

MUSCULOSKELETAL
HEALTH EBOOK

WRITTEN BY
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DRAKE
CHIROPRACTIC



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This Ebook has been written in response to the current pandemic that is Covid-19 and the resultant number of people isolating, unable to attend their normal bodywork treatment appointments or exercise classes, the increased mental stress and possibly undertaking house activities such as gardening and DIY that their body is not used to.

It may not look very pretty but I hope that the information contained will assist you in remaining as pain free as possible in these difficult times.

At the time of writing I am still treating those in acute pain or those with chronic pain conditions that without treatment will gradually deteriorate whilst still following WHO and HSE guidelines in relation to social distancing (where possible), disinfecting surfaces, not treating those; over 60 years old, immune compromised, have an underlying health condition in particular respiratory or heart, have symptoms that could be C19, have to travel by public transport to attend or have flown in the last two weeks.

While back pain can be caused by many different factors and it's not possible to fully diagnose someone without seeing them, hopefully the below may give you some help. Disclaimer: if at any point the advice here is not helping or symptoms progress please contact a health professional immediately.

Please do not hesitate to contact me if you have any questions.

Stay safe and mind your physical and mental wellbeing.

Dr Ros Drake MSc (Chiro) BSc (Hons) DC

Images: courtesy of the internet!

Using heat, stretches and cold application:

If you start to experience back pain firstly stop what you are doing and gently go and sit in a comfortable position in a hard-backed chair and take some deep breaths.

If you are experiencing muscle spasm or tightness, then apply a heat pack for 15-20 minutes then do some gentle stretches as below and follow with a cold pack for 15-20 minutes.

A heat pack could be a warm shower or bath, a hot water bottle or a microwaveable heat pack. Apply the heat over the muscles more than the joints. If you are looking to use a 12 hour heat pack for low back pain, please do not put directly over the area of pain but rather just above the area. Prolonged heat application will increase inflammation and pain even though it will feel relieving at the time and will help with muscle spasm.

A cold pack can be frozen peas wrapped in a tea-towel, ice cubes and water in a zip-lock bag wrapped in a tea-towel or a gel ice pack from the freezer. Apply more over the joints than the muscles.

At any point if the stretches cause pain please ease off or stop.

Repeat the above every hour for 2-3 hours, take a break for 2-3 hours and then repeat.

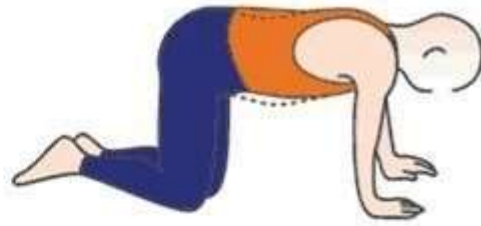
Do it at least 30-60 minutes prior to bedtime to help with sleep.

An Epsom salt bath can do wonders for sore and tired muscles and for stress/anxiety. Make sure you soak in a warm bath with 1 cup of salts for at least 15-20 minutes to get the benefits from the Epsom salts. If you don't have a bath, then try a 15-20 minutes foot soak using about ½ cup of salts. Do your stretches after your lovely bath.

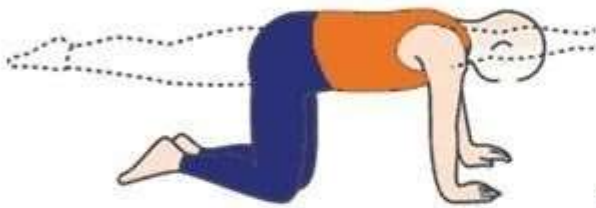
10 Best Stretches for Lower Back Pain and Tight Hips



Standing hamstring stretch



Cat and camel



Quadruped arm/leg raises



Pelvic tilt



Partial curl



Trunk rotation



Piriformis stretch



Double knee to chest

Blackdiamondbuzz.com

Working from home:

A lot of people are now working from home with suboptimal ergonomics which over time could cause some issues.

Follow the below instructions on how to create a better working environment.

A GUIDE TO CORRECT DESK POSTURE

CHAIR:

- important functions: - swivel, seat: up/down and tilt forwards, back-support: up/down
- the back support should give good lumbar support
- the seat pan should tilt 10 degrees at the front
- legs should be placed 90 degrees to the floor
- the chair and not the head should be turned if attention is required either left or right of the workplace
- armrest is recommended

SCREEN:

- when did you last see an optician? Recommended at more frequent intervals for computer workers
- a 17 inch screen is preferable to prevent a forward head position
- type with size 14 or bigger letters and resize down when the document is finished
- the screen should be placed straight in front of your workplace i.e. in front of your keyboard
- the centre of your screen should be 15 degrees down from horizontal eye level

KEYBOARD:

- an anatomic type is preferable
- forearms should rest on the table with shoulders relaxed
- if table height and chair height do not match, get a footstool to bring the seat further up
- the table should tilt 10 degrees down towards you unless your keyboard does
- if you don't have a wrist support fold a small towel and place under your wrists

PHONE:

- do not hold the phone between your head and shoulder
- if you do need to type while on the phone, get a hands free communication headset

DOCUMENT HOLDER:

- if you do not have one, get one!
- this can either be a book stand or a proper document holder which can be attached to either side of the computer screen

BREAKS:

- get up from the chair at least once an hour
- all it takes is 2-3 minutes of walking/get a drink/go to the toilet etc
- why? A poor posture over a period of time will stretch the muscles beyond the point where they easily shorten back to normal. This causes cumulative trauma disorders. A short break helps the muscle to stay within its normal length

MICROBREAKS:

- done at least every 30 minutes, takes only seconds to do and is discrete
- this procedure is done for the same reason as for the one hour break
- step 1) take a deep breath in and hold it
- step 2) bring the shoulders back as far as possible
- step 3) from position 2) bring the shoulders down as far as possible and HOLD position for 3 seconds
- step 4) relax back to neutral position which should be your correct anatomical sitting position

Food and fluids:

Our schedules are probably going out the window and without being able to go to food shops as and when we would like, we may be eating and drinking differently or be eating/drinking out of stress.

However, if you are experiencing back pain try to cut down or drastically minimise caffeine (coffee, tea, coke etc), decrease decaffeinated coffee, cut out soda drinks and alcohol. Instead drink herbal teas, warm water (with lemon is delicious), plain water, electrolyte drinks such as coconut water or warm milky drinks (using non-dairy milk where possible), in particular, Golden Milk would be fantastic with its anti-inflammatory and calming properties.

Aim to drink 1.5-2 litres/day of fluids.

Here's a simple recipe for Golden Milk:

- gently heat a mug of milk (preferably non-dairy) after adding 3-4 freshly cracked cardamom pods (not ground), ½ tsp ground turmeric, 1 tsp ground ginger, ½ tsp ground cinnamon, a good few grinds of black pepper, and ½ tsp of jaggery or brown sugar (just not honey). Stir in 1 tsp of clarified butter (ghee) if you like too! Don't let it over boil and then enjoy ideally 1 hour before bed.

In relation to food try to keep to simple homemade food and try to refrain from processed food and foods that contain gluten, dairy and refined sugar. While there is no official scientific evidence, there is anecdotal evidence to suggest that gluten, dairy and refined sugar can create an inflammatory reaction in the body, so if you are already experiencing inflammation in your muscles and joints you don't want to be exacerbating that through the foods and drinks you are ingesting.

Omega 3 is an essential fatty acid that is not only essential for hormone production as well as heart and brain function, but it also acts as an anti-inflammatory. Try to increase your dietary intake through oily fish (salmon, trout, mackerel or sardines), chia seeds, flax seeds, hemp seeds, walnuts and soybeans. In addition, get a good quality one a day supplement, brands such as MOR or Eskimo are fab, and take a double dose. If you are vegan then an algae based supplement would be suitable. The dose on the pack is a maintenance dose while we need to dramatically increase it at this moment. Take this double dose for 2-3 months and then reduce to the 1/day.

Managing different activities:

A lot of us may be using this time to complete some of those tasks that have been on our To-do list for a while such as gardening or DIY or starting a new exercise regime. While this is great, like with anything, don't overdo it on the first day! Do a little bit steadily over a number of days and the task will get done without hurting yourself in the meantime.

Exercise:

If you are unable to get to the gym or your fitness class it is still possible to work out from home, in your garden or explore nature (obviously while still abiding with social distancing suggestions!) Many outdoor areas have now become crowded and while it's important to get fresh air, stay away from people!

There's plenty of online exercise classes and yoga sessions with lots of people uploading free content to help people through these difficult times. Social media and YouTube are good places to look.

But do not start something you've never done before like running as the chances are you will only injure yourself!

Yoga is fantastic for calming the mind while stretching and strengthening the body. If you've never done this before though make sure you start at a beginner's level and with 10-20 minutes sessions and gradually work up.

Painting:

With the weather improving and the extra time, many of us may want to freshen up the house or garden. Here's some helpful hints to try and minimise physical injury especially to the lower back, neck and shoulders.

- Painting ceiling with your neck extended for long periods puts a crick in your neck
- Bending and lifting furniture leads to bad backs
- And hours of painting strains shoulders

Most lower back pain is caused not by serious damage or disease, but by sprains, muscle strains, minor injuries, or a pinched or irritated nerve – doing tasks around the home and garden can cause any of these, if you're not careful.

Pushing one body part too far

If you spend an entire day painting, your body will complain loudly, instead do a little of several different jobs that use different muscles and positions, then the same a day or two later. You'll get the same amount done but you won't put too much pressure on one group of muscles.

On the job tips:

- Always keep your shoulders, hips and knees pointing in the same direction.
- When painting a ceiling, think about how to get the largest amount of paint on the ceiling in the shortest space of time.
- Use a large paint pad or a roller with an extended handle (hold it at chest height). Keep your head in as neutral a position as possible and keep facing forward; don't over stretch your neck.
- If you need to use a ladder, make sure you are always facing it and move the ladder regularly, rather than leaning to reach your goal.

- If you can lie down on the job using a platform, do!

Too late?

- If decorating has already caused you back ache, neck pain or shoulder discomfort then follow the instructions at the beginning of this Ebook regarding the use of heat and cold while doing the stretches either for the lower back or for the neck and shoulders as below.
- Rest a little. It goes without saying that if you've put a strain in your muscles the best way to recover is to let those muscles take a break. Don't think there is only a few feet of painting left to do, stop.

Stretches for the Neck, Shoulders & Arms

Approximately 5 Minutes

Many people carry stress in their neck and shoulder area. This stretching routine will help with that problem. Do these stretches throughout the day. Breathe deeply and relax.



1
5-6 seconds
(page 29)



2
3-5 seconds
2 times
(page 27)



3
5-6 seconds
2 times
(page 29)



4
8-10 seconds
each side
(page 29)



5
10 seconds
2 times
(page 46)



6
5 seconds
2 times
(page 46)



7
8-10 seconds
each side
(page 44)



8
8-10 seconds
each side
2 times
(page 47)



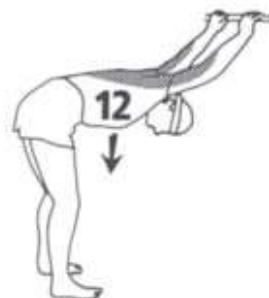
9
15 seconds
each arm
2 times
(page 44)



10
15-20 seconds
each arm
(page 43)



11
15-20 seconds
(page 47)



12
15-20 seconds
(page 81)

Gardening:

Taking care of your back begins before you start hands-on work in the garden.

- **Warm Up Before Gardening:** Do some warm-up exercises to get your muscles ready for the task ahead. Holding both your hands above your head repetitively stretching up to the sky one hand at a time simulating a ladder climb. This will stretch the muscles around your core that are primarily used whilst digging. Rolling the shoulders forward and backwards and large circular movements of the arms will prepare the upper body.



- **Digging:**
Over-enthusiastic digging by out of condition gardeners accounts for a high proportion of those with back pain. Keeping your back straight and dividing your digging areas into sensible chunks will prevent overdoing it in the first few days. By keeping your back straight and contracting your stomach muscles you will form a muscular support around the spine reducing the strain on the ligaments and joints of the low back. Remember if your back 'goes out' on day one you could be spending valuable sunny days recovering rather than enjoying your garden.
- **Mowing The Lawn:**
Most of us love to look at it but few enjoy cutting it. Beware when using hover mowers, never attempt to move them sideways by swinging from the waist with the mower at arm's length. Working in this way puts excessive strain on the low back and may result in otherwise avoidable pain. Mow a little at a time in straight lines keeping as upright as possible.
- **Use a Kneeler Seat:** The use of a 'kneeler seat' with handles will provide padding for your knees and that much needed support when returning to a standing position.
- **Use a Lifting Trolley:** Use a lifting trolley to move heavy items such pots, sacks of compost. Failing this, use a wheelbarrow and lift from a squatting position using your legs/knees, not by bending over.

- **Lighten the Load:** Decanting material into lighter loads is also a sensible back-protection technique
Buy heavy items (cement, compost etc) in smaller bags to reduce your carrying load.

Design your Garden with your Back in mind

Raised beds, low maintenance planting, the purchase of lifting hand trolleys and light-weight, long-handled tools will all help.

If you are lucky enough to have a potting shed or greenhouse, make sure that work-benches are the correct height to avoid stooping.

Planting for Protection

Go for ground-covering plants to reduce weeding; use bark to stifle weeds; enjoy tubs and container gardening for annuals, to avoid too much bending, digging and planting up in your borders.

Just remember, too much bending equals back pain!

And as above, if you've over done it follow the instructions for the use of heat, stretches (lower back and/or neck and shoulders) and ice.

Sleep:

Sleep is vitally important and the time our bodies heal. However, during times of stress individuals can find it difficult to fall asleep, stay asleep or get good quality sleep.

If this is the case here's some tips:

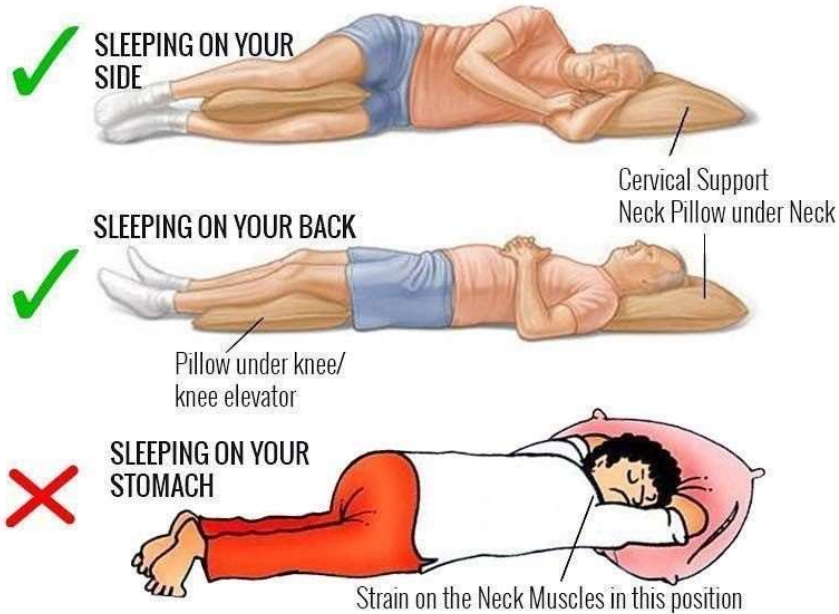
- Stay off technology for the hour before bedtime
- Have an Epsom salt bath in the evening, maybe adding some lavender oil to the water
- Avoid alcohol and caffeine in the afternoon or evening
- Make and enjoy a delicious mug of Golden Milk (as the recipe above) an hour before bedtime

- Do some meditation just before bed – I like Headspace but there’s plenty of free content especially on YouTube. If you’ve never meditated before just start with 3 minutes and gradually work up
- Sprinkle a couple of drops of lavender oil onto your pillow
- Read in bed and stay off your phone!
- Make sure you are not using too many pillows. Either use one ergonomic pillow or instead use one normal pillow, get a towel, roll it into a sausage and place along the front edge of the pillow as the photo below:



- Try not to sleep on your front as this distorts and misaligns the spine too much
- If need be you could try a pillow under your knees when on your back or a pillow between your shins running from knee to ankle when on your side. Try to keep your knees bent the same degree, like a chair shape on your side.

The Best and Worst Sleeping Positions



Stress relief:

As mentioned above that this pandemic is unprecedented, and the uncertainty is very unsettling for most of us.

Try to use this time to slow down, complete tasks and spend time with your family. If timetables help you then draw one up, if timetables stress you out then don't! However, each day try to move your body whether it's a walk in the fresh air or an at-home work out. Do something each day that brings you joy whether it's cleaning your car, having a tidy home, knitting, baking or reading.

As mentioned earlier meditation can help with stress as well as Epsom salt baths.

By decreasing your emotional stress, you will help to lower your stress hormone release and increase your happy hormone release. Happy hormones act as pain relievers while stress hormones will amplify your pain perception. But your body can't produce both at the same time. By lowering your stress, you will increase your happy hormone release and will feel less pain.

I really hope this has helped you and please do not hesitate to contact me with any questions.



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