



# The Science of Fat Loss

## Day 1: Energy Balance & your Metabolism

IT'S NOT ENOUGH THAT WE REGULATE WHAT COMES OUT. WE MUST ALSO REGULATE WHAT GOES IN.



## **Course Content:**

**Day 1 - Energy & Metabolism**

**Day 2 - Calories in (eating)**

**Day 3 - Calories out (exercise)**

**Day 4 - Fat Loss vs Weight Loss**

**Day 5 - Pulling it all together**

Welcome to day 1.

The purpose of this course is simple:

To give you nothing but the scientific facts of what's involved in losing troublesome bodyfat.

So that you have all the knowledge you could ever need on the topic..... for the rest of your life.

Aswell as help you cut through all the bulls\*t out there.

And we want to do this for you, in less than 300 seconds (5 minutes) per day.

Which we achieve by giving you nothing but the absolute essentials.

Each day builds on the preceding day, and by day 5, you'll suddenly think

**"*wow, I really CAN do this*"**

Some of it, may seem obvious, and almost "too" simple.

You may even start thinking "is this it?"

But if you devote just 5 minutes every day, to read through each section, you will know 99% of everything you will ever need to know, by the end of day 5.

And then it's over to you, to implement.

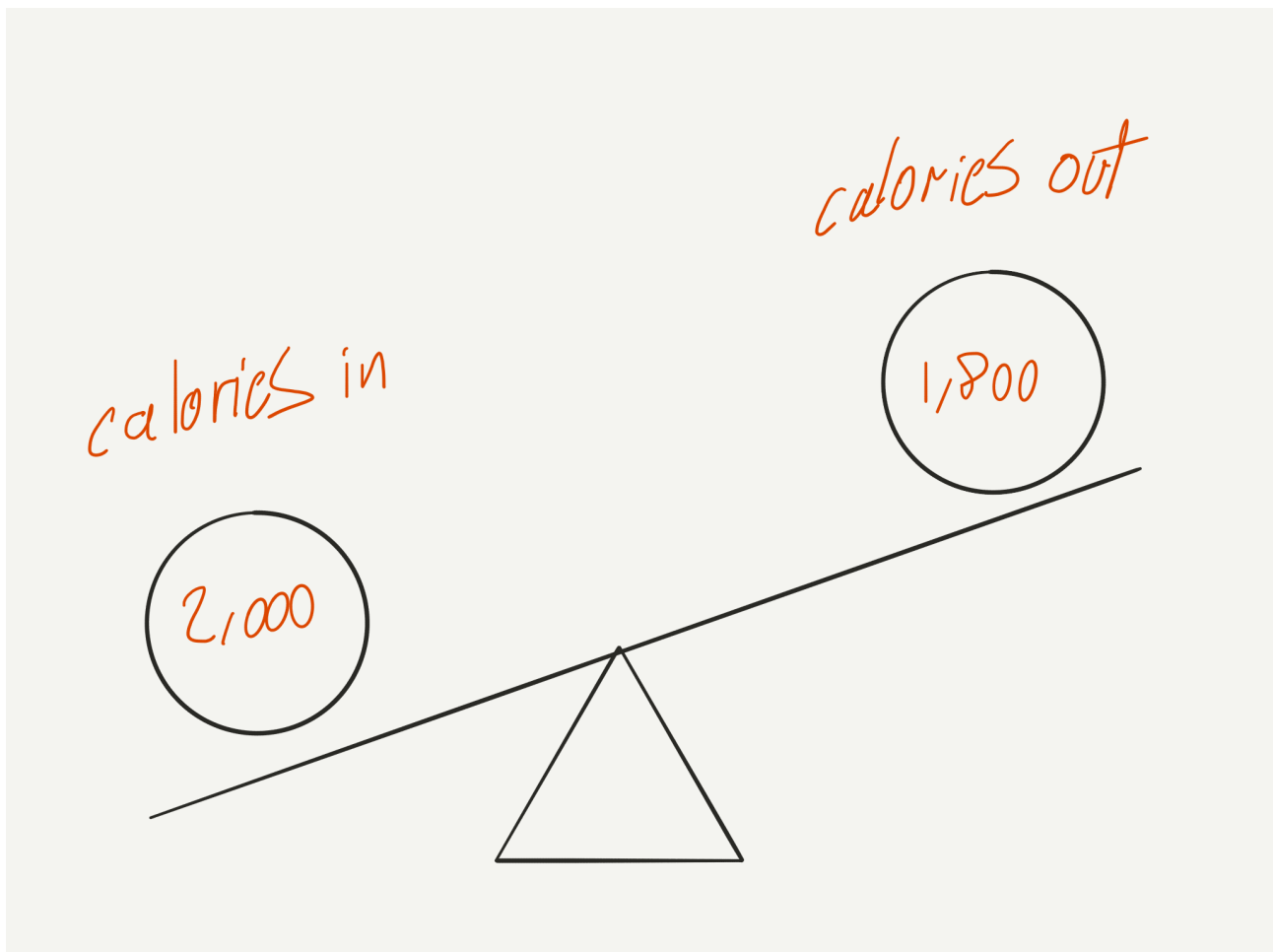
So, shall we crack on?

# Energy Balance

(how we lose, gain, or maintain weight)

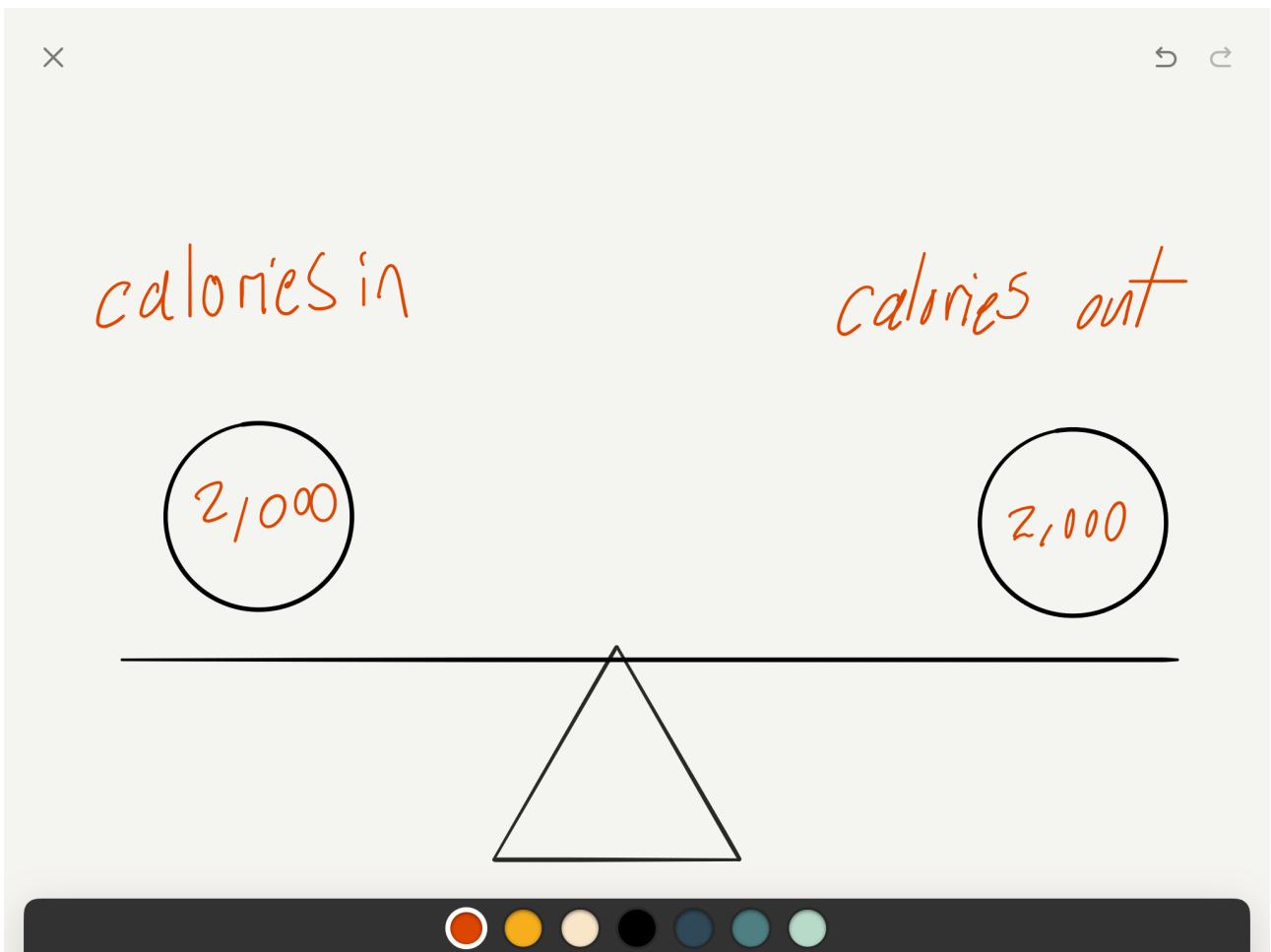
## 1) Weight GAIN

When we consume more energy (calories) than we expend, our weight increases



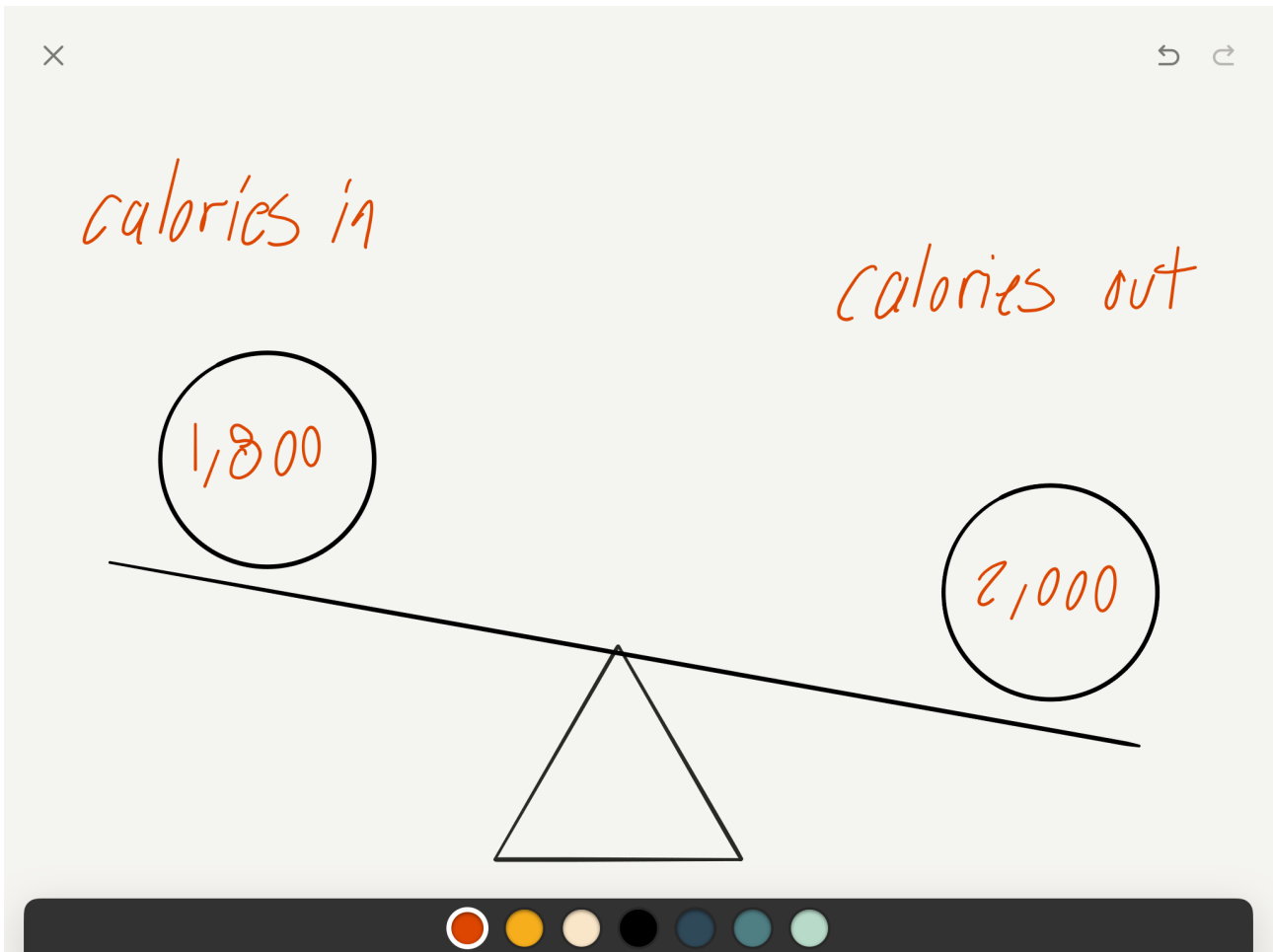
## 2) Weight MAINTENANCE

When we consume the same amount of energy (calories) as we expend, our weight remains the same.



### 3) Weight LOSS

When we consume LESS energy (calories) than we expend, our weight decreases.



Hopefully, you sussed out that **this final image, is the important one.**

**To lose fat, you need to consume less energy (calories) than you expend.**

But how do you know how much energy you're expending?

Well, that's what your metabolism is and does.

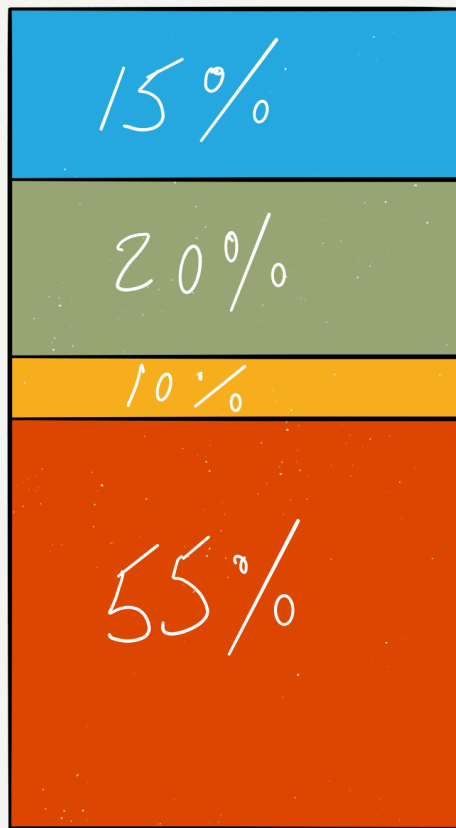
So, let's get to know what your metabolism "is", first, shall we ?

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## **Your Metabolism**

**Your metabolism is basically the sum total of all the energy required by your body, to perform it's various tasks each day.**

Those tasks can be split down into 4 main areas (see below)



EXERCISE

N.E.A.T

DIGESTION

B.M.R

These 4 components listed below, when added up, are often referred to as your **T.D.E.E.**

### **Total Daily Energy Expenditure.**

This is important to know, because if we know how much energy we're burning each day, then we can attempt to consume less than this number, in calories, in order to create an energy deficit, and thus lose weight. Let's now look at each of the 4 components of your TDEE.



## 1) B.M.R.

B.M.R stands for **Basal Metabolic Rate**.

This is the total amount of energy used by the body if you just lay in bed, motionless.

Things like your heart beating, your lungs pumping, your hormonal system, your brain functioning, your hair and nails growing (albeit slowly!).....millions of processes are happening every second inside of your body, and it uses up a lot of energy.

As you can see, **your BMR (simply just "staying in alive") accounts for over half of the total calories you expend (burn) each day!**

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## 2) DIGESTION

Believe it or not, when we eat food, we actually burn calories too!

Once food enters our digestive tract, it goes on a long process through the stomach, large intestine, small intestine etc .....and along the way, it is broken down further and further into microscopic pieces, and

absorbed by the body, and then shuttled off to various places to be used or stored.

This uses up quite a lot of energy - around 10% of our total daily energy burn in fact!

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### 3) N.E.A.T

N.E.A.T stands for **None Exercise Activity Thermogenesis**.

In simple terms, this is all **the physical activity we do each day, that's outside of what we'd typically class as exercise** (eg 'fitness' type exercise or sport).

Standing, walking, house-work, gardening, bending down and picking things up - it all burns calories.

Whilst the calorie burn per hour of these kind of activities is obviously quite low, because we do move around a fair bit across the course of a day, it can soon add up.

It typically accounts for around a fifth of our daily energy (calorie) expenditure.

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#### **4) EXERCISE**

So this is the area where most people tend to focus their efforts on.

The conscious effort of 'burning off calories' through brute force.

As you can see, the amount of energy we expend through working out or playing sport, is actually a bit less than all of our low-level activity.

This is because we only tend to workout or play sports for say an hour, whereas the daily movements of life, adds up to many hours.

**So how many calories does all of this add upto ?**

GREAT question!



If you're asking that, then it means that you've understood the above concepts.

For now, you don't need to know the exact numbers of how many calories YOUR body is burning each day.

You just need to know a bit more "theory" of how stuff works - which we'll explain over the next couple of lessons.

In the next two lessons we dive into Calories in (eating) and Calories out (exercise).

## Summary

In the last 300 seconds, **you have learned the one, single, most important and undeniable rule of weight and fat loss.....that of energy balance.**

If you create an energy deficit in your body through calorie intake and expenditure, and you will lose weight.

You have learned what your metabolism consists of, so that you have an increased awareness and understanding of how you expend energy (calories) each day.

That's it.

That's all you need to know for now.

Short, simple, and easy to absorb and understand, right ?

**Coming up in part 2:**

**Calories In (eating)**

>> What exactly ARE calories?

>> All about Protein, Carbs, Fat....and Alcohol!

>> Moderating calorie intake

**See you in part 2 :-)**

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