

How it works. Twenty-two (22) measurements of bioelectromagnetic impedance are taken in a variety of locations of the body in the interstitial liquid. This interstitial liquid is located outside the membrane of the cell and is not influenced by different chemical buffers, as is blood. Measurements in this compartment of the body give a true reflection of cellular activity; hence, an organ's activity is quantifiable.

Bioimpedance or electrical scanning of the body was established scientifically in the 1940s. It is now used in major medical centers and research facilities for lean mass fat mass ratio analysis, in T-scan tomography, biofeedback, and in thoracic impedance analysis. Low voltage direct current (D.C.) is known to pass through only interstitial fluid in the body. The EIS system is a biosensor that analyzes the interstitial fluid locally in vivo by application of a D.C. current between cutaneous zones using electrodes, as stated hereinabove.

In use, the EIS introduces electric signals of low intensity (1.28V D.C.) through the human body via 6 electrodes. This is painless and has no negative effects to the patient. The scanned results are recorded by the EIS software, which subsequently analyzes and interprets the test results; and, then, produces a variety of informative models, graphs, and text data for interpretation by a medical practitioner.

The EIS gives a comprehensive overview of the reactions of the body. Many different 3-D models of the full body and various different parts of the body are created; based on the electro interstitial gram (EIG), also known as a scangram. The models are color coded to indicate where areas of imbalance are hyper-functioning or hypo-functioning. The EIS provides report screens that show interstitial biochemical values and an evaluation of body composition including lean mass, fat mass, and hydration data. Measurements are further extrapolated to provide report screens with hormone, electrolyte, neurotransmitter, and oxidative stress analyses. Assistance is also provided to the practitioner with suggestions for further medical tests for the patient, personalized diet, and micro-nutrition, vitamin, gemmotherapy, and trace element (oligotherapy) advice. No pharmaceutical agents are suggested, though.

After any treatment is instituted, follow-up visits and tests can monitor treatment effectiveness; and, any side effects during treatment and patient recovery can also be (immediately) monitored. The system is free of practitioner input and bias that can affect earlier bioelectromagnetic medical systems.

