

## ANXIETY

Anxiety is energy provided by the body to enable us to escape danger. It is a normal and natural response to the perception of threat and it is a necessary emotion that enables us to respond appropriately to protect ourselves in dangerous situations.

Sometimes, our perception of threat is accurate, for example, being in the rain forest and coming face-to-face with a poisonous snake. In this situation it would be very important to feel extremely frightened/anxious and the way that our bodies respond when we are frightened/anxious enables us to deal with the threat/danger or to escape it and get away as quickly as possible. This is the fight/flight response.

However, sometimes, our perception of what is threatening is not accurate and the fight/flight response is activated in error and unnecessarily when there is no real danger. Whether or not we perceive threat in a situation and become anxious can vary depending on our mood and it also varies from person to person, so what one person finds very frightening, another might really enjoy and look forward to. A good example of this is extreme sports, like sky-diving, one person may relish the thought of jumping out of an airplane at 10,000 feet whereas another may feel close to fainting with fear at just the thought of this.

A less extreme example would be if you think that other people will laugh at you if you stumble over your words when talking in a group, you would likely feel very anxious about the prospect, perceive the situation as threatening and want to avoid it. On the other hand, if you think that other people are interested in what you have to say and will enjoy hearing you speak, you are unlikely to feel anxious and will probably look forward to the event.

These are examples of how what we think about a situation has a massive impact on how we will feel about it. What we think and expect in any situation will determine whether our fight/flight response is triggered and we experience fear and anxiety or if we remain calm.

An fight/flight response is an automatic response that is appropriately triggered when there is real physical danger, such as when faced with a poisonous snake in the rain forest or if you were being chased by a large and vicious dog. In these potentially life and limb threatening situations, the automatic changes produced by the fight/flight response in our bodies (see the diagram below) will enable us to either deal with the threat (fight) or get away from it as quickly as possible (flight). In such genuinely dangerous situation it is very important to feel frightened/anxious and the physiological changes in our bodies caused by the fight/flight response maximises our chances of survival.

### **Anxiety and the body – The Fight/Flight response is Anxiety**

When the fight/flight response is activated a chain of almost instantaneous automatic events occurs in our bodies, which prepares us for action. The fight/flight response can be traced back into our evolutionary past. Imagine the primitive cave-dweller threatened by a wild animal. He needs to be prepared for vigorous action: either to run or to fight to save his/her life. We still possess and very much need this survival reaction to help us survive genuinely dangerous and physically threatening situations but it is now more often triggered inappropriately by thoughts and psychological threats alone when there is no real danger.

Once danger is perceived, the fight/flight response is triggered and a cascade of neurophysiological and chemical reactions take place rapidly and automatically. A message is sent to pump adrenaline and cortisol into the bloodstream and more blood is pumped into the large skeletal muscles of the arms and legs, so we can either run away as fast as possible or have more strength to fight the predator. To get extra blood to the long muscles of the body, the heart has to work harder and therefore beats faster, so the heart needs more fuel (oxygen), which leads to our breathing becoming more rapid to supply the extra oxygen. Because the fight/flight response itself causes the body to use more energy, the body heats up and to regulate the temperature and cool down, sweat is released through the skin and blood capillaries come to the surface causing flushing.

Activity in the digestive system slows down or stops as all the body's resources are directed towards either fleeing or fighting. Then, to increase the effectiveness of the body, it needs to be as light as possible so wanting to go to the toilet and feeling sick can be part of the fight/flight response. Evacuating the bowels, bladder and contents of stomach will make us lighter and enable us to run away more quickly. It is thought that being covered in evacuated body fluids provided our ancestors with another advantage in that, if they were caught by the predator, they would make a much less appetising meal. All these rapid and automatic changes that you don't have to think about, plus many more not mentioned, just from the fight/flight response, biology is amazing!

When this response occurs in physically life-threatening situations, which is its sole purpose, it helps us survive and the triggering of the fight/flight response in genuinely dangerous situations needs to be an highly unpleasant experience, so we don't ignore it.

But, when triggered inappropriately in situations where there is no real danger, for example, pushing a trolley around a supermarket or sitting in a business meeting, it is no less unpleasant or intensely uncomfortable and frightening. Even when there is no real danger, once the fight/flight response has been triggered, it still causes us fear/anxiety and the urge to fight something (get angry) or run away but because there is no real danger to our physical safety, there is nothing to run from or to fight and we are often left in freeze mode with excess amounts of nervous energy that the fight/flight response provides that we can't do anything with. This unfortunately then tends to cause a vicious cycle of having anxiety provoking thoughts that trigger the fight/flight response that then triggers more anxiety provoking thoughts.

## Physical symptoms of the Fight/Flight response or Anxiety

<p>The mind becomes focused and preoccupied with the thought 'there is danger, I must get to safety'.</p> <p>Symptom: <b>Panic, preoccupation, insomnia.</b></p>	
<p>The brain sends biochemical messages to release hormones such as adrenalin, noradrenalin and cortisol.</p> <p>Symptom: <b>Headaches, dizziness.</b></p>	
<p>Pupils dilate to increase field of vision.</p> <p>Symptom: <b>Blurred vision.</b></p>	
<p>Digestion and production of saliva slows/stops.</p> <p>Symptom: <b>Dry mouth &amp; difficulty swallowing.</b></p>	
<p>Large skeletal muscles contract ready for action.</p> <p>Symptom: <b>Tension in neck, back and headaches.</b></p>	
<p>Breathing rate increases to supply more oxygen to heart.</p> <p>Symptom: <b>Over-breathing (hyperventilating), chest pains, asthma, feeling faint.</b></p>	
<p>Heart pumps faster to supply more blood to muscles.</p> <p>Symptom: <b>High blood pressure, palpitations, tingling.</b></p>	
<p>Liver releases stored sugar to provide fuel for quick energy.</p> <p>Symptom: <b>Excess sugar in blood, indigestion.</b></p>	
<p>Adrenalin and noradrenalin are released causing many of the changes listed.</p>	
<p>Digestion slows/ceases as blood/energy is diverted away from digestive organs.</p> <p>Symptom: <b>Butterflies, nausea, indigestion, stomach pains</b></p>	
<p>The body cools itself by perspiring: blood vessels and capillaries move close to skin surface.</p> <p>Symptom: <b>Excessive sweating, blushing.</b></p>	

## The three systems of anxiety

Anxiety is referred to as if it is a single phenomenon, but it can be split into three parts:

1. **Bodily sensations:** As detailed above, these include irregular breathing, churning stomach, sweating, trembling, racing heart and the need to go to the toilet etc. These symptoms makes us feel afraid and 'as if' there is real danger somewhere.
2. **Behaviour:** This is what you do when faced with a situation you fear. Especially important is the behaviour of avoiding/escaping the situation, either by not going into the situation, or getting out of it as quickly as possible. Whilst avoid/escape is appropriate when the situation is genuinely dangerous, when it is not physically dangerous and just a psychological threat, like being afraid of talking in public, then avoid/escape has a short-term benefit of reducing anxiety but the long-term negative effect of making anxiety worse because a) you don't stay in the situation to learn that there is no real threat and b) the avoid/escape reaction reinforces the misperception that there was real danger in the first place and that you would not have been able to cope with the situation.
3. **Thinking:** This includes all your thoughts, ideas, beliefs, mental pictures etc about the situation, whether your are consciously aware of them or not, and including your ability to cope with it and your negative predictions about what is likely to happen in the situation you fear. People who suffer from anxiety tend to hugely overestimate the threat and equally hugely underestimate their ability to cope even if the worst does happen.

Looking at these three parts separately, and learning new skills in each area, is an important part of anxiety management.

### Anxiety and confidence

Anxiety reduces confidence because it can make it hard to do the very things that help us build self-esteem and a sense of mastery and control in our lives, all of which we need to feel confident. We normally feel confident when we do things well and when we have good social interactions and we lose confidence when we assess that we have not done so well or when we avoid situations that make us feel uncomfortable. It is easy to get into a horrible vicious circle when, because we feel less confident we avoid situations, and then because we have avoided situation, we feel even less confident. Confidence can be regained by learning skills to cope better with the physical feelings of anxiety and gradually building up to enter previously feared situations and remain in them for longer. Over time, as long as the anxiety-provoking situations are not avoided, the anxiety that used to be associated with them will die out.

### Why do anxiety symptoms begin?

There are usually a combination of causes. Three of the most important ones are:

1. **The amount of stress you are under:** You may have a single major problem, or a number of smaller problems, which add up to a large amount of stress. Stress can be measured by the amount and size of changes that have taken place in your life recently, so the more changes and the bigger they are the more stressed you are likely to be. Additionally, being physically tired, run down and having traumatic experiences makes us more vulnerable to stress and anxiety.
2. **The kind of person you are:** Some people have a far more sensitive autonomic nervous system. Their bodies' arousal response (the sympathetic nervous system) is triggered far more quickly with much low levels of stimulation and they are very sensitive to the subtle changes in their bodies. Equally, for more physiologically sensitive people, it may take a longer time to calm back down to the resting state (the parasympathetic nervous system). Other people may require much higher levels of stimulation and are less sensitive to the subtle physiological changes in their bodies.
3. **Exposure to anxious parents/carers during childhood:** An important method of learning, especially during childhood and formative years, is through observation and modelling other people's behaviour. So, if our parents or carers have issues with anxiety, we can learn to be anxious in similar situations.

### What maintains anxiety?

There are two main ways that anxiety is kept going or maintained:

1. Because of the **way we behave** - what we actually do, in response to our anxious feelings, especially if this is to habitually *avoid/escape* situations that arouse fear.
2. Because of the **beliefs/expectations** we have about the situation and the predictions we make that the consequences of being in the situation will be negative.

For example: Someone who is 'Lift phobic' never goes in a lift because they may believe it will fall to the bottom of the lift shaft; 'agoraphobics' never go out because they may believe something terrible will happen if they do; some people may avoid socialising because they believe other

people don't like them; some people obsessively clean or check that doors are locked etc to prevent something terrible happening. These examples highlight two things:

1. Thoughts and beliefs can become distorted and exaggerated about what will happen in the feared situation. Anticipating and predicting that something bad is going to happen creates a vicious circle of anxiety and avoid/escape and safety-seeking behaviour becomes much more likely.
2. There are direct avoidance and escape behaviours, and there are indirect 'safety behaviours', such as, always carrying a plastic bag in case of being sick, or always sitting close to the door for a rapid escape, or never going anywhere alone. All these avoidance/escape and safety behaviours prevent you from learning that you can cope with anxiety and that, although the physical symptoms are real, there is no real danger. Through avoidance/escape and safety behaviours your irrational beliefs continue and are reinforced (made worse) because they are never proved wrong. Further, the reduction in anxiety achieved through avoidance/escape fools you into thinking you were right that the situation was genuinely dangerous because when you avoid/escape the physical symptoms of anxiety reduce.

### Common myths about anxiety

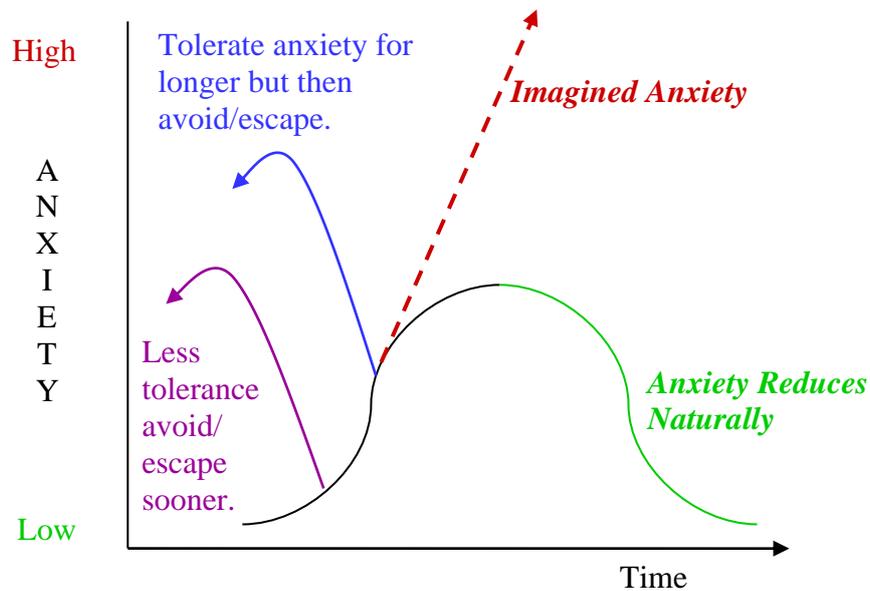
As anxiety symptoms often occur without any obvious explanation, people often misinterpret them and think there is a more serious problem, such as the following:

1. **I'm going crazy:** There is no link between panic/anxiety and more serious mental health problems.
2. **I'm going to lose control:** There has never been a recorded case of anybody doing anything 'wild', or 'out of control' or against their wishes because of anxiety or panic.
3. **I'm having a heart attack:** Although symptoms of heart attack can include breathlessness and palpitations, these symptoms are generally related to effort and will go away with rest.
4. **This anxiety will harm me:** Anxiety does not harm you physically, although it can be extremely unpleasant and uncomfortable, uses up a lot of energy and can leave you feeling exhausted.
5. **I'm going to faint:** This is very unlikely as your heart rate and blood pressure goes up during anxiety, and we only faint when our heart rate and blood pressure drop.

## HOW AVOIDANCE/ESCAPE INCREASES ANXIETY

Avoidance is an important concept to understand how anxiety is maintained and increases. For example, when somebody feels so panicked they rush out of a supermarket mid-shop, several things happen. Firstly, their anxiety reduces immediately as they feel relief to be out of the situation, but this leads to the misperception that the supermarket really is a dangerous place. Secondly, the unconscious message reinforced is one of failing/not coping, so confidence goes down and the person will likely develop the unhelpful belief that: "I can't cope". Thirdly, when faced with the same situation in the future, anxiety will rise more quickly and severely and may result in them not entering the situation at all, which further undermines confidence.

### Anxiety Curve and Avoidance



This applies across all anxiety provoking situations that are avoided/escaped when there is no real danger. Each time we avoid/escape the situation and our anxiety goes down, we make it much more likely that the next time the feared situation crops up, we will avoid it again, be able to tolerate even less anxiety and our anxiety will get worse as time goes by.

Generally, people fear that if they do not avoid/escape or engage in safety behaviours, their anxiety will go on increasing uncontrollably (red dashed line on the graph) until something catastrophic happens – they will pass out, be sick, collapse, have a heart attack, or go mad. This belief is not correct, as we know from research on anxiety that, after a relatively short period of time, anxiety symptoms will begin to decrease naturally of their own accord without us doing anything. The fight/flight response is designed to give a massive energy boost for a very brief period-of-time only and then our system settles back down to resting. It is not physiologically possible for it to continue to rise indefinitely, as you may fear it will. When you avoid or leave a situation as the way to reduce your anxiety, you never find out that it would have reduced of its own accord anyway. The way to overcome anxiety is to learn coping strategies and techniques to manage the physical symptoms of anxiety so you can stay in situations and not avoid them. By facing your fears in this way, you learn that the situations themselves are not dangerous after all, it is just the physical symptoms of anxiety or the fight/flight response and your beliefs and behavioural reactions to them that were the problem.