## Stress and Weight Gain



#### Table of contents

1. What is stress?

4. Next Sessions

2. Signs of Stress

5. Sources

Cortisol & WeightGain

1.

# What is stress?

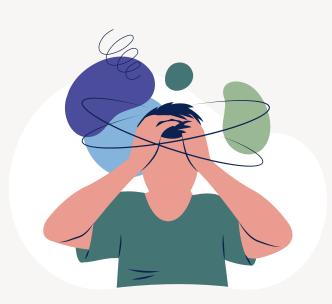


#### **Stress**

 State of worry or mental tension caused by a difficult situation (World Health Organization)



#### **Types of Stress**



#### Short-Term/Acute

- Lasts for a brief time and then goes away
- Helpful in situations where you need to react quickly or feel energized
- "Good stress" can help you prepare for events

#### Long-Term

 Stress that lasts for weeks or months
→ can lead to physical and emotional problems

First step: Shape Your Body. Moses Clinic, June 5, 2024

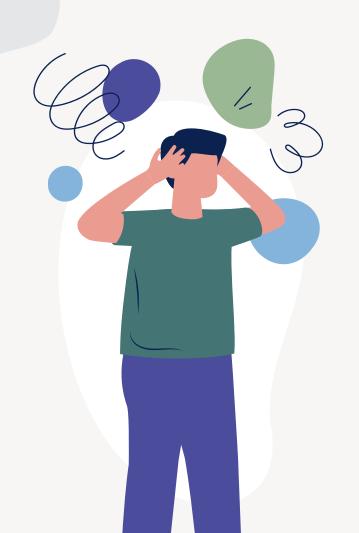


# Signs of Stress

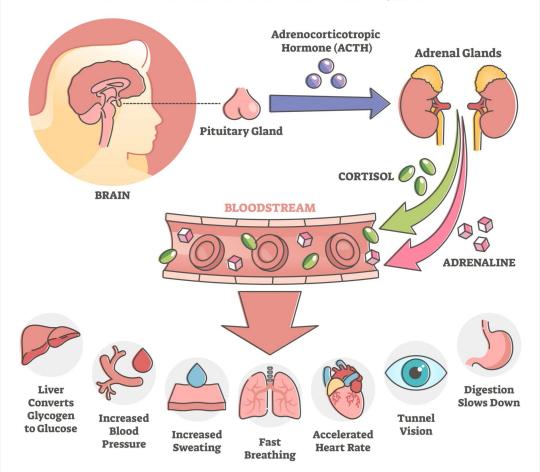


**3**.

## The Role of Cortisol



#### **STRESS RESPONSE**



First step: Shape Your Body. Moses Clinic, June 5, 2024

#### **Long-Term Effects of Cortisol**



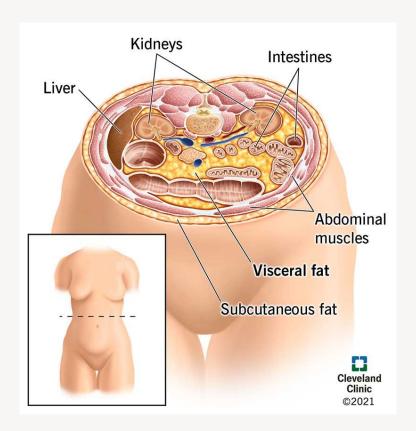
- Increased blood pressure
- Atherosclerosis (buildup of plaque on arteries)
- Immune suppression
- Muscle Breakdown
- Osteoporosis
- Weight Gain

### How does cortisol cause weight gain?

- Cortisol puts body in 'fight or flight' mode → increases processes needed for survival only
- Increases blood glucose and insulin
- Stimulates appetite
- Increase fat storage in abdomen (visceral fat)



#### **Visceral Fat**







### Next Sessions...

## Learning More About Stress & Stress Management





### Questions?

**CREDITS:** This presentation template was created by <u>Slidesgo</u>, and includes icons by <u>Flaticon</u>, and infographics & images by <u>Freepik</u>

Please keep this slide for attribution

First step: Shape Your Body. Moses Clinic, June 5, 2024

5.

### Resources

#### Resources

- <u>UpToDate: Patient education: Stress (The Basics)</u>
- World Health Organizations: Doing What Matters in Times of Stress
- <u>Cleveland Clinic</u>: Stress
- Cleveland Clinic: Stress and Weight Gain
- <u>Effect of increase in cortisol level due to stress in healthy young individuals on dynamic and static</u> balance scores
- <u>Stress, cortisol, and obesity: a role for cortisol responsiveness in identifying individuals prone to obesity</u>
- <u>Stress-induced cortisol response and fat distribution in women</u>
- <u>Is visceral obesity a physiological adaptation to stress?</u>
- <u>Stress (World Health Organization)</u>
- <u>Visceral Fat (Cleveland Clinic)</u>