

# BODY WEIGHT AND BODY FAT

Body weight may be divided into three types: bones, muscle and fat. In a healthy female of average weight, bones make up 12 percent of total body weight, muscle/lean tissue about 35 percent and body fat about 27 percent. The remaining body weight is skin, connective tissue, tendons, blood, organs and so forth.

Body Fat is lighter than Muscle by Volume

Fat is lighter by volume than lean body tissue. For example, a 'cup' of fat is lighter than a 'cup' of muscle. This explains why increased physical exercise (which builds muscle) may actually cause weight gain rather than weight loss - at least to begin with.



## Body Fat Percentage

Body fat is often expressed as our "Body Fat Percentage" or "Body Fat Percent." Body fat percentage is the amount of body-fat-tissue as a percentage of total body weight. If your total body weight is 160 pounds and you have 32 pounds of fat, your body fat percentage is 20 percent.

## Body Fat Calculation and Health

The higher your percentage of fat above average levels, the higher your health risk for weight-related illness, like heart disease, high blood pressure, gallstones, type 2 diabetes, osteoarthritis, and certain cancers.

## Body Fat Location, Abdominal Fat and Body Fat Percentage

As we can see, the total amount of body fat we have is an important factor in weight control. But where our fat is stored is also important - especially for health. In simple terms, the more fat we have around our middle (abdominal fat, or visceral fat) the worse for our health. Abdominal fat is strongly linked to an increased risk of heart disease and stroke and is far more hazardous to health than lower-body fat.

## Who Develops Excess Abdominal Fat?

Generally, men tend to store fat around their middle (apple body shape), while women store fat around their pelvis, thighs and butt (pear body shape). But while gender is the most powerful influence on the distribution of body fat, it's not the only factor - genes and genetics also count.

## VISCERAL FAT

Fat surrounding the internal organs. The fat is located in the abdominal cavity (stomach area). Visceral fat is not the fat that lies just under your skin, that type is called subcutaneous fat. Visceral fat is deep inside. Visceral fat is different from other body fat. Visceral fat is also called intra-abdominal. Studies have shown that those with visceral fat are more susceptible to heart disease, stroke, diabetes and hypertension. Sedentary people, smokers and drinkers have been shown to have more intra-abdominal fat, or visceral fat, than active people who are non-smokers and non-drinkers. Stress may also be a factor in the storage of visceral fat on the body. It is important to try and reduce the visceral fat levels to an acceptable level.

According to research, exercise can significantly reduce the amount of visceral fat you carry around. The more exercise you do, the more of this type of dangerous fat you will lose. Researchers in this study said that extra exercise can reverse the amount you have, while some moderate exercise can stop your visceral fat mounting up.

Visceral fat is harder to lose than subcutaneous fat because it is more deeply embedded in the body's tissues. A person may be within a healthy weight range, but still have too much intra-abdominal fat around the internal organs.

### **SUBCUTANEOUS FAT**

Subcutaneous fat, on the other hand is the fat we most see lying under the skin. Too much fat can cause the skin to become tight or stretched, and result in dreaded cellulite or a dimpled look of the skin. When subcutaneous fat is relatively small in amount, it tends to lie loosely under the skin layers and is thus less visible.

**SKELETAL MUSCLE:** Muscle is divided into two types; muscle in internal organs, such as the heart and muscle attached to bones that is used to move the body. Skeletal muscle can be increased through exercise and other activity.

**RESTING METABOLISM:** regardless of your activity level, a minimum level of energy is required to sustain the body's everyday functions. Resting metabolism, the amount of calories needed to supply the body with the minimum level of energy, differs between individuals depending on variables such as age weight, body composition, and energy expenditure.

How does resting metabolism relate to weight loss?

Once you know your approximate resting metabolism, you can choose the amount of calories consumed to determine weight loss or gain. If you exceed your resting metabolism consistently you will gain weight. However, if you incur a slight daily deficit of calories over a period of time, you can lose weight.

The most profound way to increase your resting metabolism which can account for an increase up to 10 times resting levels during big muscle exercise. An individual with more lean body mass will have a higher resting metabolism than a counterpart with high levels of body fat.

Therefore, if you consume approximately 200 calories per day less than your resting metabolism and exercise regularly (ending at a deficit of 300 calories per day) you will lose 1 pound of fat loss per week!

Metabolism is the rate at which your body uses energy, or, burns calories. Your resting metabolism measures the number of calories required to keep your body functioning. Your metabolism burns calories all the time, whether you're just sitting on the couch or you're jogging around the block. Even while we sleep our metabolism is working. Your body is using up energy to keep running -- to make your heart beat, your kidneys function, and so on.

Your Basal Metabolic Rate (BMR) is the number of calories you would burn even if you slept all day and night.

Many factors can affect your BMR, including your age, health, stress level, and even the temperature of your environment.

**WAIST HIP RATIO:** If your waist is too wide relative to your hips then that increases your risk for all kinds of health problems (heart attack, diabetes, high blood pressure). Your ratio should be less than 0.9 (for a man) or 0.8 for a woman. For most people, carrying extra weight around their middle increases risk for heart diseases, Diabetes, high blood pressure more than carrying extra weight around their hips or thighs

Although heredity plays a role in body shape and what a person weighs. People from different races, ethnic groups, and nationalities tend to have different body fat distribution (meaning they accumulate fat in different parts of their bodies) or

body composition (amounts of bone and muscle versus fat). But genes are not destiny. No matter whose genes you inherit, you can have a healthy body and keep your weight at a level that's normal for you by eating right and being active.

**IDEAL BODY WEIGHT (IBW):** IBW is defined in reference to average weight, according to height

**BMI:** Body Mass Index (BMI) is a measurement of the relative percentages of fat and muscle mass in the human body, in which weight is divided by height and the result used as an index of obesity. BMI is not a direct measure of body fat, but is the most widely investigated and most useful indicator, to date, of health risk associated with underweight and overweight. Exceptions to a high BMI score include competitive athletes and body builders, whose BMI is high due to increased muscle mass, and women who are pregnant or lactating. The BMI is also not intended for use in measuring individuals under the age of 18 or over the age of 65.