

Is running good for my child?

The short answer is YES!

Running is a great form of physical activity for children. It helps to develop cardiovascular fitness (heart and lungs) and muscle strength, and because running is a weight-bearing activity, it can improve bone strength too.

More than 16% of children in the UK are obese, and approximately one third of all children do not take enough exercise to benefit their health. Running is an ideal way to increase activity levels, burn off excess energy and control weight. There are also long term benefits to be gained from running, since people who take part in regular physical activity when they are young, are more likely to stay active throughout their adult life too.

Because there are no technical skills to master or complicated rules to learn, children of all ages and abilities can run. Running can provide instant success and a sense of achievement. As with any exercise, running can boost a child's self-esteem, improve body image and enhance mood.

How far should children be running?

Children need to experience success in order to feel good about themselves, so they should be running achievable distances. Young children's bodies are designed to do short bursts of activity followed by recovery periods, so they can sprint short distances and then they need a rest. This doesn't exclude young children from completing longer distances, but they shouldn't be expected to run all the way, run and walk is best for them. As children grow, their ability to keep going for longer improves. However, distance running is not for children because of the possible long term damage it can cause.

If your child is taking part in the Tesco Great School Run, allow them to walk as well as run, and offer praise for the taking part rather than the time or position they achieve.

The English Schools Athletic Association does not allow cross country races of more than 1500m for year 5 children and 2K for year 6. The Fell Runners Association also limits the distance over which children can compete in fell races:

6 – 8 years: ½ mile

9 – 10 years: 1 mile

11 – 12 years: 2 miles

13 – 14 years: 3 miles

15 – 16 years: 4 miles

Be guided by these distances. If your child wants to run farther, question their motives and be aware of the race rules. The age limits are there for good reasons.

How often should children run?

There are no hard and fast rules about how often a child should run. Running, and sport in general, should be geared to meet the child's level of development, physically and mentally. Children mature and develop at different rates, and some may be comfortable (and happy) running two or three times a week. If your child is new to running, they should probably start with one session a week, and build up slowly from there.

Pushing a child to run too much will probably result in them losing interest quickly, and may lead to injury. On the other hand, children should participate in some form of daily physical exercise to remain fit and healthy, and some children need to be encouraged to do that. In line with national guidelines, this programme recommends 60 minutes of physical activity per day – although this doesn't all have to be in one go.

The key is to keep it varied and interesting. Avoid letting your child specialise in one sport too early. Mix running with other sports and activities like swimming, cycling and team games. Listen to your child, if they are having fun and are free from aches and pains, then you probably have the balance right.

What should they wear on their feet?

A pair of comfortable trainers will be fine for most children if they are only running now and again. Make sure they fit properly and your child can tie their laces. For a child who runs regularly, maybe at school or a local club, a pair of running shoes is recommended. Running shoes are designed to meet the demands of running, and as a result can help to reduce the risk of injury.

There is a wide variety to choose from, so make sure you buy the shoe that suits your child's feet rather than their taste in design or brand (although it is important that they like their running shoes too!). Some children have quite flat, flexible feet. This is fairly common in children and as long as their feet are not painful, it shouldn't be a problem. However, they may need a running shoe that offers more support, and you should see your local specialist running shop for advice. Use a shop where the assistants are runners and know what they're talking about rather than just a sports retail outlet.

How can I develop running skills in children who are poorly coordinated?

Some children look awkward when they run. They bump into others and struggle to stop easily. It is normal for young children to have varied running styles but by the age of 7, walking and running matures, so it should become more automatic and efficient. If there are older children in the class who are struggling with running, here are some things you can try that may help.

- Demonstrate good running style by slowing it down to a march. Show children how to swing their arms and lift their knees. March around the playground as soldiers, trying to encourage good rhythm and timing
- Try using visual cues to develop spatial awareness. Spots, hoops and cones on the ground are great for providing visual boundaries and markers to stop at, to run around and to run between. Chalk some lanes on the ground if children are running in zigzags, and encourage them to stay within the lines
- If you're playing games which include changing speed and direction, make it clear what you mean by demonstrating different speeds and how to change direction quickly. Show the children where to run and use visual cues such as traffic lights as well as a whistle or shouting. Some children find it difficult to run and concentrate on listening at the same time, so make it easier for them
- Pacing is a skill which develops with maturity, but you can help children who always go off too fast by playing games such as "Follow My Leader" or running in snakes. Try to put children who are poorly coordinated at the beginning or end of lines though as they are less likely to get tripped up there

- Playing animal games can help children understand how to change their running style, and improve their body awareness. Stomp around the playground like an elephant, and then run quietly and lightly as a cheetah
- There will be some children whose running style will never change, don't worry. The most important thing is joining in and having fun!

Are there any problems associated with running in children?

Running is generally very safe, but as with most sports there is a risk of injury. Any child can trip and graze their knee when running in the playground, or sprain an ankle running on a bumpy sports field. These types of injuries are often unavoidable. There are however, some common problems associated with running in children that it is important to be aware of.

Children are not small adults

The first thing to remember is that children are not small adults and they do not respond in the same way as adults to exercise.

- They use more energy relative to their body mass than adults, so running takes more out of them and they get tired easily.
- They are not as good at regulating their temperature as adults, so they get hotter quicker, and cool down faster.
- They are developing and growing, which puts them at greater risk of certain injuries.
- They lack experience, so they don't always realise when they are running too much and risking injury.

Heat Stress

Children have a larger surface area to body mass ratio. This means that they will absorb more heat from the environment on a hot day, and lose heat more rapidly when it's cold. Compared to adults, when children exercise they produce more heat and less sweat. Since sweating is our main cooling mechanism, children find it harder to cool down when they get hot. You can help your child to stay the right temperature by ensuring they are wearing clothes that suit the running conditions, and making sure they drink plenty of water before and after running, especially on a hot day.

Tight Muscles

When children grow, their bones grow first and then their muscles catch up. During this "catch up" time, muscles can become quite tight, and a child may temporarily lose some flexibility. For most children this goes unnoticed, but for a child who is involved in sports such as running, they are at

greater risk of muscle pulls and tears during growth spurts. Stretching before and after running can help to prevent this, and it's a good idea to make stretching a regular feature of any running programme. Make sure muscles are warmed up first as cold muscles don't respond so well to stretch. Parents should ask PE teachers for advice on stretching.

Growth Plates

These are areas of growth in children's bones, located at the ends of long bones and at points of muscle attachment to the bone. Growth plates presents a potential weak spot in the bone because they are made of cartilage and do not ossify (become bone) until certain stages in a child's life. While growth plates are "active" e.g. during a growth spurt, they are more likely to become sore and problematic, especially if a child is running a lot.

Common Overuse Injuries

Osgood-Schlatters Disease

This is a condition which affects a growth plate at the front of the shin bone, just below the knee. It is often seen in "sporty" children who are usually midway through puberty (11 – 15 year olds), as this is when the growth plate is active. It is thought that high levels of activity causes repeated trauma at the point where the muscle attaches to the bone. This results in pain and swelling in the area.

Severs Disease

This affects the growth plate at the back of the heel, and is also related to overuse. Severs disease is commonly seen in children aged 9 to 13 (but can be as late at 17), who complain of pain and tenderness at the back of the heel after sport.

For both conditions, rest will help. The muscles that attach at these growth plates can become tight, so a programme of stretching is advisable with a gradual return to activity. If you suspect either of these conditions in your child, you should consult your GP who may refer you to a physiotherapist who specialises in children.

Developmental Co-ordination Disorders

Some children look awkward when they run, their arms and legs appear to be "all over the place" and they often trip up over their own feet, or even thin air. The same children are often labelled clumsy, always bumping into things or slow to develop skills such as tying shoelaces or using a knife and fork. If this sounds like your child, it is possible that they have a developmental co-ordination disorder, commonly known as dyspraxia.

There is no reason why children with dyspraxia should not run. In fact, running for these children is often preferable to sports requiring skill and co-ordination such as football or tennis. It is possible however, that your child may benefit from specific exercises, to improve their strength and co-ordination, that will help them to run more efficiently. Not all children who are clumsy are dyspraxic,

but if you're worried see your GP. They may refer your child to a children's occupational therapist or physiotherapist who specialises in this condition.

Asthma

Asthma should not prevent your child from running (unless it is really severe). In fact, exercise is very important for children with asthma. The fitter they are, the better they will cope with an asthma attack. However, running can be a trigger for asthma that is not well controlled. This is because it is often done outside in cold air without regular breaks.

You can help your child to manage their asthma when they run by:

- Encouraging a warm up and cool down. This is important for all children, but especially so for those with asthma.
- Avoiding very cold air. Some runners find a thin scarf over their nose and mouth helps to warm and moisten the air in cold weather.
- Making sure they take their reliever inhaler with them when they go running.
- Helping them to stay generally fit and active.

If your child is having frequent symptoms or you are concerned that your child might be asthmatic, make sure you consult your GP before starting a running programme. It is important to remember, however, that most children run happily and healthily benefiting from a physically active lifestyle.

Jenny Featherstone BSc (Hons) MCSP, Paediatric Physiotherapist