

## Managing Healthy Living

*-Improving Health through Body Composition Management -*

**Overview** - In recent years, many doctors, fitness experts, researchers, and other health professionals have tried to determine the correct approach to healthy living. These professionals have developed or recommended a variety of methods to manage one's overall health. The overwhelming amount of media reports and public discussion on this topic has created confusion as to how the general public can best manage their own healthy living standard through a correct diet, right type and amount of exercise, and individual measurement of current and future levels of health as a person ages.



What does this  
scale tell me?

**Health Management** - Overall health management is a major concern and a top priority for people around the world. The balance of proper nutrition and exercise helps reduce the negative effects of aging and promotes an overall healthy lifestyle that also can reduce the chances of disease. How is overall health assessed accurately? This can be accomplished in a number of ways that measure specific areas of health such as weight and athletic performance. The ability to create a mark that assesses overall body aging and health is vital. Body Composition Analysis can provide individuals and their health advisors the information they need to customize a diet/exercise program based on maintaining or improving their body composition. They will understand what is considered a healthy body composition for their age, gender and body frame, and through regular testing clearly see how their body is responding to their efforts.

**Aging** - During the course of our life our bodies go through a transformation by losing muscle mass and gaining fat. The aging process is evident in our outside appearance and also internally through the increased presence of disease. The ability to slow the aging process requires daily attention and management of a number of factors (*Source: alignlife.com*).

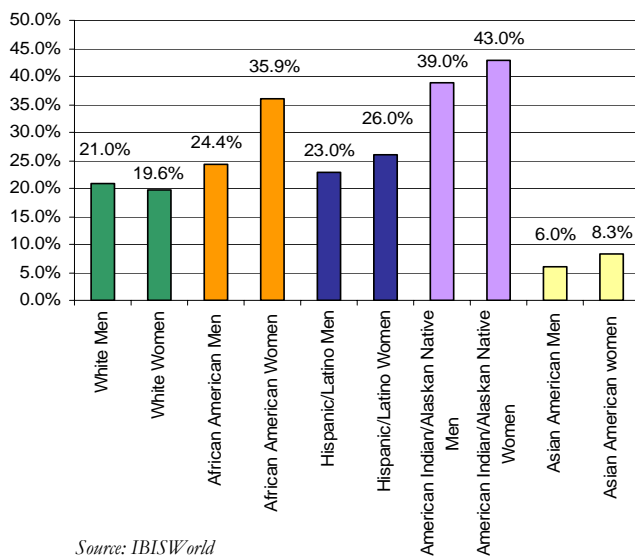
**Standing on a Scale** - Scale weight is not an indicator of an individual's fat content or health. Though a good indicator of overall weight, scale weight does little to inform a person of their overall internal make-up – how much body fat versus muscle is a good balance for them?

**Preservation of Muscle** - As many athletes can attest, the wasting of muscle mass due to lack of use or injury can affect an athlete's ability to perform in the short or long term. Also, the lack of use of our muscles accelerates the shift from muscle to fat. The same principles can be applied to someone whose muscle mass percentage is low. This person is usually unable to perform strenuous tasks due to underdeveloped or weak muscles. This can cause adverse effects on the whole body.

**U.S. Weight Statistics** - According to statistics compiled by the Surgeon General, 34% of adults in the United States in the age group of 20 to 74 years old are overweight. Additionally, 27% in the overweight category are considered obese. Approximately 50% of females in this age group are overweight, or obese. African Americans, Mexican Americans and Native Americans amount to slightly higher proportions of this percentage (*Source: IBISWorld – Weight Loss Centers in the U.S.*).

It is estimated that approximately 60% of the US adult population have weight management issues, according to the 2000 National Health Survey. The graph on the following page illustrates how obesity affected the following gender and ethnicity groups.

### National Health Survey – Obesity Groupings



Source: IBISWorld

statistic indicates potential long-term health issues for this age group that needs to be addressed by some form of weight management program (Source: IBISWorld – *Weight Loss Centers in the U.S.*).

These figures translate to approximately 7% of total health care expenditure according to the CDC. People are becoming more aware of health risks/issues associated with obesity and are looking for a management tool to improve and maintain their weight problem. A quick, affordable and convenient weight management program would assist people in addressing their weight issues more effectively.

**Body Fat Percentage** - As more and more people are becoming obese due to bad information or advice, their muscle/fat ratio is moving in the wrong direction. This is the result of lack of proper exercise, bad diets, and the psychology of each individual. Peoples’ habits and choices are a major factor in the management of a healthy lifestyle. The need to properly address these habits requires a person to ask themselves certain questions.

**Individual Health Questions** - The following are some of the questions an individual should ask to gauge their health level?

- Q.** *What are some key points to measure my overall health?*

**A.** *Weight, diet, regular exercise and enough sleep. All these measure different parts of the human inflow/outflow of energy.*
- Q.** *On a daily basis, what can I do to improve my overall health?*

**A.** *To improve someone’s health is not difficult. A person needs to watch their diet, exercise regularly, and understand one’s own body to manage it correctly.*
- Q.** *What is the best way to slow aging?*

**A.** *Premature aging occurs through the intake of bad foods and lack of exercise. To reverse the effects of aging, one must only manage a healthier lifestyle.*

**Q.** *What's useful about Body Composition?*

**A.** *Body composition measuring provides a gauge with which a person can measure their progress towards a healthier lifestyle.*

**Body Composition** - Body composition is the amount of lean tissue compared to fat and percentage of body fluids. Body composition data can form the basis for a wide variety of therapeutic health and fitness prescriptions. In clinical applications, body composition analysis together with correct nutrition and exercise advice can provide the foundation upon which further treatment is based. Body composition analysis can determine how much muscle, fat and body fluids are lost or gained as the result of nutrition, exercise, and professional advice.

**Body Composition Measuring** – Body Composition measurement is a quick, non-invasive (“no-discomfort”) procedure that provides an assessment of fat, lean body mass, and intra- and extra-cellular fluids. This information helps promote healthy management of one’s body. An individual who is provided with body composition measurements is more likely to manage their diet, exercise regimen, and other variables compared to those who just stand on a scale to weigh themselves.

**Comparative Body Composition Statistics**

**Body fat percentage (%) for average Americans**

Age	Males	Females
20 – 29 years	16.8 to 29.8	29.6 to 41.8
30 – 39 years	18.0 to 30.4	28.6 to 44.6
40 – 49 years	19.6 to 31.2	31.2 to 44.8
50 – 59 years	19.8 to 31.4	31.6 to 45.6

*Source: RJL Systems (Nhanes)*

**Guidelines for ideal body fat percentage (%)**

Age	Males	Females
20 – 39 years	8 to 20	21 to 33
40 – 59 years	11 to 22	23 to 34
60 – 79 years	13 to 25	23 to 36

*Source: National Institute of Health*

The above tables provide an overview of ideal body fat percentages according to the National Institute of Health compared to the average American. By comparing the two tables, a clear conclusion can be drawn on the need to shift the average American’s individual body composition and overall lifestyle.

Certain variables such as body structure, testing routines, daily activities and other variables may affect a body composition test and its comparison to normal. This is why regular testing schedules are recommended. The first test creates a baseline record and subsequent tests track and monitor any changes occurring for each individual’s body composition.

**Conclusion** – A more accurate gauge of one’s overall health and body make-up can be accomplished through body composition measuring. These measurements, if performed on a regular basis (once a month, each quarter, or every six months), can assist to better determine a person’s level of health, fat and muscle percentage. As a person ages, continual monitoring of their body composition will help them develop a healthier lifestyle and provide motivation to manage their diet and exercise routines. This would result in a more youthful appearance and healthier body.

**About RJL Systems** – [www.rjlsystems.com](http://www.rjlsystems.com) – RJL Systems invented/engineered the BIA Analyzer and holds U.S. registered patents on the devices. RJL Systems is known as the premier manufacturer of Bioelectrical Impedance Analysis (body composition) instruments, both domestically and internationally. The distinguished legacy of RJL Systems began with its founding by Rudolph J. Liedtke in 1979. RJL Systems revolutionized the BIA industry through FDA clearance of the BIA Analyzer as a Class II Medical Device in 1983. Over the course of the past three decades, RJL Systems has developed an outstanding reputation for engineering and manufacturing Bioelectrical Impedance Analysis instruments of the highest quality, accuracy and repeatability. RJL Systems has delivered its instruments to institutions in every corner of the globe. RJL Systems has sold more than 15,000 BIA Analyzers, and sales volumes are steadily increasing as preventative care, wellness, research, and weight management programs become more popular. Along with RJL Systems as the premier analyzer manufacturer, Mr. Liedtke is highly relied upon as the foremost expert in the application of bioelectrical impedance analysis for numerous alternative applications.



Today, RJL Systems continues its long history of research and development, design, engineering, manufacturing and distribution of scientific instruments of the highest quality with an ongoing objective of technical innovation. It produces a complete line of BIA instruments under the Quantum brand. In addition, RJL Systems produces software and accessories for its analyzers and custom engineering and instruments for a variety of customers.

RJL Systems is committed to securing FDA clearances for all of its products and software. These self-imposed commitments to the highest standards of quality and ethics have served to create a legacy without equal in the industry. In fact, more than 1,000 abstracts and peer review articles have been written about BIA using RJL Systems instruments.

RJL Systems is registered as an ISO 9001:2000 certified company and is ISO 13485:2003 compliant (13485 - for medical devices).



**Client Base** - Today, RJL Systems' technological advances are the benchmark, or “gold-standard” within the BIA instrument industry. The company’s BIA Analyzers are the instruments of choice for scientists, researchers, clinicians, physicians, and other medical professionals whether they are in health care practices/institutions, educational, governmental, or industrial settings.

31 Out of the Top 50 America’s Best Colleges, Special Edition magazine, purchased BIA devices from RJL Systems. This represents a 68% penetration of market share. The list mentioned above names 124 colleges and universities. RJL has provided BIA system solutions to 73 out of 124 or 59% of those institutions.

Source: U.S. News & World Report