sapiens

- May have co-existed with H. erectus and Neanderthals
- Believe in fantasies: work together



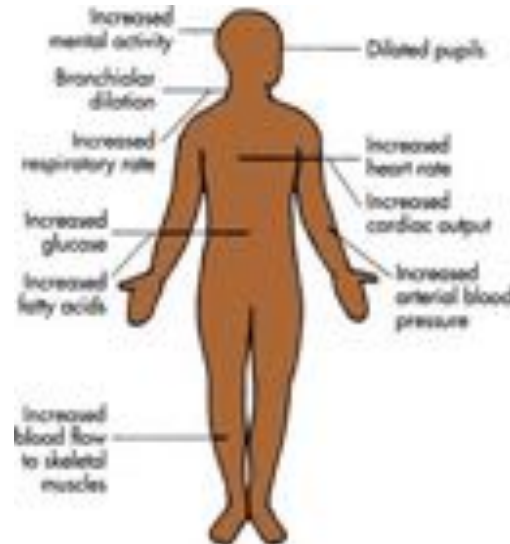
Why do we have stress at all?

Adaptive to our survival

Autonomic Nervous System

Sympathetic

Parasympathetic



Fight, Flight, Freeze

Sympathetic Arousal

Eyes Dilate

Heart Beats

Blood Redirected

Sweat

Neurons fire faster (epinephrine)



Hans Selye

- The “father” of stress
- A misnomer, really
- Stress vs. Strain

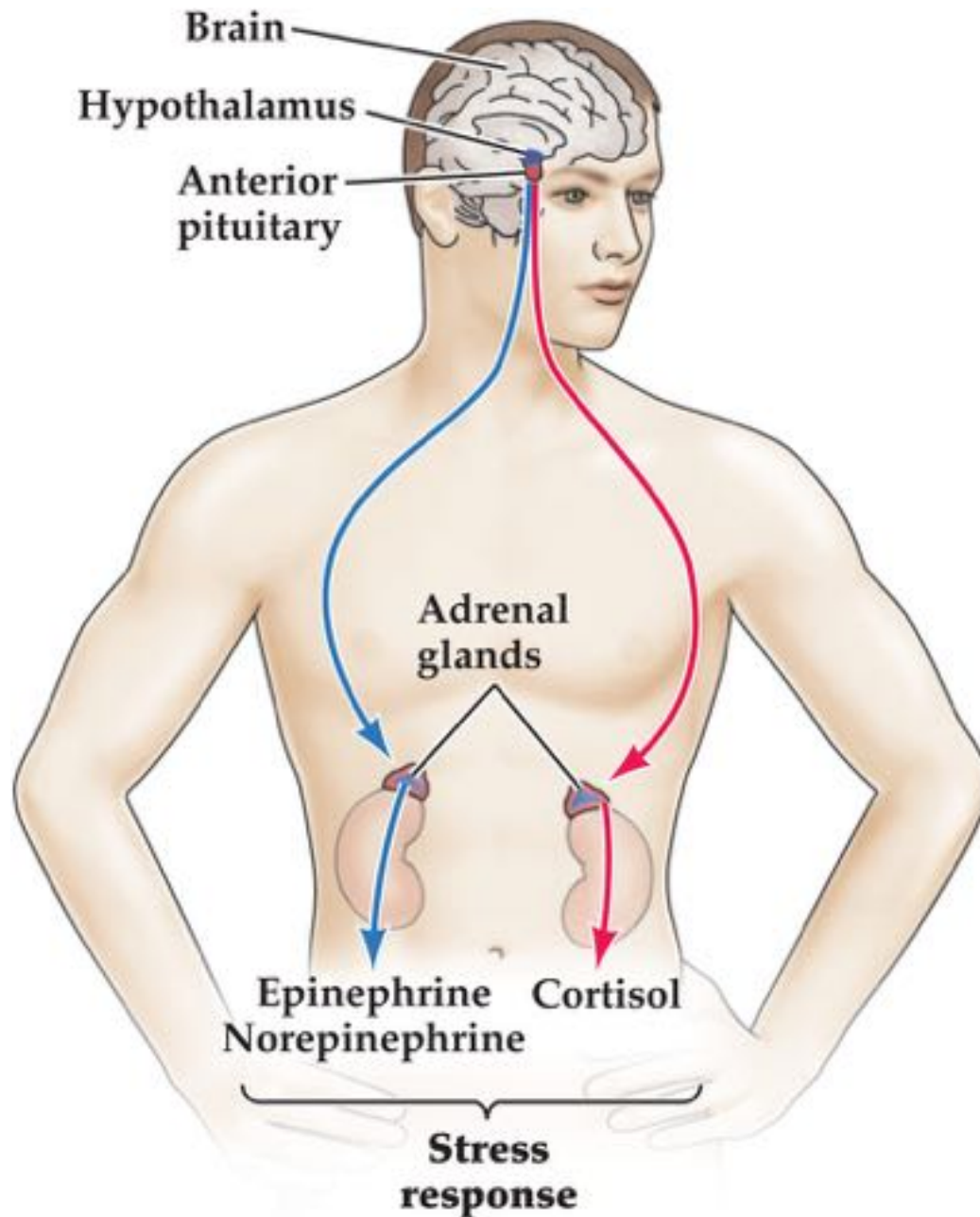


These are adaptive!
So why is stress/strain bad?



Stress!

- Causes or exacerbates disease processes by exhausting our immune system
- Long term cortisol production results in organ damage
- Has been linked to cardiovascular diseases, coronary heart disease, hypertension, diabetes, and other chronic conditions
- Correlated with sick days, underproduction, work conflict, grievances, and complaints



(a) Response systems affected in jump situation

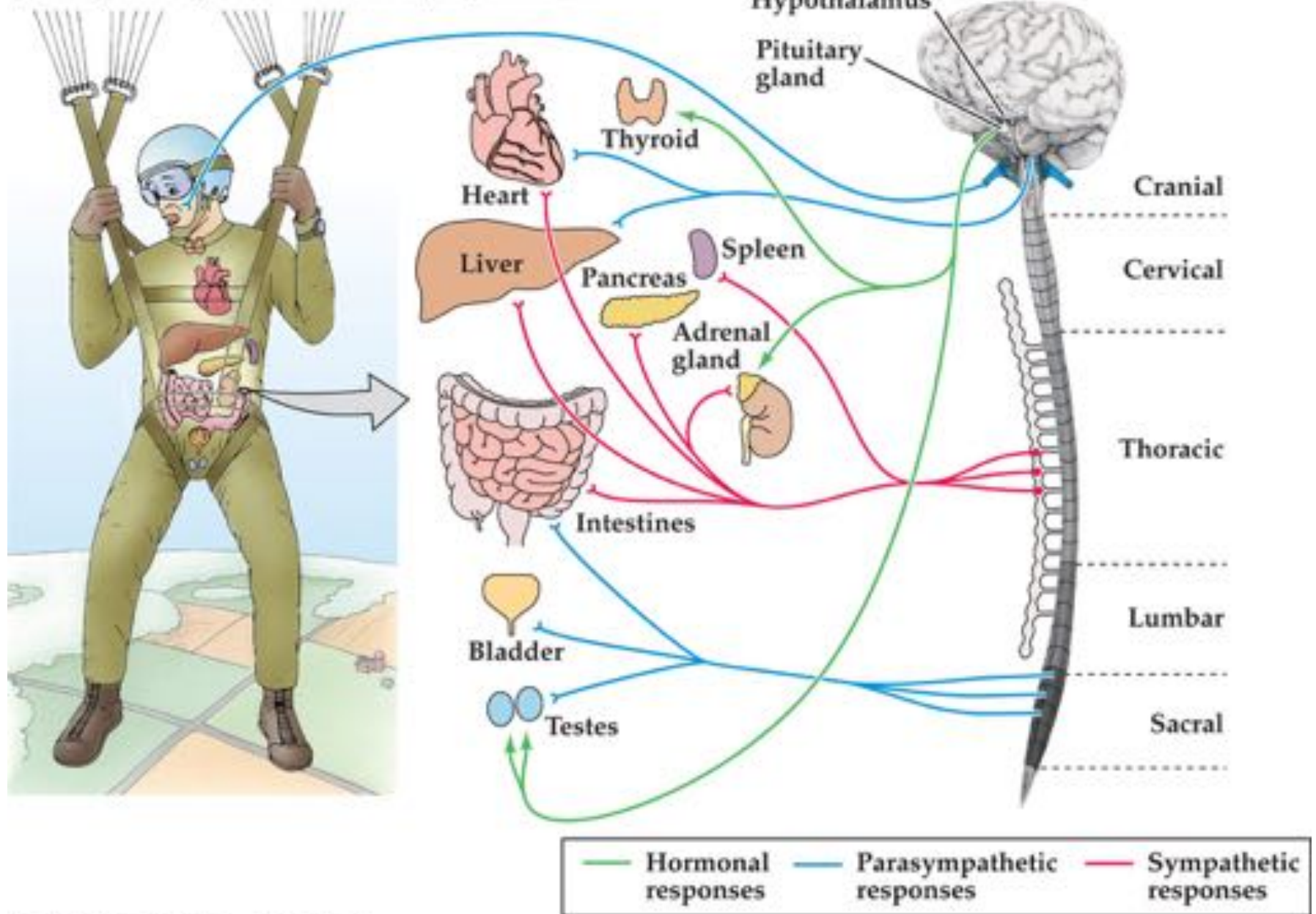


TABLE 11.1 The Stress Response and Consequences of Prolonged Stress

Principal components of the stress response	Common pathological consequences of prolonged stress
Mobilization of energy at the cost of energy storage	Fatigue, muscle wasting, diabetes
Increased cardiovascular and cardiopulmonary tone	Hypertension (high blood pressure)
Suppression of digestion	Ulcers
Suppression of growth	Psychogenic dwarfism, bone decalcification
Suppression of reproduction	Suppression of ovulation, impotency, loss of libido
Suppression of immunity and of inflammatory response	Impaired disease resistance
Analgesia (pain-killing)	Apathy
Neural responses, including altered cognition and sensory thresholds	Accelerated neural degeneration during aging

Source: Sapolsky, 1992.

Why Zebras don't get ulcers



A comparison of the Human Animal



Species Cage Match

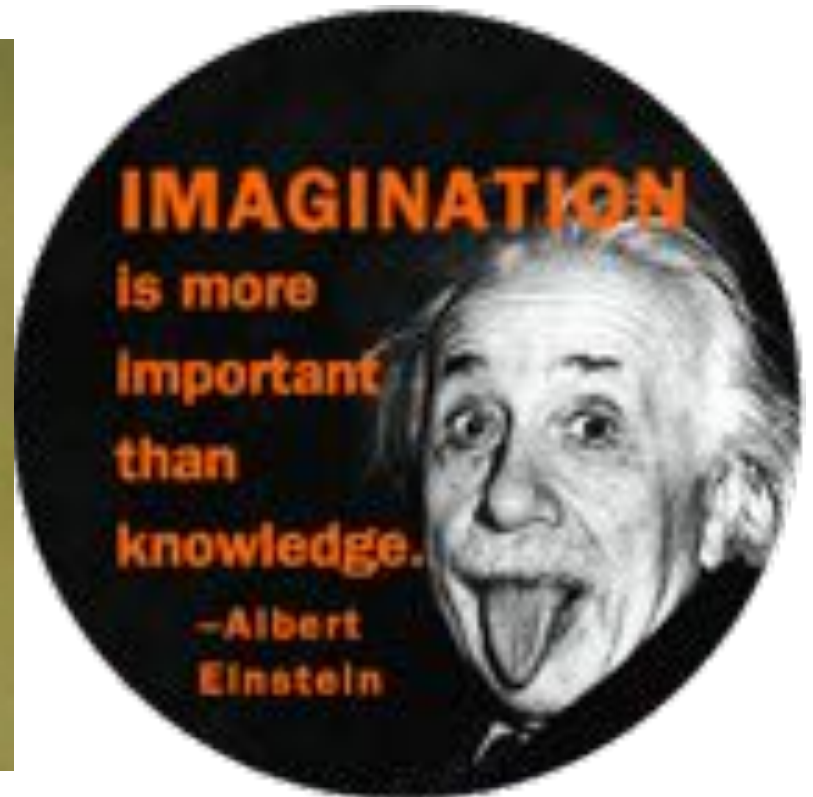


And yet...

- Homo Sapiens are the dominant species on the planet



All due to our frontal lobes and
cerebral cortex



We can

- Imagine things that never were
- Contemplate our own death
- Create fantasies



Sympathetic Nervous System

- Can't tell the difference between life-threatening stimuli and others



Allostasis

- “changes in biological systems as a result of prolonged exposure to stress”
- Long-term neuroendocrine systems
- Occurs in high-stress and high-risk environments over time

Stress has

- Physical effects
 - Fatigue
 - illness
- Psychological effects
 - Cognitive problems
 - Decision-making/insight
- Emotional effects
 - Depression
 - Anxiety



So what the heck do we do about it?



Physically

There's only one way to armor oneself against the physical effects of stress...

Proper diet and exercise

Vitamins water walking avoiding people who are sick proper sleep relaxation time no smoking etc.

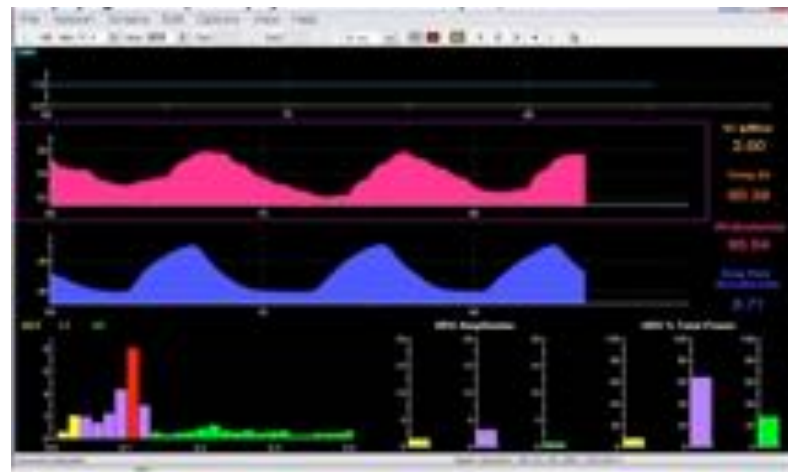
Psychophysiologically



Breathing Techniques

- Optimum Resonant Breath Frequency (between 6.5-4) breaths per minute
- Respiration – semi-conscious control
- Balances sympathetic and parasympathetic nervous systems and affects vagus nerve

(CN X)



Different people have different nervous systems, though



Who will get PTSD?

Cognitive Appraisal

- Train your brain to appraise stimuli differently

A → B → C

Model

Rational Emotive Therapy

- Activating Event – No control
- Emotional Consequence – No control

Belief System - control

The RET argument (Aspirational)

- You can choose how to feel (“you make me so mad”)
- Since you can choose how to feel, and feeling angry, sad, depressed doesn’t feel good, it is rational that you should choose to feel good all the time
- Bad feelings, then, come from irrational thoughts

Examples

- “She shouldn’t treat me that way”
- “I must get my way”
- “I can’t fail”
- “This is just awful”
- “Don’t talk to me like that”
- “This should happen”

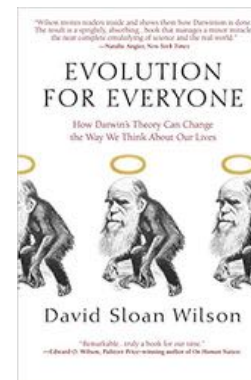
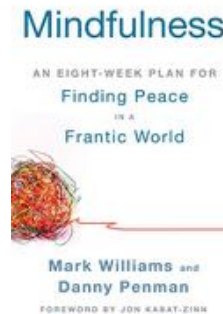
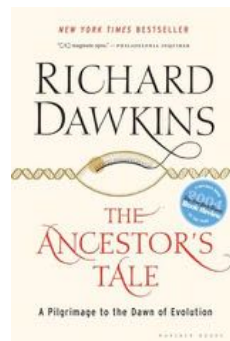
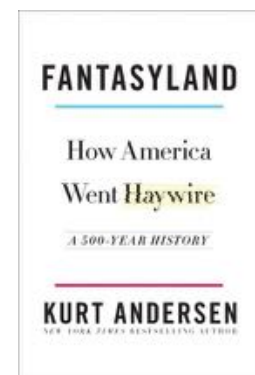
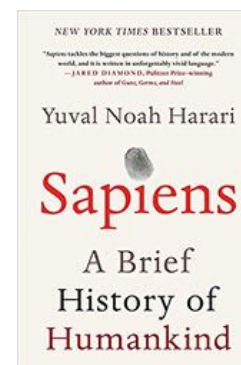
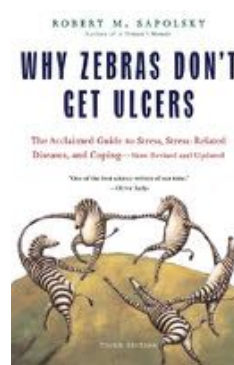
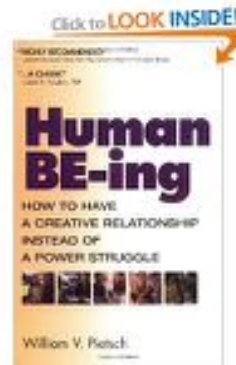
By changing the belief system..,

- You give yourself emotional “room” to feel differently

A → B → C → D → E

Model

Recommended books that informed this presentation



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