

## Reduce Stress for a Better Life ©

### Introduction

Stressor- any stimulus (i) that produces the stress response.



Brain decides that stimulus is a threat.

Brain prepares us to fight, flight, or freeze.

Similar response to potential or real threat.

Enhance/boost necessary bodily functions for survival.

Diminish unnecessary bodily functions for survival.

Stress response, Sympathetic nervous system (SNS)

Relaxation response, Parasympathetic nervous system (PNS)

Chemical messengers- hormones and neurotransmitters

Pituitary gland and adrenaline gland

Adrenaline = epinephrine and noradrenaline= norepinephrine

## Stress Response

Brain



Stimulates the SNS & sends messages to pituitary and adrenal glands

Brain- focused, narrow

Emotions- anxious

Eyes- pupils dilate, tunnel vision

Mouth- decrease saliva, dry mouth

Heart- increased rate and strength of heartbeat

Blood vessels- decrease in diameter, increased blood pressure

Lungs- increased breathing rate

Gastrointestinal tract- decreased digestion

Kidneys- conserve water

Muscles- tension, increased blood flow

Skin- increased sweating, decreased blood flow

Metabolism- increased glucose

Immunity- decreased

Bladder & bowel- sensation to empty

## Relaxation Response

Brain- threat is gone, we survived, get body into recovery phase/back to normal.



Decrease the SNS and Increase the PNS

Brain, problem solve, receptive, creative

Emotion, sense of calmness, peacefulness

Sleep, slow alpha waves and deeper sleep

Eyes, pupils constrict

Mouth, saliva produced

Heart, heart rate decreases

Blood vessels, increase in diameter, decrease blood pressure

Lungs, decrease breathing rate

Gastrointestinal tract, digestive process resumes

Kidneys, make urine

Muscles, decrease in tension

Skin, normal blood flow, decrease sweating

Metabolism, substances produced as needed

Immunity, functioning as needed

Pain, decrease sensation

## **Stress Management**

Understand the stress and relaxation responses as motivation.

Get to know yourself.

Daily or regular stress assessment.

Prioritize the stressors based on your system; and prioritize activities that bring calm and peace.

Create a plan.

Implement the plan.

Evaluate progress.

### **Resources**

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