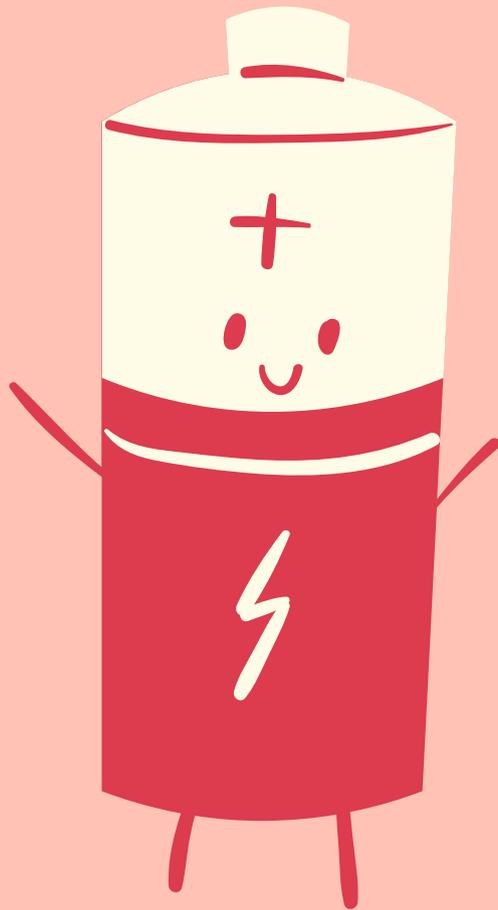


# "What is Energy Balance?"

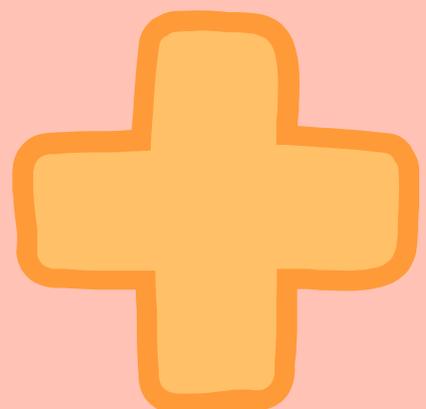


Z L R F I T N E S S  
DISCOVER YOUR INNER WARRIOR

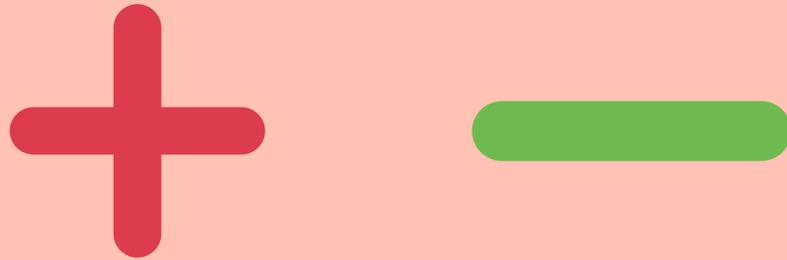


**Energy balance is the  
difference between your  
energy input  
and your energy output!**

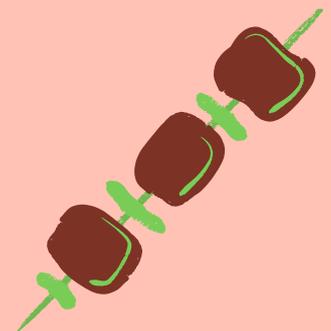
**Some people refer to the energy  
balance equation as the  
"calories in vs calories out"  
This equation provides a starting  
point for your weight loss journey.**



# WHAT IS ENERGY INPUT?

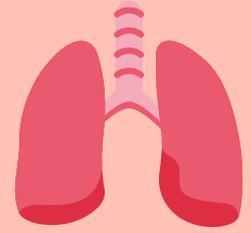


We input energy when we eat, therefore the food we consume provides calories. Calories are simply a unit of energy or heat. The food we eat & the drinks we consume provide different amounts of energy.





# WHAT DOES BMR MEAN?



**BMR:**

Basal metabolic rate is a measurement of the number of calories needed to perform your body's most basic (basal) functions, like breathing, circulation and cell production.

Let me show you how to work it out:

**Women:**

$$\text{BMR} = 655 + (9.6 \times \text{weight in kg}) + (1.8 \times \text{height in cm}) - (4.7 \times \text{age in years})$$

**Example:**  $655 + 9.6 \times 60.4\text{kg} + 1.8 \times 157 - 4.7 \times 29 =$

**1,381.14** is what I would need for my basic functions such as breathing, circulation etc.

**Men:**

$\text{BMR} = 66 + (13.7 \times \text{weight in kg}) + (5 \times \text{height in cm}) - (6.8 \times \text{age in years})$  then you add your activity level.

**RMR:**

Resting metabolic rate is a measurement of the number of calories that your body burns at rest.



**Basal metabolic rate:** Accounts for about 60%-75% of total calories burned each day. You should look to increase muscle mass to burn more calories, hence why weight training is super beneficial.

**Activity thermogenesis:** (non-exercise movement and exercise) accounts for about 15%-30% of total calories burned each day. Look to increase daily movement to burn more calories.

**Thermic effect of food:** (calories burned from eating and digestion) accounts for about 10% of total calories burned each day. It's important to choose healthy protein-rich foods to make a small difference.

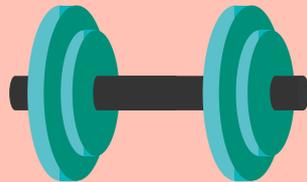


**To determine how your energy balance will affect your weight, you need to determine if you have a positive or negative balance currently.**

**So let's have a look at what this actually means.....**



# WHAT DOES A POSITIVE ENERGY BALANCE MEAN?



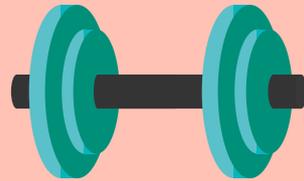
A positive energy balance occurs when your energy input is greater than your energy output. This means, you eat more calories than your body uses or burns. Your body stores excess energy or calories as fat. This results in weight gain.



For someone, who wants to lose weight should not be aiming to have a positive energy balance. A positive energy balance should be for someone wanting to increase their weight.

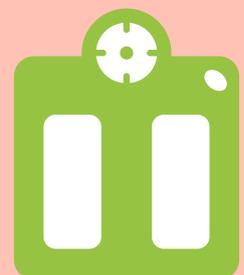
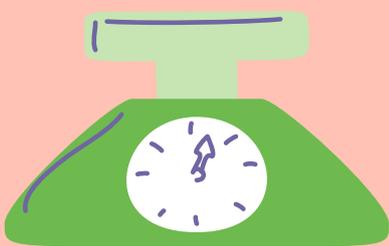
For anyone wanting to maintain their weight the energy in has to be as the same as energy out creating an even energy balance on both sides.

# WHAT DOES A NEGATIVE ENERGY BALANCE MEAN?



Weight loss occurs when you create a negative energy balance. That is, you burn more calories than you consume. When this imbalance occurs, your body burns stored energy (fat) in order to function and help you lose weight.

For someone, who wants to lose weight they should aim for a negative energy balance.... Also known as the calorie deficit!



The calorie deficit enables you to hit a certain amount of calories per day in order to hit your weight loss goals.

# Let's look at an example:

## Example #1: Camilla

Calories consumed each day: **1,800**

Calories burned each day: **2,050**

$$1,800 \text{ (energy input)} - 2,050 \text{ (energy output)} = -250 \text{ calories}$$

Camilla has a negative energy balance of **250** calories. Over the course of a week, her body will need to burn **1,750** calories of stored fat to meet its needs, and she could lose approximately one-half pound of weight.

## Example #1: Megan

Calories consumed each day: **2,000**

Calories burned each day: **1,750**

$$2,000 \text{ (energy input)} - 1,750 \text{ (energy output)} = +250 \text{ calories}$$

Megan has a positive energy balance of **250** calories per day. That doesn't sound like much, but over the course of a week she would be over-consuming. Meaning the extra **250** wouldn't be burnt off causing her to gain weight each week.

# The Calorie Deficit..

A calorie deficit is very vital to any weight loss journey.

But, remember if you don't track your food, or aren't willing to measure or even count the calories you consume then you are going to have a hard time in the weight loss journey process.

With foods look at the back of packaging, weigh your food when plating up your meals so you know you are having the correct serving! A great tip is to keep a food diary as this will build awareness to your portions, help you remember what you ate & help you stick to your calorie deficit.

Calories should never be too low or too high, both ends of the spectrum are just as drastic as each other!

**Too high= weight gain!**

**Too low= no weight loss!**

Sure, take them too low you may lose weight for a little bit but you will very soon hit that wall, finding it unsustainable, restrictive and you will give up as a result. We don't want that!

A calorie deficit should be as high as it can possibly be at the start of your journey, from here this helps you lose weight without restricting or starving yourself. It is way more sustainable, still gives you freedom to enjoy food and allows you to build a lifestyle that works for you.

Don't forget that a calorie deficit will need to be constantly adapted so you continue to see weight loss.

Just because you do the calculation it doesn't mean that number will be the perfect deficit for you. Every person does different things for their day job, home life & exercise routine etc. You may find you have to tweak it so that it is right for you.

Let's have a look at how we implement one successfully!

**1. To work out the deficit, you need the right calculation to find out:**

**Women:**

**Weight in kg x 22 + Activity level**

**Men:**

**Weight in kg x 24 + Activity level**

**Activity-**

**Sedentary = x1.2**

**Lightly Active = x1.3**

**Moderately Active = x1.4**

**Very Active = x1.5**

**Most of us are sedentary unless you spend all day on your feet!**

**2. Find out the calorie amount by doing the calculation and adding the daily activity on. Let's use me as an example:**

**60kg x 22 = 1,320**

**x1.4 (Moderately active) = 1,848**

**I would need this many calories to maintain my weight.**

**3. From here, you are then ready to implement the deficit.**

**I would advise taking away between 100-200 cals and see how it goes...**

**Deficit = 1,648 calories per day**

**If you find your weight doesn't budge you may need to keep tweaking it so that you get a correct negative energy balance in order to lose weight. As you begin to hit a wall that's when you will need to adjust it again.**

**Tweaked = 1,500 calories per day**

**These are just examples but hopefully they give you a good idea of how to work it out for yourself!**

**Losing weight: Just take away cals as & when you need too. If you can comfortably lose weight on the cals you are on, there is no need to change anything!**

**Maintenance: Looking to maintain then keep the calories where they are after activity is worked out. However, if you have dieted heavily I would gradually work to bring calories up to the maintenance amount slowly, to prevent excess weight gain!**

**Gaining Weight: Looking to gain add 100-200 cals after activity is worked out, and keep adjusting it if it doesn't work. You will want to do this in gradual stages, so take your time.**

# **We are all beautiful coming in different shapes & sizes!**

**Just because someone is eating 1,400 cals and losing more weight than you, it doesn't mean you are doing something wrong.**

**It's very important to not compare your body, your progress or your weight loss to anyone else's.**

**We all lose weight and build muscle at different rates and paces! By the way, this is totally normal!**

**When your calories are set correctly for you then you will be successful in your efforts! By doing so you will lose weight in a slowly, healthy & maintainable way!**

**It is extremely detrimental to your journey if you take your calories too low and to not have them set at the right amount.**

**When you have your calories too high then this can lead to unnecessary weight gain, and seeing no weight loss each week; which can be extremely confusing & frustrating!**

**However, setting it up correctly can enable you to enjoy food, lose weight and stick at it for a sustainable amount of time!**

**Also on occasion you can be seeing no progress with the scales, aslong as everything is moving in the right direction such as through pictures then don't worry! It's important not to fixate on the scales too much!**

**Remember to love yourself through every stage & part of your journey!**



I hope this guide has been  
super useful and remember  
this has vital information that  
you will want to hold on to!

Make sure you download it!

Love Zo x