

## 24 Hour Postural Management

### What is it?

Postural Management is a programme of suitable handling, treatment and positioning of children that promotes motor development and reduces the risk of children not developing symmetrically. Postural management is built into the lifestyle of the child and can be used throughout the day for all of their activities where their posture needs more support.

### What does it involve?

Programmes are specific to the child and involve the use of postural management equipment. This equipment can help with the child's position when lying, sitting, or standing to allow them to take part in their normal daily activities. Regular changes in position and comfort are an important part of a postural management programme.



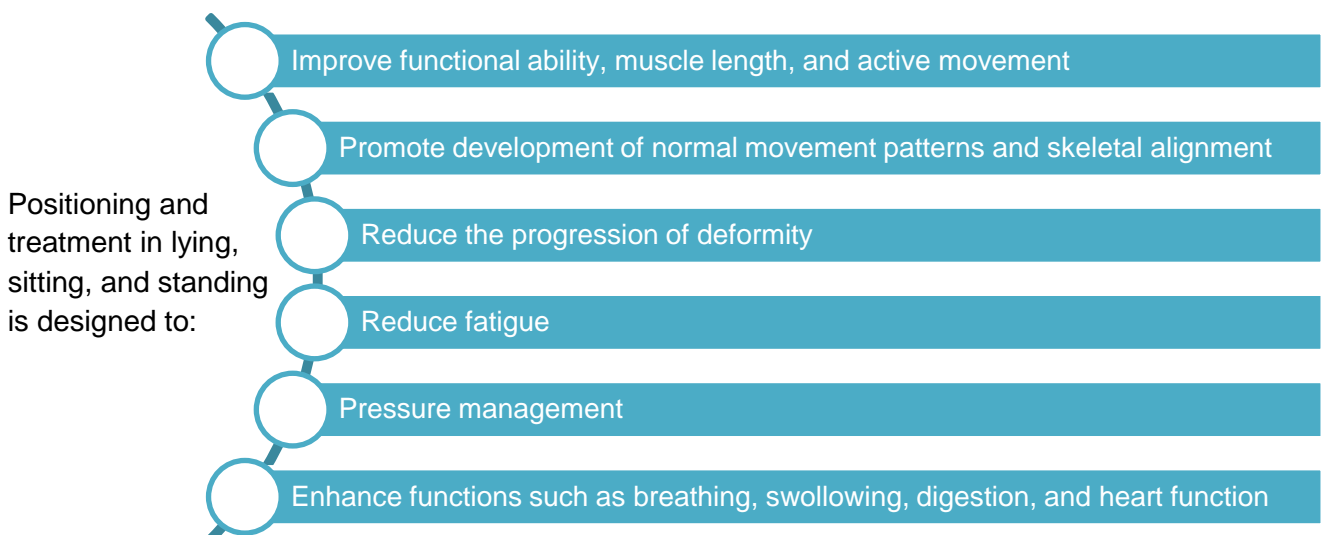
Postural management is not just about equipment. The term is used to describe everything that has an impact on a child's postural ability including:

### Why do we need Postural Management?

Children who have difficulty moving and who are unable to sit, stand or walk by themselves are at risk of developing complications of the hips and of the spine. If these are left unchecked, they can lead to pain, structural changes, breathing and digestive difficulties, and the possible need for surgery.

### What are the benefits?

Positioning equipment works together with the child's therapy programme. Postural management equipment also enables children to join in with activities, gives them a stable base of support to work from, better positions to rest in and enhances their physical abilities, and their overall quality of life.



## Standing Care



The best defence against body shape changes is movement or change of position. For some, supportive standing can have many benefits on their health and well-being. It is not always appropriate for every child/young person to be standing and there are various types of standing frames available.

### Enables eye-to-eye interaction with peers:

Eye-to-eye interaction improves confidence, self-esteem and self-image as the child/young person can complete similar tasks or activities as their friends or siblings. Supported standing reduces the fear of falling which allows the individual to direct their attention towards learning and socialising with their friends.



### Enhances circulation and blood pressure:

Effective circulation is closely related to breathing. Standing results in improvements in blood pressure, heart rate and circulation.

### Improves respiration and voice control:

When we stand, the diaphragm (our main breathing muscle) has more room to move, meaning that we can breathe in and out more deeply. Therefore, standing also allows individuals to speak with improved volume and voice control.





**Stretches muscles, preventing the onset of contractures:**

Regularly taking part in standing programmes helps improve the length of the hamstrings, increase the range of movement and reduce spasticity. Standing also increases body awareness to young developing muscles and joints, builds endurance to standing and regulates resting muscle tone.

**Increases bone density and the risk of fractures:**

Normal bone development needs a good healthy diet, weight bearing (through standing or walking), and the use of muscles. Research shows that standing improves the bone strength in the pelvis and legs of non-ambulatory children.



**Improves wellbeing, alertness, and sleep patterns:**

Studies have reported improved sleep, decreased fatigue, increased alertness and feelings of wellbeing from regular standing.

**Aids digestion, bowel function, and bladder drainage:**

Standing is believed to help with digestion and toileting through a combination of gravity and the activation of the stomach muscles. Studies have showed standing improves bowel regularity and clearance, and better bladder awareness and emptying.



**Facilitates the formation of the hip joint in early development:**

Children who stand at the normal developmental age of 12-16 months are considered more likely to develop the ball and socket joint, which can prevent hip subluxation or dislocation. Standing from an early age also helps a child/young person with standing transfers in the future.

**Improves skin health by relieving pressure encountered during sitting:**

As standing improves breathing, it allows more oxygenated blood to reach body tissues which are put under pressure when seated, resulting in fewer bedsores and improved skin health.



## Lying Care



Individuals with postural care needs can spend from 33% to 50% of their day in a lying position!

Anytime your child/young person is in a lying position day or night they should be positioned symmetrically and supported.

Even when lying on their back; your child's muscle tone, muscle strength and gravity can have an impact on their body shape, pulling them into destructive postures.

### Protects hips from dislocation:

An imbalance of muscle pull can increase the risk of the hip coming out of joint, which can cause discomfort and pain. Treatment for hip dislocation can involve surgery and a long recovery period. This can be avoided through good positioning.



### Improves skin health:

When well supported and symmetrical, weight is distributed more evenly across the body, minimising the build-up of pressure points. This protects the skin from breaking down at these areas of pressure.

### Improves wellbeing and sleeping pattern:

Improving comfort through decreasing areas of pressure on the skin and improving joint position leads to less disturbance of sleep and improved wellbeing. Individuals who sleep on their back may often be able to sleep through the night undisturbed.





**Protects joint range of movement:**

Keeping joints symmetrical and in 'midline' while lying is a natural position to rest in. This prevents joints being pulled into non-symmetrical positions for long periods of time, which can shorten or lengthen muscles and cause contractures. These contractures prevent joints from being able to move in their full range of movement and can make it harder to be positioned comfortably or move effectively.

**Increases comfort:**

When the body is lying in a symmetrical and supported position the joints are at rest. This prevents an imbalance of muscles pulling the body into non-symmetrical positions causing discomfort and pain.



**Improves respiration:**

When the chest is positioned evenly, it allows the lungs optimal room to breathe easier and deeper. If the chest is allowed to be pulled into an uneven posture the shape of the rib cage can change and alter the space that the lungs have to work in, as well as reducing the efficiency of the respiratory system.

**Protects the shape of the spine:**

Keeping the spine symmetrical and in 'midline' while lying is a natural position to rest in. This can prevent a spinal curve (scoliosis) which can impact negatively on breathing, comfort, digestion, reflux and ease of positioning and general wellbeing.



**Increases opportunities to participate socially:**

Being able to lie symmetrically protects body shape and can make it easier to be positioned in day-time equipment such as specialist seating or standing frames. This can increase participation in social activities, and the ability to travel away from home when required.



Extracts taken from:

<https://www.leckey.com/media/1437/leckey-clinical-posture-how-it-develops-and-why-standing-is-important.pdf>

## Seated Care

Children require different levels of support when seated, dependent on their individual needs. The chairs that they are provided with, are required to be as individual as the children themselves.

For example, a chair that has armrests and a footrest provides the correct amount of support for some children with additional need. However some will require a more supportive seating system such as the ones illustrated below. It is important that all children have supportive seating, as a good sitting posture is key to their engagement in upper limb, functional tasks. By reducing the amount of effort and energy wasted trying to stay sitting up straight, a child will find it easier to carry out important daily activities, such as feeding, playing and learning.



The chair needs to be correct for the child and the task. Chairs can be adjusted, raised, and lowered to enable children to access activities. If any of the listed components on the chairs below become loose, your child appears to have grown, or you have any concerns relating to the chair please consult your Occupational Therapist for support.



To find out more about postural care (whether standing, sitting, or lying) please **click on the link below** for access to some short videos by our colleagues in Torbay and South Devon.

**Click the link-** <https://www.torbayandsouthdevon.nhs.uk/services/physiotherapy/support-videos/postural-management/>



What is 24 hour postural management and why is it important?



Supportive seating as part of a child's 24 hour postural management plan



Supportive standing as part of a child's 24 hour postural management plan



Supportive lying as part of a child's 24 hour postural management plan