The Running MANUAL

Your Total Guide To Running To Improve Your Fitness, Lose Weight And Increase Mental Strength

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Introduction

Sometimes, the best answer is the simple one.

Countless people around the world are right now trying to lose weight. In fact, nearly *all* of us have wanted to shed a few pounds at some point in our life. It's something that unifies pretty much everyone but it's also a challenge that is incredibly difficult.

Just take a look online for 'weight loss' and you'll quickly be inundated with different tips, advice and strategies. There are countless weight loss diets out there, 101 different workout routines and an *awful* lot of contradictory information out there. It's super hard to know what the best way to start is and often the amount of commitment involves is massive: it means counting all your calories, avoiding carbs at all costs, or training every single night.

What you'll often say is: if only it was *simple*.

Well, guess what? It *is* simple. There is one really simple answer to losing weight.

And not just losing weight either – this one simple solution will also help you to feel more energetic and alert, it will actually improve your mood and it will help you to boost your muscle mass too.

No doubt you've already guessed what I'm talking about: it's in the title of the book after all!

I'm talking about running. And I'm referring to the simple fact that if you go for just two runs a week, you *will* lose weight. And you *will* feel healthier.

Yes, it really is that simple.

And there are countless more benefits to running too. As you'll learn as you read this book, the human body is literally *born* to run. It's what we're designed to do. And if you know how to run properly, then you'll find that it quickly becomes a life-long passion that you never want to give up on!

So with all that in mind, the only remaining question – the only caveat – is why everyone doesn't run already.

If running is so great and so easy, why aren't you already running every day?

The answer is that running has something of a PR problem. Most people seem to believe that running is gruelling, unpleasant, slow and painful. You may well be among those people. You might well think that running is one of the last things you could possibly want to do. And if you feel that way… I don't blame you! It doesn't exactly *look* like it's a laugh a minute.

But running doesn't have to be hard, it doesn't have to be unpleasant… it doesn't even have to be hard on the joints.

The simple fact of the matter is that if you aren't enjoying running or you're finding it too hard, you're probably doing it wrong!

So read on and we'll put an end to that. In this book, you'll learn how to fall in love with running and how to make it work for you. Specifically, you will learn:

- Why running is SO good for you
- How to run with correct technique
- How to make running enjoyable
- How to avoid injury
- How to avoid the common mistakes of new runners
- How to stay committed
- How to increase weight loss
- How to improve your speed
- How to support running with the right food and diet
- Advanced running techniques

And much, MUCH more. So let's get this show on the road!

Chapter 1: The Top Health Benefits of Running – It's Not Just About Weight Loss!

So a good place to start is with why you should run in the first place.

And the big reason for a lot of people reading this is going to be that whole 'weight loss thing' that we talked about. Simply put, running is THE number one way to lose weight…

Why Running is THE Number One Way to Lose Weight

That sounds like a bold claim, so let's back it up.

And to do that, we'll start by assessing how anyone goes about losing weight ever. What is the key to weight loss?

Actually, there is one very simple equation when it comes to losing weight – and that is that you have to consume fewer calories than you burn.

When you eat food, your body absorbs the nutrients to help support various processes in the body and it absorbs glucose in order to provide useable energy. That glucose moves around the blood stream and when you move, breathe or *run* it is sent to muscles and the organs in order to give you the energy you need.

But what if you are just lying around and you're left with energy left over? In that case, the sugar is converted into fat and is stored around the body under the skin. This is what makes us look less attractive and what can also cause numerous health problems.

On the other hand, if you need more energy that is available to you, then your body will have to look toward its existing fat stores. It will then put you in an aerobic state, meaning that oxygen will be sent to the fat stores and will break down the fat to provide you with more energy.

All this happens on a moment to moment basis but the best way for us to monitor it is to look at our daily total. That means we need to look at our daily calorie intake and our daily calorie *burn* in order to work out the difference.

What you'll be left with is either a 'calorie deficit' or a 'calorie surplus'. A surplus means that you have left over energy that the body is going to store as fat. A deficit means that you used more than you burned, so you're going to have removed some of your fat. It's a little like writing a budget but instead of trying to *save* money, you're trying to *lose* calories.

So where does running fit in? It actually plays an important role for all *kinds* of reasons but the most simple and straightforward to understand is this: running burns a *lot* of calories. In fact, a forty minute run will help you to burn something like 500-800 calories. That's a huge amount and more than you could probably burn with any other form of exercise.

And to put this in perspective, most people will naturally aim to consume around 2,000-2,500 calories in a day. That means that running for just one hour can burn somewhere between 1/2 and 1/3rd of your total calorie count. That's a *big* difference and it's enough to make a significant impact even just twice a week.

There are actually more efficient ways to lose weight with running specifically though. We'll talk about that more in a future chapter but just know – you can burn through a lot of calories.

But there's more to this as well. Because if you look online for dieting, you'll find that there's a lot of debate as to whether this whole 'calorie counting' strategy will really work. Some people say it's too simplistic and it's more important to focus on the *type* of calorie you eat and things like hormones. Their view is that you can't accurately track calories and that some people will burn more calories than others owing to metabolic differences. Maybe you have more testosterone, maybe you have more T3, maybe you have a slow thyroid.

And this makes a lot of sense if you look at someone who uses anabolic steroids, or someone who *does* have hyper or hypothyroidism. Even someone with diabetes or insulin resistance. Hormones really do make a difference and calorie counting on its own doesn't account for this. These

individuals focus on things like low carb diets because they believe they can control insulin and other hormonal responses that way.

What's the truth here? Well, both camps have their points and again we'll get to this in a future chapter. But what really matters is that it's immaterial – because running helps you lose weight in this way too. When you run, your body will release a number of hormones like adrenaline and mysotatin which will help you to break down fat and tissue. What's more, is that your body will become more energy efficient, so that even when you're sleeping, you'll be burning more fat. This will also be helped by the increase in muscle tone in your stomach and calves and your elevated VO2 max. We'll get into all this later.

But basically, running has the short term effect of burning lots of calories and the long term effect of helping you to alter your metabolism and your hormonal makeup so that you will always be burning through more calories than you previously were…

The Many Other Benefits of Running

But fitness shouldn't just be about losing weight. In fact, this is where a lot of people will go wrong. If you simply aim to lose weight, then you'll find you can quickly become disheartened and you can make some bad choices regarding your diet and your training.

Instead, all forms of fitness and training should be aimed at feeling better and being healthier. Because when you do that, you will find it much easier to stick at what you do and you'll find that your body changes to look the way you want it to almost as a *side effect*. Don't run to look good – just enjoy the fact that it happens!

So the BIG benefit of running is what it does for your health. And it does tons for your health.

Obviously running improves your cardiovascular fitness and your energy. It's not just your heart that improves, it's also your mitochondria and all the other energy systems in your body. This means, quite simply, that you get tired less easily. That's true whether you're playing sports or you're on a long walk. Bruce Lee used to run for miles every single day and the reason he gave for this was that you can't expect to be a good fighter if you're tired out after throwing just a few punches! The same is true for tennis, for football, for rugby…

And even just a busy day or stressful commute. When you can run 10 miles, suddenly everything else becomes really easy.

Wouldn't you love it if everything was really easy?

But there are many other, much more specific and scientific benefits to running as well…

The first thing it does is to increase the size of your left ventricle. This is the part of your heart that stores oxygenated blood and then pumps it around your body. The stronger and larger this gets, the more blood you can transport around your body with the fewer heartbeats. This is a benefit that is exclusive to steady state cardio like running – it *doesn't* happen with modern forms of HIIT.

What that increased left ventricle means is that you can now deliver more oxygen and nutrients to your body at any given time. That doesn't only mean when you're running but also when you're sleeping and when you're

working. This means you'll wake up each morning feeling more energetic and you'll be able to stay awake and alert for longer during the day.

Have you ever wondered what you could accomplish with one more productive hour?

Likewise, that increased power in your heart also means your pulse doesn't have to work so hard. Instead of going into overdrive to try and pump your blood around your body, your heart can take a much more casual approach and still provide *more* than enough of what you need, where you need it.

What does this mean? It means that you now have a lower resting heartrate (RHR). That is important because a low resting heartrate is correlated with low cortisol – cortisol being the stress hormone. In other words, when your heart is healthy, you are less physiologically aroused at all times of day. That means that you will feel much more refreshed and much more rested even when you're not really doing anything. It means you'll be able to handle stressful life events much easier and it means that you'll sleep FAR better (your sleep quality is measured largely by how low your heartrate drops).

This also means your blood pressure will be lower (because blood pressure is a result of the viscosity of your blood *and* the force of your heart pumping). That in turn means you're much less likely to suffer a heart attack, stroke or other incident associated with high blood pressure. When you combine this with a lower body weight, you become generally much less likely to become ill or to suffer any kind of serious attack.

Oh and that lowered cortisol means that you'll experience *higher* testosterone. For guys, this means that you'll be able to see more muscle

mass and more fat loss. A lot of people stay away from running because they think it will make them skinny and it will make them burn muscle. We mentioned 'myostatin' earlier and indeed this is a compound that causes the breakdown of muscle.

BUT (and this is a big but), running also makes you more anabolic the *rest* of the time by helping you to rest more efficiently. That means that it can actually *boost* muscle mass. And this is greatly enhanced by the increased testosterone that correlated with an improved heartrate variability.

For men and women alike, running is actually also a very good way to build muscle mass in the legs. This is attractive in and of itself but it also leads to yet more fat loss and yet more muscle building (this is why we're told never to skip leg day!).

Women wanting to get 'fitness model' type physiques really NEED to run. Because you don't lose cellulite by losing fat – you lose it by toning up. If you start running, then you *will* have a much firmer and more toned set of buttocks.

All these changes have amazing impacts on your mood. This is what happens when you lower the stress hormone and start getting the body you've always wanted! But it's also what happens when you experience the 'runner's high'. Running triggers the release of endorphins which are nature's natural antidepressants and analgesics. They kill pain and they make you feel elated like nothing else.

This is compounded by the fact that running allows you to explore your natural area and usually involves running through naturally beautiful locations. That might mean a nearby forest or it might be a park – either

way, countless studies have shown that spending more time in nature further reduces stress and even improves creativity. If you spend most of your time in a noisy, dirty and polluted urban environment, then this is a great way to get an 'escape' and to feel a lot better for it! This is quickly becoming a health fad that some people refer to as 'bathing in nature'. For me, one of the best parts of running is just getting to explore my local area!

And that's nothing compared with the incredible sense of achievement that you get from beating personal bests. Running is one of the purest forms of self-improvement and an excellent chance to challenge and test yourself. You'll be constantly pushing yourself further and harder and it's a fantastic way to develop mental resolve and resilience. When you're a runner, *nothing* can pose an insurmountable challenge anymore. You start to learn that you just have to keep going a little further to cross that finish line. So it is with running and so it is with every other challenge life throws at you.

Chapter 2: Why Aren't You Running Yet? Overcoming Obstacles and Becoming a Runner
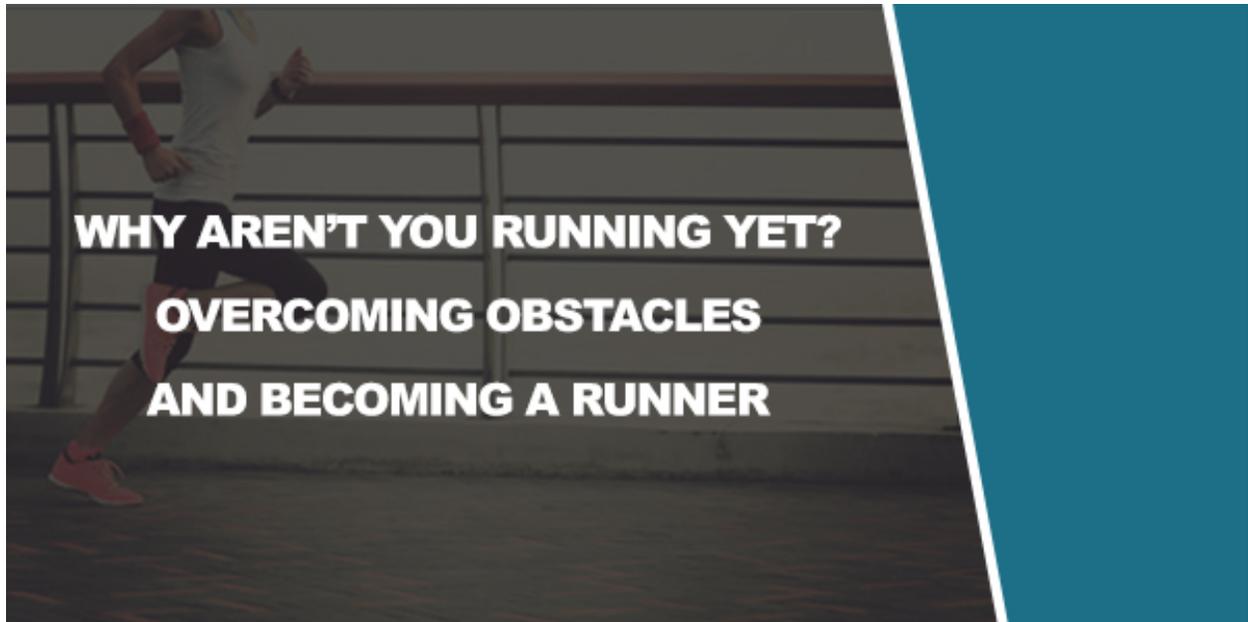
Okay, so that's a MASSIVE number of reasons to start running. Right now, you're probably ready to get up and run out the door!

But before you do that, stop and think for a minute.

Because if you're like most people, you may well have tried this before. Almost all of us have *at some point* given running a try. The problem is that most of us never stick with it and most of us quickly get bored of it.

So what's going wrong?

Where Most New Runners Go Wrong

So where do most new runners go wrong?

There are a number of places but the biggest issue *by far* is just the scale of their ambition.

Right now, you are probably tired and out of shape. That might sound rude but the fact of the matter is that most people are.

Most people are *so badly* out of shape, that once you start running, you will practically be a different species.

Most people spend 8 hours+ in an office every single day and they probably commute for 1-2 hours. That's ten hours of stress each day and ten hours of breathing in toxic fumes, being shouted at and being crowded.

So it's no wonder than when they get home, they can't muster the strength to do anything active. Most of us have admin and correspondence we need to sort out (file expenses, answer letter, phone Mum) and then we need to play with the kids, make the dinner and get an early night so we can start it all again tomorrow.

It's no wonder than the small amount of time we *do* have is spent watching repeats on TV, or just staring into the distance.

And it's no wonder that so many of us will order fast food for dinner tonight.

We barely ever use our bodies. We spend hours at a time locked into a hunched over, seated position and staring at a bright screen. We don't sleep well. And we don't eat right.

Our resting heartrate is somewhere in the 80s and we're carrying a huge amount of excess fat and flab.

Eventually, we get sick of this. So what do we do? We write a training program.

That training program might involve running, or it might be based around lifting weights. Either way though, we set ourselves the task of working out 4-5 nights a week for an hour at a time. Maybe at a gym.

And while we're at it, we tell ourselves, we're also going to start eating more healthily. That means no carbs!

And only 2,000 calories!

We'll track those calories and we'll cook right.

But wait, wait, wait! (Insert record scratch sound here…)

A moment ago, you were saying you have *zero* energy and you're really out of shape.

And now you intend to add hours of intensive exertion to your routine?

While also not really eating enough to sustain yourself??

And you're surprised it doesn't work!

You can't just go from nothing to something so incredibly intensive – it's just *not* going to work.

And time isn't really the issue here. You probably have just about enough time.

The issue is energy. Energy is not an infinite resource. Just because you can't see it, that doesn't mean it's not there and it doesn't mean it's not important!

If you don't have the energy to train, then you're not going to train. It's that simple. So if you try and introduce a MASSIVE training program, you're going to fail. And then you're going to be disheartened. And then you're going to decide that running doesn't work, or it's not for you…

Your First Run And Your New Program

So with all that in mind, what can you do to start running if your plan is to stick with it?

The first tip is to change the way you approach your first run. A lot of people approach their first run thinking they're going to burn a ton of calories so that they can quickly see some results. But I want you to put that thought right out of your mind and completely change your approach.

If you start running fast, with the wrong form, and when you're this tired, you're just going to hate it. You'll feel sick, your shins and knees will hurt when your feet hit the pavement and you'll sweat a bucket.

So instead, your aim with your first run is to go slow and just enjoy. Your first goal is to *learn to run,* not to lose any weight. So the first few times you do it, you'll go really gentle and if that means running with a 13 minute/mile pace… so be it!

Focus on letting your feet land softly and just taking in the environment around you. You can keep it short too – try two miles.

And at the same time, give yourself plenty of rest in between sessions. For the first two months, running once a week is going to be more than sufficient.

Worried that you're not 'doing anything'? Think again! You're still changing the way your body works and believe it or not, you're still going to burn a *ton* of calories. Run slowly for 30 minutes and you can expect to burn 400 at least. That's permission to eat dessert (and then some) with no negative consequences calorie-wise (which isn't the right attitude, just a demonstration).

What you're also going to do, is to find ways to improve your energy levels and to start prioritising your health. Remember: energy is a finite quantity and it's something you need to cultivate if you want to get into shape.

So you're going to start looking at eating just that little bit healthier (getting more nutrients in your diet will make a massive difference – try a smoothie),

sleeping a little bit more (just make it a priority to go to bed on time) and avoiding stress where possible.

And look, if your job is leaving you with absolutely *no* energy and it is filling you with stress, then you should look at getting another job.

What could possibly be more important than your health? At the end of the day, it's just not a sacrifice that's worth making. So if you can't make it work – then this is what you need to change.

Correct Goal Setting

Something else to change if you've been able to identify with any of this, is the way you set goals.

Too many of us make the goal about weight loss. Too many people say they want to 'lose 10lbs in 2 months' for example. But this is the wrong approach to goal setting.

Why? Because when you make this the goal, you make a goal that is much too detached from your day-to-day reality. When the goal is two months away, it's easy to skip a day of running and tell yourself you'll make up for it later. Plus, it makes it all too easy to *fail* your goal for reasons that genuinely aren't your fault and then get very disheartened.

And on top of all that, this comes back to what we said earlier – improving your health is more important than just losing weight. If you're only focussing on weight loss, then you're missing the point of training.

So instead, you should make weight loss your *vision*. Your vision is what you picture for yourself and what's going to motivate you. It doesn't have to be something you can put into words – it can be an abstract idea. You might just *picture* yourself looking and feeling healthier than ever. Being confident. Spending time in the sun with your top off. Having incredible six pack abs.

Becoming an Instagram sensation…

Those emotions will help you to push through when you can't face training anymore, so you need to really conceptualize your goal and learn to bring it to mind as needed.

But then you're going to think about the steps you need to take to make that vision a reality. In our case, to begin with at least, the first step is to run once a week.

So *that* is your goal. That is all you're going to focus on. And in your mind, you're going to link that idea of running with the vision you've created for yourself.

Run every week, get the body you want.

The reason this works, is that it is a goal that is *entirely* within your control and it is a goal that you can't 'miss' one week and still accomplish. There are no smaller steps. That said, when you do miss it (by accident), you can just pick it up again next week with no harm done.

Chapter 3: Your Running Kit – Crucial Clothes and Accessories for Getting More From Runs
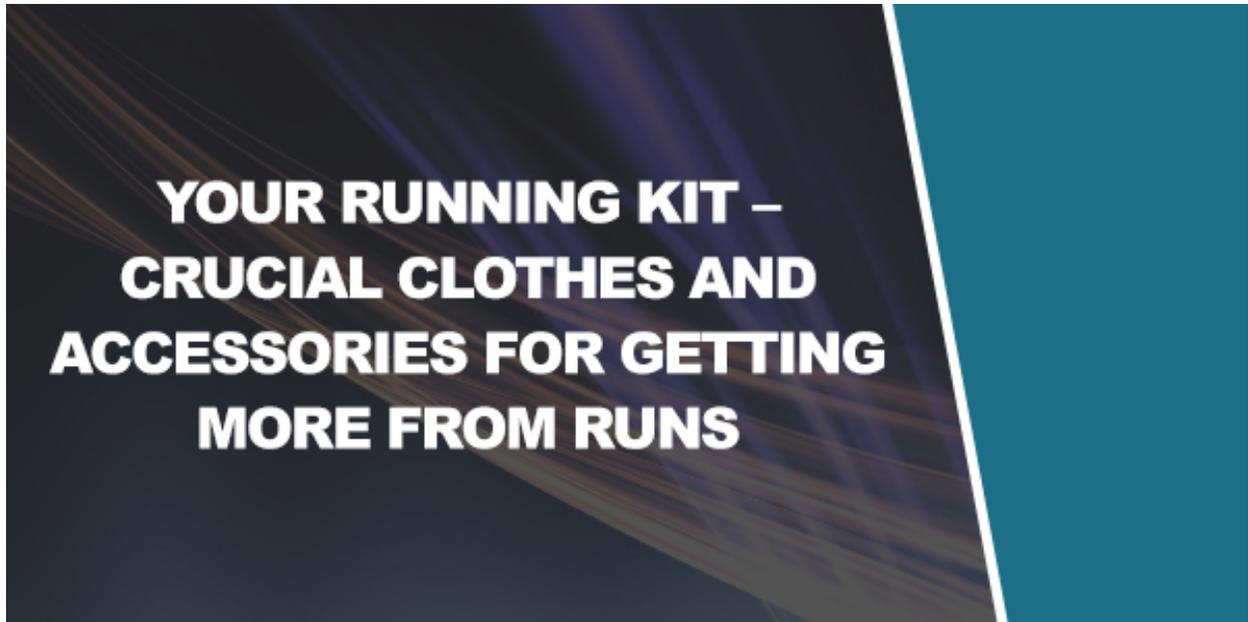
Let's go back to that first run. Remember, our aim here is not to push ourselves but rather just to have a nice run. We're aiming to enjoy this run and to make it gentle, sustainable and non-intimidating. We're learning to run and not trying to burn off any fat for now.

The attitude will help a lot but what you also need to do if this is going to work, is to make sure you have the right training gear. This can make a big difference to your comfort and therefore, to your ability to stick with it.

The first and most important piece of running kit is your running shoe. When you start running, you will invest in this shoe and it is going to become your best friend.

If you think you can just head out and hit the tarmac right now in your old, threadbare shoes, then you're not *wrong* per say, but you'll quickly find that it hurts and that you don't want to keep going very long. Spend $100 on a set of shoes though and you'll notice a massive difference. You will be faster, you will be less likely to injure yourself and it will be a lot more of a pleasant 'ride' (to use the same parlance as the shoe manufacturers!).

I'm not going to go into that in any more detail right here because it's something we're going to look at a lot more closely in the next chapter. For now though, just know that you *need* good shoes if you want any chance of sticking with your running!

Next up, you're going to want to get some running clothes.

Once again, you *can* go running in what you're wearing right now but if you invest in some good clothes you're going to find it much more comfortable and much more enjoyable. The right running clothes will be breathable but warming at the same time. You'll find that you don't get as cold when running outside in the dark but you also don't sweat profusely either.

More importantly, you'll greatly reduce chaffing. This is a big issue – especially as you start to run long distances. Later on, we'll discuss things like nipple tape, but for now you just need to worry about the itching and the rash that comes from wearing shorts as they move over your leg – or the nasty rash you can get under your armpit from a t-shirt.

What you're looking for is an under layer. This will be some form of compression gear – compression trousers and a compression top. These will cling tightly to your skin and provide that breathable warmth we were

just talking about while also protecting your skin from the material of your clothes as they move around.

Other optional extras include some kind of portable waterbottle (you can get ones that fit neatly into one hand while you're running) and a sweatband if you struggle with sweat. Headphones can also be good if you want some music to spur you along – although these can get a little sweaty and it's nice often to just listen to the sounds of nature.

Running Watches and Fitness Trackers

If there's one piece of equipment I would highly recommend (other than running shoes), then it is a fitness tracker or a running watch.

These are relatively new gadgets and people were happily running without them for many years before they were invented. But the fact remains that these are great devices and they can make a huge difference to your running and your weight loss for a *ton* of reasons.

Whether you opt for a fitness tracker or a running watch, there are a few things to look for. The best devices need to have:

- GPS
- A pedometer
- Barometer
- Heartrate monitor

What this then allows you to do is to track your route, measure your distance, count your steps and even measure your steps. That information can also be collated to tell you all kinds of other things, such as:

- Your VO2 max (in some cases)
- Your MHR (maximum heartrate)
- Your average heartrate
- Your lowest heartrate
- Your best split (time it took you to complete one mile/kilometre)
- Your average split
- Your best pace
- Your average pace
- Your overall distance
- Your precise route
- Your calories burned
- Your number of steps
- Your maximum elevation

All this information makes running *hugely* more fun and a lot more rewarding.

Why? For starters, you can now know exactly the distance you're running without having to set out a specific route prior to heading out. This makes a big difference because it means you don't have to know where you want to go but you can still monitor your progress and see improvement. It means that you can simply head outside and start running, without meticulously planning a route first and then deigning to stick to it precisely.

This is one of my favorite things about running – it allows me to explore new areas and to find new locations in my neighbourhood. I've discovered

all kinds of parks, cafes, restaurants and shops just by running around and I know a ton more shortcuts too. It's also really good for your sense of direction and internal map.

What all that does, is that it allows you to turn running into a chance to explore and discover new things and this is so much more exciting and motivating than simply running the same route time and time again.

It also means you can set yourself challenges and aim to improve. One week you might find you drastically increase your average pace and split, another week you might see that your heartrate stays much lower while you do the same run.

This again makes running more rewarding. Before smartwatches we had no real way to know if we were progressing while running. This made it in some ways less rewarding than going to the gym where you would be able to see the amount of weight you could move go up each time. Suddenly, you can see incremental progress and this makes it much more addictive.

You can also use this to set specific goals if you want to improve in specific domains. And as we'll learn, this will also make it much easier for you to lose weight. You can do things like monitoring the time you spend in your fat burning zone, or you can go on 'tempo runs' and try and push your anaerobic threshold. And trying to maintain a certain pace is also very useful if you want to train for a marathon where the whole *point* is to maintain a certain speed over the distance.

All this is possible thanks to a running watch!

Chapter 4: Choosing the Right Shoes for Your Gait and Avoiding Injury

So the most important piece of equipment you need for running is going to be the shoes. But it's no good to just get any old shoe – it needs to be a good shoe and it needs to be one that is specifically tailored to the way that *you* personally run.

So how do you know what that is?

The best way to find out is to visit a running shop. Here, you will often be able to find a treadmill with a camera attached which is designed to monitor and measure your precise gait. This will look at when your feet hit the floor and which *part* of your foot strikes the floor first.

This is important because it will right away be able to show you any signs of problems with your running style and it will help you to learn more about your individual technique.

Some people will find that the ball of their foot hits the ground first. This is called a 'toe strike'. Other people will find that their midsole hits the ground first. And many people will find that their heel hits the floor first.

Depending on which type of runner you are, you need to make sure you have the right type of shoe. Those who hit with their heel first for instance will need a bigger 'heel to toe drop'. The shoe will need to be more structured and supportive and it will need to be more padded.

Others will be able to make do with a slightly more minimal shoe. We'll be discussing this in more detail in the next chapter but suffice to say that these types of shoes use less of a sole in order to make your foot more flexible. This is good because you *want* your foot to land on the ball first in many cases and a more flexible shoe allows you to do this when it is your natural tendency to begin with.

The shoe store will be able to advise you on what type of runner you are and they will be able to give you the best shoe for your specific technique. What's more, is that they might be able to identify any issues with your current gait – for example if you are over-pronating, or if you are flat footed.

If you have a flat foot, you're going to need arch support. If you are over-pronating, then you're going to need some kind of insole. You may even find that your legs are significantly different in length. If that's the case, then you may need specialist orthotics to solve the problem.

You also need to think about what the aim of your shoe is. Do you want to run fast? Or is your aim to run for long distances?

Do you want to run on tarmac? Or do you want to run through the forest ('trail running')?

If you want to run fast for instance, you'll want to look at a shoe with a sole that is able to offer a lot of energy return. In other words, you need a shoe that is somewhat 'bouncy' so that when your foot hits the road, it propels you forward with even more gusto. Adidas makes a foam called 'boost' that is very good for this.

If you're looking for something that will let you run longer distance on tarmac, then you might want a more structured shoe that guides your foot through the motion. You will also want more shock absorption and possibly even insoles.

And if you're planning on trail running, you'll need to go more minimal to avoid letting your foot roll.

We'll discuss this in a little more detail in the next chapter but this brief overview should help you understand how to pick the right shoe!

Of course sizing is also very important and so too is choosing a shoe that will be breathable enough, light and comfortable. Try a few on, try bouncing up and down and feel around the toe box to make sure there's enough space. Sizing can be a little off when you're wearing running shoes – so make sure you actually try them on before you order!

Some Common Injuries and How to Avoid Them

The right shoe will help you to avoid some injuries and problems but there are a few that can still crop up nevertheless.

Runner's knee is one common complaint for runners for instance, although this isn't actually a single issue but rather a whole cluster of problems that tend to get lumped together under the one heading. Runner's knee is any situation where the knee cap (patella) stops tracking properly across the joint which can cause pain and weakness. This is often caused by the impact that the knee goes through on the ground, as well as loss of cartilage.

To prevent runner's knee, you need to find the right trainer, you need to avoid running too hard too fast, you need to use the correct technique (see the next chapter) and you need to rest up if you notice any early indicators. What can also help is to try and strengthen the muscles and connective tissue that help to guide the kneecap during running. Any exercises in the gym that target the leg muscles will help you to do this – especially using a very light leg extension.

While recovering, another tip is to switch to the treadmill and to try running on a very slight incline. While the treadmill isn't normally as good, this can be a good way to reduce the involvement of the knee – you'll often find that knee pain is worst when going downhill or even descending stairs.

Another common problem is shin splints. Shin splints arise when you continuously pound them on the ground and they are actually a result of the *muscle* (not the bone!) swelling up as a result. In some rare cases, shin splints can actually cause minute cracks in the bone called stress fractures.

If your shins feel hot and are in pain when you're resting, then it may be a fracture or an infection and you should see your doctor. If it's the more usual muscular cause, then try massaging the fronts of the shins, wear more padded shoes to try and absorb more impact and try stretching the leg in order to loosen the muscles and the tendons.

In rare cases, shin splints can point to flat feet or other issues – so again, be sure to see your doctor.

Blisters are another blight of the average runner and the key to dealing with these is often to look for the right socks. Surprisingly, thin and light socks can sometimes make matters worse as they allow the foot to move around more inside the shoe, thereby creating the friction that leads to the blister. The trick is to wear a sock that is just thick enough to keep the foot a little stiller in your shoe. It may also be that your technique is off, or that your shoe needs to be a little smaller.

Stretching

And now for the big one: stretching.

Stretching is something that many people will associate with running and conventional wisdom will tell you to always stretch before you go for a run.

But conventional wisdom often is not correct and this is where things get a *little* controversial. Because actually, there is no evidence to show you need to stretch before you run. And in fact, some studies suggest that stretching may even reduce your control over your muscles, thereby increasing the risk of injury.

But that doesn't mean that you should throw stretching out completely. Because where stretching *is* very useful is in generally improving your flexibility and your strength and in reducing the likelihood of injury by allowing the limbs to move further with less resistance.

Is that a contradiction?

No. What I'm saying is that you don't need to stretch *before* you run. But stretching generally and trying to find ten minutes a day before bed is a great way to reduce your likelihood of injury and thereby to extend your running career!

Chapter 5: Correct Running Technique Explained! (And a Primer on Barefoot Running)

Another very good way to prevent your chances of injury when running is to run using the correct gait and biomechanics. In other words, you need to make sure that you are running with the right technique.

Is there are right and a wrong way to run? You bet there is!

And actually, the right way to run is something that people are only just beginning to learn. Because for years, we believed incorrectly that correct running technique involved a heel-toe strike. This is why our shoes have big heels on them: for centuries we believed that our heel should hit the floor first and then roll onto the ball of the foot, propelling us off.

But then we started to study the way that native humans ran, such as the Tarahumara tribe. The Tarahumara are a people who still live and work in a manner very similar to how we would live and work when we were still evolving.

And they run entire marathons most days in order to hunt.

Not only that but they do in either in bare feet or in very light sandals. And they do it with no rest and no recovery.

Conventional wisdom tells us that this should be terrible for them: there bones should be shot, their adrenal glands should be empty and they should be constantly close to starving.

But the reality is that these people are incredibly healthy and capable of physical feats that modern man can only dream of.

And the big truth that comes from all this is that we were born to run.

Evolutionary biologists now know that humans are designed for running long distance. Compared with other animals in the animal kingdom we are not particularly strong. We are not very fast either. Our speciality is in tracking.

And tracking needs two things: brains and the ability to run for long distances.

We can't outpace our prey and predators but we can out-endure them. When other animals are left panting, we can keep going because we have

the ability to sweat. When other animals are out of glycogen, we switch to our aerobic energy system. We can just keep on going.

This is *why* running is so healthy for us – and the best way to do it is just like the Tarahumara tribe.

How the Tarahumara Run

So how *do* the Tarahumara tribe run?

Well, they run barefoot. This then means that they strike the ground with the ball of their foot first because hitting the ground with your heel first *hurts* if you're not wearing shoes.

This instantly changes their whole gait. It means that their feet are now directly underneath their knees and their bodies when they hit the ground. This in turn means that there is straight line that the impact travels through and that the knee, ankle and waist can all compress to absorb that impact like a spring. Watch a cheetah run and it's very similar.

This way, the leg provides natural shock absorption, which is rather different from what happens when our heel hits the floor first and sends a wave of impact travelling up through our legs and all the way through our backs.

What's more, is that it allows us to lean slightly more forward, which means that gravity can help us to propel ourselves forward. This makes this form of running a bit more energy efficient because we are no longer relying *purely* on our own thrust to push forward.

And as such, we can run further, faster and injury free.

This is the correct way to run and it means that 'toe-heel' is actually the better option. This is what athletic coaches are now teaching their athlete, except they are giving the technique names

It also means that you should aim to gradually move toward a more minimal shoe so that you can come a little closer to running as you would naturally and as you would if you were going barefoot.

## How to Switch to a More Minimal Running Style

There are more and more shoes hitting the market that offer a more minimal structure to encourage this kind of running. And if you want to go there, you can even try something like the 'Vibram Five Fingers' – this is a shoe that is designed to act like a glove around the foot. It offers enough protection from twigs, grass and shrapnel that you can safely run on all terrains but it also lets your foot move completely freely.

But before you go and jump right in, keep in mind that this can be a quick way to injure yourself. While this is the correct way to run technique, different people are built differently. If you have a flat foot or a pronated foot, then you will be less likely to adapt well to this style of running. With no cushioning and no guidance, you are much more likely to cause an injury.

What's more, is that you have likely been walking and running using shoes with heels for a very long time – and your feet have probably adapted. If you currently have a heel-toe strike, then you should try and *slowly* change your form with time and practice rather than just jumping straight in.

Progress to slightly more minimal shoes over time and monitor how it feels carefully. And only do this once you have checked with your doctor that it is okay to go ahead!

Chapter 6: How to Lose Weight With Running
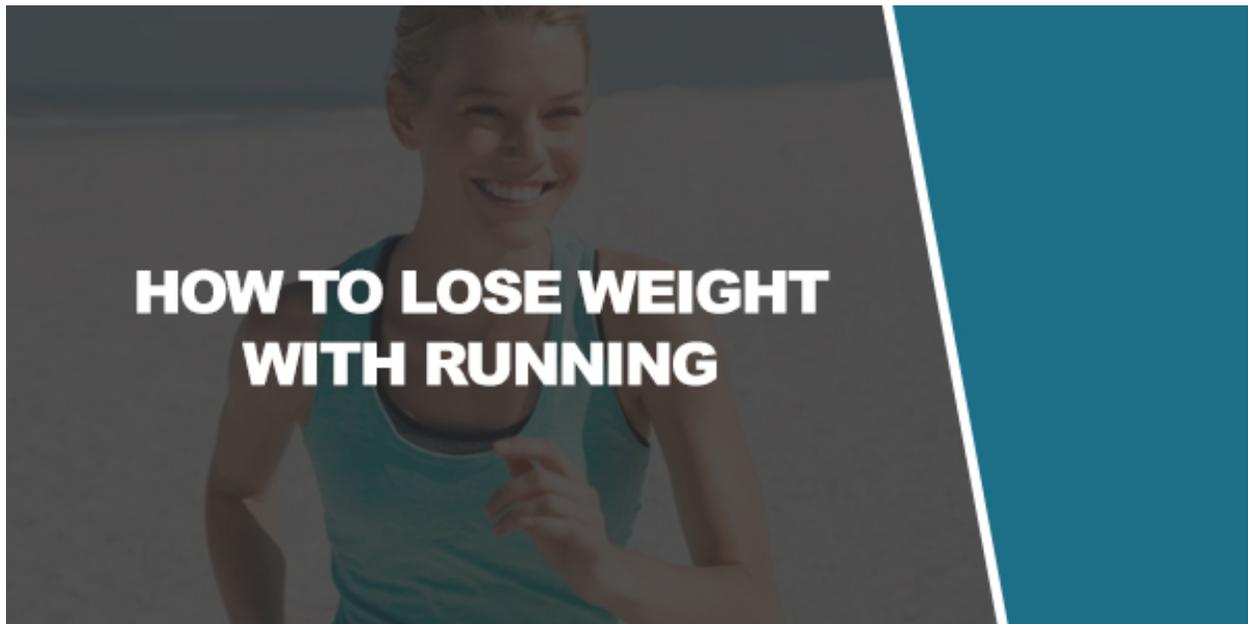
Using a very gently, gently approach, you can start to gradually improve your running ability and introduce it as a part of your regular routine.

But of course you will *eventually* probably want to start increasing the amount of running you're going to do so that you can start to lose weight. So this is then where you need to calculate how much running you need to do and how you can gradually progress.

Once you have eased yourself into running then, the next step is to start increasing the amount you're doing. Aim to increase to 5 or 6 miles once a week, which you'll find is more than enough to start seeing some changes in your body composition over time.

After a while, you should start to find that this is enough to begin seeing significant improvements in your overall fitness. What you'll likely see specifically, is that your heartrate stays lower while you're running and that your VO2 max improves (if you have a fitness tracker that is capable of working this out).

That means you can now start to push your pace a little and see if you can go faster and longer without becoming exhausted. See if you can start hitting personal bests for your pace and doing the same distance in less time. Don't go crazy with it – stick with what is comfortable and listen to your body.

As you improve with that, you can then start to introduce a second session. It can take as much as 3 days in order to recover from a 40 minute run, so don't try and fit more than two of these in a week. But if you run on the Sunday and the Wednesday for example, you should find you have time to recover and that you can start pumping out more strides.

At this point, you're now going to be seeing a calorie burn of an additional 1,500-2,000 a week. For many people, that's actually the same as having a *whole extra day* of burning calories! What's more, is that you'll feel a lot more energetic and as you keep pushing yourself to get slightly better times, you'll find that you also have more energy the rest of the time and can start being more active in your day to day life.

This is where having a fitness tracker (which you where all the time) can actually be superior to a running watch (which you wear just during runs). As this way, you can now start to try and increase your overall step count and calorie burn in order to gradually keep improving.

If your main goal is to lose weight, then this should be *more* than enough.

Combining Your Running With the Right Diet

Exercise is one part of the equation.

The other part of the equation is your diet. More specifically, it is how many calories you are consuming and how many you are burning.

So if you want to be very safe about your weight loss and very meticulous, then you can start to track your calories as they go in and out.

To do this, you first need to workout your BMR and your AMR. BMR stands for 'Basal Metabolic Rate' and it is an indicator of the calories that you should burn every day *before* movement. So in other words, these are the calories you burn simply to stay alive – the calories you burn to breathe, to maintain your immune system and to digest food.

The basal metabolic rate can be calculated like so:

BMR = 370 + (9.79759519 x LBM(lbs))

Or

BMR = 370 + (21.6 x LBM(kg))

If that's a little confusing, it's probably because you're not sure what your LBM is. Well, that would be your 'lean body mass', which is your body mass *before* fat (because fat isn't metabolically active, muscle is). To work this out, you just need to take your weight, minus your body fat percentage.

You can get your body fat percentage by taking a ruler and pinching some fat from the *side* of your tricep halfway down your upper arm. Now measure the thickness in order to measure the flesh and fat.

From this, you can use the following table to roughly calculate your body fat percentage:

Skin fold thickness in mm	Bodyfat % Men	Bodyfat % women
6	5-9	8-13
13	9-13	13-18
19	13-18	18-23
25	18-22	23-28
38	22-27	28-33

(This only works if you're honest…)

So now you're going to use that percentage to workout how much of your weight is left once the fat is removed. So if you have 10% body fat and you weight 130 pounds, your overall LBM is 117.

Next you need to calculate your AMR. That's your *active* metabolic rate – or how much fat you burn with your usual activity. Get an activity score simply by using the following reference:

• 1.2 if you're sedentary (little or no exercise)

• 1.375 if you're lightly active (you exercise 1-3 times a week)

• 1.55 if you're moderately active (you exercise or work about average)

• 1.725 if you're very active (you train hard for 6-7 days a week)

• 1.9 if you're highly active (you're a physical laborer or a professional athlete)

Now multiply your BMR by your activity score. If none of these quite describe you, then it's fine to pick something that is just in-between.

What you're left with is how many calories you were burning prior to your new running regime. So if you calculate how many calories you eat on a

daily basis, then you know what the difference you have to make up with running is. *Or* you can run more *and* eat less.

Remember: this isn't a perfect measure and your metabolism *will* come into play. What's more, is that you need to make sure you're getting all the right nutrition in your diet, including protein if you want to build muscle mass.

But as a guide, this is the best we have. And if you recall that running will also help you build muscle *and* improve your metabolism, then it can create something of a perfect storm to help you start shedding the pounds.

Chapter 7: HIIT Versus Steady State Cardio

If you want to run specifically for weight loss though and you've mastered simply jogging to the point where you're able to do long runs twice a week, you might want to start introducing some more advanced protocols.

The Fat Burning Zone – Fact or Myth?

For example, you may have heard of the 'fat burning zone'. This is the idea that there is an ideal speed at which the body will mobilize fat for energy. Is this true?

Absolutely. That fat burning zone is 70% of your MHR and if you run at this pace, then you'll find your body automatically resorts to burning fat. Some people are wary to try and run above this number because they worry they'll enter an anaerobic state meaning that they're running *too fast* to

burn fat for fuel (aerobic energy is relatively slow and inefficient). This too is true, so if your aim is simply to burn calories in the short term, then maintaining a run at 70% of your MHR is a good way to go ahead.

But if you want to burn more calories in the long term, if you want to boost your running speed and if you want to start becoming a true athlete, then you may want to consider another option: interval training.

What is Interval Training

With interval training, you are going to alternate between periods of high intensity and periods of lower intensity for recovery. This means you might sprint flat-out for 1 minute and then jog lightly for 2 minutes before going again.

This then forces your body into that anaerobic state where it will only be able to burn glycogen and blood sugar for energy. That means it is burning carbs, not fat and it won't lead to as much weight loss.

So why is it considered a good thing? Well, for starters it means that you're depleting your primary fuel resource. This means that when you enter back into the slower speed, your body will be forced to rely *solely* on fats for energy. What's more, is that the low glycogen stores in your muscle and your liver means that your body will now have to burn fat stores throughout the rest of the day. This creates an 'afterburn effect' whereby your body continues to burn more fat long after you've finished training. And when you eat any carbs or fat after this routine, they will then be sent to the muscles rather than stored as fat.

Another advantage of interval training is that it trains your mitochondria and your ability to utilize glycogen *and* clear up glycogen.

This all adheres to a law known as 'SAID' – Specific Adaptation to Imposed Demands. If you want to improve your running speed, run faster. If you want to improve your endurance, run longer. If you want to improve both… do both!

Thus interval training is a fantastic addition to your routine once you've built up the cardiovascular strength and the running technique to cope with it. Only once you're comfortably running twice a week, consider adding a few 20 minute HIIT session in on the other days. You can also use these as 'finishers' at the end of a weight lifting regime.

But don't ditch steady state – it is better for your RHR and overall short-term calorie burn. The combination is what's truly effective!

Chapter 8: Marathon Training 101

If you really want to see progress in your running and your weight loss, then one of the very best things you can do is to enter yourself into a marathon. Why? Because it will give you the motivation and dedication to keep training and it will really help to focus your goals.

In this case, you want to focus on steady state rather than interval and the objective should be to keep increasing your distance and to keep reducing your time. You will also want to start going further than 6 miles and begin trying 10 mile runs and even 15.

There's a lot to keep in mind though if you want to succeed, so here are some top marathon training tips…

Start With a Small Marathon

My first ever marathon was the London Marathon – 26 miles. That was a big mistake because I really had no idea what to expect or how to train (it didn't help that I only had 3 months' notice either!).

Instead, I highly recommend entering into a 10k or shorter to begin with so that you can see how your body reacts to distance. Then you can start to increase the challenge as you go. You'll learn how best to pace yourself.

Chaff Management

Marathons are where the chaffage really starts to become an issue. The solution is to think ahead and prepare for it. That means wearing nipple tape – this is really important because they can bleed a *lot* otherwise and you don't want this to be the reason you fail!

Likewise, look into using some kind of talc for the crotch region and/or lubrication. You should think about armpits too and carefully test the clothes you're going to wear over the long distances you're intending on wearing them!

Food and Blood Sugar

Incredibly important is the way you handle food. You're going to want to top up on carbs before the race, which is called 'carb loading'. Going out for a big pasta the night before can help you a great deal but especially if you combine this with some fiber in order to slow down the release of the energy through your stomach.

If you want to take *another* leaf out of the Tarahumara book, then you might try cia seeds. These are seeds that can absorb vast amounts of water,

helping you to stay hydrated as you run. You'll find water refuelling stations around the track but eating cia seeds can help out a fair bit! Another great superfood for runners is coconut oil. This will provide you with ketones, which are an alternative energy source your body can run off of when blood sugar is low.

You'll be offered energy shots on the way around too most likely. These are pure bursts of sugar that you can use to pick yourself up but they can come as a bit of a shock to the system if you've never had one before and make you feel quite sick. Experiment with them before you accept one on the day! If you can't get to grips with them, then Wine Gums or a similar sugary snack can do a good job too.

One of the biggest mistakes people make though is to forget about salt. You'll use up a lot of sugar yes but you'll also lose a lot of salt from your sweat! Make sure you replace this too by drinking an isotonic drink – Lucozade will do the trick nicely.

Tapering Your Training

The aim of your marathon training is to gradually build up over time and aim for longer and longer runs. But you should never go all the way to 26 miles before your actual marathon and you should also avoid going too far too close to the run. A week or two before your run, start to cool things off and give yourself time to recover. The aim here is to train your heart and muscles hard but then let them recover so you can start on a fresh tank before you begin.

And don't push yourself too hard – the biggest problem many marathon runners face is injury. If you injure yourself prior to your marathon you'll be kicking yourself for years to come!

Chapter 9: Advanced Techniques – Fasted Cardio, Trail Running, Resistance and Going Barefoot
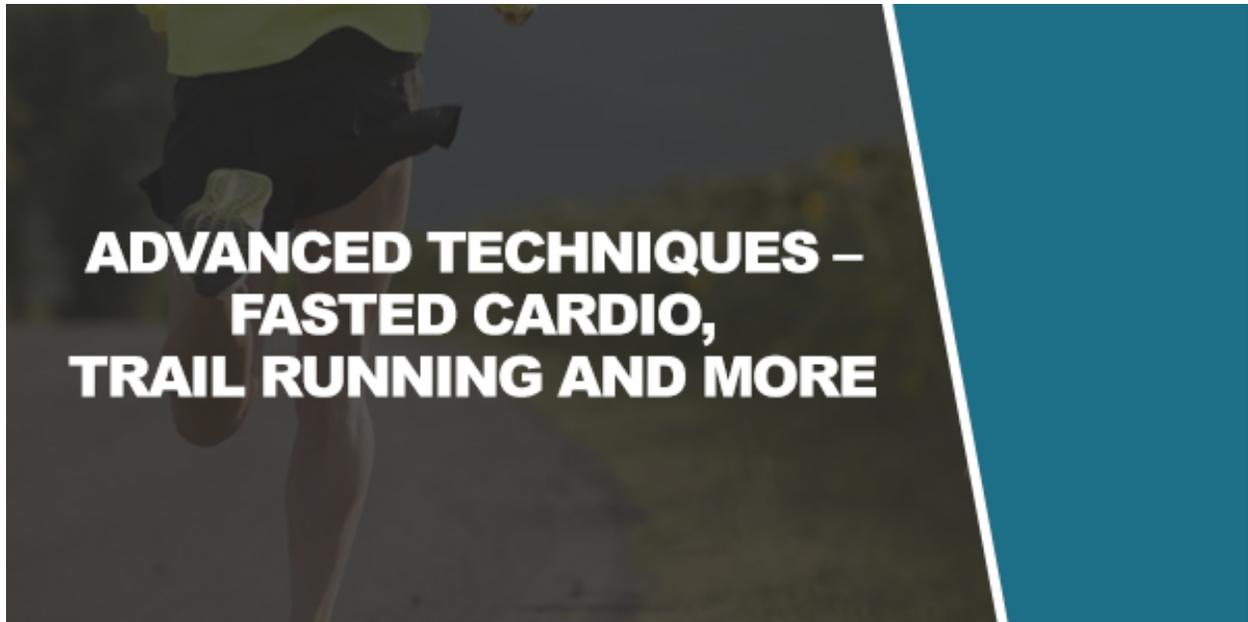
You're now running marathons and performing high intensity interval training. There's not a ton more for me to teach you!

But there are one or two tricks you might want to consider as you start to adapt your training…

Fasted Cardio

If you're not interested in muscle (this will *burn* muscle) and your main interest is in burning fat, then you might want to consider fasted cardio.

Fasted cardio basically means that you're running at a point when you have very low blood sugar. You can do this either by having a day of eating very little *or* by going running first thing in the morning when you wake up (when we sleep, we don't eat – thus we are fasted!). This works a little like HIIT in that your blood sugar is low and this forces the body to burn fat and utilize glycogen. It also increases your cortisol a lot, as well as your myostatin so use with caution. But if you're really keen to lose weight fast, it might be worth a try!

Running Off Road

Another tip is to try running off road. One great way to do this is to run against resistance which can mean running through sand or running through relatively shallow water (such as the sea). This is a great way to increase the challenge and it causes the muscles to work harder. That in turn makes it into something that's known as 'resistance cardio' – a fantastic form of cardio that actually burns more calories while also preserving your muscle.

This is one of the great examples of what you can do for yourself when you start running in nature and again start returning to your roots a little. As we've already seen, we were born to run and this is how we would have done it!

When you *really* go off road running, then you'll be in the territory of what is known as 'trail running'. Trail running means that you're running through forests and along rocks and it's much closer to what our ancestors did. The great thing about this is that it requires more awareness, more alertness and challenges the body in a lot more ways. In particular, it utilizes a lot of

muscles as you have to constantly stabilize yourself against rocks and roots and other things that might cause you to trip or slip.

This is why you need more minimal shoes for trail running and it's why you *might* even start to venture into barefoot territory at this point. That's because running barefoot allows your foot to become much more malleable and you'll see that your toes and your foot bends and contorts to handle changes in the level of the ground. Instead of your foot tipping and giving you a twisted ankle, your foot just wraps around lumps in the ground like a hand. Not only is this great fun and good exercise, it actually builds 'foot dexterity' which has a ton of amazing health benefits and is good for building more muscle in your foot.

As mentioned though, this is an advanced technique and not for those just starting out by any means!

Lactate Threshold

As you get better and better at running. It's likely you'll develop a greater and greater love of stats and figures. It's great fun seeing your scores improve and watching as you become an efficient machine.

One very useful figure to look out for then is your 'lactate threshold'. Lactate was once what we thought causes muscle soreness – it's a byproduct of the glycogen-lactic-acid energy system – but it's actually useful as a secondary source of energy for your body. Lactate concentration in the blood happens to correlate with fatigue because fatigue happens at the point where we can no longer use that energy source – because we're going too fast. A build up of lactate is also one of

the signals that tells the brain we're going to fast and this makes us feel nauseous in order to force us to slow down.

The lactate threshold then tends to effectively be synonymous with the anaerobic threshold – the point at which we switch back to using glycogen because we can no longer use fat stores and we are going too fast. This is usually around 85% of your MHR, so once you work that out, then you can calculate your lactate threshold.

What's more, is that once you have *this* number, you can then calculate your RSLT – Running Speed at Lactate Threshold. This tells you how fast you can go while staying below the lactate threshold. To calculate that, try the '30 minute test'. That means running as fast as you *possible can* for 30 minutes to the point where you are completely fatigued by the end. You then divide the average speed by the distance covered. If you managed to complete 8,000 meters in 30 minutes, your RSLT will be 4.5 meters per second.

You'll train this by using HIIT and 'tempo runs'. Tempo runs are runs that you perform at or around your LT – much like that 30 minute test. This is one of the best ways to improve your overall performance and if you were ever interested in becoming a professional long-distance runner, it would make up an important part of your training.

Chapter 10: A Recipe for Running Success

Wow, towards the end there we got pretty advanced didn't we!

For now though, I want you to scale it back and focus much more on just getting started. If you're not already a professional runner and you're just looking to lose weight, then you need to start at that beginning. Even the longest marathon starts with a single step!

And that beginning is going to be learning to run. And learning to *like* running.

And you have to believe me when I tell you that it gets a lot easier as you get used to it. So that one big key to success is in easing yourself in gently and in knowing just how beneficial it can be to add running to your routine.

So let's look at the steps you're going to take to go from 'tired, stressed and out of shape' to 'fit, happy and healthy'.

- Focus on energy – look at your life and find ways to eat better, spend more time active and outdoors and avoid things that make you stressed

- Buy new running shoes, a running watch and ideally some training clothes. All this should set you back no more than $250 maximum.

- Start slow. Don't aim to burn calories even… just start running gently and learn to like it.

- Build up the amount and speed very gently to the point where you're running 4-6 miles once a week comfortably in no more than 40-50 minutes

- Now calculate your AMR and your BMR. Your fitness tracker may also be able to give you a good indication of how many calories you're burning. Calculate the calories you eat too (roughly) and then come up with a target to burn.

- Introduce a second run halfway through the week at about the same time.

- Now you'll come to a crossroads and have to decide how to progress. You can either keep increasing your pace and distance to take the hobby further, or you can look to gradually start introducing more advanced techniques like HIIT to burn more fat and improve your overall physical performance. Maybe even sign up to your first marathon!

Either way, the information is in this book and you now have the essential basics down. You're now unstoppable and the more you run, the more you'll improve. The more you improve, the more you'll run!

Conclusion and Closing Comments

There might seem like a lot to take in there but just remember that it all starts with a simple run. A run where the aim is not to burn calories or push yourself but rather just to introduce yourself to running and to have fun.

Even if you never progress past that point where you're running 3 miles once a week it will *still* make a big difference to your lifestyle; even if only because you're getting outside and getting sunlight and fresh air!

But we've covered an awful lot in this book and hopefully it has helped you to see the big picture when it comes to running. To recap, we explored:

- How to introduce yourself to running
- How to avoid injury
- How to buy the right equipment and gear
- How to run with the correct running style

- How to learn your current gait and biomechanics
- How to track your progress and see yourself develop
- How to set the right targets and goals and stay motivated
- How to calculate your AMR and BMR and use this information to lose weight
- How to start pushing your training and getting more from it
- How to use HIIT and other advanced forms of training
- How to develop your technique toward a more natural running style
- How to calculate more advanced stats like your lactate threshold
- How to train for a marathon
- And much more!

To get started, take another look over anything you might have missed and be sure to check out the extra resources like our checklist and resource sheet. With these as your aids, you'll have everything you need to get started.

And that's the most important thing of all: just get started!

Good luck and happy running!

<u>IMPORTANT:</u> To help you further take action, print out a copy of the *Checklist* and *Mindmap* I provided. You'll also find a Resource Cheat Sheet with valuable sites, posts and articles that I recommend you go through.