Article / Golf-Journal

Rejuvenation - all show and no substance

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While most present yearnings and wishes to rejuvenate do not go beyond skin-texture and body's youthful silhouette, aging process gnaws invisibly but the more merciless deep in our tissue. Because physical health, vigor and mental freshness depends mainly on tension force of cells, undamaged mitochondria, functioning microcirculation, abundance of neuronal synapses and the skill of deep (slow wave) sleep, leaving aside a life-loving attitude of mind.

New "electrifying" approach

Largely unnoticed from the wider public there has established a therapeutic and training method pursuing a completely new approach by imitating body's electric. It is called PEMI and utilizes weak electromagnetic fields in order to "transport" frequencies to all cells of our organism as well as creating microcurrents in form of a vitally necessary ion-flux.

Influencing electromagnetic receptors - do it like your body does

Obviously, there is a wide variety of cell-mediated receptors ("receiving antennas") that respond-to extremely low electromagnetic frequencies - familiar to chemical receptors that transfer the desired effects of hormones and neurotransmitters. For example, the effects are stimulating so called "second messengers" that are indispensable for general cell health and energetic supply. Certainly, it's a truism that endurance training enhances stamina. But the messenger substance behind the reproduction of the power stations responsible for cellular energy (mitochondria) is the same that can be activated by PEMI. Admittedly not at the same rate as active endurance exercises but at least appreciably well.

Unhappy old stem cells - why not recreate?

Until recently it has been assumed that lost neurons (cells of brain) cannot be replaced. But meanwhile there is evidence that adult neural stem cells could play a regenerative and reparative role - if only as a response to injuries and diseases and the restriction that adult stem cells are becoming increasingly scarce with increasingly age. Therefore, a study attracted attention that extremely low-frequency electromagnetic fields did promote neuronal stem cells, incidentally by the same second messenger as already mentioned. Possibly also because it referred to the hippocampal area where the long-term memory is generated. Obviously, this not only means the neurons (grey matter) but also the "white matter" known as nourishing substance of neurons and motor nerves.

What use is oxygen - when it does not arrive?

Oxygen supply of our cells mainly depends on a good microcirculation. Here applies the rule of thumb: the lower microcirculation the higher is your blood pressure - while mitochondria (aerobic cellular plants) are lacking sufficient energy resources for cellular function. Simultaneously blocked microcirculation prevents a removal of metabolic by products and cellular waste. It is with good reason that unnoticed microcirculatory disturbances are considered as a quiet killer. It is therefore all the more important to point out that the PEMI technology is able to increase microvascular blood-filling up to 66 percent within 3 minutes. This will certainly not only raise the interest of people with a sedentary lifestyle but also of performance and recreational athletes.

Where sleep originates

Just like alertness also sleep is caused by brain waves from the thalamus. This insight can be used because special extremely low-frequency electromagnetic fields are adopted by this part of brain. In a PEMI-study 70 percent of people with insomnia experienced substantial or even complete relief of their complaints. The consequences are evident from the fact that chronic sleep disruptions alter gut microbiota, induces systemic tissue inflammation, insulin resistance as well as BMI and the risk of atherosclerosis.

What is more attracting than inner vitality that radiates outward?

RK 16.07.19