



NOTES

# Running Rewired

REINVENT YOUR RUN FOR STABILITY, STRENGTH & SPEED

JAY DICHARRY

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250 PAGES



## KEY POINTS

### What's Your Movement Program?

Do you even have one!

### What's your plan?

How will you become better at running?

### Rewiring Your Movement Takes Brainpower!

So how's your concentration!

### Alignment Really Matters!

You CAN master it.

### Fix Your Feet!

How strong is your big toe?

*“Every runner knows that it takes a lot of hard work to get there. But a lot of runners get confused by this concept: They end up interpreting “a lot of hard work” to mean “a high volume of work”. In the quest to log the miles it's easy to lose sight of the quality of those miles. First place isn't awarded to the person who racks up the highest weekly milage or trains the hardest. Instead, medals adorn the necks of those who nail the fundamentals, which in turn allows them to train consistently and successfully. You've got to put in the miles to get fit, but how can you be sure that your training is setting you up for success? Put simply, there are things that all runners of all abilities should be doing outside of running to improve their running. If you want to run better, you need to move better.”*

Jay Dicharry from 'Running Rewired'

Jay is awesome. I've read a number of books on running and Jay's are some of the best. Check out the Move Notes on 'Ready to Run' by Kelly Starrett and 'Anatomy for Runners' by Jay to find out more about the keys to your running success. But back to Jay. He is the guru of running. I have learnt so much from reading his books and engaging with his resources online. I highly recommend you get this book if you are a runner.

## What's Your Movement Program?

*“A poor movement program equates to poor body control. When the body becomes overwhelmed by the demands of running it sets us up for injury or leads to compromised performance. Specifically, it is how we deal with the mechanical demands of running that dictates how well we perform. The two big questions are:*

- 1. Is your movement safe? What type of movement skill and body awareness do you bring to running?*
- 2. Is your movement efficient? Could you rewire the way you move to drive you forward with less effort, and less form breakdowns during your runs?*

*An efficient movement program improves the quality of your stride for long term joint health and efficiency”*

*“A poor movement program equates to poor body control”.* This begs the question--what’s your movement program? Do you even have one? How much movement do you get on a daily basis apart from your running? What does the rest of your day look like? Are you sitting in a chair for 8 hours a day? If so your movement program (more specifically your lack of movement) leads to tight hip flexors, weak glutes and limited core control. Do you do anything to undo this? Are you working on getting enough hip extension? Firing up your big strong gluteal muscles? And doing some movement based core work? If you are not you have a massive opportunity to reduce your injury risk and increase your running skill, which in turn will make running more fun! ☺ So what’s your movement program? Write it down! How many days do you run? What distances? And what else do you do? Are you working on moving better?

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## **What’s Your Plan?**

*“To get better at running, you must first understand the sport so you can identify the sports-specific skills that are critical to improving. Then, you need a formal plan of attack to develop those skills. And then there’s ongoing work to continue to improve and refine those skills. For a runner, deliberate practice entails taking specific actions to improve durability and economy, and this doesn’t always involve running.”*

Simply running a whole lot more won’t improve your running; you’ll just run more with the same imbalances. You need to practice specific skills and you need to practice them purposefully-with a lot of concentration if you are going to rewire your running. Which sports specific skills do you need to improve? And what is your plan for developing these skills? I highly recommend you get your hands on a copy of this book because that’s exactly what it is. It’s a plan to show you what your movement problems are and how you can fix them.

*“We are going to open up the black box of running and establish a system for making you a better runner. Your body drives your running form. Build a better body and you will improve your running form. By focusing on the specific skills that improve running, you can move with precision and strengthen your spring. To move with precision you need enough mobility to move unencumbered and enough stability to control the path your body takes over each mile. Building the skills of mobility and stability will reduce your “stress per stride” and ensure your body symmetry is dialed. Moving better makes you more durable as a runner, which allows your training to be more consistent.”*

## Rewiring Your Movement Takes Brainpower

*“Most runners’ hip muscles are inhibited, or unplugged. Put simply, you can’t make toast if your toaster isn’t plugged in. Likewise, your hip muscles won’t turn on unless you teach them to connect with your brain”*

*“To plug the muscle back in, we need to teach it to work and co-ordinate with the rest of the body”*

Most Westerners have weak glutes? YOU probably have! Chances are you do a lot of sitting which creates the pattern that we see in most western humans: weak gluteal muscles and overactive, tight quadriceps. Are you quad dominant? Then you need to clean this up. Do you have the ability to extend at the hip? If not you need to clean this up too. There are certain things you must be able to do as a walker or a runner or a human, for that matter. You must be able to dorsiflex your ankle, extend your hip and keep your spine upright with the strength of your glute max (as well as other things). Can you do all these movements? Get a professional to help you find out or get the book to see the specific movements that Jay suggests you try.

You need to know what your movement problems are before you can clean them up. Do you have mobility ‘software issues’ like the glutes being unplugged? Do you have mobility ‘hardware issues’ such as short muscles, stuck connective tissue or joints that are jammed due to positional problems?

Plugging your glutes back in is going to take a lot of work. You need to concentrate.

*“For most of us, the mental concentration needed to engage in a new movement ranks around 7 on a scale of 1 to 10. This is the cognitive stage of improving movement. During this stage, movement is not smooth and requires lots of brain power”*

After the cognitive stage of learning a new movement comes the associative stage. In this stage the movement is much more clearly understood and ‘felt’ but it still needs lots of repetition to fully dial it in. After a huge volume of practicing the correct new movement we pass into the autonomous stage. In this stage the movement is automatic and the chance of slipping back into the old movement pattern is reduced significantly.

*“You can make changes in your running form, but good form is not going to happen in one session with one cue. Your body needs to build a database of proper muscle memory. Once your body has “been there’ it can easily find its way back, just like riding a bike”*

## Alignment Really Matters

*“But posture is not easily changed. Posture reflects your core strength, your mobility, and your habits.”*

Your body has been shaped by your movement history. Better alignment can be created through new movement patterns. Creating new movement patterns takes time and concentration. You CAN do it.

*“Your brain is hardwired from an early age to put the body in a position of stability centrally (in the core) and to move distally (through the arms and legs). When that central link is blown, certain muscles unwire themselves from normal reflexive movement, others fire late, and you lose the ability to move with precision. When posture and alignment are compromised, the types of inhibition we discussed in Chapter 2 begin to get your attention.”*

We can get back to this position of central stabilisation. To do it, we need to work out what our current movement habits are and work to correct any deficiencies we have. Most people in western culture have the same deficiencies. This is because we have all been exposed to the same culture, a culture in which we all sit down a lot.

*“Let’s look at how problems above or below the core can crush your can—even if you can hold a plank for 20 minutes.*

*You have two big ball-and-socket joints both below and above the core. Below the core, each hip should be able to swing freely from front to back without cranking your low back into an arch. Above the core, you should be able to reach your arm overhead without arching your low back. But once again you can only move as efficiently as your body allows. Sitting and slumping for hours on end tightens the muscles around the front of the hips and pulls the shoulders forward.”*

Can you stabilise your pelvis relative to your ribcage while moving your arms above your head? Can you stabilise your pelvis to your ribcage when you move your hip into extension (behind you)? Stabilizing your pelvis relative to your rib cage means that it stays in a neutral position and it does not move.

Ask a runner to extend their hip and they will most likely arch their lower back to try and fake more hip extension. Ask a runner to lift their hands above their head and as soon as they reach their shoulders end range of motion they will again arch their lower back to make it ‘look like’ they have more range.

If you do either of these you need to increase your hip extension and shoulder flexion. AND you also need to learn how to stabilise your ribcage relative to your pelvis. Get the book to find out how to do this or see a local professional who has a lot of knowledge in this area.

## Fix Your Feet

*“Your foot is not a brick. It’s a leaf spring with the ability to twist and adapt to the ground to keep you stable. For this to happen, it’s critical that your forefoot and rearfoot have good mobility and that motion between your forefoot and rearfoot is specifically controlled by the muscles inside the foot. If you want to improve your balance, the first thing you must do is screw the big toe to the ground without cheating motion through your rearfoot.”*

I love feet, and I love everything Jay has to say about feet in this book. Due to the amount of time our feet have spent in stiff shoes over our lifetime our feet are very weak and stiff. Returning mobility and strength to the feet is vital for any human, but for runners it is essential. A lot of people balk at the idea of doing foot exercises but they are very important. Jay has included a lot of foot exercises in the book. They are worth the price of the book alone, in my opinion.

Back to the quote above, can you push your big toe down into the ground, using the strength of your big toe alone, or do you have to move your rearfoot or move at the ankle to make it happen? Most foot and lower limb problems are due to weak flexor hallucis muscles (that’s the muscle that pushes the big toe down into the ground). It’s amazing how my feet have dramatically changed shape from spending time doing my foot exercises. Are you doing yours?

*“Once your big toe is on the ground, it’s time to improve the coordination of the muscles that stabilize the twist between the forefoot and rearfoot. The main reasons that runners over-pronate have nothing to do with foot type (high arch versus low arch), and everything to do with how you control your foot type. Normally, the big toe provides about 85 percent of the stability in your foot. If you can’t master the coordination of the big toe, it’s a forefoot problem. And when you’ve got a forefoot problem, the rearfoot is unsupported and collapses down into excessive pronation. This problem is typically the cause of symptoms in Achilles, plantar fascia, metatarsals, shins, and almost any other foot and lower leg pain. Targeting the forefoot is the solution to keep the foot and lower leg aligned during running.”*

Please go back and read that again! If you have any foot or lower leg problems you need to strengthen and learn to control your big toe. Start by lifting your big toe off the ground (while keeping all the other toes on the ground). Then drive your big toe down into the ground (while lifting all the other toes) without collapsing your arch. You are going to want to practice this a lot. Get the book for the specifics.

That's it a very quick look at some of my favourite ideas from this awesome book by Jay Dicharry. So what's your plan to run better? Spend a moment writing your new plan in the space below.

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### **About the Author of 'Running Rewired'**

#### **Jay Dicharry**

Jay is a true expert when it comes to understanding the foundations and biomechanics of running. He is a physical therapist and a board-certified Sports Clinical Specialist. His unique approach works outside of the traditional model of therapy to correct imbalances before they affect performance. He is also the author of 'Anatomy for Runners' and is a keen surfer, skier, cyclist and general outdoor enthusiast. You can find out more about Jay at his website <https://anathletesbody.com/>.

### **About the Author of this Move Note**

#### **Hazel Boot**

Hazel has a degree in Exercise and Sports Science. She is also an Anatomy Trains Structural Integrator and a Restorative Exercise Specialist. She works with clients to improve movement and reduce pain. She loves reading and geeking out on movement books. She writes notes on the books she loves to help others learn faster.

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I hope you enjoyed the content of this note but please remember that it is not medical advice and should not be used as such.