

Physiotherapy

'Breathing games' for young children with cystic fibrosis

This leaflet describes how to encourage your toddler in their chest physiotherapy sessions.

When your child reaches the 'toddler' stage, they are old enough to participate in their physiotherapy sessions.

Making these sessions fun will help your child to learn how to clear their lungs of secretions.

Why must my child do these 'breathing games'?

The two aims of the 'breathing games' are to encourage your child to take bigger, deeper breaths and to learn how to breathe out in different ways. This will help to move and clear secretions from their lungs and increase ventilation.

Eventually, your child will learn how to huff and cough and learn the difference between shallow, deep, fast and slow breaths. This awareness of their breathing will help them to perform more formal breathing techniques to clear their lungs, which are taught by the physiotherapist when they are old enough to understand.

What about normal physical exercise?

Once your child is able to walk, run and maintain good balance, physical activity and exercise should also be encouraged, for example, jumping on a trampoline or a space hopper or playing wheelbarrows! Sporting activities should be included as they get older. This is because there is increasing evidence that physical activity not only improves and maintains a healthy level of fitness. It also helps to ventilate and clear the lungs of secretions too.^{1 2}

No matter how active your child is, it is beneficial that they drink plenty of fluids each day. Your dietitian can advise you on exactly how much fluid your child needs. This will keep them hydrated and help prevent the lung secretions from getting too thick and sticky, thus making it easier for your child to cough and clear their lungs.

Breathing Games

The following is a list of breathing games that can be performed at any time of the day. However, they can be more effective if done during their physiotherapy:

- **Blowing bubbles:** This is a firm favourite. To make it effective your child should take a big breath in and then gently blow out through an 'O'-shaped mouth. Repeat three to four 'blows'. As their technique improves, encourage your child to breathe out for longer and more fully.
- **Cotton wool balls:** Place a cotton wool ball on your open, flat palm and ask your child to take a big breath in and then blow the ball off your hand. Alternatively, you and your child can hold a cotton ball each and blow the balls off together...who can blow the ball the furthest? Repeat three to four times.
- **Cotton wool balls and a straw:** Place a cotton wool ball on a table and at one end place an open empty box on its side to make it into a 'goal'. Then your child should take a big breath in and blow through a straw onto the ball to move it across the 'pitch' into the goal. As your child gets older you may want to participate with your child to make the game competitive. For example, who can score the first goal? Aim for your child to take four to five big breaths / blows in a game.
- **Blowing onto a tissue:** Hold out a thin tissue and ask your child to take a big breath in and blow onto the tissue to lift it up (if the tissue is too heavy, remove one or two ply-sheets). Repeat this three to four times. As their technique improves, encourage them to keep the tissue up for as long as possible, so that they exhale fully.
- **Bubbling water:** With a straw placed in a cup of water (half full only), ask your child to blow gently through the straw and make lots of bubbles in the water. Repeat three to four times.
- **Blow painting:** Place a few spots of paint on a piece of paper and then ask your child to blow into a straw as close to the paint as possible. This should 'move' the paint in different directions to make a picture. **Warning:** this may get messy!
- **Huffing:** Using a small cardboard tube such as a peak flow mouthpiece, ask your child to blow through it with their lips closed tightly around it. This might be difficult for your child to understand and perform at first, so leave this game until they have mastered others and introduce it into their routine gradually.

If you are experiencing any problems with these exercises or have any questions, please ask the physiotherapist (contact details below).

The following are additional toys which also encourage your child to take bigger breaths in and out or to breathe harder (as in aerobic exercise), all of which help to mobilise and help clear secretions from the chest. They are not necessary if your child is active on a daily basis and is doing the games suggested on this sheet. These are simply alternatives that may help to encourage your child if they get bored or grow out of the other games:

- Party bag whistles and blowing toys (available from large supermarkets)
- Toy recorder/harmonica
- Bird-sounding whistle
- Polystyrene plane with a straw (available from toy/gift shops)
- Paper windmill

It is recommended that the 'blowing' toys should not be shared with other children. They should be kept in a box marked 'physiotherapy', so that they are only brought out for play during these sessions.

Some toys/equipment can be used only once, for example, a straw or a tissue. Other toys can be kept clean by washing them in warm soapy water, rinse with clean water and leave to dry naturally (alternatively, some toys may have cleaning guidelines attached to them so these instructions should be followed).

Further information

If you have any questions or wish to discuss the information contained in this leaflet, please contact the paediatric cystic fibrosis physiotherapist:

- 01223 216020
- Bleep 156 2125 (via main switchboard: 01223 245151).

References

1. Baldwin DR, Hill AL, Peckham DG and Knox AJ. 'Effect of addition of exercise to physiotherapy on sputum expectoration and lung function in adults with cystic fibrosis' *Respir.Med* 1994; 88:49-53
2. Sahl W, Bilton D, Dodd M, Webb AK. 'Effect of exercise and physiotherapy in aiding sputum expectoration in adults with cystic fibrosis' *Thorax* 1989; 44: 1004-8



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For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169

Help with this leaflet:



If you would like this information in another language, large print or audio format, please ask the department to contact Patient Information: 01223 216032 or patient.information@addenbrookes.nhs.uk

Polish

Jeżeli chciałbyś uzyskać te informacje w innym języku, w dużej czcionce lub w formacie audio, poproś pracownika oddziału o kontakt z biurem Informacji Pacjenta (Patient Information) pod numerem telefonu: 01223 216032 lub pod adresem patient.information@addenbrookes.nhs.uk

Portuguese

Se precisar desta informação noutra língua, em impressão de letras grandes ou formato áudio, por favor peça ao departamento que contacte a secção de Informação aos Doentes (Patient Information) pelo telefone 01223 216032 ou através do e-mail patient.information@addenbrookes.nhs.uk

Arabic

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Cantonese

如您需以另一語言版本、特大字體或錄音形式索取本資料，請要求部門聯絡病人諮詢服務：電話 01223 216032，電郵地址 patient.information@addenbrookes.nhs.uk

Turkish

Eğer bu bilgileri başka bir dilde veya büyük baskılı veya sesli olarak isterseniz, lütfen bulunduğunuz bölümdeki görevlilere söyleyin Hasta Bilgilendirme servisini arasinlar: 01223 216032 veya patient.information@addenbrookes.nhs.uk

Urdu

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Bengali

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Document history

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