

DEVELOPED
IN A WORKING
HOSPITAL
ENVIRONMENT

# Cocoonababy®

For a better start in life



## Cocoonababy, the secret of well-being ...

Until now, there has been no way to simulate the feeling a newborn experiences in his mother's womb. Before birth, he was tightly contained in an aquatic environment but still able to enjoy a certain freedom of movement. Curled up in the well-known foetal position he was able to touch his face or suck his thumb. At birth, however, he is thrust into a vast 'aerial' environment where he can no longer do so.

Following birth, the first few months act as a transitory period during which the baby adjusts from the aquatic to the aerial environment. As a result, the way in which he is positioned throughout this time is very important; his posture dictates the level of his well-being and how his motricity will evolve. If the newborn lies flat on his back on a very firm mattress, without the safe and secure feeling he had in the womb, he could feel lost and as if he were falling into space. This posture could also be the start of various physical ailments, for example, the immaturity of the cardia during the first year of a child's life can lead to problems of gastric reflux which can in turn create problems in the respiratory or auditory sphere.

In most of these cases, if the child's body is repositioned in the curved foetal posture, the problems disappear and medication can be avoided.

Lying on a firm mattress, in a batrachian posture with his arms folded back and upwards on either side of his body (i.e. a "3 branch candlestick" posture), baby either stares at the ceiling or turns his head inevitably to the same side – the one he adopted in his mother's womb. Ultimately this can result in a non-symmetrical lateralization, potential delay in the child's psychomotor development and an increase in the risk of plagiocephaly (a flattened head) observed amongst a growing number of young children today.

Without a doubt, any of these problems has an effect on the child's well-being – and that of his parents!



In the nest



Without the nest



### ... for a better start in life

The Cocoonababy® nest is the result of several years' attentive observation in a medical environment, in particular on the neonatal ward in the Hôpital Nord in Marseilles, France. Over a period of 10 years, the babies born prematurely were 'installed in nests made to measure', designed in a way so as to recreate the same feeling they had in their mother's womb. However, these nests made individually by staff members, were not entirely stable and were of course difficult to use. No product actually existed which was easy to use both in hospital and in the home.

By observing the needs of the babies she was treating, Danielle Salducci, a paediatric physiotherapist, started to design and make 'nests' which would enable newborns to make movements similar to those made inside their mother's womb. The design was based on her experience as a member of the team headed by Dr Christian Palix (head of the neonatal department in the Hôpital Nord). He explains that: 'the initial stage was to medically research and to determine a posture for the premature baby which could be described as a "follow-up womb". The parameters were based on the vital functions (heart, oxygenation, and respiration), the sleep patterns and the level of the influence of stress on various pathologies. The second stage was the postural research. The "follow-up womb" posture is determined by the support given, the way the baby is held tightly or "contained" and the curled up posture of the child's body.'

Danielle Salducci and the team soon realised that the benefits reaped by the premature babies would also apply to full-term babies. After several more years of research and a partnership with RED CASTLE, a company specialising in childcare products, these nests are now available on a wide scale.

In Cocoonababy®, a nest which is both firm and soft, baby always lies on his back – as recommended by the medical profession – but at the same time he feels reassured as he is held in a semi-foetal position with his shoulders and spine slightly curved. He suffers less from gastric reflux and is able to move his arms and head as he did in his mother's womb. This ease of movement reduces, amongst other things, the risk of plagiocephaly (baby getting a flattened head). As Danielle Salducci, paediatric physiotherapist notes, 'in this nest the child cannot put himself into a hyper-extended posture and will thus benefit from a better quality of neuromotric development.'



With his head tilted slightly forwards he can make easy eye contact with his mother and father as soon as they bend towards him, facilitating the relationship between child and parent. With his arms in front of him and no longer in the batrachian or "3 branch candlestick" position described earlier, his hands rapidly find his face. This in turn leads to a better ability to touch, feel and grasp. Less stressed by his new environment, calmed by the fact he can touch his face and aware of the limits of his own body, baby feels comforted and falls asleep more easily.

It is this feeling of 'well-being' which the Cocoonababy® nest reproduces today for the benefit of all newborns, be it on the neonatal or paediatric wards, at the maternity clinic or in the home.



## Cocoonababy, a nest with a double secret ...

The first "secret" is the specificity of the foams used to make the nest in order to reproduce the elasticity and softness of the expectant mother's womb. Neither too soft, too hard nor too flat, Cocoonababy® is made in such a way that its base is firm yet its surface soft. It offers the newborn the necessary transition between the comfort and freedom of aquatic life

in the womb and the constraints of aerial life.

Cocoonababy® is not made from visco-elastic foam, gel or polystyrene beads, all of which maintain babies in the position in which they are first laid down and incite problems rather than solve them. In fact, it is made from the combination of two types of foam, one reactive, the other soft and welcoming. The design of the nest allows the child to turn his head from side to side and to move his arms in front of him, thus encouraging eye-hand

coordination.

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**The second "secret"** of the Cocoonababy® nest can be found in the posture adopted by the child when placed in the nest. This posture presents several advantages for newborns.

It gives them time to adapt comfortably to their new environment and to develop their motricity, while simultaneously limiting the appearance of the principle problems which can bother babies in their first few months. By using the Cocoonababy® nest:

- Baby can touch his face and bring his hands to his mouth as he did in the womb.
- Gastric reflux, which makes baby cry, is reduced.
- The risk of plagiocephaly (flat head syndrome) is limited.
- Baby is unable to put himself in an over-extended posture, detrimental to a harmonious development of the body.
- Startle reflex (Moro reflex) is reduced.
- The quality and duration of sleep is improved, due to baby's increased feeling of safety and comfort.
- Baby can move his head and hands freely in the correct direction, improving his eye-hand coordination key to future development.
- Interaction between baby and those around him is vastly improved.



# Well-being around the clock

The result of several years of attentive observation in a medical environment, in particular on neonatal wards, Cocoonababy® was initially designed to solve the problems encountered by premature babies. As the medical teams gained experience with the product, they realised that the positive results obtained for premature babies would equally apply to full-term babies.

While respecting the medical recommendation to keep a newborn baby lying on his back with nothing close to his face, the Cocoonababy® nest solves the problems which have arisen as a result of this posture. An ergonomic nest designed to bring comfort and awareness to newborns, the Cocoonababy® is already in use on neonatal wards in hospitals and clinics across France. For example, the Sainte Monique maternity unit of the St Joseph hospital in Marseilles is entirely equipped with Cocoonababy® nests.

Thanks to its unique shape and the materials used to manufacture it, the Cocoonababy® nest is the only product for newborns which can be used around the clock. During the daytime it promotes an increased level of awareness, and at night tranquil sleep. Baby should use it in the home until the day he begins to attempt to change position in the nest - a sign that he has acquired a certain autonomy and no longer needs to be in the nest (around 3-4 months).



Position Cocoonababy® right up against the head of the bed





The wedge should be used at all times as it not only serves to reduce the size of the nest but also to keep baby's legs higher than his body.



## Cocoonababy exists in three sizes



#### Size 1

- Used only on the neonatal ward, for premature babies as soon as they no longer need the incubator.
- From about 1.2kgs.



#### Size 2

- Used in hospitals, for premature babies when they have outgrown size 1. Also used in place of the classic mattress in the baby's crib on maternity wards for full-term babies.
- Can also be used in the home, but only for the premature baby who has been allowed to go home with his parents.
- From about 2kgs and until the premature child is the equivalent of four months old corrected age i.e. calculated from the expected due-date.



#### Size 3

- Used in the home for full-term babies.
- Used by paediatricians, osteopaths, physiotherapists, health visitors ... to examine babies in health establishments and doctors' practices
- From about 2.8kgs and until the child starts trying to change position in the nest (around 3-4 months old).

**NB**: Health professionals can use this size for examining babies for as long as they wish; so long as the child remains under constant adult supervision.

Each size comes with a wedge which enables the nest to be adapted to the size of the child. This wedge, which must be placed up against baby's bottom to avoid him slipping down to the centre of the nest, is attached by Velcro bands. Fitted sheets exist for each size of nest. Please contact us to discover the colours and fabrics available for each size.

The covers used to enclose the nest are made in a special material which has been tested by the Anios Laboratory (France). This material is compatible with the disinfecting products made by this company (ex. Wip'Anios). Furthermore, all nests, covers and sheets conform to the standards of hygiene at the St Joseph Hospital in Marseilles. Since May 2008, this hospital has replaced all 108 crib mattresses with the Cocoonababy® nests and their accessories.



#### **Testimonials**

I testify that the Cocoonababy® concept for newborn babies is of considerable interest during early life:

- it brings them instant physical comfort: it allows the wrong positions adopted by the fetus in the womb to be corrected, particularly as these wrong positions tend to become worse over the first few months
- it enables them to gain an early advantage on both the psycho-affective and motor fronts as this position allows them to have a better interactive relationship with those around them thereby helping them to learn more easily
- it gives them an advantage later on because as the child lies in this correct, flexed position his sight and hearing sensory inputs and thus his proprioceptive functions are enhanced.. The Cocoonababy® nest will therefore be an excellent prevention for dyspraxia in the future (dyslexia, dyscalculia...). These problems appear when the child starts primary school and the neurosciences have now linked them to bad posture during the initial months.

Dr Philippe Mayé, Pediatrician, Osteopath, Marseilles hospitals

Thanks to the Cocoonababy® nest all newborns can benefit from the fruit of 10 years' medical and postural research. In the first few months it will help them adapt from the aquatic environment in which they evolved into the aerial life in which they must live.

> Dr Christian Palix. Head of the Neonatal Unit, Hôpital Nord, Marseilles

Besides the medical and strongly re-educational benefits from lying in the Cocoonababy® nest (helps to avoid hypertonia, misshapen heads, reflux ...) it also offers the following advantages:

- it secures the child's sacro-iliac base and makes it easier for him to lie in a regrouped position with flexed legs, similar to his position in the womb;
- the young child's body and head are postured in such a way as to encourage eye contact with those around him
- his body being in a flexed position, the movements and visualization of his upper limbs are optimized;
- the posture obtained in the Cocoonababy® nest which no other baby product or accessory can offer today limits hyper extension and so dissipates the child's fear of being "fragmented" (this feeling could be due to a difficult birth or discomfort in the womb).

Marie Schmitt,

Psychotherapist, Specialized in Newborns, Aix-en-Provence

We have equipped the whole maternity clinic. Our aim is that no baby should ever lie flat on his back but always be correctly postured. Personally I use a Cocoonababy® nest when I examine all children younger than 4 months; the parents are surprised because their children cry so much less and are much more alert.

Dr Jean-Michel Bartoli, Neonatal Paediatrician, Saint-Joseph Hospital, Marseilles



By lying a child in the Cocoonababy® nest:

- it prevents the newborn putting himself into an overextended posture which can often happen if he is lying on a hard, flat surface:
- it allows the child to make eye contact with those around him more easily:
- it enables a flexed, adducted posture which encourages and facilitates early active prehension;
- it avoids positional, postural plagiocéphalie which leads to numerous facial dysymmetries, which in turn can create problems with dental articulation later on.

Roselyne Lalauze-Pol\*, Lecturer in osteopathic perinatality, Paris

In the field of prematurity, the use of the Cocoonababy® nest brings about a quite spectacular result:

The child's comfort is immediate, the psychomotor prehension starts again, and interactive relationships are

As for the full term baby, he finds himself contained in a reassuring "envelope", lying in an adducted flexed posture which relaxes all the tensions acquired during birth and in the prenatal period. This posture favours visual contact and interactive communication with the child. The examination of a baby is completely revolutionized because he is calm, feels safe and reassured and is at the height of his interactive capacity. If used daily, the shape of the Cocoonababy® nest will refrain the child from adopting a hyper extended posture which in turn encourages misshapen heads. In fact the nest will actually help to progressively reshape the head.

> Dr Claude Swaenepoel Paediatrician, ex head of department of Paris Hospitals





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