What's Your Body Fat IQ?

Write True or False at the end of each question

please email your answers to Pamela.greene1@us.army.mil

1. There are two types of body fat: essential fat and storage fat.
2. There is a healthy range of body fat and it is the same for men and women
3. 30 percent essential body fat is healthy for women
4. If your body fat goes above the healthy range, you are at increased risk for developing certain diseases.
5. It doesn't matter whether you carry your fat around your waist or your hips or thighs. Fat is fat.
6. The more lean body mass (muscle) you have, the easier it is to maintain your weight.
7. Strength (resistance) training can help you increase your lean body mass
8. Aiming to lower your percentage of body fat is always better
9. When you lose weight, you lose both lean mass and fat.
10. To lose weight, it doesn't matter what kind of method you use as long as your weight goes down

Body Fat & BMI

The Body Mass Index is a statistical measure of the weight of a person scaled according to their height. It is your body weight divided by the square of your height. The BMI is one way to determine whether or not an adult is overweight. BMI assesses height and weight; muscle mass is not a part of the equation.

BMI (pen and paper calculation) example
A 160 pound person : multiplied 160 by 705 = 112808 divided by your height in inches 55 inches = 2050.90 divided again by your height in inches = 37. This is your BMI

Waist-Hip Ratio
Recently it has been suggested that waist-hip ratio, which measures the proportion of fat stored on your body around your waist and hips, is the best indicator of a person's risk of heart disease, making it a more accurate measurement than BMI

Measure your waist-hip ratio while standing naked and relaxed. Measure your waist at the top of your hip. This is called the iliac crest. Then measure your hips at its narrowest point (most often this is around the buttocks). Don't pull the tape tight. Let it rest on your skin. Finally, **divide your waist measurement by your hip measurement**. The figure you get from this calculation is your waist-hip ratio.

Example: waist is 33 inches; hips are 39 inches. Divide 33/39 = 0.85. **Your waist-hip ratio is 0.85**

If you are a man and your ratio is more than 1.0, or a woman and your ratio is more than 0.8, you are apple shape and at a greater risk for health problems.

Fat
Fat is one of the basic components that make up the structure of our bodies. It is divided into two categories: essential fat and stored fat.

Essential fat is needed for normal healthy functioning and is stored in small amounts in your bone marrow, organs, central nervous system and muscles.

In men, essential fat is about 3% of their body weight
For women, it is higher, about 12% because essential fat also includes some sex-specific fat found in the breast, pelvis, hips, and thighs.

The average healthy range of body fat for adults varies with our age

18 – 39 female 21-32%	male 8-19%
40-59 female 23-33%	male 11-21%
60-79 female 24-35%	male 13-24%

Discover yours:_____

We don't typically have this problem, but your fat levels are sometimes too low. When this happens you compromise your health and could become more susceptible to illness or experience chronic fatigue. For women they could stop having a period and might experience infertility, they could compromise the health of their bones as well.

Lean body Mass
Lean body mass is commonly used to describe the muscles in your arms, legs, back, neck and abdominal. It also includes your heart muscle and the tissues of your other internal organs as well as water and bone.

How much lean body mass you have is the most important factor in determining your metabolism (the rate at which you burn calories). The higher the amount of your lean body mass, the higher your metabolic rate and the more calories you will burn when you are just sitting or lying down. This higher metabolic rate makes it easier to maintain your weight.

How can you build your lean body mass? Strength training workouts,

What happens when you gain weight?
We gain both lean body mass and storage fat when we gain weight. The amount of fat gained usually far exceeds the amount of lean body mass gained. **The extra weight you gain is about 60-80% fat and 20-40% lean body mass**. So, if you gained 10 pounds, about 6-8 would be fat and 2-4 lean body mass. This would mean increases not only in your fat tissue, but also in your muscles, stomach, intestines and other organs, bone and water.

What happens when you lose weight?
When we lose weight we lose water, lean body mass and fat storage. Lost water is replaced when we hydrate. Our goal is to preserve the lean body mass and reduce the

body fat. Experts determined that during the early weeks of weight loss, at least 75% of the weight we lose should be fat loss and not more than 25% lean body mass

As we continue to lose weight, especially if we are exercising and eating right, fat loss should be about 90% of the weight we lose and lean body mass about 10%.

Best methods for losing:

Eat balanced meals with portions under control
Get active. You have to include a healthy steady exercising lifestyle.

The average rate of weight loss should be not more than 2 pounds a week. If the calories you eat are too low and you lose weight too fast, you will lose a greater percentage of lean body mass.

How to calculate your body fat percentage:
Tools needed: calculator, tape measurer

Step I
Multiply your weight by **1.082**
Add: **94.42** (for males)
Add: **76.76**(for females) to that number

Step II
Measure your waist at its narrowest point. Multiply your waist girth by **4.15** and subtract that figure from step #1

The result obtained after the subtraction is done is your lean body weight

Finally, subtract your lean body weight from your total body weight and multiply that number by 100. Then divide it by your body weight. This final result is your percentage of body fat

Example:
190 pound male
30.5 inch waist
(190x1.082) + 94.42 = 300. Step two says my lean body weight equals 300-(30.5x4.15)= 126.575. finally, step 3 says that my body fat percentage is (190-173.425)x100 divided by 190=8.72%.

Step I
Multiply your weight (190) x 1.082 = 205.58
Add: 94.42 (for males)
205.58 + 94.42 = 300

Step II
Take waist girth and multiply by 4.15
30.5(waist) x 4.15 = 126.575
Subtract 300 (from step I) – 126.575 (waist girth calculation) = 173.425
173.425 is your lean body weight

Step III
Subtract 173.425(lean body weight) – 190(total body weight) = 16.575
Multiply 16.575 x 100 = 1657.5
Divide 1657.5 divided by 190 (total body weight) = 8.8

8.8 is your body fat percentage