

## **What is the Fight or Flight response?**

To understand the Fight or Flight response it helps to think about the role of emotions in our lives. Many of us would prefer to focus on our logical, thinking nature and ignore our sometimes troublesome emotions, but emotions have a purpose. Our most basic emotions like fear, anger or disgust are vital messengers: they evolved as signals to help us meet our basic needs for self-preservation and safety. It would be dangerous to be indecisive about a threat to our survival so the brain runs information from our senses through the most primitive, reactive parts of our brain first. These areas of the brain control instinctive responses and they don't do too much thinking. This more primitive part of our brain communicates with the rest of our brain and our body to create signals we can't ignore easily: powerful emotions and symptoms.

The Fight or Flight response is a physiological response triggered when we feel a strong emotion like fear. Fear is the normal emotion to feel in response to a danger or threat. Fear also has a close relative we call anxiety. The Fight or Flight response evolved to enable us to react with appropriate actions: to run away, to fight, or sometimes freeze to be a less visible target.

So it is important to think of this as a normal response, but one which can be triggered too often, by things which we perceive to be a threat to us. A good analogy is the smoke alarm. A smoke alarm is designed to alert us to the danger of fire but it cannot distinguish between steam from the shower, burnt toast or a house fire. While the first two examples are not real threats the third is but the response of the alarm is the same: an irritating, uncomfortable and difficult to ignore alarm!

But for most of us life isn't about fighting or escaping predators or enemies anymore. The Fight or Flight response was designed to deal with feeling fear for our lives, but it is much more likely to be triggered by more complex and subtle concerns: internal threats in the form of worries. When we feel anxious or fearful about a presentation, job interview, exam, or social situation the Fight or Flight response is triggered in our body and we experience a range of strong, physical symptoms designed to temporarily change the way the body is functioning to enable rapid physical response.

### **Increased activity will occur in the body**

- Circulation increases blood supply to brain, muscles and to limbs (more O<sub>2</sub>). Brain activity changes: we think less and react more instinctively.
- Heart beats quicker and harder – coronary arteries dilate.
- Blood pressure rises.
- Lungs take in more O<sub>2</sub> and release more CO<sub>2</sub>.
- Liver releases extra sugar for energy.
- Muscles tense for action.
- Sweating increases to speed heat loss.
- Adrenal glands release adrenalin to fuel response.

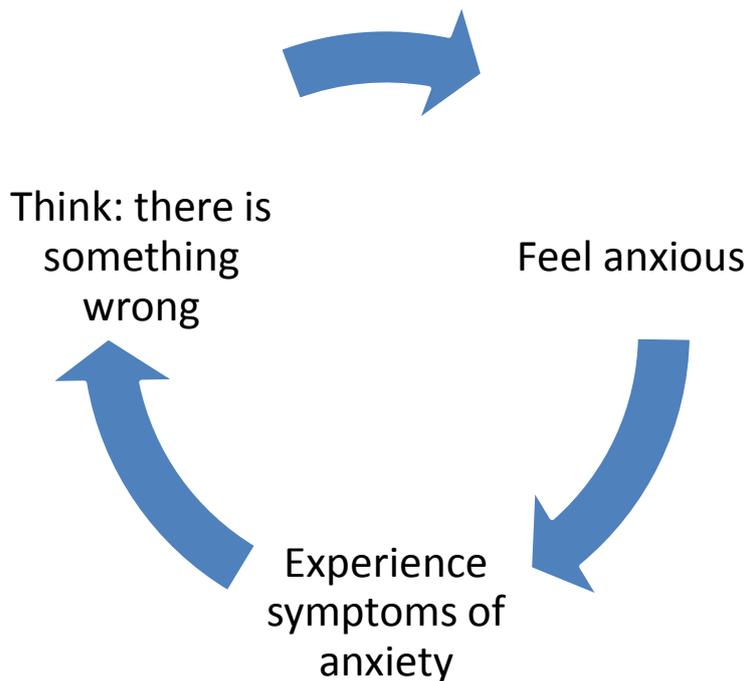
### **Decreased activity will occur in the body**

- Digestion slows down or stops – stomach and small intestines reduce activity. We might feel sick, or be sick.

- Mouth does dry – constriction of blood vessels in salivary glands.
- Kidney, large intestine and bladder slow down. We often feel we want to go to the toilet: this is the body's way of "lightening the load"
- Immune responses decrease.

You might be wondering how understanding the physical symptoms of the Fight or Flight response is going to help you feel less anxious. Once again we need to think about the way the mind and body are set up to help us survive. It is normal for the brain to register pain or discomfort because these are vital indicators of threat and danger. The physiological changes or symptoms of anxiety can be very uncomfortable, like pain, and can lead us to conclude something is really wrong, a thought which increases our anxiety.

So anxiety can persist because we have both an emotional and a cognitive reaction to our anxiety which keeps anxiety going. We get anxious about getting anxious or experience fear of fear. This is even more likely if there is not an obvious source of physical danger in the vicinity which we can choose to combat or escape from. Then when we can't see an external danger we tend to use our powerful imagination to search for the source of anxiety. In this way we start responding to perceived dangers: "I might make a fool of myself in the presentation", "I might fail the exam". What this can mean is that we create a reason to be anxious which along with our physical symptoms then proves to us that we should be anxious.



The first step to breaking the cycle is to recognise the symptoms of anxiety for what they are and to remind ourselves that they are not evidence of something being really wrong: they are not in themselves a reason to become more anxious.

The next step can then be to deal with the symptoms of anxiety as symptoms which can be "treated". Learning to calm down your rapid breathing with relaxation breathing can counteract the Fight or Flight response and induce its anti-thesis: Rest and Digest – The

Relaxation Response. Learning to relax your tense muscles can help to do the same thing. Listening to the other podcasts on this website can help you learn exercises to relax.

This is just one way to begin tackling anxiety. If you would like to learn more strategies then you may want to attend one of the workshops run by the University Counselling Service, see our website or leaflet for more details.