

How the Fight, Flight & Freeze Response Works



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The “**fight, flight, & freeze response**”, also known as the acute stress response, refers to a physiological reaction that occurs in the presence of something that is in actuality (or perceived to be) stressful, either physically or mentally. The response is triggered by the release of hormones that prepare your body to either stay and deal with a threat, to run away to safety, or to go still and silent in the hopes that the threat will pass.

The term ‘fight-or-flight’ represents the choices that our ancestors had when faced with a 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.

More recently, the “freeze” response has been identified as another part of this process: In situations where neither overcoming nor escaping the threat seems possible, we might find ourselves overcome with terror to the point that we can’t act at all. Ancestrally, this could have been helpful by keeping us hidden from a predator, or by signaling to a potential foe that we are not a threat to them.

What Happens During the Fight, Flight, or Freeze Response

In response to acute stress, the body’s sympathetic nervous system releases hormones such as adrenaline which are responsible for “turning on” the body’s defenses. This leads to increased heart rate, higher blood pressure, and faster breathing. After the threat is gone, it can take anywhere from 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, flight, or freeze response. In the face of something frightening, your heartbeat quickened, you began breathing faster, and your entire body became tense and ready to take action – or in extreme “freeze” cases, so tense that you felt like you couldn’t move at all.

The fight, flight, or freeze response can happen in the face of imminent physical danger (e.g., encountering a growling dog during your morning jog) – or as a result of a more psychological threat (e.g., such as preparing to give a big presentation at school or work).



Some of the physical signs that may indicate that the fight, flight, or freeze response has kicked in include:

- **Rapid heartbeat and breathing:** The body's heart and respiration rate increases in order to provide the energy and oxygen to the body that will be needed to fuel a rapid response to the danger.
- **Pale or flushed skin:** As the stress response starts to take hold, blood flow to the surface areas of the body is reduced and flow to the muscles, brain, legs, and arms are increased. You might become pale as a result, or your face may alternate between pale and flushed as blood rushes to your head and brain. The body's blood clotting ability also increases in order to prevent excess blood loss in the event of injury.
- **Dilated pupils:** The body also prepares itself to be more aware and observant of the surroundings during times of danger. Another common symptom of the fight-or-flight response is the dilation of the pupils, which allows more light into the eyes and results in better vision of the surroundings.
- **Trembling:** In the face of stress or danger, your muscles become tense and primed for action. This tension can result in trembling or shaking.
- **Feeling Numb:** As blood is diverted towards your bigger muscles, you might feel your extremities going numb, as if you've been out in the cold for several hours.

Why It's Important

The fight, flight, or freeze response plays a critical role in how we deal with stress and danger in our environment. 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 work or school. In cases where the threat is life-threatening, the fight, flight, or freeze response can actually play a critical role in your survival. By gearing you up to fight, flee, or freeze, the response makes it more likely that you will survive the danger.



Although the fight, flight, or freeze response happens automatically, it is not always accurate. Sometimes, we respond in this way even when there is no real threat: **Phobias** are a good example of how the fight-or-flight response might trigger for a perceived, rather than an actual, threat. A person who is terrified of heights might begin to experience the acute stress response when they have to go to the top floor of a skyscraper to attend a meeting. Their body might go on high alert as their heartbeat and respiration rate increase. When this response becomes severe, it may even lead to a panic attack.

Understanding the body's natural fight, flight, or freeze 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.

