

### Introduction

To help you get the most out of your Daytot Neo+, we have created a handy Therapy Guide, providing education and support to parents, therapists, and care givers.

The Neo+ Therapy Guide will cover the fundamental principles of good postural positioning for infants, as well as offering advice on how to position your infant in three key therapeutic positions with suggested activity options from our highly specialised, consultant physiotherapist who specialises in neonates and development for the under two population.



# daytot neo+

# Supporting them from day one

Neo+ is a positioning support for infants aged 0-18 months who have delay in their development and require supportive positioning to strengthen their core, improve their patterns of movement or assist access to their environment.

Co-created with healthcare professionals, this mouldable support can be individually tailored for supervised lounging, playtime, and integrated into your child's therapy programme.





#### Who can use the Daytot Neo+?

The Daytot Neo+ is suitable for infants at risk of developmental delay or those displaying the following:

- Hypotonia due to muscle weakness or altered tone.
- Extensor patterning due to posturing, muscle imbalance +/or altered tone.
- ✓ Poor central control affecting development– due to surgery or long periods of time spent in supine
- Skeletal asymmetries e.g., scoliosis, torticollis head turning preferences.





## **Early Intervention**

From the minute they are born, babies learn. Their brain is growing and changing as they explore the world around them. They learn through movement and their senses; touch, watching and listening.

As your baby progresses, a core strength develops giving them the ability to maintain postures and produce controlled movement against gravity. This can be seen in the first few months as they learn to fix and follow, develop head control, and take their hands to the midline. These first milestones are the building blocks from where they learn to explore.

Your therapist will support you through assessment and management of your baby's development and will work together with you to help you understand the activities that will influence them.

Posture and movement also play an important role in development of language, social and cognitive development.

All children deserve to develop to their full potential. Early help or intervention given when a potential difficulty emerges tackles the problem head on, minimising the risk and giving the child the best possible outcome.

Early developmental support is an ethos, not a treatment, integrating handling and postural management into your baby's daily routine through interaction and play allowing your baby to acquire new skills, building on all aspects of their development. Parents and carers are therefore able to take a leading role in their baby's development.

The Neo+ works alongside more traditional methods of developmental therapy by supplementing handling and positioning with structured supportive positioning targeting strength, posture, tone and movement.



#### Principles of good postural management for babies

When a baby is born at full-term, they have developed an active curled position in utero which is called physiological flexion. This helps the baby to work against gravity for the first weeks of life whilst they develop stronger core muscles. As development progresses the baby will begin to use a combination of patterns of both flexion and extension. If this balance is harder to achieve the baby risks a delay in the development of their milestones.

In the first few months the movement will be asymmetrical as this is connected to their natural reflexes. As baby grows and develops, they become symmetrical and find midline, this milestone is the foundation for their development.

When this foundation is disrupted, it is often difficult for the baby to overcome the effects of gravity on their posture and they can find movement against gravity difficult or they move in an abnormal way. Supporting the baby centrally reduces the effort required to move their head, arms and/or legs thus allowing them to experience an easier more natural movement pattern. This movement will strengthen their muscles and may help the baby learn new movements.

See 'Therapy Terms Explained at the end of the guide

#### **Setting goals**

The Daytot Neo+ can be used to progress your babies' skills providing essential stability to allow them to access their environment.

When using the Daytot Neo+ it is important set goals for use and to seek advice from your therapist to ensure you use the positions which will benefit your baby.

It is important to remember that babies develop at different rates and for some difficulties are not easy to overcome. Goals will vary and the Neo+ may be used not only for developmental progression but for some to allow support to experience and access what may always be a challenging environment.

Understanding what you are trying to achieve is important as development of skills relies on having the building blocks in place.



#### **Key therapeutic positions (Prone, Supine and Back Lying)**

The Daytot Neo+ can be used in 3 key therapeutic positions:

## Back Lying (Supine):

#### Why is Back Lying Important?

In this position your baby will strengthen their core by working their limbs against gravity.

#### Setting up Neo+ for Back Lying

By supporting your baby behind their shoulders, around the trunk and with their pelvis tilted posteriorly you are giving them a resting position of supported flexion from which to move.

Moulding around your baby's head is not generally required as supporting their trunk tends to allow the head to move more freely.

Encourage your baby to bring their head into the middle, this is the first step towards head control and will help to develop symmetry as well as building on their attention and visual control. As they get stronger, they will start their journey of exploration as they begin to bring their hands to the middle and hands to knees/feet.

The support at their shoulders and pelvis will help them reach up and lift their legs against gravity. Introduce a toy or a baby gym to encourage them to move and reach out.

## Top Tip

Use rattles, brightly coloured toys and noises to encourage the infants vision, hearing





#### Side Lying:

# 2

#### Why is Side Lying Important?

A position for your baby to learn balance with their trunk whilst keeping their chin in a tucked position. Arms and legs may move more freely with gravity counterbalanced.

#### Setting up Neo+ for Side Lying

The Daytot Neo+ can be moulded back and front if required to stabilise your baby. This is a nice, supported position to introduce toys for your baby to explore.

Position your baby with a soft flexed posture with upper limbs forwards, hips and knees bent and chin in neutral position. For babies who tend to extend avoid moulding the Neo+ behind their head or under their feet as this encourages them to push back.

This position allows the extended, weak, or asymmetrical child with poorly controlled movement to come into midline and have additional stability to interact with their environment. Get down next to them and have a chat, read a book, or introduce a toy for them to explore with both hands.

Remember to do on alternate sides as most babies will have one they prefer.

## Top Tip

Side lying can be a difficult position for some infants, especially if they have a preference to one side. Focus on maintaining & enjoying this position – keep activities simple.



## Tummy Time (Prone):

3

#### Why is Tummy Time Important?

This is important to help your baby develop strength in their neck, shoulders, arms, and trunk and will help build the skills required for rolling, crawling, and sitting.

Early tummy time is introduced by holding your baby in a supported position up against your shoulder. From 3 months of age, with the improvement of head control, the infant's ability to lift their head whilst on their tummy improves and this becomes a more functional position.

#### Setting up Neo+ for Tummy Lying

The Daytot Neo+ provides a tilted surface to assist head lift and arm support. Moulding around the trunk supports the pelvis and allows you to take a more hands off approach freeing you up to interact with your baby from the front.

Keeping the arms forward in a propped position will help your baby learn to lift their head up to look. You may need to give them support by a hand on their pelvis initially but as they grow develop stronger you will notice the pelvis stays still and your baby will keep their hips straight.

As they progress your baby will learn to push up on straight arms and reach out for a toy.

The Neo+ can be moulded to provide different levels of tummy time support and for the baby who has a tracheostomy or ventilation it provides additional space to ensure clearance until your baby can support their head themselves.

As with the other positions encourage your baby to be interactive with toys to look at or explore. Mirrors are particularly good in the early stages.

## Top Tip

Tummy time is an important skill to develop as this helps progression with floor sitting and four point kneeling.



daytot neo+

### **Case Stories**

Our case stories provide further insight into the therapeutic outcomes that Neo+ can provide infants with developmental delay. We have worked alongside highly specialised neonatal and paediatric therapists, to provide evidence-based case stories with babies with a range of conditions.



Babies learn to develop by moving themselves or by us moving them as we change their position during the day. Jacob has been in hospital most of his life. He had to get a tracheotomy when he was 7 weeks old and required additional surgery to help him breathe. He was not able to get out to play on the floor until he was 4 months old, the lack of movement means his development is delayed.



Calvin was diagnosed with a hole in his diaphragm and required surgery to fix it. He was ventilated and was unable to move by himself for his first six weeks of life. Surgery during the neonatal period can lead to delay in development and Calvin showed general weakness following his long time lying still.



Sophie has cerebral palsy. She is a bright and interactive wee girl who loves to have fun with her family and friends.



Stuart was born 3 months prematurely. He had several medical difficulties which kept him in hospital long term. He was unable to consume food and required a tube in his neck to help him breathe.

Read more Neo+ case stories on our website:

www.daytotjourneys.com/daytot-neo

If you would like to work with Daytot to create evidence-based case stories, please email us at **hi@daytotjourneys.com** 

## Therapy Terms Explained

Full-Term:	A pregnancy is considered full term at 39 weeks
Flexion:	A bending or forward movement of the spine or limbs
Extension:	A straightening or backward movement of the spine or limbs
Core stability:	The strength of the muscles in the trunk that assist in posture, balance and movement
Gravity counter-balanced:	A movement with gravity reduced or eliminated so that it is easier to perform
Midline:	An invisible line that runs from the head to feet separating the two sides of the body. E.g. hands to midline is when you clasp your hands together in front of you.
Pelvic Tilt:	The angle of the pelvis compared to midline. A posterior tilt is when the front of the pelvis is tilted back causing the trunk and hips to flex.
Utero:	Within the womb
Asymmetrical position / movement:	Two sides or halves that are not the same
Atypical posture:	A position of the body that is different from the normal
Tracheostomy:	A tube inserted into the neck to help you breathe.





## daytot neo+

## Why is Neo+ different to other support, positioning systems?

The Neo+ supports posture whist the infant is awake and moving, actively strengthening the whole child and is different therefore from more traditional positioning which may be more passive or used when the child is asleep.

The contouring the product provides ensures it is adaptable and individualised to suit each child. The level of support that may be offered can influence the whole of the infant including the pelvic position which is key supporting the core.

## How do I know if Neo+ is suitable for my child?

The Neo+ is a positioner for infants aged 0-18 months who have delay in their development and require supportive positioning to strengthen their core, improve their patterns of movement +/or assist access to their environment.

#### My child has quite high / low tone. Can they use Neo+?

The Neo+ provides a supported flexed resting position for your child from which to move. For the child with high tone, it inhibits asymmetrical and more extended postures allowing for a better quality of limb movement. The lower toned child benefits from the central support given to reduce effort required for movement. In both cases the Neo+ promotes central core strength, symmetry, and development.

### My child doesn't like certain positions - what should I do?

It is not uncommon for infants to show preferences for certain positions but for developmental progression, unless advised otherwise, placing your child in different positions is encouraged. Due to the support provided you may find that previous challenges are easier. It may be appropriate to work in one position first to improve your child's core strength and posture progressing to a more varied selection later. Talk to your child's therapist if you have any concerns.

## Is Neo+ suitable for infants with controlled / uncontrolled seizure activity?

It is important that all infants are supervised when using this product. If a seizure occurs whilst in the Neo+ the positioner can be softened if required by opening the valve, we recommend you follow your normal seizure management protocol for your child.

#### Can I over/under vacuum the Neo+?

Yes. If you do not take sufficient air out of the product it will not retain its shape to support your child. The product should feel firm but have some bead movement when handled to ensure that it is not a rigid surface.

#### Can Neo+ be used for sleeping?

Neo+ is not recommended for sleep. Do not let the infant sleep in the product. Sleeping on their side / front can pose a suffocation risk and is thought to increase the risk of sudden infant death syndrome (SIDS). Ref NHS Guidelines, the Lullaby Trust & US Safe to Sleep® Campaign.



# daytot

## www.daytotjourneys.com







