## MOTOmed® Movement Therapy





Passive Movement for More Mobility convenient | independent | safe



#### MOTOmed Movement Therapy »Forced Exercise« – The New Therapy Method Against



# Interesting Signs of Hope for Many Persons Dealing with-

Parkinson's A random USA study with a Tandem bicycle has lead to the discovery of the indication that high-speed movement (up to 90 rpm) can cause a significant reduction of Parkinson's-typical symptoms. Scientists have tracked this back to the fast pedal revolution. Consequently, they developed a therapy method called »Forced Exercise«.

During a Scientific Research in 2007, a group of Parkinson's patients was treated at the Cleveland Clinic (USA). One half of the group was pedaling at 90 rpm on a stationary Tandem bicycle, with the assistance of a trainer who was sitting in the front seat. The scientist refer to this as »Forced Exercise«. The other half of the participants was training on their own, at a freely chosen speed level. At the completion of the »Forced Exercise« training, improvement was noted in the participants' brain function, which is generally seen after the intake of Parkinson's medication. These improvements were not found in the participants who were training at a freely chosen speed.<sup>1)</sup>

Up to a 35% Tremor Reduction Further studies distinctly confirm the improvement of motor function in patients engaging in leg training at a speed that is higher than individually possible. Suggested optimal speed levels lie between 80 and 90 pedal revolutions per minute. The study participants showed a 35% improvement in reduction of tremor which continued well after the day of training.<sup>1)</sup>

The positive results of this study gave ground to the RECK Company initiative for the development of the MOTOmed viva2\_Parkinson. RECK Co. applied special components by which the 90 rpm speed level is achieved. >> Regular passive movement with the MOTOmed viva2\_Parkinson can lead to obvious improvements of Parkinson's-typical symptoms.

»After taking a one year break, I am able to write on the blackboard again, at an almost normal pace. My letters are big and legible again. I can apply mascara and hold a cup of coffee relatively well with my right hand. Briefly: I am overjoyed with this progress!«

Parkinson's-diagnosed teacher. She has been using the MOTOmed therapy device regularly for approx. one year.



<sup>&</sup>lt;sup>1)</sup> Quoted testimonial. Complete literature available from your local MOTOmed representative.



#### The Problem »To Feel Enchained «...

...when every movement feels like swimming against a current. Many persons with Parkinson's disease suffer from rigor, tremors and imbalance (postural instability). The main cause is an insufficiency of the neurotransmitter dopamine in the brain. Regular movement therapy, in combination with medication, is the keystone of today's treatment of Parkinson's disease, leading to a significant alleviation of its symptoms.<sup>1)</sup>



#### The Chance The New »Forced Exercise« Movement

- Support and improve walking ability With the help of regular MOTOmed training you can achieve the basic fitness necessary for a safe and stable gait. Strengthen your muscles, improve your coordination and increase your individual step length.
  - As an addition to that, you can better your body awareness.
- Relax your muscles Muscle stiffness (rigor) causes immobility and pain. Physical activity can help relieve these symptoms. It can also help to naturally increase your metabolism and contribute to a more mobile and active lifestyle.<sup>1)</sup>
- Improve physical performance The MOTOmed Movement Therapy supports your mobility and blood circulation. It can also help increase your metabolism naturally. Your cardiovascular and respiratory system is improved.<sup>1)</sup>
- Improve your overall well-being Physical activity leads to an increase in dumping of neurotransmitters (e.g. endorphin, dopamine and serotonin)<sup>1)</sup> which has a positive effect on motivation, mobility and the overall well-being.





#### The solution MOTOmed® Movement Therapy

You will discover new perspectives with the MOTOmed viva2\_Parkinson. Enjoy a healthy movement, similar to a bicycle ride, conveniently from a chair or a wheelchair, from the comforts of your home, in a familiar environment and according to your time schedule. Get engaged in an undisturbed and unforced training. Train independently and safely, free from weather and seasonal change. Passive, motor-assisted, or active resistive by using your own muscles, targeting your legs, arms and upper body. The consistency in movement and speed (1 to 90 rpm), can have a positive effect on the symptoms associated with Parkinson's disease. >> Create movement for your advantage: Start the MOTOmed Movement Therapy today and start feeling well sooner!









Stirring



Computer Work

Cooking Handcraft Comfortable Reading



## Achieved Effects are Similar to Medication Treatment

Different areas of the brain are activated during and after the MOTOmed training, which are similarly stimulated when undergoing Parkinson's medication treatment.<sup>1)</sup> This explains why the effect of fast leg movement is not only local, but – as seen in medication – widespread throughout the body.



Brain activity with medication intake



Brain activity is the same with physical training

#### Create Movement for Your Advantage

Improve your mobility in a natural way. Many persons with Parkinson's disease are impaired in their daily activities (e.g. brushing the teeth, cutting or writing), due to frequent occurrences of tremors. Shortly after

training at the high-speed movement with the MOTOmed viva2\_Parkinson significant improvements can be seen, particularly in fine motor skills.



#### »I am able to write normally again.

The left-side tremor has decreased significantly. I am able to brush my teeth, without problems and my fine motor skills have improved considerably.« Christiane Heyng, undergoing Parkinson's treatment



#### »My gait has become more fluid.

Riding a bike is possible again since my balance and coordination have improved. It makes me especially happy that the common tremors have lessened and I can cope easier with activities like stirring, cutting and writing.« Rita Wolf, Parkinson's patient

»Since I've been using the MOTOmed, the edema has gone down well. There is almost no need for the continuation of prescribed edema medication. I can see some major progress with stamina and walking in an upright position.« Swantje Funk, Parkinson's patient

»After a short time I felt overall better. The tremors lessened and I was able to reduce my medication intake from three times per day to twice a day ( $\frac{1}{2}$  of 125mg dopamine and 1 piribedil).« Gerhild Grolitsch, Parkinson's patient

»Even after the initial 35 minutes of training with this Parkinson's program I found that I was more flexible. The medication had a longer and stronger effect. Generally, my mood and my overall wellness were heightened. « Hans G. Mayer, undergoing Parkinson's treatment









Taking Walks



Applying Make-up

Brushing the Teeth Cutting

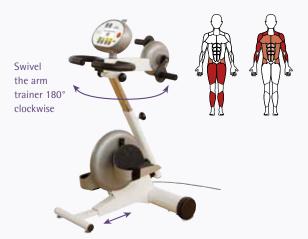
#### MOTOmed viva2\_Parkinson Model Options and Training Feedback



A Fully-Integrated Training Upgrade your leg trainer with the MOTOmed arm/upper body trainer. This addition will prove to be of benefit in targeting and strengthening your arms/upper extremities, your shoulder muscles and the spinal cord supporting muscles. You can swivel the arm/upper body trainer 180 degrees, clockwise, in the operator's direction, from a sitting position and without additional assistance requirements. >> It is this easy to achieve an overall well-being.



MOTOmed viva2 leg trainer promote leg muscle strength and endurance



MOTOmed viva2\_Parkinson leg and arm/upper body trainer alternate between training your legs or upper body muscles

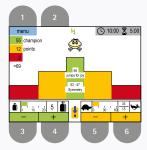
Interactive Training Feedback (Biofeedback) Different biofeedback prompts provide a continuous return of information based on your performance so you can control and correct your movement accordingly and at any given time. >> Simply more training success with a targeted training.



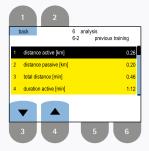
»training overview« most important data at one glance



»SymmetryTraining« leg training



»MOTOmax MotivationProgram«



»training analysis« displays up to 30 training values







»My MOTOmed is easily operable at home. When the weather is nice, I put it on the porch and let the device move my legs while I enjoy the warm sun. When I am indoors, I like to train »passively« while I am watching TV«.

### MOTOmed® viva2\_Parkinson Accomplished Daily Well-Being



#### **Experience and Expertise**

Since 1972, the RECK Co. has been engaged in worldwide developments in the field of movement therapy, in close collaboration with physicians, therapists and patients. The motor-driven and software-controlled MOTOmed has successfully been utilized since 1981 and is now used in over 70 countries.

What started as a family business over 50 years ago, resulted in the invention of the groundbreaking passive, motor-assisted and active resistive movement therapy.

Inventions, high quality, reliability and safety – typical »Made in Germany« – characteristics are what the MOTOmed stands for and what makes it the world market leader and innovation specialist.

#### Get Informed!

Ask us about our special brochures, studies and comprehensive literature, or the new MOTOmed DVD package (6 MOTOmed video films).

Request more information at: www.parkinson.motomed.com, via email: info@motomed.com or by simply calling us.

Your MOTOmed Contact:

### **RECK** MOTOmed<sup>®</sup>

Movement Therapy for a Better Quality of Life

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