

Translation

## Kids Flyer

adViva® has been offering medical products, orthopedics and rehabilitation technology since 1997 and is certified according to DIN EN ISO 9001:2000 and DIN EN ISO13485. The company's founders, Gerhard Biber and Klaus Happes, together with Karin Happes, manage the company with over 115 employees. adViva® offers training in the industrial and commercial sectors and teaches around 20 apprentices every year.

Individually customized medical aids such as orthopedic shoe inserts, orthoses, prostheses, and positioning systems are just as much a focus of the healthcare company as consulting services for wheelchairs, compression therapy, and the care of women who have undergone breast surgery. Video-assisted motion analysis as well as medical and rehabilitation products are undergoing constant development.

The employees' high level of technical and medical know-how as well as regular further training characterize adViva® just as much as excellent manufacturing and product quality. In the care of patients, adViva® works together with doctors, physiotherapists, and health insurance companies in an interdisciplinary manner to achieve and further develop the individual requirements and personal goals for each individual.

In 2020, based on this idea, "adV Physio ... moving with medical aids" was founded in order to create the most effective medical aids in cooperation with the physiotherapists in charge of the patients. Furthermore, the company is committed to the code of ethics *Gehen-Verstehen*® and is a certified OT Competence House. At the beginning of 2019, the adViva® AKADEMIE was established with the aim of providing a professional platform for the company's expertise in health topics.

adViva ... we help people move

### **"Participation in daily life and increased quality of life".**

With the extensive know-how of the adViva's experts, children receive the right solution for every area and every need. We support and accompany them with individually adapted aids and are available to answer questions about child-friendly care. We support children in achieving their cognitive goals, such as improving body awareness, spatial perception, communication, attention, and social skills.

- sensorimotor insoles
- silicone hand orthoses
- orthoses
- prostheses
- orthoprostheses
- positioning systems
- standing orthoses
- corsets

- incontinence products

... and much more ...

## **Protection against malpositions & overloading**

### **Custom-made adViva® orthopedic shoe insoles**

Orthopedic shoe insoles with sensorimotor foot bedding from adViva are individually manufactured for each child and specifically activate all muscle chains. In this way, possible malpositions and overloads can be corrected or even completely prevented.

Orthopedic shoe insoles

- muscle stimulating and enhancing coordination
- reduction of late damage
- promoting new impulses for the movement pattern.

## **Individually manufactured adViva® orthoses support the process of learning**

When standing and walking do not come naturally, orthoses can help. Depending on the child's physical condition, we manufacture orthoses that make difficult movements easier. In our range of products, you will find ankle-foot orthoses, lower leg and thigh orthoses, and even pelvis-spanning orthoses. If your child has narrow feet, then so-called "DAFOs" can be worn in ready-made shoes. Please make sure that they have a firm toe cap and a suitable profile of the sole. However, DAFOs take up additional space in the shoe, so ready-made shoes may be too narrow. In this case, we recommend orthotic shoes for a good grip in the shoe.

### **Ankle-foot orthoses**

... for the correction of foot malpositions in the hindfoot and forefoot

## **The adViva® movement analysis determines which orthosis provides the best support: a classic lower leg orthosis or the adV PowerSpring®.**

### **1 Joint goal definition with the patient and movement analysis according to Gehen-Verstehen®.**

The holistic adViva care concept starts with a gait consultation. Here, the patient's current status of movement sequences is recorded and visualized, and the goal-setting approach is discussed.

This concept is used for all adViva orthoses and is always adapted to the needs of the respective child.

### **2 Development of a goal-oriented aid concept**

The adV PowerSpring promotes muscle activity. Thus, the orthosis also becomes a training device and the subsequent movement training supports the effect of the orthosis.

### **How does the adV PowerSpring® work??**

- Energy storage and a stretch-rebound effect enable the releasing phase of the forefoot; the energy from the spring is discharged and the tendons and fasciae have more energy for the swing phase to allow the leg to swing through. For a clean heel strike, a good swing phase is needed.

- The design of the orthosis supports knee and hip extension.

**adV PowerStrap... another invention from adViva®.**

It works similarly to a symphysis belt, stabilizing the hip and leg axis while walking.

**Pants supporting external rotation... and another invention from adViva®:**

- Purposefully placed dynamic bands support the work of the hip external rotators. Improved stimulation of the muscle inhibits the external rotators and abductors on the thigh and strengthens the external rotators and abductors on the hip.

### **3 Implementation in the patient's training by adV Physio**

After analyzing the movement patterns and fitting with an orthosis, adViva develops a personal training program for you to learn how to use or handle the orthosis.

- Instructions for a new, improved gait pattern of the patients to prevent contractures.
- Recommended exercises for training at home.

### **4 Contact with supervising physiotherapist**

Findings from the care concept are forwarded to supervising therapists on site.

### **Participate in social life while standing**

**Thigh orthoses are available in a variety of designs depending on individual needs**

To ensure that the orthoses are lightweight and cosmetically appealing, they are made of state-of-the-art materials.

### **Customized RGO - Reciprocal Walking Orthosis**

... Orthosis for high degree of paralysis (Th5 - L2) Functional electrical stimulation L300 Go

The RGO orthosis is equipped with a reciprocally guided hip joint system that allows isocentric movements of the hip joint. It can be used for lesions between L2 and Th5. Reciprocal walking orthoses are supportive in helping spina bifida children learn to walk. They stabilize the joints of the lower extremities across the hips and thus enable the paraplegic to straighten up. By connecting the hip joints, walking with alternating (reciprocal) flexion and extension of the hips becomes possible.

### **Reliable lifting of the foot and increased knee stability**

**Functional electrostimulation L300 Go**

The L300 Go supports your child's movement ... and without an orthosis: The movement sensor in the cuff on the knee allows the same functions to be performed as those with an orthosis; with foolproof control of the (grow-with-you) system.

### **Supports the grip function**

#### **Hand orthoses made of silicone ... Tweezer grip by holding the thumb in a correct position**

- high wearing comfort due to fine, soft silicone material
- elastic reinforcements for adjustment
- prevention of pressure on the edges due to thin, tapered margins
- breathable material
- sterilization by boiling
- child-friendly design (e. g. with glitter effect)

### **Correction of the spine during growth**

#### **Scoliosis corrective orthoses ... growth-guiding treatment for idiopathic scoliosis**

- correction by "growing into" the free spaces and breath control
- state-of-the-art digital body shape registration
- CAD-supported design
- interdisciplinary approach with therapists: " hand in hand therapy ".
- overnight corsets for an early low-impact therapy

#### **Neuromuscular trunk orthoses ... for paralytic scolioses and postural kyphoses**

- digital 2-phase scanning technique leads to stress reduction for the child
- CAD-supported design
- test orthosis for clarification of optimal posture
- dynamic concepts preserving residual muscular function
- soft orthoses for gentle stimulation and controlled support

### **Walking independently and autonomously**

We only use state-of-the-art components and materials for the production of our prostheses. The prostheses are made at adViva® according to your wishes, made to measure and according to your ideas of design. We distinguish between forefoot, lower leg and thigh prostheses depending on the level of amputation. Our prostheses are so carefully matched to the respective child that he or she can enjoy the greatest possible quality of life while wearing them.

### **Children's sports prosthesis**

... for active participation in school sports

- with sports knee joint and carbon spring feet
- supports the child's development and joy of movement in a social environment
- suitable for high loads, being sturdy, but light and compact at the same time
- optimal swing phase matched to walking

### **Forefoot orthoprosthesis up to knee**

Also available as adV PowerSpring® so that kids enjoy and have support while moving around

- for treatment of dysmelia or forefoot amputation
- dynamic adjustment possible due to carbon construction at adViva
- can be used for bathing
- length adjustment possible, if necessary

### **Orthoprosthesis for children**

A symbiosis of orthosis and prosthesis that not only compensates for the difference in length of the affected leg, but also provides corrective support for the extremity. At adViva, we design orthoprostheses with our specific know-how and experience to achieve the best possible functional as well as cosmetic results.

### **Early mobility support**

Mobility has many facets and means something different for everyone: physical mobility, social independence, and flexibility. adViva offers your child a wide range of aids that are individually adapted. They are practical and functional and harmonize with your child's personal wishes and lifestyle.

### **Walking aids for children and adolescents**

For maximum independence due to coordinated proportions

- improvement of weight transfer to the legs
- prevention of secondary damage (inactivity osteoporosis, joint deformities, soft tissue contractures)
- extension of the range of motion
- creating an opportunity for independent movement

### **Wheelchair for active children**

Well adjustable, partially "growing with the child", with and without electric drive

- enabling a stable, safe, and physiological sitting position
- strengthening of arm and shoulder girdle muscles through independent movement
- safe transportation outside the house (e.g. visits to the doctor/clinic)
- extension of the life radius of parents and child through joint activities

### **Therapy tricycle for children**

Combines a variety of therapeutic and medical goals

- relief for the nursing person
- avoidance of damage to bodily functions and structures due to overload
- participation in family life or in activities in the facility
- safe, preferably unrestricted movement/transportation
- improvement of independent locomotion

### **We make children strong ...**

#### **Children are especially close to our hearts**

We often support them for years and observe their individual development. The growth of the little ones means that the concept of aids has to be checked again and again and individually adapted to the respective development. At adViva, you have the advantage of receiving competence in both orthotics and rehabilitation technology from a single source.

#### **As many aids as necessary, but as few as possible**

True to this motto, we manufacture our products with special attention to child-friendly design. Whether aids for spina bifida, ICP, AMC, dysmelia or Down syndrome... in order to encourage your child to use the aids and thus support his or her development, he or she is free to choose the colors and pattern of the aids.

#### **adViva is rehaKIND partner**

A lot of commitment, making good care - oriented to individual needs - affordable, using existing budgets reasonably for the benefit of children and adolescents: These are the driving forces behind rehaKIND. In this context, adViva advises parents and schools on the cross-generational task of "inclusion". Children and adolescents are also entitled to the provision of assistive devices at regular schools or institutions. We are happy to meet this demand.

## **Stabilization while sitting and lying down**

The adViva seating and positioning systems stabilize body posture and thus enable stable, physiological sitting or lying. This is the prerequisite for a better spatial visualization, supports participation in family life and activities within the family, school or institution. It also ensures safe transportation inside and outside the house with an individual seat shell. Bladder and bowel emptying are made easier and secondary damage can be largely avoided or stopped, and pain reduced.

### **dViva® seat shells**

For individual stabilization of posture with breathable and waterproof fabrics.

- to improve / facilitate food intake
- to improve the active use of arms and hands

### **Bath / toilet aids**

Aids for bathing in the tub or shower, provide adequate body and skin care.

- create a safe sitting / lying position when going to the toilet or during personal hygiene
- facilitate the performance of personal hygiene for the nursing person

### **adViva® positioning systems**

For abdominal, supine or lateral positioning according to vacuum impression

- improving breathing
- prolonging rest periods

### **Continence care**

- products suitable for children and adolescents for bladder and bowel incontinence
- easy handling - thanks to individual solutions

## **adPhysio**

moving with medical aids

adViva® is committed to the Code of Ethics Walking Understanding® Certified OT Competence House

The effectiveness of assistive devices is always particularly high when they are professionally adapted, used and worn. Each patient has individual requirements and personal goals and needs a treatment and therapy tailored to him/her and his/her needs.

Through the close cooperation of adViva with the patient, the relatives, the treating physician and physiotherapist, the achieved goals are consolidated in the long term and a positive further development is ensured.

Joint goal definition with the patient

Movement analysis according to Gehen-Verstehen®

Development of a goal-oriented assistive device concept

Contact with supervising physiotherapists

Implementation in user training