



# Slackfit®



## CASE STUDIES BASED ON SLACKLINING

Case Study:	Author: / Article:	Organisation	Results:
Slackline implementation as leg axis training or just trendsport?	Bianca Brantner Diploma	European Academy for Health Professionals	Proofs: > Therapy with Slackline improves leg axis > Slackline can be used for full body training > Slacklining improves general balance > Slacklining improves general coordination > Core muscle groups around the joints improved Partial proof: > pain relief through correction of leg axis
Slacklining for Lower Extremity Rehabilitation and Injury Prevention	Charles P. Gabel, PhD, PT - International Journal of athletic therapy and training	University of the Sunshine Coast, Coolool Beach, Australia	Contributors to injury risk include impaired postural control, poor neuromuscular coordination, and muscle weakness. An activity that simultaneously addresses all 3 of these injury risk factors through a self-directed training process should be incorporated into lower extremity injury rehabilitation, as well as training.
Effects on Slacklining for balance of best agers	G. Seeber - C. Zalpour Case Study	University of Osnabrück	Slacklining provides an effective means and therapy and training to improve balance and coordination skills of older people in just a short time.
Improved postural control after slackline training is accompanied by reduced H-reflexes	M. Keller, J. Pfusterschmied - Scandinavian journal of medicine & science in sports	Christian Doppler Laboratory Biomechanics in Skiing, Salzburg, Austria	Slackline training alters postural control and Ia-afferent transmission (H-reflexes) similar to a classical balance training. Classified as a funsport activity, more joyful and even more demanding in some aspects as a classical balance training. Thus, many athletes are highly motivated in trying to improve their balance performance on the slackline without knowing anything about the potential positive side effects described above.
Effects of 4-week training on lower limb joint motion and muscle activation	Pfusterschmied - Scandinavian journal of medicine & science in sports	Christian Doppler Laboratory Biomechanics in Skiing, Salzburg, Austria	Training on slacklines increases postural stability following a simulated slip. Training on slacklines enhances preparatory rectus femoris muscle activity during a simulated slip. Specific exercises on slacklines appear to increase functional joint stability and could be a well-suited alternative method used in training and therapy in young people.
Balance training induces highly task-specific neural plasticity	Giboin Louis-Solal <sup>1</sup> , Kramer Andreas <sup>1</sup> , Thomas Hassa <sup>2</sup> , Ariel Schönfeld <sup>3</sup> , Christian Dettmers <sup>2</sup> , Gruber Markus <sup>1</sup>	1. Sensory Performance Laboratory, Universität Konstanz 2. Department of Neurorehabilitation, Kliniken Schmieder, Allensbach 3. Leibniz-Institut für Neurobiologie, Magdeburg	Study still in process... First indications show significant neuronal modulation occurred, after the training, only in the trained group, and only when walking on the slack line. It is assumed that the training induces plasticity (modulation of the H-reflex) only used when the same trained task is done. Trained subjects increased their performances only on the slack line and not on another balance task (here a tilt board).