



## BACKS FOR THE FUTURE

Back pain is a condition we usually associate with growing older. However, lifestyle changes mean back trouble is no longer confined to the adult population; more and more children are also reporting discomfort.

Studies show that almost half of all children of secondary school age experience occasional backache. Childhood back pain has been related to heavy schoolbags and ill-fitting classroom furniture. These factors can certainly contribute, but physiotherapists point out that books and bags alone should not cause bad backs. It is only when the everyday physical demands of school life are **combined** with sedentary lifestyles and poor posture that real back problems begin to set in.

The car culture and a passion among children for computer games, crisps and fizzy drinks has limited physical activity and created a situation where inactive lifestyles and bad diets are the norm. Such habits encourage poor posture and weight gain and mean that joints and muscles are not worked through their full range and normal length. This makes it more difficult for the body to cope with day to day tasks. We take many of the practices of childhood into adult life so our chances of maintaining a healthy back in adulthood are also greatly reduced.

Backache has a huge impact on the UK economy. The condition will affect 95 per cent of the population at some stage, and costs the country £6 billion a year in medical treatment, benefits and sick leave. Given these statistics, it is important that our children develop good habits early on in life.

This leaflet looks at how elements of modern living combine to cause back pain. It offers practical advice to parents on how their children can avoid putting unnecessary stress on their backs while carrying out everyday tasks.

### Understanding adolescent back pain

The back is designed to perform many functions but it is also an especially vulnerable part of the body. This is because it serves two contradictory purposes - **mobility** and **stability**. It has to be flexible enough to cope with basic movements such as bending and twisting, but it also needs to offer stability so that we can stand upright, walk around and carry load where necessary.

Teenage backs also have to deal with the effects of puberty. Growth spurts cause big structural changes within the body as bones, muscles, nerves and connective tissues lengthen. Different parts of the body may take longer to grow than others. This can sometimes result in temporarily uneven posture and lead to pain from tightness or over-stretching muscles and nerves.

### School days

In recent years, the curriculum has expanded and class sizes have swollen. Many schools have had to make sacrifices that may not be in the best interests of our children's health. PE lessons have been cut back to make way for more academic subjects and personal lockers and desks with storage space have been ripped out



to provide larger teaching areas. Following the advice below can help ensure your child stays healthy at school.

### Schoolbags

A heavy backpack can put stress on the neck and shoulder muscles. But it's not necessarily the weight of the bag that causes back pain – it's the type of bag and how children carry it that really counts!

- ✓ Encourage your child to choose a sturdy backpack from an outdoor activity shop rather than a fashion bag. These bags are designed for people carrying heavy weights over long distances and will protect your child's posture
- ✓ Look for a bag with wide, padded straps and a waist-belt which will redistribute weight from the shoulders and back to the pelvis
- ✓ Children should wear the bag over both shoulders – they might think this is 'uncool' but it will spread the weight evenly over the body and avoid placing uneven pressure on one side of the spine
- ✓ Show your child how to pack the bag correctly. Heavy objects should be packed first and on the inside so that they are close to the spine and the pelvis. This will prevent the back from arching and take weight off the shoulder region
- ✓ Adjust the shoulder straps and fasten the waist-belt so that the bag sits snugly against the entire back

### Desks, chairs and equipment

Secondary school children vary enormously in height. But tight budgets and strict timetables mean that classroom furniture follows a one-size-fits-all philosophy. Children are at special risk of suffering discomfort from poorly designed furniture because they spend long periods sitting down. Fewer than 20 per cent of students can find suitable desk/chair combinations and many pupils sit at desks that are too big or chairs that are either too high or too low. Therefore, children need to try especially hard to maintain a good posture during lesson time.

- ✓ Sloping desks were ideal as they prevented slouching, but most have been replaced by flat tables to create space. While working at a table kids should try imagining they have a string attached to the top of their head, which is lifting them into a tall upright position. This should help them avoid hunching over their work
- ✓ Children can make the most of the support their chair is designed to offer by bringing it close to the table and sitting back in the seat rather than perching on the edge
- ✓ Our bodies are not designed to spend too much time sitting in one position. Teachers should encourage children to stand up and stretch during long lessons and to be active during breaks

### **Hometime**

When hometime comes, children have a golden opportunity to leave the sedentary environment of the classroom behind and spend their evenings



engaging in some physical activity. Physios suggest that working towards a good level of fitness is one of the best things children can do for their backs:

- The Healthy Schools Programme recommends one hour of moderate physical activity everyday. Regular exercise will mobilise and strengthen the spine
- Active children tend to develop better muscle tone. Strong abdominal muscles make it easier for children to maintain a good posture
- Exercise improves balance and co-ordination, which promotes better body awareness. Exercise also boosts self-esteem. Children who are confident and body aware often adopt a more upright posture, which holds the key to a healthy back

### **The 'goggle box' generation**

Nowadays, however, sedentary hobbies compete with physical activity. Kids used to make their own fun, but thanks to modern technology, much of that is now done for them. Studies show that six in ten children spend over 25 hours a week slouched on the sofa watching TV or sitting in awkward positions playing games consoles.

### **Use it or lose it!**

Physiotherapists warn that unless children regularly begin putting their bodies through a full range of motion, elasticity will cease, muscles will weaken and joints will stiffen up. Under these conditions, backs become particularly vulnerable, and by adulthood, could be feeling the full effects of an inactive youth!

### **Promoting healthiness at home**

There are many ways in which parents can help children build regular activity into their leisure time and prevent them from developing bad habits while working or relaxing at home.

#### Homework and use of computers

- ✓ Create a sloping environment with textbooks propped up. This prevents children from hunching their shoulders. Better still, provide them with an adjustable desk for doing homework
- ✓ Make sure your child sits on a supportive chair when completing homework. Feet should be on the ground, or a footrest and hips should be slightly higher than the knees
- ✓ If your child uses a computer, position the monitor so that the screen is at eye level. This prevents children from craning their necks
- ✓ Move the keyboard about 10cm from the edge of the desk and make sure the mouse is within easy reach. The keyboard and mouse should be in a position that keeps the shoulders relaxed and the elbows at around 90 degrees
- ✓ Sit your child square on to the computer desk on an adjustable chair. The chair's backrest should tilt slightly and allow your child to lean against it comfortably
- ✓ Encourage your child to take lots of short breaks. Simple actions such as walking up the stairs or making a phone call are enough to give the body a chance to loosen up



- ✓ Having finished their homework, many children choose to relax by playing with computer consoles. But spending hours in static positions can lead to discomfort. Sitting cross-legged can tilt the pelvis, which puts stress on the lower back and lying on the floor with the trunk arched upwards can strain the neck and shoulder area. Encourage your children to swap positions regularly to avoid stiffness

### Be a good role model for your children!

Finally...to help your children lead a healthy lifestyle; you must set a good example!

- ✓ As a family, try to eat a well balanced diet. Inactivity has led to an increase in juvenile obesity. Being overweight places extra stress on the spinal joints, the hips and the knees
- ✓ Take the family out walking at weekends, plan activity holidays, go to your local leisure centre, play football or tennis with your kids in the park!
- ✓ Try to limit your use of the car by walking to the shops. Encourage your children to walk or cycle along safe routes to and from school

### **If pain strikes?**

- Some children find a hot water bottle or an ice pack applied to the affected area provides some relief
- Give your child some simple analgesic recommended by your local pharmacist, but don't exceed the recommended dose
- Don't send your child to bed! Inactivity is not the correct treatment for a bad back. Gentle exercise and stretches can help reduce pain and prevent reoccurrence. A physio will be able to suggest suitable exercises and other helpful advice
- If pain lasts more than a week, your GP may recommend your child sees a physiotherapist
- This leaflet is aimed at adolescents. If a younger child experiences backache, you are advised to consult a GP as soon as possible
- **Remember – prevention is better than cure, so keep this leaflet handy for easy reference!**

### **How to find a physiotherapist**

There are over 40,000 chartered physiotherapists in the UK. Most work in the NHS and are usually located within hospitals or GP practices - some even see patients in their own homes. A GP will be able to refer you to your local physiotherapy service.

Alternatively, you may wish to book an appointment with a private physiotherapist. Contact names and numbers can be found in directories such as the Yellow Pages, or if you have access to the internet, visit:

[www.physio2u.org.uk](http://www.physio2u.org.uk)  
[www.physiofirst.org.uk](http://www.physiofirst.org.uk);  
[www.macp\\_online.co.uk](http://www.macp_online.co.uk)

When choosing a physiotherapist, make sure they have the following sets of initials after their name:



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- MCSP (Member of the Chartered Society of Physiotherapy)
  - SRP (State Registered Physiotherapist)

This will guarantee they are properly qualified, governed by a professional code of conduct and covered by professional liability insurance.

To find out more about physiotherapy, contact:

The Chartered Society of Physiotherapy, 14 Bedford Row, London WC1R 4ED.

Tel: 020 7306 6666 Fax: 020 7306 6611 Web: [www.csp.org.uk](http://www.csp.org.uk)