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Dear Mr. Wilhelm,

Thank you kindly for allowing me to borrow your "Sit" vibration plate. I have now had the opportunity to test the device extensively. I am happy to provide below a summary of my impressions, and give my personal opinion on possible applications for the device.

The results of our own studies, during which we used the "Sit" vibration device, together with a range of results from other studies on the topic of whole-body vibration training, jointly show that vibration is an extremely effective method of training whose application may be unreservedly recommended for purposes of rehabilitation and training. In the example of "Sit", I was admittedly initially very sceptical of the claim that training might be performed solely in the sitting position. After extensive testing, I must say that I am extremely surprised in a positive way, and I can imagine a wide range of applications for the device. These applications are not restricted to people who are only capable of working with partial loads; in my opinion, the plate may also find meaning applications for candidates who are perfectly "fit".

I can suggest the following potential applications for the plate:

- In the early stages after injuries or operations, the joints of the lower extremities can be mobilized, increasing metabolism in the joints
- If appropriate frequencies are chosen, muscles may be activated using the vibration reflex to increase their tone
- Through activation of the muscle pump, venous return and lymphatic drainage may be enhanced
- Furthermore, one can expect an increase in blood flow, which will act usefully not only during healing processes in cases of pathology, but also positively in sportive applications with a decongesting effect
- Decongestion and improved blood circulation generally produce a positive effect on pain levels by flushing tissue hormones ("pain producing factors")
- Studies have shown that vibration training is very effective in combating pain. Presumably, the strong sensory input is relevant here in line with the principles of "gate control theory", acting to "override" the perception of pain.
- With the "Kutscher sitting position", it is possible to achieve good mobilisation of the spine and increased metabolism in this area

Accordingly, I can think of the following areas of application and target groups:

- Arthritis (increase of metabolism in the joints, reduction of pain)



- Post-traumatic and post-operative states (increased blood flow, stimulation of healing processes, mobilisation of the joints, muscle activation, oedema resorption)
- Oedemas, venous injuries (stimulation of lymphatic drainage)
- Back pain (mobilisation, increase of metabolism, release of tension)
- Pain (decongestion and stimulation of blood circulation, flushing of tissue hormones)
- Increasing productivity in performance-weak areas (activation, muscle toning)
- General usage (muscle relaxation, stimulation of blood circulation, relaxation)

I am looking forward to reports on therapists' initial findings, and on the results of the first studies to quantify these effects. Overall, I am convinced that the device has much potential, especially since it can be applied essentially "on-the-side" without much effort or fatigue, which will ensure good levels of compliance.

Best regards,

Dr. Simon von Stengel