

Diaphragmatic Breathing

This is an information sheet about how you can work with your breath to reduce your stress levels.

Breathing is a vital function – we do it every second of our lives, yet it is something we are rarely conscious of. This is because we don't have to 'think' about breathing in order to do it; our autonomic nervous system does it for us, along with controlling our heart beat, digestion and other physiological processes.

We know that breathing keeps us alive, but it has other important functions too. It is a big indicator of our stress levels, and reflects the state of our nervous system. On the flip side, we can consciously use our breath to help reduce our stress levels and bring our nervous system into balance.

Early-human stress encounters were acute and isolated incidents, such as fighting for our survival against wild animals. Such encounters would cause a number of biochemical reactions in our body (including increased heart rate, blood pressure and adrenaline) to help us either fight or run away from the wild animal. After the encounter had finished, these physiological 'stress responses' would be replaced by a flood of hormones that would put our body into rest and repair mode, helping return our nervous system to a balanced state.

This survival mechanism is still hard wired into our brain, and although we don't have the threat of wild animals to contend with, our stress responses are easily switched on by our environment that operates 24/7, and leaves



little room for genuine rest and repair. As one example, just think how available we are now through our phones and computers - we rarely get the opportunity to switch off.

People with TS are often more sensitive to stimulation and have additional stress factors to contend with, e.g. physical and emotional demands of tics and co-occurring conditions or concerns about how others may perceive them. Stress is also well known to exacerbate tics, so a vicious cycle can occur where stress feeds the tics, tics feed more stress, and more stress feeds the tics...

Continued over-stimulation, and exposure to stress can make it difficult for our nervous system to access a calm and restful state, and when the stress response stays switched on, it can leave us feeling anxious and on high alert.

So how can we reduce our stress levels and return our nervous system to a balanced state?

Slow abdominal breathing or diaphragmatic breathing as it's also known, helps to stabilise our heart rate and blood pressure, and activates the part of our nervous system responsible for relax and repair mode. This will lead to an experience of feeling calm and more present.

The diaphragm is a dome shaped muscle that separates the chest cavity from the abdominal cavity. It is a vital part of our breathing apparatus, however many of us use the diaphragm inefficiently because we have a tendency to breathe in the upper chest.





Visit the link below to see the diaphragm in action https://www.youtube.com/watch?v=23-KAubf-js&feature=youtu.be

How to do diaphragmatic breathing

- Inhale through the nose and direct the breath down into the belly, filling the belly up with your breath as you breathe in. Another way to think about this is to consciously fill up your lungs from the bottom to the top until you can't take in any more breath – this will cause your belly to fill up with air.
- To breathe out, release the breath slowly through pursed lips. If possible, make the outbreath 1 to 1.5 times longer than the inhalation but don't get too caught up on measurements. The key thing is a slow, long released exhalation. Your belly will naturally draw back towards your spine as the breath is released.

When you're experiencing tics, anxiety or even anger, you're very much 'in' that experience, so diaphragmatic breathing at such times can be challenging if you're not used to doing it – even though it's when we need it most!

The more you practice diaphragmatic breathing, the more automatic and accessible it becomes.

You could start by setting the bar low, and make a commitment to do three rounds of diaphragmatic breathing when you wake up in the morning. Attention to what you are doing plays a vital role in the effectiveness of this breathing practice. So give your full attention to the breath filling up your belly nice and slowly, the pause before the exhalation, and then the breath slowly leaving the body through pursed lips, as the belly drops back towards your spine.

You can practice this lying down with your hands on your belly, as well as sitting or standing.

To help young children with this practice, use a visual aide like a rubber duck or similar small object on their belly when they are lying down. The child can then focus on the object moving up and down with the belly as they breathe.

If you can reduce your stress levels and increase a sense of calm and relaxation in yourself, this can have a positive effect on reducing tics, anxiety levels and anger/rage outbursts, as well as increasing your overall sense of wellbeing.

This information sheet is intended as a self-help tool for managing stress, tics, anxiety and anger.

If you feel overwhelmed by any of these things, it is always advisable to speak with your GP or consultant for further advice.