

A little

MOVE & RELAX LEXICON

Bioelectrical impedance analysis:

Bioelectrical impedance analysis (BIA) is the measurement of electrical resistance in the human body. BIA is a scientifically recognised method of calculating the body composition. Not all weight is the same: Personal scales do not distinguish between weight due to muscle mass or weight due to fat tissue. During your consultation, BIA is used to check your medical history and to check success.

Two electrodes each are attached to the backs of your hands and feet, generating an electrical current field. As the different body tissues conduct

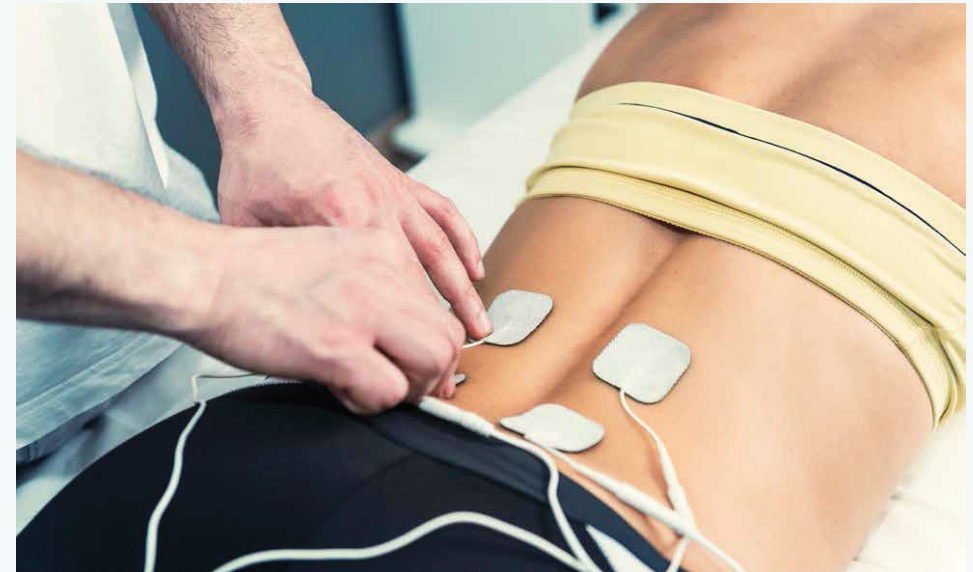
current with varying degrees of efficiency, it is possible to distinguish between fat and water. Body fluids, which contain electrolyte, conduct current well, while body fat has an insulating effect.

During the measurement, a low, unnoticeable current is passed through your body. The bioelectrical impedance analysis is based on the different conductivity of the tissue types in the human body. Bones and body fat are poor conductors, while the musculoskeletal system is a good conductor of electrical impulses due to the high content of water and electrolyte. The results of your body composition analysis are shown to you in a clear measurement report

with full colour graphics. The results will also be explained to you in words. After the second measurement, you will be given a comparison chart as a bar graph or curve diagram.

Spiroergometry:

Spiroergometry is a diagnostic method for qualitative and quantitative assessment of the reactions of your heart, circulation, breathing and metabolism by measuring respiratory gases during physical exertion. It provides a real-time insight into the ventilation, circulation and metabolism of the person being tested. Based on this data, fitness and activity adjustments can be analysed accurately.



Spiroergometry allows you to monitor your metabolism as well as your cardiac, lung and muscle fitness "live" on a screen during the physical activity.

Spiro = Breathing Ergo = Work Metry = Measurement

With spiroergometry, your physical fitness is measured through your breathing while you cycle. The respiratory gases are recorded

and measured in real-time by means of sensors in a mask, which in no way hinders your ability to breathe. Computer software analyses the data and displays it for you in an understandable format.

Breath by breath, spiroergometry reveals the physical exertion required to burn body fat and/or sugar to gain energy. For this, you must complete a personalised fitness test. The test starts with "comfortable cycling" and contin-

uously increases until full physical exertion is reached. It ends with subjective exhaustion. With spiroergometry, it is possible to ascertain the specific areas in which you need to train your lipometabolism (basic endurance fitness) and how much effort is required to improve your oxygen intake (maximum fitness).

The method is today considered to be the "gold standard of medical fitness diagnosis", as it is objective, reliable and effective.