

Fight-or-flight response

The fight-or-flight response (also known as the acute stress response), refers to a physiological reaction that occurs when we are in the presence of something that is mentally or physically terrifying.

The fight-or-flight response is triggered by the release of hormones that prepare your body to both stay and deal with a threat or to run away to safety.

The term "fight-or-flight" represents the choices that our ancient ancestors had when faced with danger in their environment. They could either fight or flee. In either case, the physiological and psychological response to stress prepares the body to react to the danger.

What Happens During the Fight-or-Flight Response

In response to acute stress, the body's sympathetic nervous system is activated by the sudden release of hormones, which in turn increases the heart rate, blood pressure, and breathing rate. After the threat is gone, it takes between 20 to 60 minutes for the body to return to its pre-arousal levels.

You can probably think of a time when you experienced the fight-or-flight response. When faced with something frightening, you can feel your heartbeat quicken, you may start breathing faster, and your entire body becomes tense and ready to take action.

The fight-or-flight response can happen in the face of an imminent physical danger (such as encountering a growling dog during your morning jog) or because of a psychological threat (such as preparing to give a big presentation at school or work).

Physical signs that can indicate the fight-or-flight response has kicked in include:

- **Dilated pupils:** In times of danger, the body prepares itself to be aware of its surroundings; dilation of the pupils allows more light into the eyes and results in a better vision of the surroundings.
- **Pale or flushed skin:** Blood flow to the surface areas of the body is reduced while flow to the muscles, brain, legs, and arms is increased. Paleness or alternating between a pale and flushed face as blood rushes to the head and brain is common. The body's blood clotting ability also increases to prevent excess blood loss in the event of injury.
- **Rapid heart rate and breathing:** Heartbeat and respiration rate increase to provide the body with the energy and oxygen needed to fuel a rapid response to danger.²
- **Trembling:** The muscles tense and become primed for action, which can cause trembling or shaking.

Why It's Important

The fight-or-flight response plays a critical role in how we deal with stress and danger in our environment. When we are under threat, the response prepares the body to either fight or flee. The fight-or-flight response can be triggered by both real and imaginary threats.

By priming your body for action, you are better prepared to perform under pressure. The stress created by the situation can actually be helpful, making it more likely that you will cope effectively with the threat.

This type of stress can help you perform better in situations where you are under pressure to do well, such as at work or school. However, in cases where the threat is life threatening, the fight-or-flight response plays a critical role in your survival. By gearing you up to fight or flee, the fight-or-flight response makes it more likely, that you will survive the danger.

While the fight-or-flight response happens automatically, that doesn't mean that it is always accurate. Sometimes we respond in this way even when there is no real threat. Phobias are good examples of how the fight-or-flight response might be falsely triggered in the face of a perceived threat.

A person who is terrified of heights might experience an acute stress response if they have to go to the top floor of a skyscraper to attend a meeting. Their body might go on high alert, with their heartbeat and respiration rate increasing. If the response is severe, it can lead to a panic attack.

Understanding the body's natural fight-or-flight response is one way to help cope with such situations. When you notice that you are becoming tense, you can start looking for ways to calm down and relax your body.

Resources:

The Fight or Flight Response Q&A Factsheet

Threat Mind Map

Fight or Flight Response

What is the Fight or Flight Response?

<https://www.verywellmind.com/what-is-the-fight-or-flight-response-2795194>

What happens to your body during the fight or flight response?

<https://health.clevelandclinic.org/what-happens-to-your-body-during-the-fight-or-flight-response/>