



Hi, I'm John Miller. Thanks for downloading the **How to Relieve Back Pain Yourself** booklet.

You've been through the mill:

- You've been rubbed, crunched, heated, vibrated, hung upside down and electronically twitched
- You've spent a fortune on manipulative therapy
- you've been drugged to the eyeballs ... and you're still in pain.
- I feels like someone is poking a red-hot poker into your back every time you sneeze or cough.
- You can't put your socks on or take them off without sitting down.
- You're headed for the knife. Maybe you've already been under it.

Chances are no-one has discovered or told you what the most likely, underlying cause of your pain is – or successfully treated it. Their attention has been focused on the site of the pain, not the cause of the pain.

In this booklet, I'll outline the two most likely causes of back pain and several of the key the exercises you can do to get your skeleton back into better alignment.

You can do the exercises at home in the lounge room while you watch TV. Most don't even take any effort, they're relaxation exercises.

Understand that most people do less for their musculo-skeletal condition in a year than a sports person will do in a week. Plus, when they put themselves in the hands of a doctor or manipulative therapist, they think they don't have to do anything to themselves. That's why they often never get better.

How to Relieve Back Pain Yourself booklet is designed to give you relief and get you started on a systematic rehab program that restores poor function to good.

In the meantime, stay tuned, highly tuned and remember, it's a bit ask expecting to get better by having someone do something to you; sooner or later you have to do something to yourself.

# John Miller

If any of the links won't open from these pages, cut and paste them into your internet browser.

#### How to Relieve Back Pain Yourself

© John Miller BA, Dip Physed, Dip Teaching, Registered Fitness Practitioner Published by Global Back Care a division of Miller Health Pty Ltd 7 Salvado Place, Stirling, ACT Australia 2611 <a href="mailto:john.miller@millerhealth.com.au">john.miller@millerhealth.com.au</a> (61) 424 391 749



## PRINCIPLES OF MUSCULO-SKELETAL DYSFUNCTION

There are few key principles you need to be aware of:

- It's most likely that your joint and muscle pain is a symptom that your skeleton is out of alignment. You
  have a system problem, not just a lower back problem.
- Over the weeks, months, years and decades, tight muscles have pulled your pelvis out of alignment. As a
  result, bones above (and below) the pelvis are drawn out of alignment as well. Ligaments, tendons and
  muscles in your lower back are stretched beyond their pain threshold. Discs become herniated. The
  symptom is pain. This is what you're setting yourself up for if you don't have a regular and systematic
  flexibility (and strength) training program.
- •. The cause of the pain is rarely at the site of the pain. Therapy directed at the site of the pain is frequently misdirected.
- Manipulative therapy may speed up the rehab process but does not take the place of the exercises you
  need to do for yourself to loosen off tight muscles attached to your pelvis.
- If you're not getting stronger, you're getting weaker.
- If you're not getting looser, you're getting tighter.
- It's the system, stupid! Fix the system and the parts will look after themselves.

It's pretty much potluck where skeletal misalignment will manifest itself. Whilst the lower back seems to be the most 'popular' site, the symptom of skeletal mis-alignment can appear anywhere, hips, knees, neck or shoulders ...

This being the case the best fix is a system fix.

#### ABOUT JOHN MILLER

I live in Canberra, national capital of Australia where I write and publish health, fitness and wellbeing books. I also conduct corporate health programs, the most popular of which is the musculo-skeletal health program based on the principles outlined in this booklet.

I began my professional life as a physical education teacher. Along the way I've been the CEO of the Australian physed professional association (ACHPER), been the Director of the South Australian Recreation Institute, worked at the Australian Institute of Sport and run my own fitness centre - where I developed this program.

I've had a bad back; every time I sneezed and coughed, I'd get a shooting pain in my lower back. I had to 'warm it up' in the shower for 15 minutes every morning in order to get me going. In September 2000 I started the strength and flexibility program that I have for you. It took a couple of months before the pain disappeared and hasn't come back. I still run through elements of it three times a week – at the gym after my strength training program.

I'm indebted to Pete Egoscue of the Egoscue Clinic in San Diego for some of the insights and in the Global Back Care series of ebooks. I highly recommend his book 'Pain Free.'

You are always welcome to contact me at the email address below, or phone me between 8am and 8pm Eastern Australian (Sydney) time.

john.miller@millerhealth.com.au

Int: 61 424 391 749

## CAUSES OF JOINT AND MUSCLE PAIN

The most frequent cause of joint and muscle pain is bones, particularly those attached to your pelvis that have been
pulled out of alignment by your own muscles. Likely as not, the whole integrity of your skeletal system is
compromised. You have a system problem that can best be fixed by treating the system and not just the part where
the symptom of the system problem is manifest.

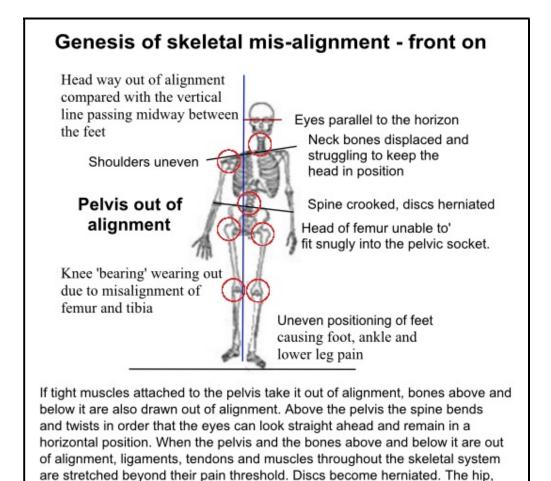
Your pain is telling you to get your skeleton back into better alignment.

2. The muscles throughout your body are too tight: they're taking your bones out of alignment.

You don't have a regular and systematic flexibility training program. You don't go to a yoga or tai chi class. You don't do any stretching at all. You've got joint and muscle pain. Go figure!

#### 3. The muscles throughout your body are weak.

You don't have a regular and systematic strength training program. You can't do a situp or a pressup. You can't squat up and down. You don't go to a gym. Muscles throughout your body aren't strong enough to do every day lifting, pushing and pulling tasks without breaking down.



knee and shoulder 'bearings' wear out. The most likely 'agents of first cause'

are tight muscles attached to the pelvis. It's the system stupid!

Looking at the pelvis, spine and legs side on ...

Due to the action of tight muscles attached to the pelvis - front, back and sides - but particularly the hamstring and buttock muscles, the pelvis is taken out of alignment.

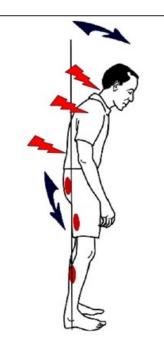
There's collateral damage as bones in the lumbar spine are dragged out of alignment.

The 'S' shaped curve of the back becomes a 'C' shape.

Ligaments, muscles and tendons are stretched, beyond their pain threshold, resulting in continuous pain.

Discs prolapse, with the nucleus pinching the spinal column. It feels like someone's shoving a red-hot poker in your back every time you sneeze of cough.

Your experience sciatic pain as the prolapsed disk pinches the sciatic nerve



Tight calf, hamstring and buttock muscles pull pelvis back and down.

Bones in the upper part of your spinal column are pulled out of alignment.

Head and shoulders move forward placing stress on soft tissues around the neck and shoulders. It's a principal cause of sore shoulders.

It feels like your upper back, neck and shoulders are on fire.

You're always hanging out for a neck and shoulder massage.

You're always off to the therapist to 'pop' the bones back into alignment.

Back pain is not due to a lack of rubbing, crunching, heating, vibrating, doping or surgery.

Millions of people the world over are experiencing musculo-skeletal pain, much of it personally generated. In a sense this is good news because if you've caused the pain yourself, there's a better than even chance you can personally 'ungenerate' it and get rid of the pain yourself by restoring poor skeletal alignment and poor muscle function to good.

From my surveys of corporate groups, over 50% of people give themselves 5/10 or less when asked to rate the current condition of their musculo-skeletal system. Most have resigned themselves to putting up with this pain for the rest of their life.

The treatments they've undergone have not restored poor function to good. In the main that's because the treatments have not addressed the underlying cause of their pain; plus, their physicians and manipulative therapists have not encouraged them to embark on a regular and systematic strength and flexibility training program.

## LOWER BACK PAIN

Lower back pain is the most frequently reported occurrence of joint and muscle pain. Some, but only a small proportion is the result of trauma: people have accidents. Sometimes an incident will get the blame, but it's usually an incident that people in good musculo-skeletal health take in their stride. Often, it's an incident that brings to the foreground the pre-existing skeletal misalignment and a lack of strength lurking in the background.

Some back pain is alleged to be the result of lifting. However most back pain, allegedly caused by lifting, is in fact personally-generated. If the skeleton is already out of alignment, if muscles are weak, then lifting a leaf off a lawn is enough to send some people 'over the edge.'

So, who do you blame? The usual culprits are

- 1. tight muscles that have taken first the pelvis and then the bones above (and below) it out of alignment.
- 2. weak muscles throughout the body that are unable to support the skeleton while lifting, pushing, pulling etc ...

And guess who is responsible for tight and weak muscles?

# BIOTENSEGRITY – don't treat the site of the pain? -

Our common practice in western medicine is to reduce the body into parts in an attempt to assign and treat a particular anatomically-defined diagnosis. The particular part, region of the body, or system is then often treated in isolation.

This approach might be warranted if we are dealing with a machine, identifying where the 'weak or broken link' is located. This form of reductionism is often satisfying and simplistic, but in the case of biologic systems, the approach is short-sighted.

This structural design principle recognizes that stability and ease of movement are not due to the strength of individual components but are determined by the way the entire system is configured to distribute mechanical forces through closed kinematic ... mechanisms that are interlinking.

Kelly Clancy

# **BIOTENSEGRITY**



'(Tensegrity, and in this context) Biotensegrity, is a structural principle that describes a relationship between every part of the organism and the mechanical system that integrates them into a complete functional unit. It is a conceptual model that represents a paradigm shift in biomechanical thinking and changes the way that we think about the complexities of functional anatomy.'

Graham Scarr

The term 'tensegrity' was coined by Buckminster Fuller in the 1960s as a word meaning 'tensional integrity'.

Tensegrity, a combination of the words "tension" and "integrity", is a structural principle in architecture that offers the most elegant model for illustrating how fascia, ligaments, tendons and muscle and internal structures work together. A weakness or injury in one part of the body causes the entire structure to shift in an effort to restore tensegral balance.

The biomechanical tensegrity model has been well outlined by Thomas Myers\*. He explains what happens when the tensional integrity of the muscles, ligaments, tendons and fascia attached to the skeleton is disrupted. The skeleton loses its tensegrity. Sooner or later, pain will be experienced in one or more joints or muscles.

#### A pelvis in alignment stays in alignment unless acted upon by a force.

The pelvis is the largest bony complex in the human body. It's the 'foundation' of that goes ion both above it and below it.

The tensegrity of the pelvis depends on the equilibrium created by the muscles, tendons, ligaments and fascia attached to it that hold it in place. Disrupt the tension and the pelvis moves out of alignment. When that happens the structural integrity of the skeleton is disturbed, which explains why the cause of the pain is rarely at the site of the pain – as illustrated by the red spot in the illustration opposite.

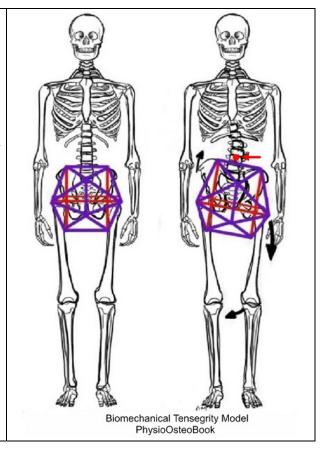
The tensegrity of the system depends on the balance of the soft-tissues of the fascia, ligaments, tendons and muscles.

If the tensegrity is balanced, the body stays in alignment.

Disruption of this tensegrity system is the source of joint degeneration, the symptom of which is joint and muscle pain.

The body is designed to take (as a system) the strain that occurs when moving and lifting. The body distributes the strain; it does not localize the strain and as a result, local injuries soon become global strain patterns.

If a shortened muscle shortens one of the continuous lines of tension in the body, the whole structure deforms.



<sup>\*</sup> I'm indebted to Thomas Myers and commend him for his biomechanical outline of the tensegrity concept. Search on the internet for 'Thomas Myers, Tensegrity' and you can spend some time reading and watching him expound his biomechanical treatise.

# THE TWO MOST COMMON CULPRITS OF SKELETAL MISALIGNMENT – tight hamstring and buttock muscles

Based on my experience, here are two of the most graphic examples of what tight hamstring and buttock muscles can do to take the pelvis/skeleton out of alignment.

## 1. an example of tight hamstring muscles,

I asked this fellow to sit up straight against the wall. He adopted this position. I said, 'Sit up straight.' He said, 'I am!'





## 2. an example of tight buttock muscles.

This fellow hasn't a snowball's chance of sitting up straight with his hands clasped behind his back – without falling over.





The remedy is obvious. Loosen off tight muscles attached to the pelvis.

The symptom that these (and a range of other muscles attached to the pelvis) have been loosened off and the pelvis and the bones above it are back in better alignment, will be that the back pain has disappeared.

A body in alignment stays in alignment unless acted upon by a force. 'That force' is usually the force of your own muscles.

# FIX BACK PAIN - emergency exercises

In my experience people experience low back pain for two main reasons: -

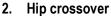
- Their pelvis and the vertebrae above it have been drawn out of alignment by tight muscles attached to the
  pelvis front, back and sides. Muscles, tendons and ligaments in the lower back are stretched beyond
  their pain threshold. Discs herniate. You experience pain. The pain is telling you to get yourself back in
  alignment.
- 2. The muscles of the body are not strong enough to support the pelvis and spinal column in correct alignment.

Here are 4 exercises I highly recommend you do as often as you can to square up your skeleton and relieve your pain. It's hard to call the static back 'exercise' an exercise. In fact, for the first two exercises, all you have to do is lie on the floor of an evening while you're watching TV and let gravity do the work for you.

#### 1. Static back

Lie on the floor with legs up on a chair or ottoman. It's the most relaxing position you can get yourself into when you have back pain.

20 minutes is good, 30 minutes is better, 40 minutes is best.



This is a five-star exercise for anyone with joint and muscle pain, particularly low back pain. It mobilizes the hip, groin and lower back.

Start with the heel of the right foot up toward the top of the left knee. Push the right knee away from you. Then drop the right foot and left knee (together) onto the floor on the left side of your body and let it rest there for a minute. Repeat on the other side.

Build up to 5 minutes each side for 40 minutes.

#### 3. Hamstring stretch in the shower

Start with legs straight and hands grasping your calves.

Bend your legs, drop you hands down a centimetre or so, grab hold again and straighten your legs.

Do this 10 times. Over the weeks and months, you'll gradually be able to get your hands further down your legs and perhaps even to the floor.





You may find one side tighter than the other. That's because you're out of alignment. If you can't get your knee and foot down onto the ground because it's too painful, rest them on a cushion or some books.



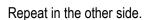


It's the system, stupid!

#### 4. Buttock stretch

Sit with legs straight in front of you. Put the left leg under the right and the right leg over the left.

With knuckles on the floor to support you, lean forward. Then with every breath you breathe out, lean further forward. After 20 or 30 breaths you'll have made satisfactory progress in loosening off your right buttock.





If you find this exercise exceedingly difficult, do it against a wall. After leaning forward 10 times, push your bottom back closer into the wall.

If you've got lower back pain, after a week or so doing these exercises, you should start to feel the difference. After 80 days there's an 80% chance (for 80% of people) that you'll be back to 80% of 'good nick'.

A final word: the ability to do pressups has been found to be a very good predictor of risk of back pain.

Pressups are the 'plank' exercise in motion. As well as strengthening your arms and shoulders you're strengthening muscles in your torso, front, back and sides.

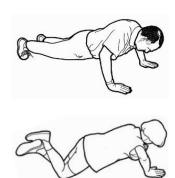
Start doing pressups.

When you can do 20 straight off, men on the toes and women on the front of the thighs, report back!



In the Fix Back Pain ebook, I recommend 12 Key flexibility exercises to relieve back pain. Apart from the four exercises above, are the exercises to seriously loosen off the muscles attached to your pelvis and the bones in the lower part of your spinal column.

http://www.globalbackcare.com/back-pain/



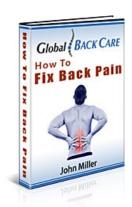


I have the belief that for 80% of people there is an 80% chance they can get themselves back to 80% of good shape in 80 days if they're diligent.

## SO, THERE YOU HAVE IT

... a brief explanation of what may have happened to you, an outline of what you can do to restore poor function to good and the emergency exercises. The foundation of your pain relief program is to strengthen weak muscles, loosen tight muscles and get your skeleton back into better alignment.

My great encouragement is for you to purchase the **Fix Back Pain** ebook containing a detailed outline of the causes and treatment of back pain – including a series of exercises designed to get your skeleton back into better alignment and pain free.



\$14.99 us

# **Click here** to purchase **Fix Back Pain**

# Contact me

If for any reason you wish to write to me, be assured that I will respond promptly. My aim is to help you recover quickly without recourse to expensive therapeutic treatments, without drugs to mask the pain and without surgery.

My email address is john.miller@millerhealth.com.au

... or phone me: between 8am and 8pm Eastern Australian (Sydney) time:

### 61 424 391 749

# **Final words**

Remember, if you keep doing what you've always done, you'll continue to get what you've always got.

You need to start doing something different. Take charge. Start treating yourself. I'll show you how to do that.

Treat the cause of your dysfunction, not the symptom.

Shift your focus from the spot where it hurts to the spot that's causing the problem.

In the meantime, stay tuned, highly tuned and remember, it's a big ask expecting to get better by someone doing something to you – sooner or later you have to do something to yourself.

John Miller

## **COMING SOON**



Using the online Clinical Diagnostic Assessment, I'll Zoom you through a postural analysis to determine which muscles have caused your lower vertebrae to move out of alignment.

I'll teach you the exercises you need to do to restore poor function to good.

The assessment will also help you diagnose the cause(s) of hip, neck, shoulder and knee pain – and teach you the exercises.

## **STAY TUNED**

I can give you the program but I can't do it for you. Kenneth Cooper