



Training Basics

The whole point of exercise is to strengthen muscles and bones, as well as tendons and ligaments. How you do this is completely up to you, but my hope is that this e-book gives you some insight into how to optimize your own training.

There are 2 main forms of exercise: bodyweight training (also known as calisthenics) and resistance training (lifting dumbbells, barbells, kettlebells etc.)

Bodyweight training includes exercises using just your own bodyweight, such as:

- Push ups
- Pull ups
- Lunges (forward, reverse and walking)
- Bodyweight Squats
- Leg Raises
- Plank
- Horizontal Pull Ups

Resistance Training Includes any exercise involving a piece of resistance, such as:

- Barbells
- Dumbbells
- Kettlebells
- Cable Machines
- Plate Loaded Machines

The Benefits of Bodyweight Training

When you perform any form of bodyweight training, you are improving your balance and

coordination, meaning you are less likely to fall over when you squat or perform a walking lunge. You will also challenge your core strength a lot because a lot of bodyweight training requires core strength to maintain equilibrium while moving through the air, examples of such are:

- Bracing your core to prevent swinging when performing pull ups
- Bracing your core to prevent the hips dropping during push ups
- Bracing the core to maintain a neutral spine position during squats.

What Muscles Do I Use When I Train With Just My Bodyweight?

This is really exercise dependent, so i'll make it simple. I have listed each exercise and written which muscles are the most commonly used during the exercise:

Push Ups: Chest and Triceps and Abdominals

Pull Up: Forearms, biceps and lats

Lunges: Quadriceps, abdominals and glutes

Bodyweight Squats: Quadriceps, core and glutes

Leg Raises: Hip Flexors and abdominals

Plank: Abdominals, glutes, quadriceps

Will I Burn Calories When I Perform Bodyweight Movements?

Yes, you will burn calories when you perform bodyweight movements, but probably not as many as you think. My suggestion is to play a game with yourself, which is to burn more calories than you did the previous session, this will make you work harder than the previous session

You can burn more calories if you move faster, because movement burns calories, and fast movements burn more calories, which is why people love high intense stuff, and gym classes, because they are usually fast paced and you feel like you are doing something.

However, to truly burn enough calories that you tone up and lose weight, you need to burn more calories than you consume, which is all about nutrition and the law of thermodynamics.

How Many Times Should I Perform Bodyweight Movements Per Day or Week?

My personal view is not to worry about performing a certain amount of bodyweight movements per day, but instead, build up your fitness to the point where you can perform a certain amount of these exercises at the drop of a hat, this is really where your fitness comes in.

Here are the numbers I suggest to work up to:

Push Ups:

Men: 30 Minimum
Women: 10 Minimum

Pull Ups:

Men: 5-10 Minimum
Women: 3-5 Minimum

Lunges:

10 On each leg without struggling

Leg Raises:

10

Plank:

10 seconds with ease

Horizontal Pull Ups:

Men: 10
Women: 5

Resistance Training

As I've listed above, there are a few different varieties of resistance training, based on my opinion of what resistance training is, which is simply:

Performing exercises against an external force or resistance, which excludes bodyweight, but includes all of the following possibilities:

Dumbbells and Barbells

These are fantastic tools to use to target every single muscle group, and personally I prefer it when people become experts at using these than the stuff below.

Cable Machines

Sometimes a cable machine can give you a better contraction and help you 'feel' a muscle working, such as for the chest or triceps, so cable machines are an awesome tool to use.

Plate Loaded Machines

Examples being leg press machine and seated row machine. Just awesome.

Resistance Bands

Depending on the type of resistance band some are extremely cheap and basic and work well for band pull aparts or clamshells, but not much else. Other, most expensive and higher quality bands are used for assisting exercises like the bench press, squat and deadlift, mainly used by powerlifters.

Kettlebells

Kettlebells are brilliant to use, but can take a long time to learn and I wouldn't want a beginner to learn how to use them without first being taught.

How Many Days A Week?

There is no set amount of days I would recommend, but I would suggest targeting the muscles you want to change. You might train for a few years to get used to the movements and experiment. You will probably favour the easier exercises first, and the muscles you want to see, for guys this is usually arms and chest and abs, and for women it's usually the butt and legs.

Over time, you will notice certain muscle groups lag and others grow fast, so you will need to adjust your training.

For example, my lats and triceps and shoulders grow really well, as do my quads, but my chest is my most lagging part. I can do 2 or 3x as much volume per week for my chest as I do for other body parts, but the muscles don't respond as well, so I have to hit the muscles harder.

For beginners, consistency is the most important part, and looking good is the aim of the game, so I would suggest training the body parts you really want to train to stay motivated.

A program example would be something like this:

Monday- Chest and Triceps

Tuesday- Back and Biceps

Wednesday- Rest

Thursday- Shoulders and deltoids

Friday- Legs

Saturday and Sunday- Rest/Abs

Nutrition Basics

To build strong muscles, you need to train them. To show those muscles, you need to focus on your diet, and that's where nutrition comes in. A combination of training your muscles and

fine tuning your diet equals a more toned look.

First of all, let's nail down the macronutrients:

Protein (4 calories per gram)

Protein is important for muscle repair

Fat (9 calories per gram)

Fat is important for protecting the myelin sheath, keeping the nervous system and brain healthy and for transportation of hormones and vitamins.

Carbohydrates (4 calories per gram)

Carbohydrates are important for preventing hanger from striking, and you accidentally committing murder. All joking aside, carbohydrates are important for aiding in building muscle, providing energy and keeping your mood up.

Losing Weight

Far Left: 15th July Far 2 right 8th September



The first thing to know about weight loss is that everybody's weight loss will be different. Some lose weight faster than others, so have different fluctuations of weight loss, some people will find it easy to lose weight, just remember not to compare yourself too much to other people, it is YOUR journey.

In order to lose weight, you must burn more calories than you consume.

To do this, you first need to know your BMR, which is your Basal Metabolic Rate. Your BMR is how many calories you burn on a daily basis by doing basic daily tasks. You also have your RMR, which is how many calories you burn at rest.

To work out your BMR, you need to follow this simple mathematical guide:

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

I weigh about 79kg. So for me, it would look like this:

$$790 + 1062 - 150 + 5 = 1707.$$

1707 is the amount of calories I need on a daily basis to maintain my body weight.

If you want to lose weight, find your number and subtract 100-200 calories from that number. Remember though, that it will take a lot of trial and error to figure out how many meals is possible for you each day, how many calories per meal. Here's a few questions to ask yourself.

If you have 4 meals per day, for 7 days, then 3 meals per day for the next 7 days, how are you going to adapt to changing your calories per meal? 3 meals per day will require more calories per meals since you are eating less whole portions.

If you are on a low carb diet, how are you going to replace the calories lost from your carbs? Have more protein such as eggs or fish perhaps?

How will you store these meals? In tuppaware? In tin foil?

Is your fridge big enough to store the food you need?

Does your spouse have the same goals in relation to their food?

With so many things to consider, working out your BMR and being consistent is the easy part, believe it or not. The hard part is fitting your food in around your schedule.

Gaining Muscle

To gain muscle, train your muscles as often as you feel you can. This means up to 5x a week, because rest is still a priority.

Now, with building muscle, you need to make sure your protein is on point. A general rule of thumb is 30g per meal. It's a well rounded number and easy to remember. Nobody really knows the 'magic' number of how much protein, so sticking to 30g of protein is relatively simple.

In order to get 30g protein, you want to eat roughly 100g of meat sources (turkey, beef, chicken). There will be a difference in exactly how much protein there is per 100g, but don't worry about the finer detail, just worry about being consistent.

You want roughly 1g to 1.5g of protein per kg of bodyweight per meal. This means that if you weigh 80kg, you want between 80g and 120g protein per day. For most beginners to exercise, specifically weight or resistance training, this isn't really a whole lot of training.

You have to remember that you don't actually have a whole lot of muscle on your body that needs so much food, and this is where most people go wrong, they eat too much and don't burn it off. So make sure, that when you eat each meal, you give yourself just enough protein to satisfy your muscles, which isn't a whole lot.

If you do weigh about 80kg, you could even start with just 80g protein and pick it up from there, which is about 3 chicken breasts, or 2-3 turkey fillets, or a couple of steaks. You could potentially even have a few scrambled eggs or omelettes chucked in for good measure.

Carbohydrates

Carbohydrates are your friend, you need to remember that. They have you create energy in the form of ATP and can give you that energetic boost that you need. Carbohydrates also signal to the body to release insulin from the pancreas, which is the hormone that drives nutrients all over the body. Carbohydrates produce a far better insulin response than fat or protein does, so you need to include carbohydrates to fuel your body and get nutrients around quicker and more effectively.

Carbs and Sugar

Carbohydrates and sugar are the same thing, the difference is their molecular structure, which comes in the form of different saccharides:

Monosaccharide

Disaccharide

Polysaccharide

Oligosaccharide

People will also talk about how sugar is bad for you, but sugar is just a very simple form of saccharide, with very few molecules that is easy to digest. Sugar is not bad for you, just too much can be bad for you, and what's worse than that is too much over a long period of time.

If you eat 1 single sugar cube, the effects aren't bad, but if you eat 20 a day over a year, the results will show.

Fat

Fat is actually more important than you think for a number of reasons.

The first reason, in regards to training, is that fat helps to sustain the myelin sheath, which is what protects the nerves. Essentially, when a nervous signal travels from the brain to the contracting muscle, the myelin sheath is what allows the signal to travel safely. Fat is what makes up the myelin sheath.

If you want more effective muscle contractions, you need to make sure you are eating fat.

You can find these types of fat from sources such as fish, eggs, avocado and nuts.

Fat Doesn't Make You Fat

Fat is 9 calories per gram, and people worry that too much fat will make you fat, but even though fat doesn't directly contribute to fat gain, it is the most calorific macronutrient per gram, so please be wary of any excess fat, grease or oil you are using or your food is cooked in.

This is the same reason why takeaways are so bad for us, most of the food we eat, such as the chips and the chicken, is cooked in a fryer of fat.