

Body Composition Testing – Analyzing Results

Body composition testing is one of the most essential, yet overlooked, components to getting and staying in top shape.

Why? Because it gives you clarity.

It tells you exactly how much fat you have to burn and how many calories you need, per day, to sustain yourself.

With these 2 pieces of information, you can see where you stand, develop a timeline to reach your goals, and also have the numbers you need to create a slight energy deficit that will allow you to lose weight.

If, on the other hand, you are looking to bulk up, you can use the numbers to see how much lean mass you have and how many calories per day your body needs, so you can design a ‘bulking diet’ and monitor how your lean mass increases over time.

ANALYZING BODY COMPOSITION RESULTS

When you get a body composition test, whether that be BodPod, DEXA, or something similar, you will receive a report with all kinds of numbers. What you’re really looking for are the following:

1. Total Weight and Body Fat Percentage
2. Resting Metabolic Rate (RMR)
3. Total Daily Energy Requirement (TDEE)

Total Weight and Body Fat Percentage

These numbers will tell you what percentage of your total body weight...is fat. You can then look up that number in the Body Fat Rating chart (below) and see where you stand.

If you have excess fat, you’ll be able to do a few simple calculations to see how many pounds you need to lose in order to get to the Lean or Moderately Lean rating.

For instance, let’s say John gets his results and they look like this.

Total Weight: 202 pounds

Body Fat Percentage: 26% (52.5 pounds of fat)

Since John is a man, we look in the 'Men' column and see that this earns him the 'Excess Fat' rating.

Now John can take a piece of paper and a pen, and run a few scenarios.

Scenario A

Lose 20 pounds fat
Add 5 pounds muscle

Scenario B

Lose 25 pounds fat
Add 10 pounds muscle

In scenario A, his total weight will end up being 187 pounds, with 32.5 of those pounds attributable to fat – 17.4%. That will land John in the 'Moderately Lean' category. Good progress indeed.

Scenario B is more ambitious. John will end up with the same total weight of 187 pounds, but now, only 27.5 of those will be fat. In other words, 14.7%. He'd now be bordering on the Lean category, and with a bit more work can get his body fat down to 12% - a great place to be for a man.

Body Fat Rating	Men	Women	Notes
Risky (high body fat)	>30%	>40%	Too much body fat can pose serious health risks.
Excess Fat	21-30%	31-40%	Represents an excess accumulation of fat over time.
Moderately Lean	13-20%	23-30%	Fat level is acceptable for good health.
Lean	9-12%	19-22%	Lower body fat levels than many people. This range is excellent for health and longevity.
Ultra Lean	5-8%	15-18%	Fat levels sometimes found in elite athletes.
Risky (low body fat)	<5%	<15%	Too little body fat can present health risks, especially for women.

Remember, body fat percentage is one of the best indicators of good health. Excess fat, particularly visceral fat, is one of the best predictors of heart disease, metabolic disorder, Type II diabetes, heart attacks, and stroke.

So don't let anybody confuse you with body-positive marketing talk. Yes, it's important to be happy with your body. But you also need your body to be healthy and strong so you can live long and get maximum value out of life.

Resting Metabolic Rate

The next piece of information we extract from the body composition test is your Resting Metabolic Rate (RMR).

This is your metabolism - the energy needed to keep you alive, without taking any activity into account.

Metabolism is the biggest part of your energy requirement, accounting for as much as 75% of the energy that your body burns every single day. And it's influenced primarily by your lean mass.

The more lean mass you have, the more tissues, the more cells, the more 'you,' the more energy you need to stay alive.

Interestingly enough, fat cells need very little energy to stay alive. They just are. This is why your Resting Metabolic Rate depends on your *lean* mass, not total mass.

Now, alone, this figure doesn't tell us much. But it's helpful to know it, nonetheless, because it allows us to see how changes in body composition affect our metabolism. If you continue to get body composition tests on a somewhat regular basis, you will see how your Resting Metabolic Rate starts to increase as you build a bit of lean muscle.

The more lean muscle you add, the more energy your body needs on a daily basis just to stay alive. In other words, as lean muscle mass goes up, your Resting Metabolic Rate goes up with it.

Total Daily Energy Requirement

The final, and perhaps most crucial, piece of information you get from the test is your Total Daily Energy Requirement – how much *total* energy your body burns per day.

As we said, your Total Daily Energy Requirement is the sum of 3 parts:

- Resting Metabolic Rate (RMR)
- Thermic Effect of Eating (TEE)
- Energy Requirements of Activity (ERA)

We have your Resting Metabolic Rate.

Your Thermic Effect of Eating is estimated by the software (typically around 10%).

All that remains is to figure out your Energy Requirements of Activity.

The body composition test will provide a chart that sums up your Total Daily Energy Needs based on activity level. And you will need to pick where you are based on your lifestyle.

ENERGY EXPENDITURE RESULTS		
Est. <u>R</u> esting <u>M</u> etabolic <u>R</u> ate (RMR) kcal/day	*Est. <u>T</u> otal <u>E</u> nergy <u>E</u> xpenditure (TEE) kcal/day	Daily Activity Level
1500	1900	Sedentary
	2300	Low Active
	2500	Active
	2900	Very Active
(See RMR Info Sheet for additional info)	*Est. TEE = Est. RMR x Daily Activity Level	

**Sample chart*

This is where it pays to be brutally honest. Because you might think of yourself as moderately active, until you realize that the definition of Moderately Active requires you to perform deliberate exercise that burns about 500 calories per day!

The truth is that most of us are either Sedentary or Low Active. And that's OK. As long as we take our true activity levels into account, we'll be able to work with what we have and create successful plans to transform our bodies.

By choosing the right level of activity you will:

- Know exactly how many calories you need per day to avoid overeating
- Be able to calculate the correct caloric deficit to lose weight, if needed
- Be able to calculate the correct caloric surplus to gain weight, if needed

The chart below will help you determine your activity level so you can pick the corresponding Total Daily Energy Requirement from the test.

Sedentary: This level applies to the majority of the population. It assumes you have a sedentary job (i.e. office work), do a small amount of walking, and incorporate minimal intentional exercise.

Choose Sedentary if:

- You have a sitting job
- Your activities are limited to daily living only, such as shopping, cleaning, taking out the trash, walking the dog
- You have no moderate to high intensity activities
- *Unless you do at least 30 minutes per day of intentional exercise, you are considered Sedentary*

Low Active: This level assumes that energy requirements of your lifestyle are more demanding or that you add intentional exercise to your day.

Choose Low Active if:

- You otherwise fall into the Sedentary category, but do at least 30 minutes of moderate intensity exercise (such as jogging) per day
- You have a job that requires you to spend a portion of your day on the move (salesman, mechanic, professor, housekeeper)

Moderately Active: This level is suitable for people employed in highly active professions, recreational athletes, and individuals who are constantly on the move.

Choose Moderately Active if:

- Your day revolves around constant movement (mail carrier, gardener, warehouse worker)
- *You perform intentional exercise* that burns around 500 calories per day. This could be walking for 1.5 hours at 4-5 mph. Other, higher intensity exercise can be performed for shorter periods of time, such as mountain biking or swimming for 1 hour).

Very Active: This level is suitable if you are a competitive athlete or have a truly physically demanding job.

Choose Very Active if:

- You perform exercise that burns 1200-1500 calories per day. This could be walking for 4 hours at 4-5 mph. Higher intensity exercise such as cycling can be performed for shorter durations.
- You spend most of the day doing intense physical activity (e.g. baggage handler, carpenter, bike messenger).