

*“The theoretical principles of Extracellular matrix (ECM) led us to **Extrazell® battery supported Bio Mechanical Stimulation handheld device (BMS)**. After initially rather cautious use, the BMS treatment now belongs to our daily preventive and rehabilitation program for our professional athletes, but also with corresponding indication to our entire patient cohorts.”*

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The cells of our body are embedded structurally and functionally in the complex extracellular matrix (ECM) or also called interstitium. This extracellular space serves the supply of nutrients and the removal of metabolic end products. Hormonal control, vegetative regulation and immunological defence also take place across this space. The metabolic processes in the ECM are regulated not only by mere diffusion, but also by the microcirculation, which strongly depends on an intact skeletal musculature in this space.

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The changes to tissue metabolism are much more often the cause of pains and reactive inflammations than structural damage to tendons or joints. Excess strain, monotonous activities and stress factors all lead to tense muscles, which are disrupted in the microcirculation. Local deposits in the cell environment are the result with an insufficient supply of nutrients and oxygen to the cells, which triggers the conditions.

Bio mechanical stimulation works on these process disruptions in the tissue. It gets microcirculation back up and running and normalises the metabolism of the cells. This ensures that the affected muscles, tendons, joint capsules etc. are protected against hyperacidity and inflammatory factors and that the environment is normalised again. Freedom from pain, well-being and superior performance.

Dr. med. Thomas Frölich