

PRESS RELEASE

LumboTrain lumbar support

Published patient study repeatedly refutes suspected atrophy

The patient study conducted by Prof. Dr. Christoph Anders that has now been published in the open access journal *PLoS One* found no evidence of muscle atrophy when wearing the LumboTrain lumbar support. In some cases, it was, however, even able to measure an increase in muscle activity and a faster reduction of pain symptoms.

The results of the randomized, controlled study are summarized in the scientific article *Influence of elastic lumbar support belts on trunk muscle function in patients with non-specific acute lumbar back pain on* journals.plos.org (10.1371/journal.pone.0211042). Over a period of around three weeks, 36 test subjects suffering from acute, non-specific lumbar back pain took part and performed tests while walking on a treadmill as well as under static strain in the whole body tipping unit Centaur. The electromyographically measured activity of the back muscles in the group wearing the support was on the same level or even above that of the control group at all assessment visits.

Furthermore, patients fitted with LumboTrain also reported increased pain relief and fewer functional impairments than those not wearing the support. “The support can be understood as providing passive stabilization and a simultaneous stimulating effect on the back muscles. This combination of effects promotes and thereby shortens the natural healing process,” explains Study Director Prof. Anders, specialist in pathophysiology at the University Hospital Jena, when discussing the therapy accelerating effect.

His preceding study on healthy subjects that came to the same conclusion regarding muscle activity has now been published in the open-access journal *Biomechanics Open Library* under the title *Effects of an abdominal belt on trunk muscle activity during treadmill walking* (doi.org/10.1080/00140139008927106). The Bauerfeind Academy is providing a summary of selected findings for each of the two LumboTrain studies.

Place, date

Captions:

LumboTrain: The LumboTrain uses circular compression to straighten the lumbar spine and massages the tissue with its nubbed back pad during movement.

LumboTrain_Study: Electromyograms showed increased muscle activity when wearing the LumboTrain lumbar support. (Image: Bauerfeind life/Frank Steinhorst)