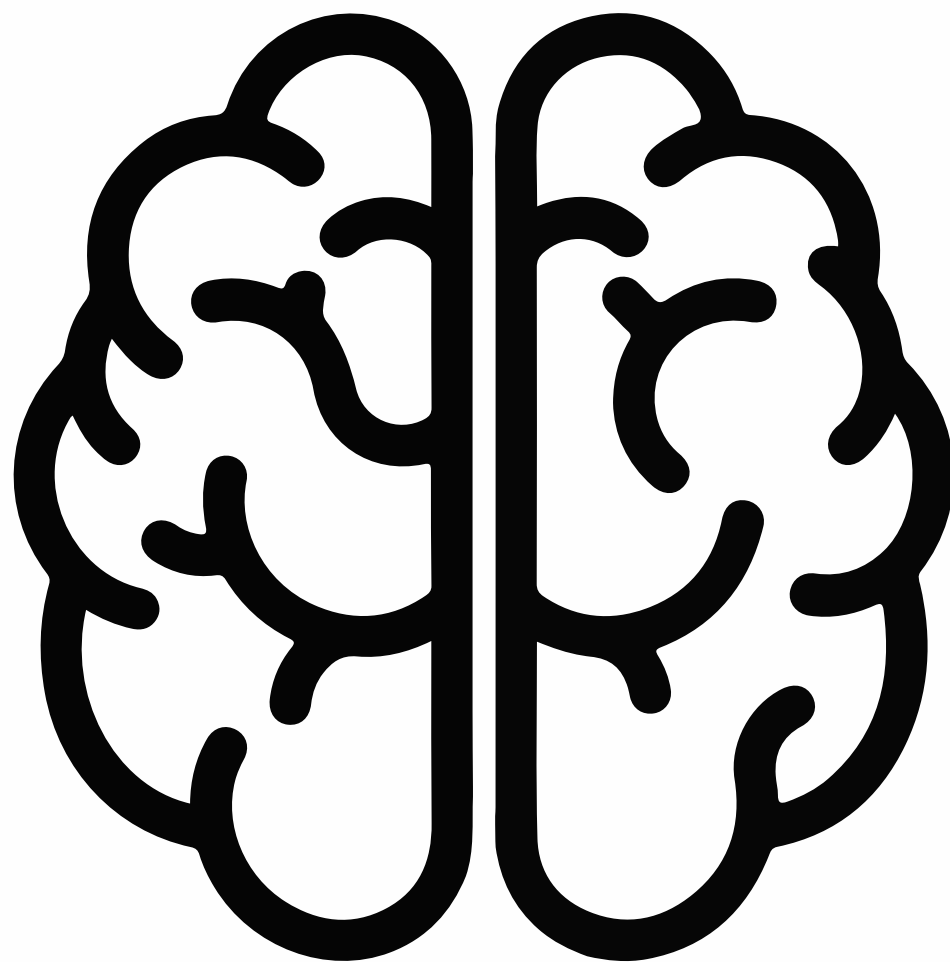
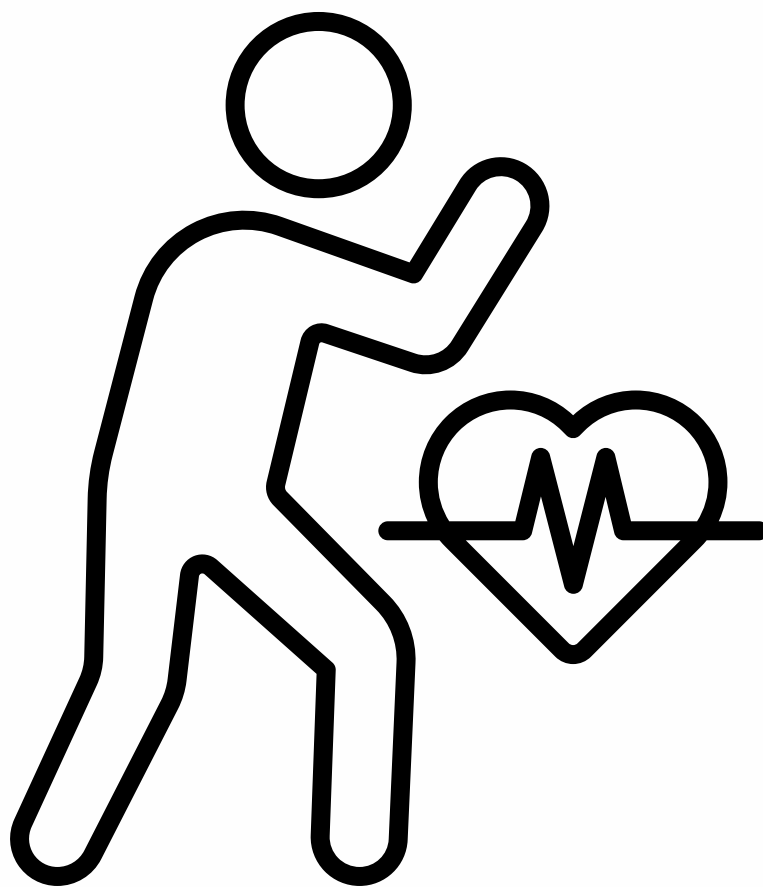




**The Fight or Flight
Response: What happens
to our body when we feel
anxious?**



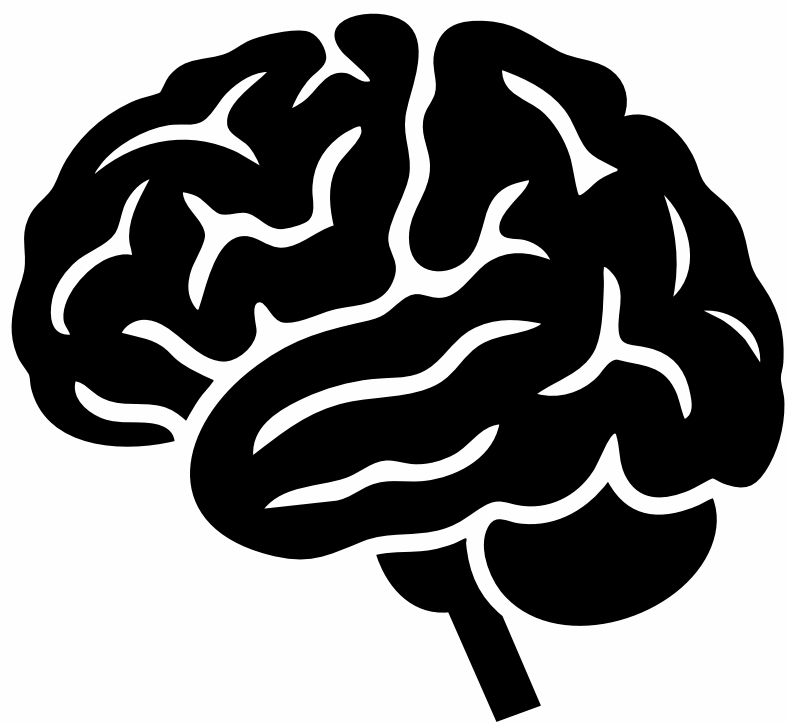
What is it?

When you feel anxious, you might feel like your heart races, your mouth dries up, and you start to shake and/or breathe quicker.

These changes in your body are called the Fight or Flight Response (FoFR), and as unpleasant as it is, your body is trying to protect you from a threat that may or may not actually be there!

So why does this happen even if there's nothing to actually worry about?

Understanding the reason behind how you're feeling physically might be able to help you calm yourself down.



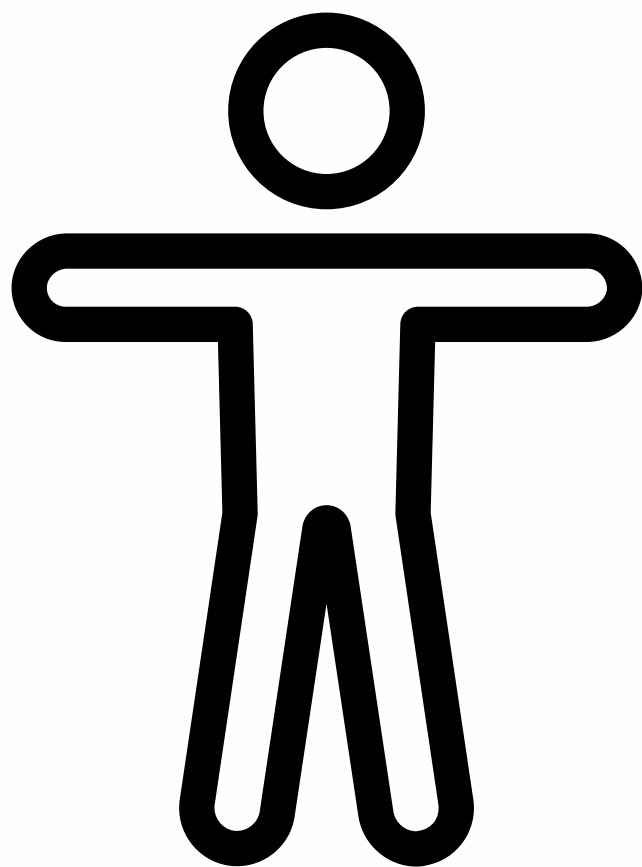
Why does it happen?

Thousands of years ago, when we lived in caves and needed to hunt our own food, we were constantly under attack by predators.

To survive, we either had to run away or fight back - hence, the Fight or Flight Response - and our bodies needed to prepare for this.

Nowadays, we don't have to worry about bears and lions trying to eat us. But that instinct is still there, only now all it has to protect you from, for the most part, is that presentation you have coming up soon.





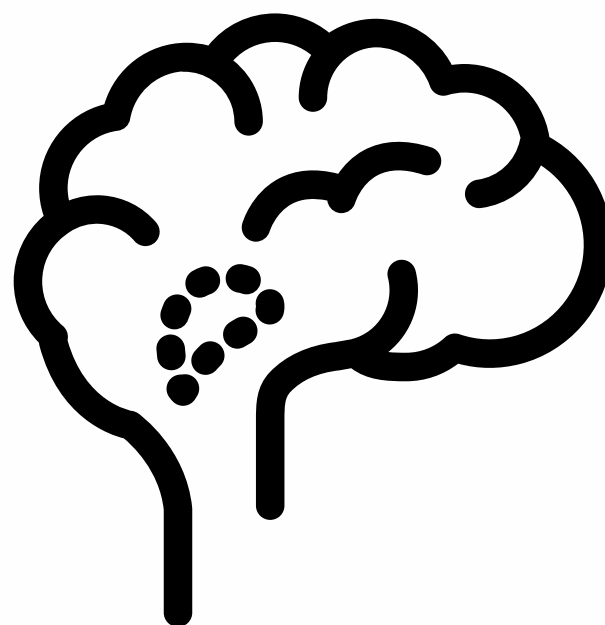
What's happening in my body?



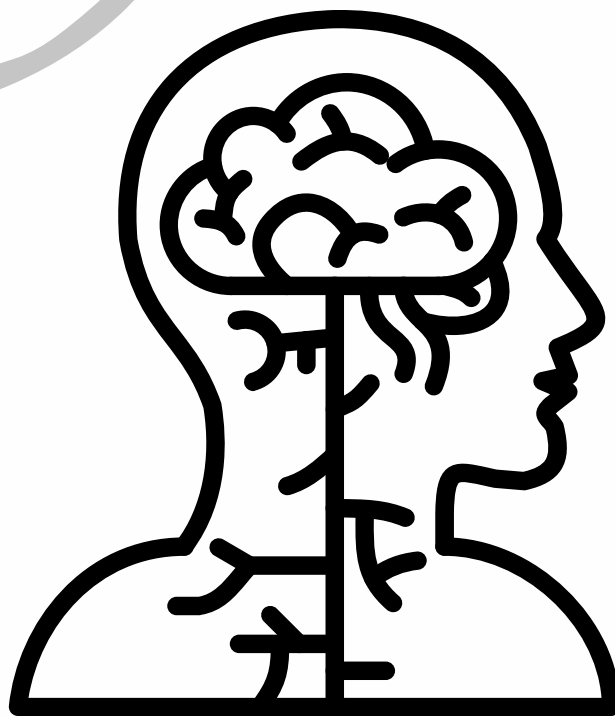
Amygdala

You have two parts of your brain that kick off the FoFR: the **amygdala** (or the “reptile brain”) and the **hypothalamus**. Don’t worry too much about the terms – or pronouncing them – there’s a glossary at the end!

The **amygdala** tells the **hypothalamus** there’s a threat, and the **hypothalamus** tells your **nervous system** to get your body ready to respond.



Hypothalamus



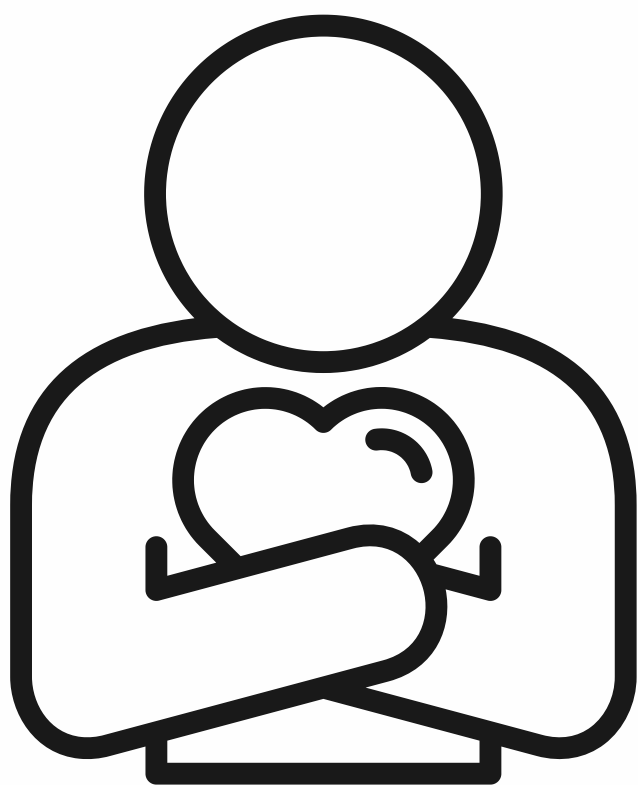
Your **nervous system** is divided into multiple sections with different roles. Let's focus on the ones involved in the FoFR: the **sympathetic** and **parasympathetic** divisions of the **autonomic** nervous system.

It's the **sympathetic** division that triggers adrenaline to be released, and that's what causes all of the symptoms of the FoFR. Think of it as your body having sympathy for you. It wants to rescue you from whatever threat it thinks you're facing, imaginary or not.



**What are the
changes it causes?**

- **Your heart rate increases, often causing palpitations. This makes sure you get enough blood to your muscles to prepare your body to react to a threat.**
- **Your breathing quickens so that you can get enough oxygen for respiration (to produce energy!)**
- **Ever noticed you get a dry mouth when you're anxious? That's because you've stopped producing saliva, because it isn't a priority to your body in the moment.**
- **Your pupils dilate. This one might not seem like it does much, but your eyes are trying to take in as much light as possible so you can react to movement quicker.**



How can I calm down?

When a threat has passed, your **parasympathetic** nervous system kicks in. This is otherwise known as the 'rest and digest' state. There are ways you can trigger this to 'override' the FoFR.

- Deep breathing slows your heart rate and relaxes your muscles.
- Distract yourself with a hobby or some exercise to keep your brain occupied.
- Stimulate the **vagal nerves**. They're a key part of the **parasympathetic** nervous system. You can do this by massaging the outer ear (where the **vagus nerve** is close to the surface), or humming, which stimulates it with vibrations.

- **Practice grounding techniques to shift your focus away from what's making you anxious.**
- **Splash cold water on your face. This triggers the dive reflex and slows down your heart rate.**

Remind yourself that when you feel physically anxious, it's because your brain is trying to protect you from what it thinks is an immediate threat.

What you're feeling is real and valid, but the **amygdala can often react disproportionately to a situation. Take some time to ground yourself, remind yourself that you're safe, and reconnect with the present moment.**

Glossary

Amygdala (ah-mig-dah-la) → The oldest part of your brain, first developed in reptiles (giving it the nickname 'reptile brain'). It processes emotions and acts as a sort of alarm system when it perceives a threat (and it often makes mistakes!)

Hypothalamus (hai-poh-tha-la-muhs) → This part of your brain manages the nervous system, controls hormones, and regulates internal conditions e.g temperature, blood pressure, thirst, etc.

Nervous system → Your body's communication network. It sends signals to and from the brain so that you can move, feel and think via nerve cells (or neurones if you're feeling fancy).

Vagus nerve → Carries signals between your brain, heart and digestive system, and is a key part of the parasympathetic nervous system. It's also the longest cranial (skull) nerve in your body!

Autonomic (or - toe - noh - mik) nervous system (ANS) → A subdivision that controls automatic functions like your heart rate and breathing. You don't have to consciously think about doing these things.

Sympathetic (sim-pah-theh-tik) nervous system → A subdivision of the ANS that triggers the Fight or Flight Response.

Parasympathetic (pah-rah-sim-pah-theh-tik) nervous system → Counteracts the FoFR so that your body can enter a rest and digest state - in other words, it makes you relax.

Respiration → A chemical process that happens in our bodies to produce energy for movement and cell growth and repair. Our cells use the oxygen we breathe in and glucose (sugar) from the food we eat and converts it into carbon dioxide and water vapour.