Body Fat

Fat Mass v. Lean Mass

Fat is a basic component of a healthy body. It plays an important role in providing the body with energy, in insulating and protecting it, in assisting in nerve impulse transmissions, and in supporting normal hormone activity. There are two types of body fat, essential and storage. Essential fat is necessary for normal, healthy functioning (about 3% in men and 12% in women). Women have a higher percentage for reproductive purposes. Storage fat is mostly expendable, although some is desirable for its protective role. This is the type of fat that increases or decreases as you gain or lose weight.









It accumulates beneath your skin, in your muscles, and other areas inside your body. Too much storage fat, especially in your waist area, increases your risk of disease, while too little is linked to problems with temperature regulation, hunger, fatigue, depression, fertility in women, etc. All non-fat parts of the body (i.e., bones, blood, muscle, and water) are lean mass. The more lean mass you have, the higher your metabolism will be and the more calories you will burn at all times. By increasing lean mass, such as bone density and muscle mass, you can decrease your percentage of body fat.

Gaining and Losing Weight

When adults gain weight they usually gain more fat than lean body mass unless, for example, they are involved in an exercise program that specifically increases muscle mass. When adults lose weight, they lose storage fat and lean body mass (especially water and muscle). They often follow poor diets that cause them to loose too much lean body mass. The best way to lose weight is to follow a program where you maintain hydration, lose storage fat, and lose as little lean body mass as possible. Maintaining or increasing lean body mass is even better. Such programs promote exercise, balanced eating, and drinking plenty of water. Balanced eating means including foods from all food groups and controlling portions. Exercise should include cardiovascular activities to boost metabolism and burn calories, strength training to build or preserve muscle, and weight-bearing activities to increase or maintain bone density. In general, the amount

of weight loss should be no more than two pounds a week. If you do not eat enough calories and you lose weight too fast, you will lose the wrong type of weight—too much lean body mass.

RESULTS: %BODY FAT

Healthy Ranges of Body Fat*		
AGE	MALES	FEMALES
18-39 years	8-19%	21-32%
40-59 years	11-21%	23-33%
60-79 years	13-24%	24-35%

*These are the percentages recommended for average adults. Note that athletes often have much less body fat—just enough to maintain normal body functions without excess weight for the muscles to carry.



Measuring and Keeping Track of Your Body Fat

Body fat can be measured several different ways, including Underwater Weighing, DEXA (x-ray), Skin-fold Measurement, Waist Circumference, Waist-Hip Ratio, Body Mass Index, Bioelectrical Impedance (BI) Method, etc. There are pros and cons to all of them. Basically, the most accurate forms of measurement are expensive, complicated, and impossible to do in an employee health fair type setting. We use the BI method, which sends a small, harmless electrical current through the body. The current flows more easily through certain types of tissues, so it is able to sense and measure the part of you that has fat. That measurement is then used, along with your other information (height, weight, gender, etc.), to predict your body fat percentage.

Despite the limitations, body fat measurement is recommended. No single body weight is best for everyone. Healthcare providers usually compare people's weights with weight-for-height or body mass index (BMI) tables, but the tables are not accurate for everyone. For many people, being overweight means that they are overfat. This is a general assumption but it is not always true. Athletes, for example, usually have little body fat although their heavy dense bones and well-developed muscles can cause them to fall into the "overweight" category. The opposite also holds true. There are some people who seem to have acceptable weights, possibly because they are small, but they actually carry too much body fat. Weight-for-height and BMI tables do not indicate how much weight is fat and where fat is located. These are important indicators of health. Therefore, knowing your percentage of body fat prevents you from being misclassified based on weight and height and it gives you a better idea of your fitness and health risk. Knowing your body fat can also motivate you to maintain it within a healthy range while allowing you to check your progress.

For further information visit www.shapeup.org • www.americanheart.org • win.niddk.nih.gov • www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/

Follow up counseling within two weeks: followup@totalwellnesshealth.com (888) 434-4358 x 120

