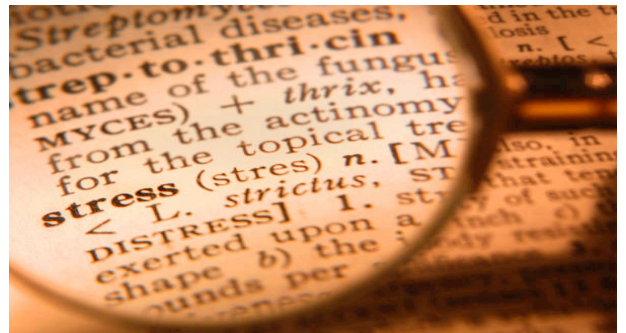


Movement and Relaxation

Stress Workbook: Your Guide to Stress

Stress Review...

1. What is stress?



2. What are the causes of stress?

a.) Offer at least five (5) of your current stressors.

3. How do you know that you are stressed? List signs and symptoms of stress.

a.) Circle the signs or symptoms you observe when stressed.

4. What is the importance of learning about stress and employing positive stress management techniques as a teenager?

Self-Check:

1. What do I know?

2. What do I need to review?

3. What questions do I have?

Basic Stress Anatomy and Physiology

A. Nervous System

The nervous system divides into two branches: Central Nervous System (CNS) and Peripheral Nervous System (PNS). Both branches are vital to the stress response.

1. Central Nervous System

- a. Brain
- b. Spinal Cord

2. Peripheral Nervous System

- a. Somatic Nervous System
- b. Autonomic Nervous System
 - i. Sympathetic Nervous System
 - ii. Parasympathetic Nervous System

➤ Our focus will be on the Autonomic Nervous System (ANS).

Autonomic Nervous System (ANS)

The ANS branches into the sympathetic and parasympathetic nervous systems.

1. Sympathetic Nervous System (SNS)

This branch prepares the body for action. The effect of this nervous system innervates organs for arousal.

2. Parasympathetic Nervous System (PNS)

This branch restores and relaxes the body. The effect of this nervous system is to slow the body.

Some SNS and PNS Effects

SNS

- Accelerates heart rate
- Increases heart contractility
- Stimulates sweat glands
- Dilates bronchi
- Dilates pupils
- Salvia flow (thick mucus)
- Inhibits digestions
- Inhibits pancreas
- Secretes adrenaline and noradrenaline
- Inhibits intestines
- Inhibits bladder wall

PNS

- Inhibits heart
- Decreases metabolism (heart)
- Constricts sweat glands
- Constricts bronchi
- Constricts pupils
- Salvia flow (watery)
- Increases digestion
- Stimulates pancreas
- Stimulates intestines
- Constricts bladder

Structure and Function

Anatomy

For each of the following items, identify their anatomical location on the various pictures.

- Cerebral cortex
- Hypothalamus
- Pituitary gland
- Adrenal glands
- Adrenal medulla
- Adrenal cortex
- Pineal gland
- Neocortex
- Limbic system
- Brain-stem



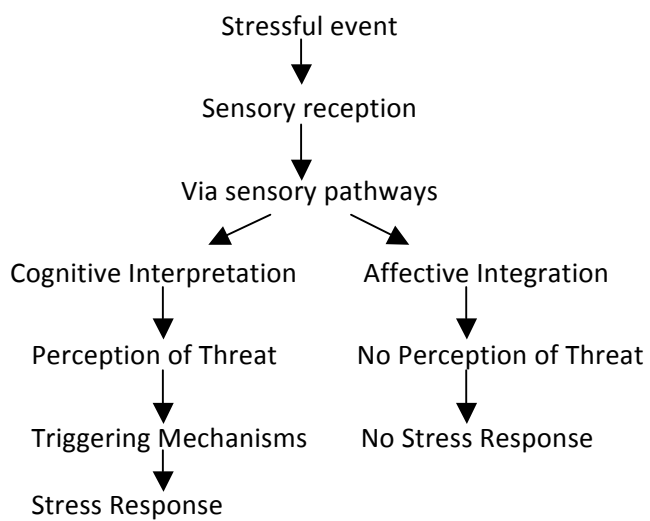


Function

For each of the following items, provide their function as it relates to stress.

Cerebral cortex	Hypothalamus
Pituitary gland	Adrenal glands
Adrenal medulla	Adrenal cortex
Pineal glands	Neocortex
Limbic system	Brain stem

The Stress Response



Father(s) of the Stress

Dr. Walter Cannon and Dr. Hans Selye were instrumental to the development of the Stress Theory.

What contributions did each physiologist make to the Stress Theory?

The General Adaptation Syndrome

1. What is the General Adaptation Syndrome?

Articulate what happens in each stage:

- a. Stage 1

- b. Stage 2

- c. Stage 3

Discuss the order of the General Adaptation Syndrome.

What determines how exhausted the body becomes as a result of the stressor?

Stress and Health and Performance

What are the leading causes of death in the United States? Explore the top ten (10).

List the risk factors for each of the top 3 – 5 leading causes of death.

What is the relationship with stress?

Self-Check:

1. What do I know?

2. What do I need to review?

3. What questions do I have?