

# Understanding Hyperventilation Syndrome and Dysfunctional Breathing

## What Is 'Good Breathing?'

To have a 'good breathing' pattern, a minimum amount of effort should be needed to move air in and out of the chest.

In order to do this we need to use the correct muscles of respiration (breathing).

The diaphragm is the most important muscle used for breathing. This is a strong flat muscle which is attached to the lower edges of the ribs.

When you breathe in, the diaphragm contracts and flattens drawing air into the lungs. This causes your tummy to rise and distend.

As you breathe out, the diaphragm moves upwards and the air is expelled from your lungs.

It is also important to breathe in and out through your nose. The little hairs inside your nose filter, warm and moisten the air before it reaches your lungs.

## What is Hyperventilation?

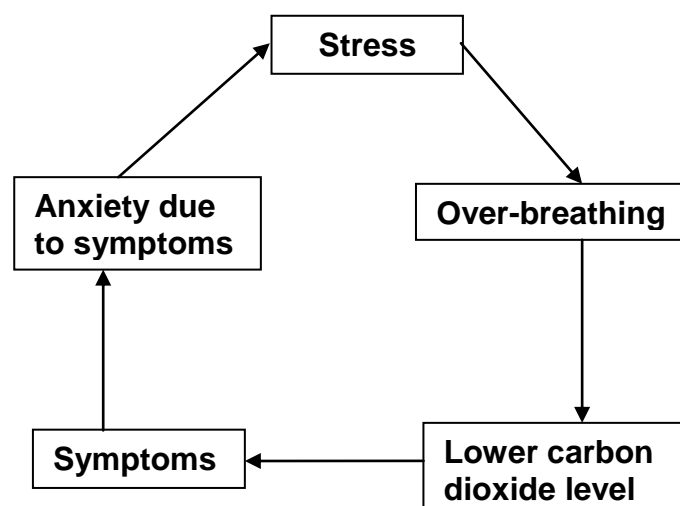
Hyperventilation is a medical term for over breathing. If done occasionally, it is not a problem; it serves as part of our 'fight or flight' response.

If over breathing happens too often it can result in breathing out large quantities of carbon dioxide with every breath.

This causes a change in your blood chemistry as your normal carbon dioxide levels in your blood starts to get lower.

This change can give rise to a variety of

symptoms which can increase your anxiety and worsen your over breathing.



As you can see in this diagram, a negative circle can become established.

## What are the Symptoms?

- Sighing and Yawning
- Anxiety and Tension
- Breathlessness
- Palpitations
- Pins and Needles in hands, arms and around the mouth
- Fatigue
- Poor concentration
- Throat/Gastric problems
- Muscular aches
- Dizziness
- Bloated feeling in the stomach

## How can I change my breathing pattern?

- Lie on your back, as flat as possible, with a pillow under your knees. In this position you should begin to relax and feel able to concentrate on your breathing.
- Breathe in through your nose.
- Let the air flow out of your chest, through your mouth.
- Try to breathe low down into your chest. This is more important than the **amount** of air inhaled.

Take light abdominal breaths and not large gulps of air. You should feel your tummy rise and distend as you breathe in.

- The breath should be unforced and silent.
- Breathe out gently through your nose.
- You need to practice as often as you can in order for changes in your breathing pattern to occur. Start by practicing this twice daily (morning and night) for 5-10 minutes each time and work towards four times.
- As your confidence increases and your technique improves do the same in sitting and standing.

## Here are some handy tips to remember:

- Your abdominal muscles may feel twitchy at first. As you practice, they will grow stronger and this will stop.
- When you breathe in, your chest should be relaxed. You can place your hand on your chest to check this.
- Check your shoulders for tension. Shrug them up and then let them drop.

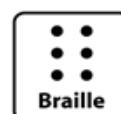
- During the day, check and correct your breathing pattern hourly.
- Remember, a change in your breathing pattern cannot happen overnight but success will come with practice, patience and perseverance.

## What can I do to control Hyperventilation?

To change your breathing pattern, you may need to:

- Re-educate the way you breathe using breathing exercises.
- Try to identify the trigger for your hyperventilation and look at all aspects of your lifestyle that may be contributing to your over breathing.
- Exercise is a good way to increase your confidence and overall wellbeing.
- Eat regularly, avoid large meals and choose healthy snacks.
- Limit caffeinated drinks and alcohol.
- Take part in activities which you find relaxing.
- Learn to build these ways of coping into your everyday life so that **you** can control your breathing and it doesn't control you.

**If you have any questions, please do not hesitate to ask your physiotherapist.**



### If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

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