

# Breathing Freely

Your guide to breathing retraining for asthma



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This booklet and DVD explain how practising breathing retraining techniques can teach you **lifelong skills to help you breathe freely.**

# BEFORE YOU START

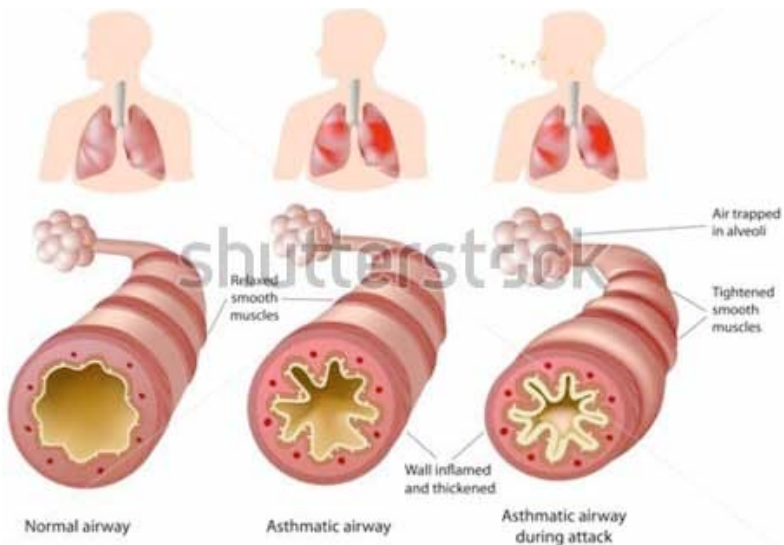
## Q How does asthma affect breathing?

A Air gets in and out of your lungs through a series of tubes known as airways. Asthma is a long-term condition that affects your airways.

When you have asthma your airways are inflamed and so are more sensitive than in people without asthma. If you come into contact with something that irritates your airways (a trigger) **your airways become narrow**. As they become narrower, it becomes **difficult to move air in and out of your lungs** and more difficult to breathe.

This is due to:

- **tightening** of the muscle surrounding your airway
- **swelling** of your airway wall
- an increase in **sticky mucus** or **phlegm** in your airway



## Q How can my breathing pattern affect my asthma symptoms?

A Different people have different breathing patterns:

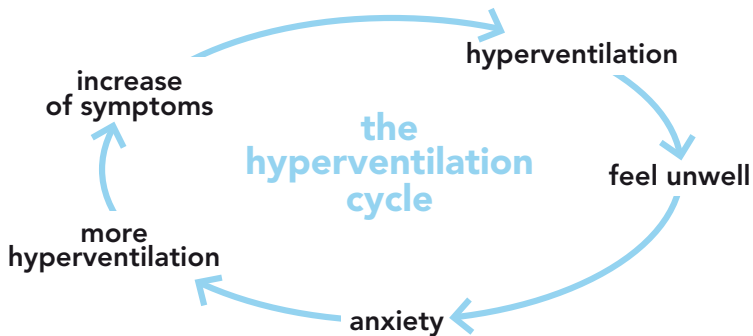
- Some people breathe through their mouth, and some through their nose.
- Some people breathe from their stomach, and some from their chest.
- Some people breathe slowly and some people breathe faster.

You can breathe more freely if you breathe **slowly and steadily** through your **nose** and **from your stomach**.

**Breathing too fast** is known as “**over-breathing**” or **hyperventilation**.

This means you take in more air than your body needs. This can lead to you feeling dizzy and short of breath, and may also make your airways narrower.

It is natural to feel anxious when you find it difficult to breathe - but this anxiety and stress can actually make your asthma symptoms worse. When you are under stress your body gets ready to fight or run away by automatically **breathing faster** to supply your body with oxygen. This increases hyperventilation and so makes your symptoms worse, as you can see in the diagram below.



**Q How can the Breathing Retraining Programme help me to change how I breathe?**

**A** Breathing retraining encourages people to change their breathing patterns by learning more efficient breathing techniques, which include how to breathe more slowly, through the nose, and from the stomach, which can help you feel more relaxed and less short of breath.

Breathing retraining can help you to:

- **Stop your lungs from inflating with too much air.** When this happens, you are less able to push out the air from your lungs. During **slow breathing you breathe out for longer than you breathe in**, which means you do not take in too much air. This helps to reduce tightness in the chest and breathlessness.
- **Breathe more easily**, so you don't have to work so hard, and your breathing is more natural. When you aren't breathing calmly, different sets of muscles can be working against each other. This can be tiring, and make your chest feel more uncomfortable.
- **Breathe through your nose.** This allows air to be filtered, warmed and humidified before it reaches your lungs, which is much less irritating.

**All this helps to open your airways, to reduce wheeze and feelings of breathlessness. This will help you to feel more comfortable in stuffy, polluted places.**

## Q What is the evidence that breathing retraining will help me?

A Scientific studies have shown that people with asthma who are taught breathing retraining using methods that have been developed by physiotherapists for people to use at home **experience fewer asthma symptoms, feel more in control of their asthma, and find that they are more able to exercise and take part in social activities** after completing breathing retraining.

## Q How will doing the breathing retraining benefit me?

A Breathing retraining can be carried out by almost anyone. It **is good for everyone, not just for people with asthma**, as you learn to breathe more efficiently.

Carrying out the breathing retraining may help you to:

- Feel less wheezy or short of breath
- Use your short term 'reliever' puffer less often
- Do more or walk further before you feel out of breath
- Feel more relaxed
- Feel more in control of your asthma

## Q Do I still need to take my medication if I am doing breathing retraining?

A **Yes, you should continue to take your preventer medication as usual.** You may find that the breathing retraining means you will not need to use your "reliever" puffer as often. If your asthma control is much better after practising the breathing retraining, you can talk to your doctor or nurse about the possibility of reducing your regular medication, but this should be done carefully and in partnership with your healthcare team.

# PRACTISING BREATHING RETRAINING

## Q What is involved in breathing retraining?

A Breathing retraining involves 5 sessions that you can work through **at your own pace**. We recommend you watch the DVD to see a physiotherapist demonstrating the techniques in these sessions.

- **Session 1** introduces stomach and nose breathing.
- **Session 2** introduces slow breathing and controlled breath holding
- **Session 3** introduces relaxation training.
- **Session 4** progresses breathing retraining to carrying out the retraining while sitting and walking, and introduces more advanced slow breathing
- **Session 5** covers using the breathing retraining in everyday life, and its impact on everyday activities.

**The speed at which you progress through the sessions is completely up to you** – some people feel happy to move on after a couple of days and others feel more comfortable practising the techniques over a few weeks.

## PRACTISING BREATHING RETRAINING

For breathing retraining to help you reduce your asthma symptoms you need to practice regularly until it becomes a habit. We recommend that you:

- Practice the stomach breathing regularly during the day
- Practice the slow breathing twice a day – building up to about 15 minutes for each session
- Practice 3 to 4 controlled breath holds twice a day
- Try to nose breathe all the time

## Planning where and when to practice breathing retraining

When you have a busy life, it is often difficult to find time to fit something else into your routine. To help you carry out the breathing retraining regularly, it is good to plan where and when you are going to do it.

- **Find a good time to practice the breathing retraining**

You will learn the techniques best if you practice regularly. You can practice nose breathing and stomach breathing throughout the day. From the second session you can start practising slow breathing twice a day and you can also add a few gentle breath holds to your practice session.

**Tip: some people find it helpful to practice slow breathing and relaxation at night before they go to sleep, as they can help you sleep better.**

- **Choose a place to do the slow breathing and controlled breath holds**

It is best to find somewhere you feel relaxed and will not be disturbed, such as your bedroom. You will need to lie down to do the slow breathing at first.

- **Build up gradually**

You may only be able to do the slow breathing for 1-2 minutes at the start. This is fine, and you will get better with practice. Keep trying, during each practice session, to increase the time you can do the slow breathing, gradually increasing to about 15 minutes.

- **Keep track of your progress**

Most people find it helpful to keep track of their progress in the chart on page 18.

**Decide NOW on the times when you will do the slow breathing and breath holds, and write these times down on the progress chart on page 18.**



# SESSION 1: STOMACH AND NOSE BREATHING

**Q** How can stomach breathing benefit me?

**A** Stomach breathing is helpful because it **can be used to help relieve your asthma symptoms (such as feeling short of breath) when you feel an attack coming on.**

## How to practice stomach breathing

1. Lie down in a comfortable place. You may want to place 1 or 2 pillows behind your head and loosen any tight clothing.
2. Close your mouth and **breathe through your nose**
3. Relax your shoulders and chest (*see page 14 for advice on relaxation*)
4. Put one hand on your stomach and one on your chest
5. Breathe in and out as normal.  
**Be careful not to take very big breaths at this point.**
6. Now, as you breathe in gently, try to keep your chest still whilst allowing your stomach to rise.
7. As you breathe out allow your stomach to fall gently – **do not force it.**

You should aim to practice stomach breathing regularly during the day



**Q** How can breathing through my nose benefit me?

**A** Research has shown that breathing through your nose rather than your mouth can:

- Filter the air getting to your lungs, which can prevent dust and bacteria from being taken in
- Warm and moisten the air breathed in (you may be more likely to have an attack when the air is dry)
- Reduce the speed at which you breathe, so you are less likely to over-breathe.

Try to nose breathe all the time.



# SESSION 2: SLOW BREATHING AND CONTROLLED BREATH HOLDING

## Slow breathing

Slow breathing aims to help you take **fewer breaths a minute**. This means you are less likely to **over-breathe** and take in too much air (see page 4). Some people find it helps to have a clock or timer to count their breathing, others prefer without.

1. Lie down in a comfortable place.
2. Close your mouth and breathe through your nose.
3. Relax your shoulders and chest.
4. Now practice your stomach breathing.
5. Then try to **slow down your breathing**. It can help to count in your head with your breathing, e.g. breathe in for a slow count of 2 and breathe out for a slow count of 3.
6. Now to slow your breathing down more, put a **short pause after you have fully breathed out**, before you take the next breath. Breathe in for a count of 2, breathe out for a count of 3, and then pause for another count of 2 to 3. **It is important not to pause so long that you feel faint!**

To start with, you may find slow breathing difficult, but if you persevere it will get easier. **You can record your practice sessions in the chart on page 18.** As it gets easier you can try to **increase the length of time that you pause** at the end of your breath out, before taking the next breath.

You should aim to practice the slow breathing twice a day – building up to about 15 minutes for each session

## Controlled breath holding

The aim of this breath holding technique is to practice holding your breath without needing to gasp for air afterwards. As you get used to breath holding you are less likely to feel breathless in your everyday life.

1. Sit upright and well supported.
2. Breathe gently in and out through your nose.
3. Relax your shoulders and chest.
4. Take a normal relaxed breath in and gently breathe out, using your stomach breathing.
5. At the end of your breath out, pinch your nose and hold your breath
6. Keep holding your breath until you feel a very slight urge to breathe in. Then let go of your nose and breathe normally.



Your next breath should be a relaxed breath, using your stomach breathing technique. **If you have to take a deep breath or gasp for air at this point, then you may have held your breath for too long.** This is not dangerous. Next time you practice, try not to hold your breath for as long. Once you are able to hold your breath in this way, repeat it 3 more times, with a 1 minute rest in between each breath hold.

You may find it helpful to time your breath holds each week using a stopwatch or counting in your head. You can record this time in your progress chart on page 18.

You should aim to practice 3 to 4 controlled breath holds twice a day.

# Overcoming difficulties in carrying out the breathing retraining

**Q I find it difficult to breathe from my stomach rather than my chest**

**A** You may find it difficult at first but this gets better with practice. To help you do this, you can put your hand on your stomach and chest, and feel your stomach moving.

**Q I find it difficult to slow down my breathing and take slower breaths.**

**A** You may find you need to concentrate more on this in the beginning, but as you practice, breathing more freely will become normal within a few weeks.

**Q I find it difficult to breathe through my nose.**

**A** If you have a persistently blocked and runny nose you may have 'allergic rhinitis' (which is common in asthma). In this case you should see your doctor as there is effective treatment for it, and it can make asthma worse.



# SESSION 3: RELAXATION TRAINING

In this session you will learn a relaxation technique that will help you to master your slow breathing. There are many relaxation techniques you can try. Some people like silence, others prefer to play peaceful music, or natural sounds.

Begin by getting yourself in a comfortable position lying flat or sitting up straight. Use plenty of pillows if needed. This method of relaxation will help you to relax your whole body, working from your feet up to your head.

## 1. Breathing

Close your eyes and breathe in and out through your nose using your stomach breathing.

## 2. Feet

Gently point your toes towards the floor or away from your body, hold this position for the count of 5 seconds and relax. Repeat **once**.

## 3. Legs

Tighten your thigh muscles and push your knees down, hold for 5 seconds, and relax. Repeat **once**.

## 4. Buttocks

Tighten your buttocks, hold for 5 seconds and relax. Repeat **once**.

## 5. Back / abdomen

If you are lying down push the small of your back into the floor, hold for 5 seconds and relax. If you are sitting up, pull your stomach muscles in, hold for 5 seconds and relax. Repeat **once**.

## 6. Shoulders

Shrug your shoulders towards your ears, hold for 5 seconds and relax. Repeat **once**.

## 7. Arms

Push your arms downwards, hold for 5 seconds and relax. Repeat **once**.

## 8. Hands

Clench your fists, hold for 5 seconds and relax. Repeat **once**.

## 9. Eyebrows

Raise your eyebrows as though surprised, hold for 5 seconds and relax. Repeat **once**.

## 10. Jaw

Keeping your mouth closed gently stretch your jaw downwards, hold for 5 seconds and relax. Repeat **once**.

## 11. Head

Push your head down into the pillow. Hold for 5 seconds and relax. Repeat **once**.

Allow yourself to relax your whole body now, and notice how your body and muscles feel. Stay in the same position for another 5 minutes and focus on your gentle breathing pattern.

# SESSION 4: PROGRESSING BREATHING TRAINING

## Progressing your stomach and slow breathing

As you practice you will become more confident with your breathing retraining. Once you are happy doing your **stomach and nose breathing** and **slow breathing** while lying down you can move on to trying them whilst **sitting upright**.

**Stomach and nose breathing can also be done whilst standing and walking.** It may help to breathe in time with your walking. It is important to breathe out for longer than you breathe in.

Over time you will find that breathing freely in everyday situations will become a habit, which you do not need to think about. Feeling confident using these breathing techniques may reduce any worries about not having your medication available, or about avoiding dust and pollution.

## Advanced slow breathing

Many people tend to take larger breaths when they slow down their breathing, which means they are not reducing the volume of air they take in and may over-breathe (see page 4).

This advice can help you to reduce the volume of air you take in.

### How to practice advanced slow breathing

1. Sit down and practice your slow breathing (using your stomach and through your nose).
2. Try to **breathe in less** than you normally would. You can place your hand on your stomach. **You should be able to feel that your stomach goes out less.**
3. Go back to your normal breathing as soon as you start to feel uncomfortable.
4. You will probably find you are not able breathe in this way for very long to start with. **You should not have to gasp for air afterwards, and you will be able to do it for longer with practice.**

# SESSION 5: USING THE TRAINING IN EVERYDAY LIFE

## Increasing activity

Practising the breathing techniques in everyday life can get your body used to breathing more freely. As you learn to breathe from the stomach and through your nose, and practice the slow breathing and breath hold techniques whenever you need to, you should find that you are **more able to take part in activities** you may have previously found difficult such as:

- **Physical activities** (e.g. swimming, gardening)
- **Social activities** (e.g. playing with pets or children)
- **Work related activities** (e.g. dealing with work stress)

It may help you to decide on an activity you plan to do more often, and set yourself a goal each week. You can record your activity in the chart on page 19.

Try to **breathe through your nose, even when being active**. You may find this difficult to start with, but the more you practice, the easier it will become.

Over time, you will probably find that you are **able to do more strenuous activities than before** and **do not get out of breath as often**. You may also find you do not need to use your reliever puffer as often.





## Experiences of using breathing retraining

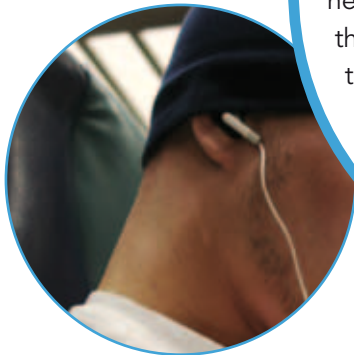
“I used to get short of breath when out shopping in town, especially carrying heavy bags. Since I started focusing on my breathing I can keep going for so much longer. When I feel I am getting out of breath I use the slow breathing techniques and find that my breathing slows down and I feel more comfortable. I also feel less worried about getting wheezy or short of breath”

### Sue's Story



### Tom's Story

“I find the easiest time to think about my breathing is when I travel to work. I do slow breathing and breath holds on the train every morning while listening to relaxing music on my iPod. It helps me pass the time and distracts me from the other commuters! Having a specific time to practice my breathing training helps me fit it into my routine. I could only hold my breath for 5 seconds to start with but now I can hold my breath for 20 seconds”





Times for daily practice    Time 1: \_\_\_\_\_ e.g. 9 am  
 Time 2: \_\_\_\_\_ e.g. evening

L = Lying down • S = Sitting

Date	Slow breathing (minutes)		Breath holds (seconds)	
	Time 1	Time 2	Time 1	Time 2
example	3 mins (L)	4 mins (S)	2 secs (S)	4 secs (S)
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

Times for daily practice    Time 1: \_\_\_\_\_ e.g. 9 am  
 Time 2: \_\_\_\_\_ e.g. evening

L = Lying down • S = Sitting

Date	Slow breathing (minutes)		Breath holds (seconds)	
	Time 1	Time 2	Time 1	Time 2
example	3 mins (L)	4 mins (S)	2 secs (S)	4 secs (S)
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

# REGULAR PHYSICAL ACTIVITY CHART

You can use this chart to write down which activity you plan to do and what you aim to achieve in this activity each week.

Regular physical activity plan		
	Planned activity (e.g., swimming)	Weekly goal (e.g. 10 lengths)
Week 1		
Week 2		
Week 3		
Week 4		

Please write down the days and times when you plan to do your chosen activities

Day: \_\_\_\_\_ Time: \_\_\_\_\_

Day: \_\_\_\_\_ Time: \_\_\_\_\_

Day: \_\_\_\_\_ Time: \_\_\_\_\_



This booklet has been written by a team of medical and health research experts based at the University of Southampton.



“I’m Breathing Freely for the first time in my life; better breathing means you can do more in your daily life. The other thing I wanted to say is around persevering with the training, as the results are worth it”

Mark

Lisa

“Recently I was ill with a chest infection and finding it hard to get to sleep at night as my breathing was so bad. Using the stomach breathing exercises for a couple of minutes really helped with my breathing and I was able to get to sleep. Now I have learnt this, I feel a lot more confident in being able to deal with my asthma when I get ill”