

# New research confirms:

## The Protac Ball Blanket® has a positive effect on children with ADHD



**Protac Ball Blanket®**

– the original with  
5 cm balls

**Recommended  
by professionals**

The children  
used 40% less  
time to fall  
asleep

Behavioural  
symptoms  
reduced by  
50%

**Improved  
daily level of  
functioning**

Nightly  
awakenings  
fell by 16%

Improved  
concentration  
in school

Improved  
quality of life

Children with ADHD  
can normalise their  
sleeping pattern with the  
Protac Ball Blanket®

*By Jakob Kehlet, journalist*

Around 70% of all children with ADHD suffer from sleeping disturbances. With the Protac Ball Blanket® almost half of them normalise their sleeping pattern and fall asleep more quickly and sleep with less awakenings.

The positive effect of the Protac Ball Blanket® has been scientifically proven twice by Danish child psychiatrists. The purpose of the research projects was to see if the blanket has an effect on the children's sleep. Several of the findings are positively significant, says Allan Hvolby, Child Psychiatrist and leading author of both research projects in 2010 and 2020.

The first project showed that the children with ADHD shortened the time it takes them to fall asleep by 40%. In that way, they spent the same time falling asleep as the healthy control group. The 2020-project confirms these results and also shows that the good sleep improves the daily quality of life and concentration in school.

Around 70% of all children with ADHD suffer from sleeping difficulties. With the Protac Ball Blanket® almost half of them experience a normalised sleeping pattern.

### Research Project 2020\*

- Confirms that the use of the Protac Ball Blanket® shortens the time it takes to fall asleep by 40%
- The school noticed a reduction of hyperactivity of 20% and behavioural symptoms almost halved
- The parents also noticed a reduction of hyperactivity of 20%
- The children generally improved their quality of life with 30%
- The project period lasted eight weeks


### Research Project 2010\*\*

- The use of the Protac Ball Blanket® shortens the times it takes to fall asleep by 40%
- The school noticed an improvement the children's concentration by 10%
- The evenings, where the children spent more than 30 minutes falling asleep fell from 19 to 0%
- The project period lasted four weeks

\* *"The Application of Ball Blankets in the Treatment of Sleeping Difficulties in Children with Attention Deficit/Hyperactivity Disorder. Effect on Quality of Life and Daily Functioning"* Allan Hvolby, Child Psychiatrist. The articles is published in *Journal of Sleep Medicine & Disorders* in 2020

\*\**"Use of Ball Blanket in attention-deficit/hyperactivity disorder sleeping problems"*, Niels Bilenberg, Professor in children's psychiatry and Allan Hvolby, Child Psychiatrist. The article is published in *Nordic Journal of Psychiatry* in 2011

More information on both research projects at [www.protac.dk](http://www.protac.dk). The articles can also be requested by contacting Protac.



The Protac Ball Blanket® reduces the time it takes to fall asleep and the number of awakenings

# The children's teachers notice that the children are remarkably more concentrated during school and that behavioural symptoms are halved.

## Less hyperactivity and inattention

For many children with ADHD it is difficult to concentrate in school. Former research projects have shown a clear relation between a poor sleeping pattern and learning disabilities.

This is why the to typical ADHD-symptoms, hyperactivity and inattention, have been given a special focus in this project. Both parents and children have evaluated the children by using a scientific testing model during the project.

Both projects show us a remarkable improvement when it comes to hyperactivity and inattention. In 2010 of 10% and in 2020 of 20%. This difference can be explained by the fact that the second project lasted twice as long as the first one and the effect of the good sleep has had more time to strengthen the children. Furthermore, the teachers noticed, that the behavioural symptoms almost halved.

## Improved daily functioning and quality of life

The parents also observed noticeable improvements during the projects. Besides, the good sleep, they also noticed a reduction of inattention of 20 %. It is also remarkable that the daily level of functioning improved with 30%. This is of huge importance for the quality of life for the entire family and for the development of the child.

"A good night's sleep gives the children more energy during the day", says Child Psychiatrist Allan Hvolby

## Case stories

### Mother to a 12-year-old boy with ADHD:

"Our entire family life changed. He could relax until he fell asleep and he seems much more at ease during the day".

### Father to two 9-years-old boys with ADHD:

"The more sleep during the night, the more energy during the day. The boys have more mental resources for the daily challenges now".

### Mother to a 10-year-old girl with ADHD:


"Now she lays under the blanket, when she feels a need for it. Her sleep is more calm and she feels much better during the day".

Protac Ball Blanket® promotes calmness, sense of security and good sleep



# Facts about the Protac Ball Blanket®

- The Protac Ball Blanket® is filled with 5 cm balls giving deep and dynamic pressures to stimulate the sense of touch as well as the muscle and joint position senses
- The movement and pressure from the balls have a calming effect and provides a sense of security for the children with sensory processing difficulties, e.g. ADHD
- Protac Ball Blanket® is CE-labeled in accordance with Regulation (EU) 2017/745 and 93/42/EC Class I Medical Devices and certified for STANDARD 100 by OEKO-TEX® no. 2076-310 DTI.



A good night's sleep provides better quality of life and additional resources for everyday challenges

## Research projects with Protac products

### Reducing the need for restraints in psychiatric units

Occupational therapist Charlotte Andersen proves that systematic application of sensory integration reduces the need for restraints in psychiatric units. The project showed a decrease of 38% in the need for restraints and a decrease of 46% in the need for forced medication.

### Depression and insomnia in psychiatric units

Ph.D-student and nurse Sanne Toft Kristiansen does research in the effect of the Protac Ball Blanket® for insomnia related to depression in the psychiatric units. Sanne will i.a. study if the Protac Ball Blanket® can be a non-pharmacological alternative for the patients.

### Sensory processing difficulties among young school children

Ph.D-student and occupational therapist Ann Nielsen does research in the effect of the Protac MyFit® ball vest for 6-12 year children with focus on their participation in school activities, concentration, learning ability and focus during the school day. The background of the project is Ann's Master O.T. Master's Thesis, which documented that 21% of the students in primary school have sensory issues.

### Dementia

Pilot project shows that Protacs products have a calming effect on patients with dementia. Physical and psychiatric unrest decreased by 60% and sleeping disorders and general well-being was improved.

See more research projects and cases at [protac.dk](http://protac.dk)

Besides the Protac Ball Blanket®, Protac also produces other sensory integration products for day and nighttime. All products are CE-labeled in accordance with Regulation (EU) 2017/745 and 93/42/EC Class I Medical Devices and all products contain specially designed balls. All products stimulate the sense of touch and the muscle and joint sense and have a calming effect on body and mind.