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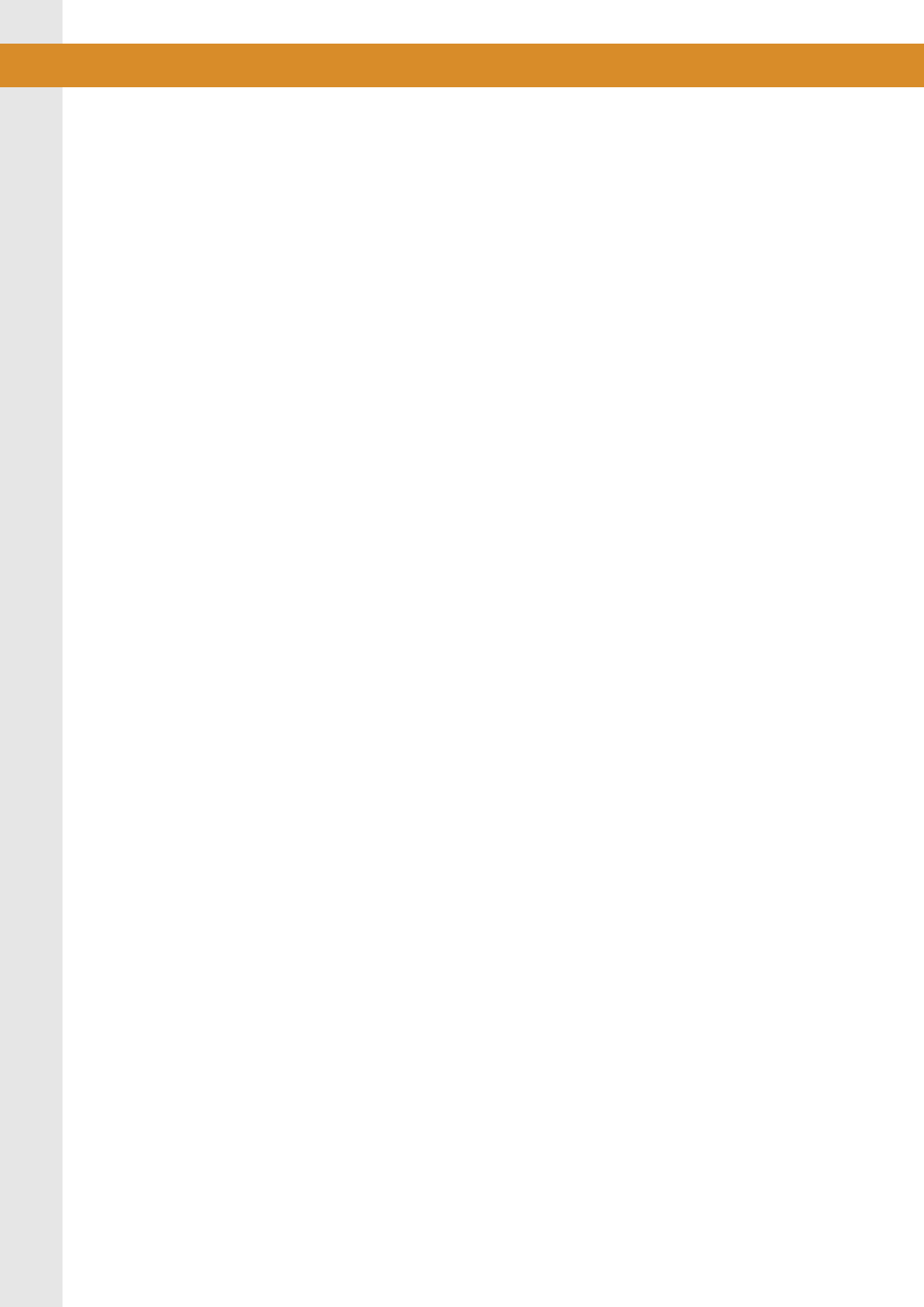
## Children Rehab Info 2

# Strollers for children with special needs

# IGAP

Institute for Innovations in Healthcare  
and Applied Nursing Science

children-rehab





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Occupational Therapist

## Dear Reader,

Very often, transporting children with physical or mental disabilities in commercial strollers is difficult.

Children either sit with unstable posture, they cannot be restrained in a safe way, or the backrest does not recline, although they still need to lie down.

In many cases, the rehab stroller is one of the first assistive devices a child receives. Many parents are not yet familiar with how to select assistive technology.

In this Children's Rehab Info 2 guide, I present an overview of rehab strollers. It is important to me that this information helps parents find the optimal rehab buggy or stroller for their child.

I hope you will enjoy reading this brochure and that you find the suggestions and information useful.

Enjoy reading it!

A handwritten signature in black ink that reads "V. Brinks". The signature is written in a cursive, flowing style.

Director Pediatrics of the IGAP Institute

## What is the actual difference between rehab strollers and normal strollers?

A rehab stroller must meet the needs and requirements of children with diverse disabilities. This makes the rehab stroller vary from a normal stroller in terms of function and partly in its visual appearance.

Normally, rehab strollers feature the following:

### 1. Adjustable in size

This means, for example, that lower leg length, seat depth, and back height can adjust to the exact size of the child.

### 2. Sitting position is adjustable

Typically, the backrest reclines, allowing the child to lie down. In most cases the seat of a rehab stroller can also be tilted-in-space. This means that not only the backrest reclines, but the whole seat can be tilted by degrees. The tilt-in-space feature provides pressure relief and assists the child to keep their hips closer to the back of the seat. Both features are important, for example, when the child is not yet able to sit upright for a longer time period, when the child takes naps, or for children with spasms who often need to lie down fully reclined.

#### **Important!**

Make sure that the rehab stroller remains stable and does not tend to tip over, even when the back is reclined. Otherwise, there is a risk for your child tipping over backwards with the stroller!

### 3. Positioning options in seat and back area

Children with special needs more often have, for example, problems with their hips, poor strength in their upper body or spastic movement patterns. The adjustments available in a rehab stroller respond to these problems, stabilize posture and improve the sitting abilities of children.

Please read our brochure “Seating systems for children with special needs” to find out more.

**New!**

Now there are rehab strollers available featuring MiS Micro-Stimulation®. They have dynamic backrests which allow for small movements of the child, but provide stability at the same time. Please contact us for more information.

**4. Different options for head control**

On the road, on rough ground, or when the child gets tired, a headrest is required for safe support of the child's head. In particular, children with poor head control need an adaptable headrest. This should be considered when choosing a rehab stroller.

**5. Removable seat**

Due to the various adjustment options, rehab strollers are often considerably heavier than commercial strollers. It is therefore important for functionality, that the seat unit be removable from the chassis.

A few models also have the advantage that the seat unit can simply be reversed. In this way, the child can sometimes sit in driving direction and at other times they can see their parents.

For flexibility you should make sure to choose a model that allows you to change the viewing direction without using any tools.

**6. Washable upholstery**

All rehab stroller upholstery must be removable and washable. In many cases, the strollers are used quite frequently and over longer time periods. It is therefore necessary that they can easily be cleaned.

## What is the difference between rehab strollers and rehab buggies?

In Germany, different terms are used for strollers or buggies, depending on the region. There is, however, an official classification in Germany that says:

**A rehab buggy** is a relatively simple stroller for children with special needs.

They are often used for children who normally sit quite well without support, but who are, for example, not yet able to walk unaided for longer distances. Rehab buggies can also be useful for children with cognitive disabilities (for example, children may require a transport device when shopping in the city due to their behavior or they fatigue very easily).

Please see an example of such a buggy in the photo on the right:



### **Important!**

If your child requires a light buggy only, they are often capable of learning how to get in and out of the buggy without assistance. This is very back-saving to parents, especially as the weight of the child increases.

In this case, you should make sure that the buggy offers the prerequisites to train the child to get in and out without assistance.

A very solid footrest or a flip-up footrest can be helpful here.



**A rehab stroller** is more complex in its construction and offers more positioning options than a rehab buggy.

As previously written, rehab strollers are suitable especially for children requiring a bit more support in sitting. A large variety of accessories are available for rehab strollers that provide stability and help to position the child. These can be soft supports like belts and harnesses, or solid supports for the head and trunk.

In the photograph, you can see a sample of a rehab stroller with dynamic backrest featuring Micro-Stimulation® for dynamic sitting.



**Tip!**

Even children who cannot walk yet, benefit from wearing shoes when sitting in a rehab stroller. Solid shoes that reach over the ankles or orthoses provide stability and help the children maintain a better position with their feet. This solid base of support is essential for children to sit properly.

Moreover, supportive shoes will keep feet warm even in cold weather!



## The chassis and the wheels

Before choosing a model, you should consider where you will use the rehab stroller most often.

As a general rule:

**The bigger the wheels, the more cross-country the stroller!**

However, another rule is:

**The bigger the wheels, the less versatile the stroller!**

Big wheels are often rigid and do not swivel. This means, in each turn the stroller must be lifted slightly, in the front. This may not be a problem with small, light weight children, since you do not need to apply that much force. But rehab strollers are often used for several years. So, bear in mind that the children typically gain weight over time.



*rigid front wheels*



*swivel wheels with swivel lock*

Strollers with swivel wheels are a lot more versatile and easier to steer in turns. On the other hand, they have the disadvantage that even slightly uneven country roads make strolling uncomfortable.

A good compromise and a true alternative are **swivel wheels with a swivel lock**. They can swivel in town or during shopping and can be locked when going “cross-country”.



## Decision guidance: rehab buggy or rehab stroller?

Ask yourself the following questions:

- 1. Actually, my child can walk, but needs a buggy for longer distances.
- 2. My child is already older than 4 years and sits quite well. At the most, he / she just needs a bit of lateral support.
- 3. Primarily, we need a buggy that can easily be put into the car.
- 4. The sitting position in the rehab buggy is less important to us, since my child sits in it a maximum of 15 to 20 minutes.
- 5. My child barely sleeps on the go.
- 6. My child is still very small (1 to 2 years old).
- 7. My child can barely sit by his/herself and requires a lot of external support.
- 8. We are often on the go for several hours, so my child needs support to sit properly.
- 9. My child has spastic movement patterns.
- 10. My child has poor head control.

If you mainly answered Yes to No. 1 to 5, you should more likely inform yourself about rehab buggies.

If you mainly answered Yes to No. 6 to 10, you should more likely inform yourself about rehab strollers.

## Notes

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