

**The Dynamic Head Suspension System** 



#### Introduction

HeadPod allows the user to maintain an upright position without restricting the movements of the head

**HEADPOD KEEPS YOUR HEAD UP** 





#### Introduction

Our head's natural position is upright.

Heádpod

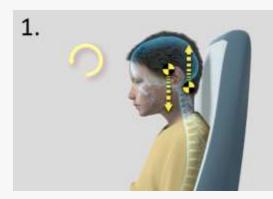
 Without head movement, we are not able to properly receive all the information from our surroundings.

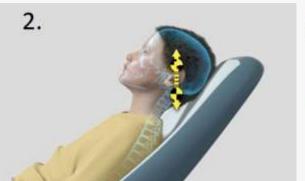
 Lack of movement leads to increased weakness of the muscles of the neck. Movement promotes strengthening of the muscles of neck.

 Any misalignment of the head will lead to future problems, thus, HeadPod is as well an investment to avoid future expenses.



**Problem:** If we maintain an upright position, the head leans forward leading to bad posture habits, and if we recline the backrest, the user will not be in a good functional and physiological posture and not exercising the muscles of the neck.







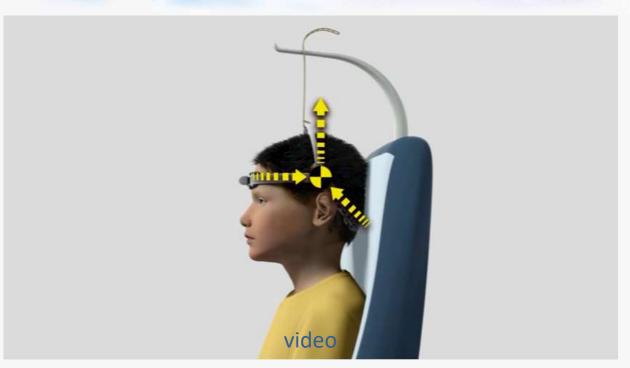
**Other Systems** 

Until now, the solution was to restrict the movements of the head













 The HeadPod maintains the weight of the head in equilibrium over the shoulders

- The HeadPod maintains the head aligned with the trunk.
- Once aligned, the user can move and rotate the head effortlessly
- Due to this little effort, the continued use promotes the strengthening of the neck muscles
- It is **not** meant to do any upward **traction** force or correct any already structured misalignment (fixed curvatures)





**Headpod** helps maintain the head in equilibrium over the shoulders

Unloading most of its weight on the cervical column







**Examples** 

(before/after)















# **Examples**

Note the difference between a restricting Headrest and **HeadPod** 





**HeadPod** is very useful for caregivers and therapists









Sidati, our first user ever to try the **HeadPod**. He was very hypotonic but within two years was able to maintain his head up







#### **Indication**

Our best indication: Kids between 2 and 14 years old

Older children and adults can also benefit from **HeadPod** as long as their head remains aligned with the trunk and there is no significant kyphosis or spinal deformities.

The **HeadPod** is not meant to correct any of these fixed problems, only helps maintain the head in alignment





#### **Benefits**

- Helps maintaining an upright, balanced position without restricting its movements. This activity helps to strengthen the neck muscles.
- Facilitates feeding at mealtime.
- Helps prevent musculoskeletal deformities, contractures and pain associated with both.
- Allows for better visual interaction with surroundings.
- Allows a more relaxed muscle tone with less dystonia, leading to a better performance in therapy sessions and school.
- Allows for **easier breathing**, thus reducing complications such as respiratory failure, pneumonia, bronchiectasis and so on.
- Improves hand to eye coordination.
- Decreases drooling.
- Improves ergonomics and prevents injury to caregiving professionals.

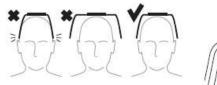


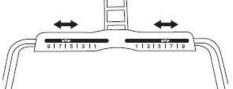


# Fitting the Headpod

#### **Step one:** Adjusting the width of the arc

Adjust both sides symmetrically until the orange parts are not touching the skin. If using the **Mini Kit**, choose the arc that fits better without touching the skin





#### **Step two:** Adjust the occipital mesh

It needs to be symmetrical and as close to the ears as possible, without running over them.

Headpod



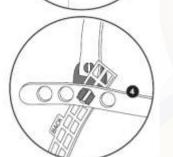


#### **Step three:** Adjusting the Frontal Strap

In the same place as the occipital strap. It does not need to be symmetrical.

PATENTED Keeps your head up



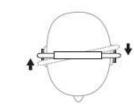


Do not fit too tight the **frontal strap**. Only enough so It will not slip off

# Fitting the Headpod

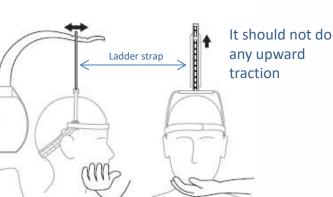
The occipital mesh should be located as low as possible touching the back of the ears

Make sure the arc is paralell to the forehead



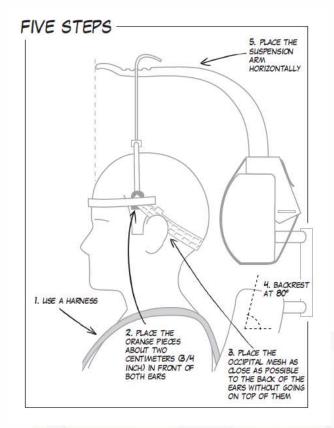
While holding the chin, insert the ladder strap in the suspension arm in the hole that will render the head

weightless





In order to make sure everything is ok, just follow this simple five steps checklist



The **HeadPod** is <u>one product</u> but there are <u>three different</u> Kits

All Three Kits contain one Headpod, three adapters and four accessories.

- **HP100 HeadPod Kit:** Contains an adjustable arc, three adapters and four accessories.
- **HP 102 HeadPod Kit Mini:** Contains two smaller non adjustable arcs and the same three adapters and four accessories.
- **HP104 HeadPod Kit Max:** Contains one HP100 Headpod Kit plus an adjustable Headrest specially designed for Headpod.





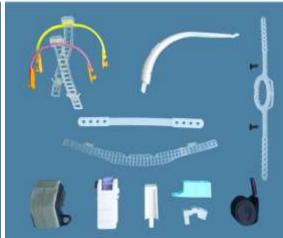


**HP100 Headpod Kit** 

**HP102 Headpod Kit Mini** 

**HP104 Headpod Kit Max** 



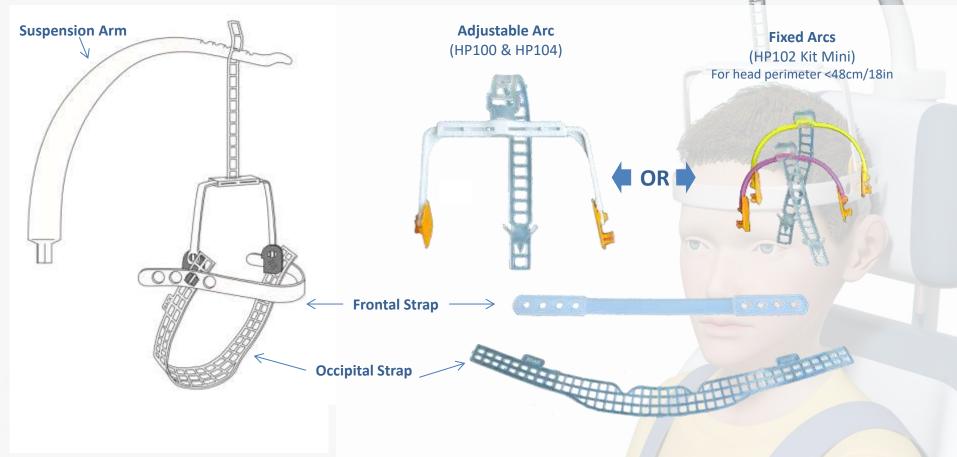








#### The **HeadPod** Harness:



The **Headpod** Adapters (Included in all the Kits):

**HP401 Adapter "A"**For Headrests



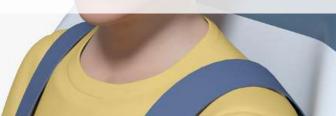
**HP402 Adapter "B"**For Rigid Backseats



HP403 Adapter "C"
For 15x15mm tubes

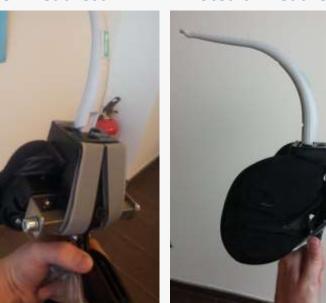






**HP401 Adapter "A"** Mounting Examples:

**R82** Headrest



Stealth Headrest



**Conventional Headrest** 







#### **HP402 Adapter "B"** Mounting Examples:

Strollers / rigid back seat chairs







Placing a wooden board behind cushion or mould



This is a very simple and cost effective solution when we can not place any of the adapters. We only need to place a wooden board tall enough so the suspension arm will be conveniently located above the back of the head.

**HP403 Adapter "C"** Mounting Examples:

Fits in any 15x15mm tube







The HeadPod Accessories: (Included in all Kits)

HP511 Extender



HP510
Angle Modifier



HP308 Chin Strap

HP307
Anti Slip Strap









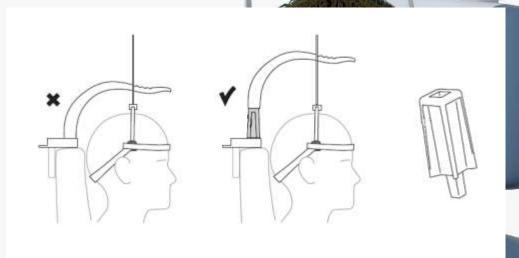
The HeadPod Accessories: (Included in all Kits)

**HP511 Extender** Helps gaining height.

If there is not enough height, it will limit the sideways movements of the head. Please allow at least



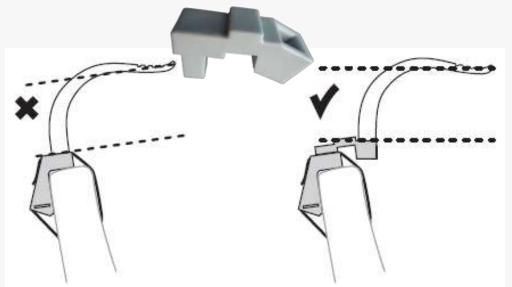






The HeadPod Accessories: (Included in all Kits)

**HP510 Angle Modifier** Helps correct the angle, can be placed in any adapter





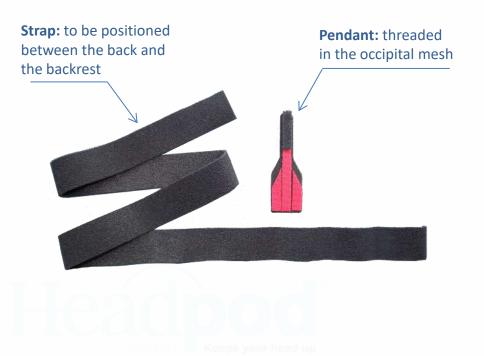


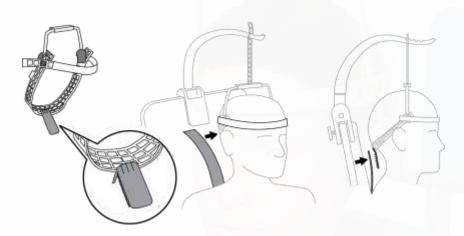
The HeadPod Accessories: (Included in all Kits)

#### **HP307** Anti Slip Strap

Helps prevent the occipital strap to slip upwards.

It will not restrict rotation.





- First, we insert the pendant with the Velcro facing backwards in the middle holes of the occipital mesh.
- Then we place the strap in the backrest which will get trapped with the users back.
- Finally we will find the point in which the strap meets with the Velcro with some tension.

The HeadPod Accessories: (Included in all Kits)

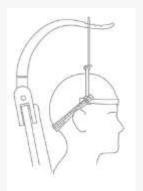
**HP308 Chin Strap:** Very useful when the frontal strap slips upwards or the patient moves too much. It will not put pressure on the chin, only a bit of tension in the chin but will prevent the orange parts slipping upwards, while improving alignment.



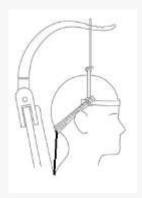


#### **Difficult Cases:**

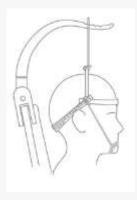
Sometimes due to a flat back head, very fine or sparse hair, the **HeadPod** may have trouble staying in place. That is why the Kits include both the Anti Slip and Chin Strap. So there are three options:



**1.- Nothing:** If the **HeadPod** stays in place, we recommend not to use anything.



**2.- Anti Slip Strap:** In case the Occipital Mesh slips upwards



**3.- Chin Strap:** In case the Frontal strap slips upwards



Not included in the Kits (Except HP406 in Kit Max)



(Included in HP104 Kit Max or sold separately)



Adjustable headrest specially designed for HeadPod. It's flat surface does not limit rotation and provides the best, firmest possible adaptation.

**HP407 Adaptor C with** mounting bracket



Mounting bracket with tube and our Adapter C with thumbscrews.

#### HP408 Mounting Bracket



For seamless adaptation in any Headrest

HP409 "U" shaped mounting bracket



Very useful if not possible to use the HP408 because of a tube or any other element







HP406 Adjustable Headrest

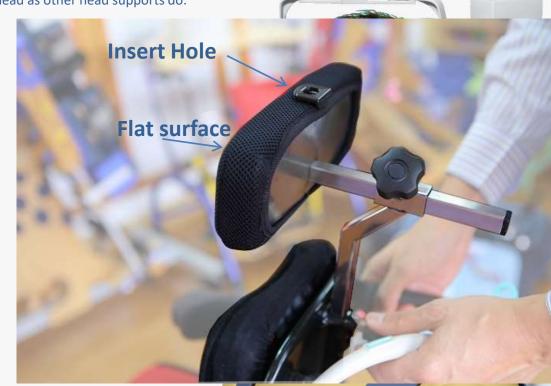
Available as an accessory or in HP104 Kit Max

With a specially designed insert hole for the **HeadPod** Suspension Arm,

• This adjustable headrest is the best possible adaptation solution as it is very firm, reliable and stable.

• It's flat surface will not limit the free movements of the head as other head supports do.







**HP407** Backrest Mounting Bracket

In case we wish to provide a more stable and definitive solution. It can be mounted on the back rest of any chair or big headrests. A small 15 cm tube is provided (longer tube available)

#### Consists of:





**HP408 Headrest Mounting Bracket** 

In case we wish to provide a more stable and definitive solution. It can be mounted on almost any headrest on the market.







**HP410 "U" Shaped Headrest Mounting Bracket** 

In the situation where it is not possible to use the HP408 due to mounting restrictions at the back of the Headrest, the "U" shape bracket is an option. It is also compatible with some R82 headrest hardware







**HP404 Conventional Wheelchair Adapter** 

It fits most conventional wheelchairs by securing a metallic profile to the push tubes of the chair, resulting in a firm adaptation.



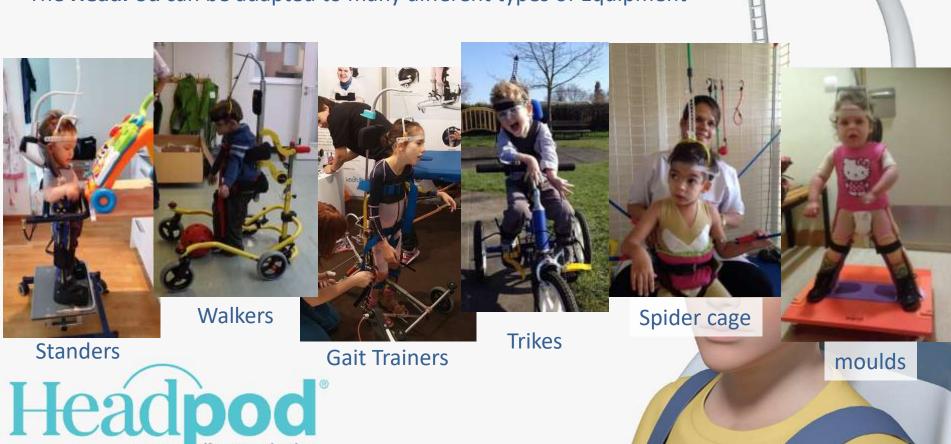




# **Adaptations**

The **HeadPod** can be adapted to many different types of Equipment

Keeps your head up



# **Adaptations**

The **HeadPod** can be adapted to many different types of Equipment And some are not very common...

**Back Pack** 







Carts



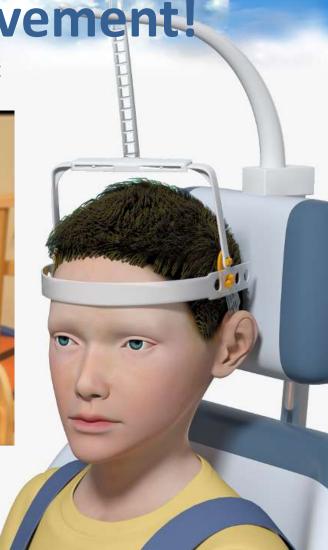
**Submarines** 

# Headpod means Movement!

And movement is improvement







## FAQ

Has the Headpod any contraindications?:

After four years in the market, we are not aware of any, but as a medical device it should be only used under direct supervision.

How long should it be used each day?:

Depends on the need of the user. Some will only need it during mealtime or computer activity. Some others will need it all day long. Use it as long as is needed or until the user shows some fatigue.

Can I use it in a reclined chair?:

Not really as it will not be of any use. The **HeadPod** balances the weight of the head over the shoulders providing support when it moves out of balance. If reclined a point of balance cannot be achieved.

What is the warranty coverage?:

The **HeadPod** is guaranteed for two years for defects in materials or manufacturing. This does not cover improper use or natural wear or tear.





#### Research

There is an increasing number of research performed on the Headpod. Up to this date we know about six studies whose abstracts can be consulted here: **Abstracts** 

- Effects of a new dynamic head suspension device in feeding people with loss of head control. Jan 2013, ASPACE, Navarra. Spain. Auth: Mónica Arroyo Noriega OT, Lourdes Lopetegui Jaunsaras MD

- Headpod: Use of an innovative dynamic suspension system in a case of spastic tetraparesia with axia hypotonia. Sep. 2013, Instituto de Neurorehabilitación Neural, Valencia – Spain, Auth: Martínez B, Téllez de Meneses Mª, Gutierrez Mª Huerta P. Cruz S. Valderrama J.

- <u>Posture and manual function with PC kids with the use of a Head Suspension device.</u> <u>Crossover trials</u>. Jun 2015, Universidad de Alcalá, Madrid-Spain, Auth: Irene Ferro Galardi

 Effectiveness of the Headpod device during feeding in kids with disfagia due to neuromotor pathology: an open clinical trial. Nov 2015, CPEE Angel Riviere, Zaragoza, Spain, Auth: Martínez B, Téllez de Meneses Mª, Gutierrez Mª Huerta P. Cruz S. Valderrama J.

- <u>Issue of maintaining the head upright in kids with polidisability with general hypotonia:</u> <u>proposition of different devices starting from a clinical case</u>. Nov 2015, Service des Pathologies Neurologiques Congenitales, INRC. France, Auth: I. Goffard, H. Lebrault

- Assessment of the use of Headpod in kids without head control. Jan 2016, Universidad de Salamanca, Spain. Auth: Eva Galarrón Pérez.



### **THANKS!**



