

# ANXIETY

Information about what is happening in the body

## **What is anxiety?**

Anxiety is a broad term used to describe everything from worry to fear and panic. When we perceive or expect a dangerous situation, the brain automatically transmits signals to that part of the autonomic nervous system – the sympathetic nervous system – which is the body's so-called fight-or-flight system. When the brain no longer perceives a threat or danger, another part of the autonomic nervous system takes over – the parasympathetic nervous system. The parasympathetic nervous system can be described as the body's brake, and it is tasked with dampening the effect of the body's response to danger. Thanks to the parasympathetic nervous system, you cannot maintain a sense of anxiety indefinitely, even if it may feel that way; in other words, an anxiety reaction always subsides over time.

## **How does the body react to anxiety?**

**Heart** – in the event of anxiety, the heart gets the body ready to flee from danger or to stay and fight. When you exert yourself, by running for example, the muscles require a great deal of oxygen. The heart therefore needs to pump extra oxygenated blood around the body and so it beats faster and more vigorously. In cases of fear and anxiety, it is therefore common to feel your pulse increase or to have palpitations.

**Sweating** – a sense of heightened anxiety will often cause you to feel hot and sweaty. This is because when the body prepares for physical activity, it also prepares itself to be able to cool down again. When we get anxious, our heart, lungs and muscles work harder, which means we get hot and our skin sweats as a way of helping to cool the body down. Sweating is an automatic response and cannot be controlled.

**Breathing** – as mentioned previously, our muscles need a lot of oxygen when we are anxious. For that reason, a common experience is that our breathing gets faster and sometimes also shallower. Rapid and shallow breathing increases the oxygen level in the blood, which paradoxically can be perceived as you having difficulty breathing, losing your breath or feeling like you are suffocating. This is because the body thinks that it needs lots of oxygen and is signalling that it needs even more. It is also common to experience dizziness in connection with anxiety. This is because the body gets more oxygen than it can use and because the blood supply to the brain decreases slightly. These symptoms may feel disconcerting, but they are not harmful.

**Digestion** – when the body is preparing for flight, it increases the activity of the heart and lungs and accords the stomach and intestines less priority, which then reduces their level of activity. Consequently, your stomach may feel unsettled and you may get diarrhoea or constipation. It takes a while for the digestive system to restore its usual balance, so these symptoms may linger for a period after the anxiety has subsided.

**Hormones** – when we develop anxiety, the stress hormones adrenaline and noradrenaline are secreted in the body. These hormones serve to maintain a high level of anxiety, and it is these substances that have to be broken down for the anxiety to subside. It takes a while for the hormones to break down and for the body to get back in balance. This means that you may feel physically uneasy even after the brain has stopped perceiving danger to be present. It can be difficult for the body to experience anxiety, and it is normal to feel listless and tired both mentally and physically after an episode of anxiety.

**Other symptoms** – when the body prepares for danger, the blood is directed to the large muscle groups and away from, for example, skin, fingers and toes. This may mean that certain areas of skin may feel cold and you may also experience tingling and numbness. The anxiety reaction also causes a number of other minor symptoms. Sometimes, for example, you may experience tunnel vision or see dots in front of your eyes, which are caused by pupil dilation. Your balance or concentration may be affected because the brain's activity is affected. You may also feel tension in your muscles as they prepare for fight or flight, which means that you can experience pain in the shoulders and neck or tremors and shaking in different parts of the body.

### **Is anxiety harmful to the body?**

It is easy to believe that anxiety might be harmful to the body because it can produce such a strong reaction. However, the truth is that thanks to the parasympathetic part of the nervous system, which is able to turn anxiety off again, it is not. The anxiety reaction is there to help us humans survive, and it would be pointless to have anxiety for so long that it becomes harmful. Therefore, the body shuts down the anxiety after a while by breaking down the stress hormones that are released. It is possible to have mild anxiety for a prolonged period because it is not as stressful for the body. Of course, even mild anxiety is unpleasant, but it too is not dangerous!