# The Key 9 Lower Back Exercise Plan

An easy and simple step-by-step exercise plan for you to follow to get your lower back functioning at it's optimum.



By Dr Tom Stringer MChiro DC

#### Who am I?

The boring bit, who am I? I'm Dr Tom Stringer MChiro DC. I graduated from the Welsh Institute of Chiropractic and since then have learnt and read everything I possibly can around optimising human performance. I own and run Bodyworx Health Clinics, which are multidisciplinary clinics in and around the New Forest. We pride ourselves on providing the highest level of health care. Here are our key areas:

- Chiropractic
- Sports Massage
- Podiatry
- Acupuncture
- Meditation and Mindfulness

So why did I write this book? Being a very active person myself, having a wife and two children I understand the importance of having a functional body in later life. I decided to put pen to paper (well fingers to keyboard) to share my knowledge.

Here are a few things you should know about me before reading on: I am dyslexic, I am 'to the point', I am a 'doer', and I am very impatient. The reason I am telling you this is that this book may have spelling mistakes, bad grammar and sometimes sound like a fiction book. This is me though and most people who know me well appreciate my honest and blunt approach.

#### **Table of Contents**

Who am I?

Introduction

Somatotypes

Sleep

Overview of exercises

Functional

Cat-Camel

Windmill

Single leg knee tuck

Plank

Bridge

Good mornings

Hamstring push and hold

Frog pushes

Cobra

Questions

#### Introduction

There is a whole multitude of exercises and stretches you can do for your lower-back and lower-limbs, but these key 9 cover most bases.

To be more specific a thorough examination and history taking is needed. If you are in severe pain, please go a therapist as soon as possible. Don't believe there is a quick fix or an optimum plan, everybody is different and in the short term it is trial and error.

The biggest mistake people make is going crazy and doing loads of exercises daily. What will happen is you will get bored or complacent and stop doing the exercises. Pain will begin to build back up, and you will say "if only I had carried on with exercises". So, what's the answer? Do little and often.

For week one I want you to do all the mobility exercises, and **only** the mobility exercises – do these once but ideally twice a day. If after one week you are feeling a little sore or unstable, repeat these exercises for another week.

Every-day, after week one, I want you to select one exercise from each area (Mobility, Stability, Flexibility). Sometimes you can add a fourth exercise of your choice, depending on your somatotype (this will be explained in a moment...). This way you are only doing about 2-3 minutes of exercise a day. Change it up each day, just make sure you do mobility first, then stability and then flexibility.

If at any point you get pain, stop! Mild discomfort is ok as your body might just need to get used to the new exercises. Any soreness after any exercises (not just these) make sure you use an ice pack wrapped in a thin cloth and hold it on the area for 15-20 minutes. Ice is a great anti-inflammatory modality.

"Ice is a great natural anti-inflammatory"

## Somatotype

A very basic way to define somatotypes is your body's natural physical and physiological traits.

#### Ectomorph

A person who is naturally thin, doesn't gain weight easily, light musculature and fragile. This type of person will normally have good mobility and flexibility but poor strength. For this type of person, the fourth exercise should be strength.

#### Mesomorph

A person who has an athletic build, can gain and lose weight easily and has a solid appearance. This type of person will have average mobility, flexibility and strength. For this type of person, the fourth exercise depends on the individual.

#### Endomorph

A person who is naturally round and soft, gains weight easily but struggles to lose it, generally large. This type of person will have good strength but poor mobility and flexibility. For this type of person, the fourth exercise should be mobility or flexibility.

#### Myself

I am mostly Mesomorph but on the more Endomorph side. In this book the pictures are of myself, they won't be perfect but are a true reflection of an average person following the plan.

## Sleep

Sleep is fundamental - without proper sleep you will never reach your full potential. I could write a whole book on sleep, hummmm maybe I will at some point, watch this space. But for now, there are plenty of good books on sleep. What I am going to tell you, in a very basic way is the positions to sleep.

#### Front

Ahhhhhhh, never do this! Sleeping on your front is the worse, you will twist and torque your spine and muscles into the worse possible positions.

#### Side

Side is OK but you have to position your head at just the right angle, so it is level with your spine. Also pop a pillow between your legs to stop your pelvis twisting.

#### Back

This is the best position, it keeps your spine in a nice neutral position. If you can't get comfortable or it feels weird place a pillow under your legs to lightly flex your knees. By doing this you will relax your lower back. You may snore, so ear plugs may be in order.

#### Pillow

Simple this one, a good quality memory foam which you find comfortable. Everybody is different so different shapes and sizes are available.

### Overview of Exercises

Mobility
Cat-Camel
Windmill
Single leg knee tuck

Stability
Plank
Hip Lift
Banded Good Morning

Flexibility
Hamstring push and hold
Frog pushes
Cobra

#### **Functional**

When it comes to mobility, stability and flexibility we are talking functional not maximal. Not sure what I mean by this? Let me use some examples:

A power lifter will have great maximal strength (stability) on say a deadlift, he may be able to lift 250kg. He may struggle to put his shoes on though. How often do you really need to lift that much weight? Functional strength will mean lifting a few heavy suitcases into the car, then push them around an airport, lift on checking isle, reclaim from baggage control, into the bus, then into hotel. Doing this and not being sore or achy the next day.

A yoga teacher has great maximal flexibility and can twist into a pretzel shape. But may struggle to move a heavy plant pot in the garden. How often do you need to shape into a pretzel? Functional flexibility means being able to tie your shoes laces without having to put your foot on something.

The whole point of this book and my system of mobility, stability and flexibility is to be functional and not maximal. Don't get carried away with your spine, it is better to be a 'Jack of all trades'.

Mobility is how well your joints and tissues can move in its anatomical range of motion.

Stability strength is how well your body can hold its position or how well a joint can hold its position when being moved or a load applied.

Flexibility is how well the tissues in your body can stretch and move from their resting state to the end range of motion.

Stability is as described above, however stability can also be used for a more general term to incorporate all these areas.

#### **Functional Fitness**

Functional fitness would be described as having good mobility, stability and flexibility but also having good aerobic, anaerobic and dynamic power.

Let me come back to my Jack of all trades comment. Doing yoga is great, doing yoga 5 times a week and no other exercise is bad. Weight training is great, doing weight training 5 times a week and no other exercise is bad. Running is great, going running 5 times a week and no other exercise is bad. You get my point. All things need to be balanced to enhance longevity. Again, we are talking functional, telling Mo Farah to run 50% less and do weight training and yoga isn't going to work. Don't get me wrong if Mo added in weight training and yoga (probably already does to a small degree) it would benefit his body in the long run (excuse the pun). However, Mo is training sport specific so functional isn't his goal, maximal is.

The class programs I design are based around functional fitness, functional mobility, functional stability and functional flexibility. Each person is given a slightly different emphasis based on longevity. If your goal is "loose 10kgs" or to "Run 10k" or maybe to "Deadlift 200kg" we will get you there but make you as functional as we can at the same time.

For now, enjoy the next few pages as they will get you on your way to a better back.

#### Cat-Camel

- \*Start on all fours with arms and legs at 90 degrees, head relaxed this is your start position.
- \*Keeping your arms and legs still, arch up like a scared cat from your spine, gently flexing your head.
- \*Pause for a second at the top of the movement.
- \*Dip your back down like a camel, gently extend head.
- \*Pause for second at bottom and then repeat.
- \*Aim for 2 sets of 15 repetitions.
- \*When doing the exercise try and have a feeling of individual joints moving.
- \*REMEMBER TO BREATHE THROUGHOUT!

"This exercise will mobilize the lower back, mid back and the pelvis joints and muscles"

## Cat-Camel Pictures







#### Windmill

- \*Lay on your back with your legs straight and arms by your sides.
- \*Flex your hips and knees so your legs are at 90 degrees. (If you struggle with this keep feet on floor).
- \*Gently move your legs to the right until your pelvis begins to lift. You should feel the movement from your waist.
- \*Pause for a second at the end of the movement.
- \*Bring your legs back to neutral and repeat to the left.
- \*Aim for 2 sets of 15 repetitions.
- \*You want to focus on a rotation sensation in your lower back.
- \*REMEMBER TO BREATHE THROUGHOUT!

"This exercise will mobilize the lower back, pelvis and hips joints and stretch the muscles"

# Windmill Pictures







## Single Leg Knee Tuck

- \*Lay on your back with your legs straight and arms by your sides.
- \*Flex your hip and knee on the right leg until you can reach your knee with both hands.
- \*Interlink your fingers and cup the front of your knee.
- \*Pull your knee to your chest while keeping your left ankle on the floor.
- \*Squeeze your right knee gently further into your chest, actively pressing your left ankle into the ground.
- \*Pause for a second at the end of the movement.
- \*Relax, let go of knee and straighten your right leg back to ground.
- \*Repeat the process on the opposite side.
- \*Aim for 2 sets on 10 repetitions.
- \*REMEMBER TO BREATHE THROUGHOUT!

"This exercise mobilizes the pelvis, hips, knees and ankles and stretches the lower limb muscles"

# Single Leg Knee Tuck Pictures







#### Plank

- \*Lay on your front with toes, knees, torso and forearms in contact with ground.
- \*Rotate your arms so your thumbs are up and squeeze your bum muscles.
- \*Rise up so that your elbow joints are at 90 degrees. Neck, back and legs are all in line.
- \*The only contact point with the ground should be your toes and forearms.
- \*Hold this for 5 seconds and do 2 sets (2-3 minute break between). If 5 seconds is easy do 10 seconds next session, only increase by 5 seconds each session.
- \*If you shake, your position breaks or you struggle to breath steadily stop at this point.
- \*REMEMBER TO BREATHE THROUGHOUT!

"This exercise is for your core endurance, also gives you a flat stomach"

# Plank Pictures





### Hip Lift

- \*Lay flat on your back with your arms resting on your chest.
- \*Bend your knees to 90 degrees and your hips to 45 so that your feet are still on the floor.
- \*The distance between your knees wants to be about the size of a football, you want to keep this distance throughout.
- \*Keeping your head, shoulders and feet on the floor raise your hips by contracting your glute (bum) muscles until your torso is in line with your legs.
- \*At the top of the movement pause for a second and contract your glutes further.
- \*Aim for 2 sets of 15 repetitions.
- \*Once this becomes easy add weight such as a kettlebell of barbell.
- \*REMEMBER TO BREATHE THROUGHOUT!

"This exercise is to strengthen your bum muscles and to get them working with your hamstrings and lower-back"

# Hip Lift Pictures





### **Banded Good Mornings**

- \*Take a theraband (start light) and place it over you shoulder/upper back. DO NOT PLACE AROUND NECK.
- \*Stretch the band with your arms and lift one leg to step onto band and push it onto floor. Then put your other foot on the band so that your feet are shoulder width apart.
- \*Stand up straight, at this point the band has the most tension.
- \*Hold onto the band with your hands, flex your knees slightly, engage core and keep head straight.
- \*Flex your hips so that your knees and spine don't move and tilt your hips backwards. Aim for 90 degrees or until your back starts to round.
- \*Once at 90 degrees contract your glutes so that you stand straight again.
- \*Tension in the hamstrings is normal.
- \*When finished stretch again with arms and then step out.
- \*Do 2 sets of 10-20 repetitions, once you can achieve 20 reps progress to a hard band and build up from 10.
- \*REMEMBER TO BREATHE THROUGHOUT!
- "This is a great posterior chain exercise"

# Banded Good Mornings Pictures







### Hamstring Push & Hold

- \*Place a theraband, towel, rope etc around your left ankle and hold with both hands.
- \*Lay flat on your back in a relaxed position.
- \*Raise the left leg until you feel a pull in your hamstrings, note a pull not a stretch.
- \*At this point hold for 10 seconds.
- \*Actively try and push your leg back down to the ground for 10 seconds with 10-20% force, use your arms and the band to stop the leg moving.
- \*Relax the leg and immediately pull your leg higher with the band using your arms until you feel another pull. Hold for 10 seconds.
- \*Repeat this process a minimum of 3 times and maximum of 5 times, getting higher each time.
- \*Relax the leg and remove the band.
- \*Repeat the process on the other leg.
- \*Do each leg twice through.
- \*REMEMBER TO BREATHE THROUGHOUT!
- "This is a hamstring and posterior chain stretch"

# Hamstring Push & Hold Pictures







### Frog Pushes

- \*Get onto all fours and then bend your elbows and knees so that you are sat on your ankles (lay your feet flat).
- \*Keeping your bum on your ankles reach forward with your hands. Have your upper arms next to your ears.
- \*Keeping your neck in a neutral position work your hands forward until you feel a light stretch.
- \*From here gently round your back and slightly raise your bum to feel a stretch throughout your back.
- \*Hold this position for 10 seconds.
- \*Relax the stretch in your back and lower your bum for 5 seconds.
- \*Round your back and lift your bum again and hold for 10 seconds.
- \*Repeat this so that you do 30 seconds in total.
- \*REMEMBER TO BREATHE THROUGHOUT!
- "This exercise focuses on lumbar and pelvic flexion"

# Frog Pushes Pictures





#### Cobra

- \*Lay on your front in a relaxed position with your legs straight.
- \*Keeping your hips on the floor slowly and gently raise yourself up onto your elbows.
- \*If you feel confident raise up again onto your hands with your arms straight but elbows not locked.
- \*Hold this position for 10 seconds.
- \*Soften your elbows and drop a little, no more than an inch for 5 seconds.
- \*Push yourself back up again and hold for 10 seconds.
- \*Repeat this so that you do 30 seconds in total.
- \*REMEMBER TO BREATHE THROUGHOUT!
- "This exercise focuses on lumbar and pelvic extension"

# Cobra Pictures







### Questions

If you have any questions on the book, want to pick my brains or just want to have a chat here are my contact details:

Contact Us

Our Flagship practice is based in Ashurst

Bodyworx Health Clinic 169 Lyndhurst Road Ashurst Southampton SO407AR

Phone: 02380 019099

Email: info@bodyworxhealth.co.uk Web: www.bodyworxhealth.co.uk

We also offer classes locally in and around the New Forest. If you want to find a class outside of this area or a trainer looking to get involved, please drop me an email.

The Key 9 Lower Back Exercise Plan came about from years of clinical case studies on what works best for different patients. This is by no means an exhaustive list of exercises but enough to help 99% of people. Dr Tom works with a large number of clients with a large number of complaints, this book represents just a small proportion of what he treats on a daily basis.

If you want a strong and resilient back, then this book is for you.



"Little and often is the key to exercise"