

Regeneration for children during sleep

MiS Micro-Stimulation® System provides restorative sleep for children



Children achieve a large part of their physical and mental regeneration through sleep. Disabled children in particular often need more sleep as their bodies have a greater need for regeneration. Children with impairments of the postural and locomotor apparatus tire more quickly and therefore also need more sleep. However, there are great differences between individual children, which means there is no universal optimum amount of sleep. In the ideal case, one can clearly see when a child has had sufficient sleep: sleep requirements are satisfied and the child feels fresh

and rested – a necessary precondition for the day's activities and therapy. Therapists report considerable improvements in training and

exercise programmes when the children are properly rested.

A survey of parents affected has confirmed the hypothesis that sleep often represents a problem for sick or disabled children.. These children often need a very long time to get to sleep. Parents have to invest a great deal of time and creativity to get their children to sleep. But even once they have fallen asleep, waking up repeatedly during the night is the norm rather than the exception, interrupting both the parents' and the child's well-earned nightly rest.

The reasons for this problem are many and varied. In many cases it can be due to lack of sleep rituals or too elaborate and drawn-out rituals. Illness-related disruptions to a normal sleep physiology can also be the reason for children's sleep problems. Pain can be a further obstacle to getting to sleep and sleeping through the night. Often it is just a feeling of security that is missing. The child's perception of its body and surroundings must be as pleasant as possible. This is also a reason why facilitating perceptual development is very important for a child.

Thomashilfen, together with IGAP (German Institute for Applied Nursing Research), has taken this problem on board and is working on solutions with sleep specialists, paediatric nurses and nursing scientists.



Sufficient sleep is important to both parents and children to have a happy and successful day.

With the Adapt Sleeping Star, we have developed a child-friendly sleep system which makes caring for the child during the night much easier. It is a new kind of combination of mattress and a flexible underframe.

The large number of side springs makes it possible for the child to feel secure all round, lying cosy and supported – almost like in its parents arms.

The key to this successful development rests on the principle of MiS-Micro-Stimulation. The gently moving sprung



Especially to children it is important to feel secure and comfortable in their bed.

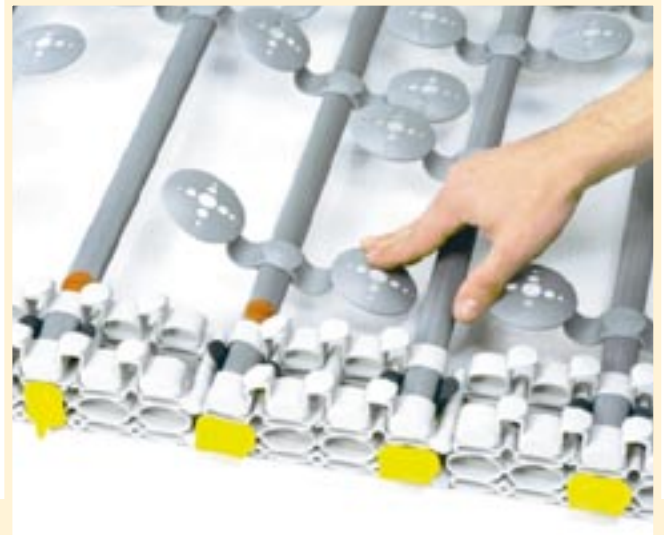
slats and side springs give the child essential feedback. Every movement during sleep leads to a minimal reaction from the system. The child feels secure, and can therefore enjoy a more relaxed and peaceful sleep.

Positive examples:

Among other examples, extensive experience using the Adapt Sleeping Star was gathered at the Paediatric hospital in Kassel, Germany. Marc, 4 years of age, with infantile cerebral palsy (hemiparesis) was waking up regularly 8 times a night before using Adapt Sleeping Star.

After just one week on the Sleeping Star, a clear improvement could be observed: Marc only woke up 3-4 times per night. The most astonishing result, however, was that after 2-3 weeks Marc slept through the whole night for 10-12 hours.

A further example arose in the case of 6 year-old Björn (ICP with pronounced spasms and a relatively limited capacity for movement). In Björn's case, it emerged after only a few nights that his spasms had decreased by over 30%, not just while sleeping but also during the day, inevitably leading to a marked improvement in his daytime training and exercise programme. Further successful cases of children being able to sleep through the night have often produced enthusiastic comments from parents: "Unbelievable, we would never have expected that: we've already tried so many different things and none of them really helped. It's a totally new feeling to be able to sleep through a whole night again."



The Sleepingstar ist based on the MiS Micro-Stimulation® System.

Further information about MiS Micro-Stimulation® is available directly from the manufacturer, Thomashilfen, Bremervörde, at the number ++49 4761 / 8860. You can also access the information on the internet at www.thomashilfen.com

