There exists a fundamental, continuous need to lower the cost of achieving and maintaining personal health and fitness. The incentive to maintain personal health is well documented; lower health-care costs, higher productivity, improved appearance, and longevity. According to the American Health Insurance Association, wellness training is one of the most cost-effective forms of health maintenance. As a result, the health and wellness industry is experiencing rapid growth.

One important measurement of physical health and fitness is body fat. The Biodynamics BIA 310e Bioimpedance Analyzer is a practical and cost-effective system for measuring body fat. Using the latest in whole body bioimpedance technology, it allows medical, health-care, and fitness professionals to better serve their patients and clients.

**HOW IT WORKS**

Sensor pads (also called ECG pads) are placed on the test subject’s right wrist and ankle. A sensor cable attaches to the sensor pads and plugs into the BIA 310e. The BIA 310e generates a low-level electrical current that flows through the body. Using whole body bioimpedance, the BIA 310e measures how much resistance the body has to this current.

Resistance is an indication of how well the body conducts an electrical current. Lean tissue is conductive, while fat tissue is nonconductive due to its low water content. In general, for individuals of the same height and weight, the lower the resistance, the lower the percentage of body fat.

For a test, the individual’s gender, age, height and weight are entered into the BIA 310e. This data, along with the measured resistance, is used to estimate the test subject’s percentage of body fat, fat weight, lean weight, basal metabolic rate, and hydration status. Once the test is complete, the BIA 310e automatically displays the results.

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The BIA 310e can also provide personalized body fat and weight-control goals. After each test, recommended target fat and weight values are displayed on the target screen. These values can be custom tailored by the practitioner to meet the weight-management objectives of the test subject. Once the goals are established, pressing the PRINT key will generate the desired printout.

The BIA 310e is portable and powered by a rechargeable battery pack. A full battery charge provides enough power to test over 100 subjects. And because the BIA 310e is self-contained, no additional computer or printer is required.
**ABOUT BIODYNAMICS**

Biodynamics Corporation, founded in 1984, designs and manufactures precision bioelectrical impedance analyzers (BIA). Our products are used and preferred by thousands of medical and healthcare professionals throughout the world.

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**BIOIMPEDANCE MEASUREMENTS**

**Resistance:**
- Range: 200 to 1500 ohms
- Resolution: 1.0 ohm
- Accuracy: 0.1 percent

**Test Current:**
- Less than 1 milliampere
- Frequency: 50 kilohertz

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**FEATURES AND BENEFITS**

**ACCURATE.** Built for those who demand the best, accuracy is the driving force behind the BIA 310e. Backed by clinical research, test results are, on average, within 1.5 percentage points of body fat, with high correlation ($r = 0.97$) to hydrostatic testing. Unique to Biodynamics whole body bioimpedance analyzers are our population-specific equations that compute body fat by body type, the key to achieving exceptionally high precision.

**CONVENIENT.** The BIA 310e is highly sophisticated, yet possesses a logical ease of operation. A self-explanatory keyboard and on-screen instructions make operation easy to learn and use. Set-up for the test procedure is simple, and there is no need for the test subject to disrobe because sensor pads attach to the wrist and ankle. The BIA 310e offers convenience for you while providing comfort for your patients and clients.

**FAST.** The combination of swift set-up and a practical test procedure accommodates both you and your test subjects. Only four minutes are required to prepare the subject, run the test, check target goals, and print accurate test results. With the BIA 310e, your time and effort spent in obtaining test results is minimized, leaving you with quality time available for professional consultation.

**SAFE.** Safety is a fundamental feature of the BIA 310e. Designed with the test subject in mind, the BIA 310e is engineered to meet the highest standard of safety. Powered by rechargeable batteries, the BIA 310e applies a test current of less than one milliampere, significantly below the subject’s sensory level. With the BIA 310e, safety plays a vital role in design, manufacture, and operation.

**DEPENDABLE.** With quality you can count on, every BIA 310e is manufactured with precision and thoroughly tested before it reaches your doorstep. Care in production and attention to design make the BIA 310e both reliable and low-maintenance. And the unit is fully guaranteed. Biodynamics stands behind the BIA 310e, backing it with a solid one-year service warranty.

**AFFORDABLE.** The BIA 310e incorporates all the qualities of a high-performance system, and yet, is reasonably priced. The BIA 310e Bioimpedance Analyzer System comes complete with sensor cables, sensor pads, print rolls, battery charger, user’s guide, and carrying case. Economically, the BIA 310e provides significant financial benefits. Professionally, the BIA 310e assists you while you help your patients and clients set, reach, and maintain healthy body-composition goals.

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**GENERAL INFORMATION**

**Dimensions:**
- 12.5”W x 8.5”L x 3.25”H (317mm x 216mm x 83mm)

**Weight:**
- 4 lb / 2 kg net
- 10 lb / 4.5 kg shipping

**Temperature Range:**
- 10 degrees C to 50 degrees C

**Humidity:**
- 70% or less noncondensing

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