# A Calm, coherent brain can be more plastic

Brain plasticity science is the study of a physical process. Grey matter can shrink or thicken; neural connections can be forged and refined or weakened and severed. Changes in the physical brain manifest as changes in our abilities.

For example, each time we breathe and visualise a calming image the process reflects a change in our physical brains: new "wires" (neural pathways) are created that give instructions to our bodies on how to perform the visualisation.

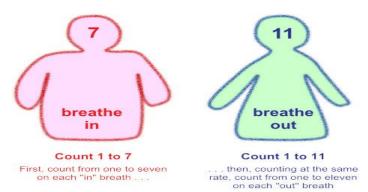
https://www.youtube.com/watch?v=ELpfYCZa87g

### Re- learn Breathing to lower stress and to think with coherence

The secret is to make each "out" breath last longer than each "in" breath. This has the effect of stimulating the body's natural relaxation mechanism. It stimulates the parasympathetic nervous system. A simple and effective way to do this is to use a simple counting method whilst paying attention to your breathing.

### 7-11 Breathing

Try this. You can do it anywhere – in bed, on a bus or the train, even whilst walking gently.



# Why count?

Counting has the effect of distracting your mind so that it can't also be worrying or analysing stuff at the same time. It also helps to keep the "out" breath "half as long again" than the "in" breath. Note that you must breathe in slightly "harder" and breathe out "more gently" if you are not going to end up gasping for air!

# How fast?

Find a breathing rate which is comfortable for your own lungs. It does not have to be particularly "deep and slow" breathing. The important thing is to keep the rate constant without getting out of breath!

# How long for?

Most people find that 10 to 15 minutes a day of good 7/11 breathing really helps them. But it does take a little practice and needs to be learned as a new skill. It can be hard to keep count when you first start – but keep trying. You will need to concentrate quite hard at first – but it gets easier with practice.

It's a bit like learning to ride a bicycle. When you start, you may find that as you get a bit more relaxed, your mind wanders off in a daydream and you forget to count. Think of this like having to put your foot down to stabilise yourself on the bicycle. Don't give up – just try again. Once you can get to the end of the lane and back without taking your feet off the pedals, you have mastered the new skill. If you find that you have stopped counting, just start again and continue until you can do it for a full fifteen minutes. By the time, you can keep it going continuously with at least part of your mind on the counting you will have mastered a valuable new skill.