

Session 2: Food As Energy & Calories

Food, Metabolism, & Your Body Goals

Food is a main factor in metabolism, weight, and body composition.

Metabolism is the term for all the processes that your body uses for energy. It includes changing energy from food and drink into energy your body uses to function.

Your body uses energy (so needs fuel!) **all the time** - for things like keeping your heart beating and your kidneys filtering your blood. It also needs fuel for things that happen **sometimes** - like taking a walk or hitting a new PR.

Too much or too little fuel can also impact whether you feel tired or you feel energized.

While CICO or “calories in / calories out” is a big part of weight management and body recomposition, your body is just not that simple.

But, let's start there for now.

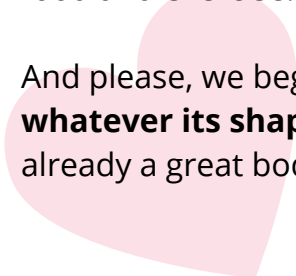
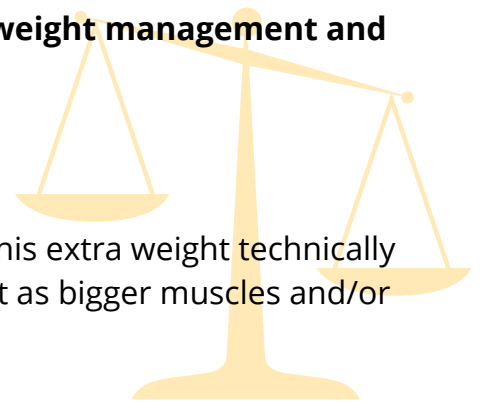
If you eat more than your body needs, you gain weight. This extra weight technically goes to lots of places in your body. But mostly, you will see it as bigger muscles and/or more fat.

If you eat less than your body needs, you lose weight. This is an oversimplification that leads to a lot of frustration because your body systems and hormones kick in to try to keep you from losing weight. And unfortunately, you will lose both fat and muscle.

Let's be clear right away, you cannot replace fat with muscle. One does not turn into the other. You can, however, do things to tone, strengthen, and rebuild muscle as you lose fat, which gives you the same result.

The trick to keeping your metabolism fired up is finding the right combination of food and exercise... and a few other things like sleep, stress, hormones, & consistency.

And please, we beg you, accept your genetics and **work on loving your body, whatever its shape or size.** If you are reading this, it's doing its job just fine. It is already a great body waiting for your love and acceptance!



Treat Calories Like Clothing Sizes.

Calories are a unit of measurement of the energy stored in food. They are NOT exact.

Calories on food labels and on your fitness watch (or cardio machines) are NOT exact.

Equations to determine your body's calorie needs are NOT exact.

So, if calories are wrong or off, then what good are they?

1

If you keep tracking the same way, then consistency is valuable.

Let's say you use the hand method for portion control and believe you are eating 2000 calories a day (but it's really more like 2500 calories a day). All you know is that you are not meeting your goals, so you decide to reduce (or increase) your daily calories.

If you started at 2,000 or 2,500 doesn't matter. **Being consistent with how you track and making a change matters.** It's that change that brings different results.

2

You have some freedom to relax and use the calculations you will do in this workbook as your first guess.

Your goal is to pick a starting target, hit that target consistently for a couple of weeks to see what happens, then adjust. Pay attention and you will find the right target for your goals. (And chances are that your first target will not be the best target.)

Treat calories like a clothing size. The number on the tag doesn't matter, the way the clothes fit does.



How Do Macros Compare to Calories?

- Calories measure food **quantity**. They tell you the amount of energy in food you eat.
- Macros are a way to describe the **category** of a food that has calories.

How Much Do You Need To Eat?

If you don't love math, use this [online calculator from the American Council on Exercise](#) which estimates your **TDEE** - then **SKIP THESE TWO PAGES OF MATH** and go to the section, "What To Do With These Numbers."

If you love math, grab a calculator and let's get you some numbers. **First, conversions.**

Weight in kilograms = pounds divided by 2.2. Your weight _____ \div 2.2 = _____.

Height in centimeters = inches times 2.54. Your height in inches _____ \times 2.54 = _____.

Your Basal Metabolic Rate (BMR)

There are many equations to choose from when we talk about metabolism and calories. We use the Mifflin St. Jeor equation (see formulas below) as an estimate of your basal metabolic rate. It has the lowest degree of error, estimated at around 10%.

Now that you know that calories are NOT an exact science, you may realize which equation you choose is not as important as how you use the information from that equation. (If you realized this, then, **hey, way to go you!**).

Your basal metabolic rate (BMR) is an estimate of the number of calories your body needs **just to fuel all the things it does on its own to keep you living.**

Males:

$BMR = (10 \times \text{weight in kilograms}) + (6.25 \times \text{height in centimeters}) - (5 \times \text{age in years}) + 5.$

$BMR = (10 \times \text{_____}) + (6.25 \times \text{_____}) - (5 \times \text{_____}) + 5.$

$BMR = (\text{_____}) + (\text{_____}) - (\text{_____}) + 5.$

$BMR = \text{_____}$ calories per day.

Females:

$BMR = (10 \times \text{weight in kilograms}) + (6.25 \times \text{height in centimeters}) - (5 \times \text{age in years}) - 161.$

$BMR = (10 \times \text{_____}) + (6.25 \times \text{_____}) - (5 \times \text{_____}) - 161.$

$BMR = (\text{_____}) + (\text{_____}) - (\text{_____}) - 161.$

$BMR = \text{_____}$ calories per day.

Your Total Daily Energy Expenditure

Chances are you do MORE than just stay alive every day.

You get out of bed, you work, take care of things, run errands, and probably exercise on most days. To **account for the fact that you do get up and move around**, we use an Activity Factor (AF).

This adds calories for moving, and so, it is based on how sedentary or active you are on an average day. Your BMR times your Activity Factor is your Total Daily Energy Expenditure or TDEE.

Find your Activity Factor

1.2 = Sedentary. Little to no exercise and a desk/sitting job.

1.375 = Light exercise 1-3 days per week.

1.55 = Moderate exercise 3-5 days per week.

1.725 = Very active. Heavy exercise 6-7 days per week.

1.9 = Extremely active. Strenuous training twice per day.



If you are using the [online calculator](#), the little bar chart boxes are for these activity levels. Hover over them to see descriptions.

Don't overthink this. Pick one and do the math. You can always adjust later.

TDEE = Your BMR times your Activity Factor.

TDEE = _____ (BMR) x _____ (AF) = _____

Important Information About Calculations

Your mileage may vary. This information is educational and based on guidelines for generally healthy adults. It may not be appropriate for you based on your medical history, current conditions, goals, or medications. Please consult with your medical provider or your registered dietitian before changing how you eat.

What To Do With These Numbers?

TDEE is an estimate of your daily calorie needs to maintain your current body weight. For a lot of people, this number is shocking. It is way more than they think they need to eat. You are not alone if you are thinking this too.

Eat **this amount (your TDEE)** when you wish to **maintain your weight**:

- Subtract 10% to get the low end of your daily calorie range
- Add 10% to get the high end of your daily calorie range

Eat **more** when:

- You want to gain weight or find that you are hungry a lot
- You are losing weight and you want to maintain or gain weight or muscle
- Consider using your TDEE as the low end of your calorie range and adding 250-500 calories to get the high end of your calorie range

Eat **less** when:

- You want to lose weight or you find that you are overly full a lot
- You are gaining weight and you want to maintain or lose weight
- Consider using your TDEE as the high end of your calorie range and subtracting 250-500 calories to get the low end of your calorie range



In most cases, **try NOT to eat less than your BMR.**

Most people **should NOT eat under 1,200 calories (women) or 1,600 calories (men) without oversight by a medical provider.**

The approach that "less is better" is not sustainable or safe.

When you "Calculate Your Macro Targets" in the next sessions, you will use your calorie range to set your macros. **Put your calorie range on Your Macro Calculations Page.**

How Will I Know If This Amount Is Right For Me?

You will try it out and see what happens. Then, you will adjust until you find the target that works for you - which means you feel satisfied, energized, and are moving towards your goals.

The goal is NOT to turn this into a restrictive diet. See your notes from Session 1 and remember that you will also use your hunger signals and honor the fact that your body has different needs on different days.