## How Breathing Affects Feelings

The way we breathe is strongly linked to the way we feel. When we are relaxed we breathe slowly, and when we are anxious we breathe more quickly.
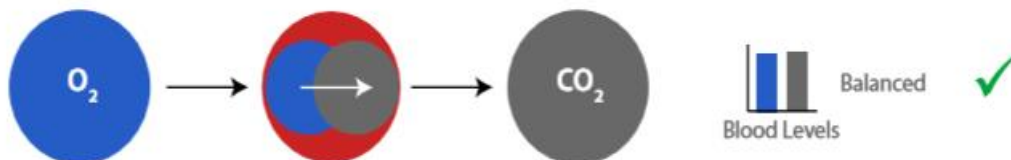
Normal breathing

When we breathe we take in oxygen (O_2) that is used by the body. This process creates carbon dioxide (CO_2), a waste product that we breathe out. When our breathing is relaxed the levels of oxygen and carbon dioxide are balanced - this allows our body to function efficiently.
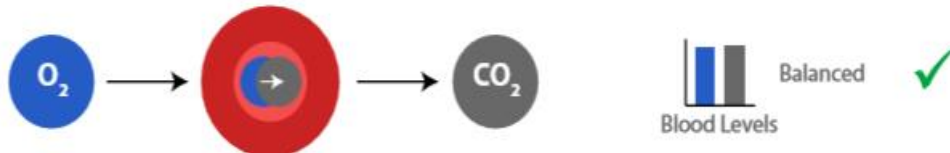
Exercise breathing

Our breathing rate increases during exercise to take in more oxygen. The body uses the extra oxygen to fuel the muscles and so produces more carbon dioxide. The increased breathing rate leads to more carbon dioxide being expelled. This means that the balance between oxygen and carbon dioxide levels is maintained.

Anxious breathing

When we are anxious our breathing rate increases: we take in more oxygen and breathe out more carbon dioxide than usual. However, because the body is not working any harder than normal it is not using up any extra oxygen, and so it is not producing any extra carbon dioxide. Because carbon dioxide is being expelled faster than it is being produced its concentration in the blood goes down (leading to a temporary change in the pH of the blood called respiratory alkalosis). This change in CO_2 blood concentration can lead us to feeling unpleasantly light-headed, tingly in our fingers and toes, clammy, and sweaty.
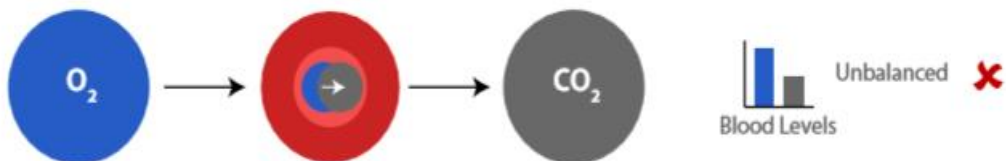
When our breathing returns to its usual rate the levels of carbon dioxide in the blood return to normal, and the symptoms resolve. You can deliberately relax your breathing to feel better.

Relaxed breathing instructions

1) Sit or lie down comfortably. Close your eyes if you would like to
2) Breathe *slowly* and *steadily* in through your nose for a count of 4
3) Hold your breath for a count of 2
4) Breathe out *slowly* and *steadily* for a count of 4
5) Repeat for a few minutes