## **Musculoskeletal Pain**

Musculoskeletal pain affects the bones, muscles, ligaments, tendons and nerves. Anyone can experience musculoskeletal pain. It is most often caused by an awkward movement, car accidents, falls, sprains, strains, fractures, dislocations and direct blows to an area of your body.

Most injuries are referred to as 'acute' (having a rapid onset with severe symptoms). Other musculoskeletal pain comes from chronic (long-lasting), overusetype injuries which may be due to poor postures or repetitive actions at work or during sport. Sometimes an acute injury, if not treated properly, can become a chronic pain source. Pain from overuse injuries affects more than 33% of adults. Musculoskeletal pain can be localised to one area, to one joint or it can be more widespread.

When a pain becomes chronic it can have far-reaching effects on your life; affecting your sleep, reducing activity levels, impacting on work and social life, causing fatigue and mood alterations, and even causing severe disability.

So, how can regular physical activity reduce your pain and improve your quality of life?



### The benefits for someone suffering from musculoskeletal pain (both acute and chronic) include:

- Reduced pain: The more active you are the stronger your muscles become. They can provide better support and alignment for your joints which in turn reduces their pain, and you have more confidence moving around.
- Improved fatigue: Although you may be tired now and the thought of doing more is overwhelming, the more physical activity you do the less tired you become. Your general cardiovascular fitness improves (your heart and lungs' ability to work improves) and your muscles become stronger which makes them more efficient, demanding less oxygen and making you feel less tired. Also, the fitter you are the better you sleep which in turn will make you less fatigued.
- Improved physical function: The more active you are the more your balance and stability will improve and you will have greater ease of movement. This comes from stronger muscles, more stable joints and the fact that the more you move, the better the nerve signals between your brain and arms and feet become, making movement safer and tasks apparently easier. You require less assistance and maintain more independence.
- Improved self-efficacy: As mentioned above, with reduced pain, better function and less fatigue, you will be able to do so much more, giving you a renewed belief in yourself.
- Improved general wellbeing and general health: Physical activity has so many benefits for your heart and lungs, blood pressure, lower blood lipid levels, regulating blood sugar levels, and boosting immune function. Release of endorphins (such as serotonin, a happy hormone) has many benefits for your mood and outlook to life.
- Improved fitness and mental health: Your musculoskeletal system will be much better tuned and the release of the happy hormones mentioned above will lead to a happier state of mind.
- Reduced joint stiffness: Joints that are not used become stiff, they need to be lubricated (greased) and they do that by movement. Strong muscles developed by regular activity help support the joints and ensure they move well. Physical activity also reduces inflammation and breaks down scar tissue, which in turn can improve joint stiffness.
- Improved quality of life: This goes hand in hand with improved confidence, selfesteem, improved fitness and mood. Being able to do more and do it without help, perform 'normal' daily tasks or even more challenging ones you thought impossible before exercising, will make your life richer in more ways than you could believe.
- Reduced absence from work: Better physical and mental health leads to a reduced risk of illness and the need to take time off work.

Understandably, starting any activity can bring with it concerns. The table overleaf details some concerns that may be holding you back from starting with being more physically active.

THE PHYSIO CLINIC



01454 54 00 66

www.thephysioclinicbristol.co.uk

Concern	Advice
I am already in pain, won't doing more make it worse?	Regular physical activity has been shown to reduce pain, and can be even more effective than paracetamol and anti-inflammatories. Yes, initially there may be some muscle pain, which is normal for anyone when starting to exercise. However, this will subside over the first few weeks as your body adapts to the activity. Ultimately over time the strong muscles and more mobile joints will result in less pain. Start slowly and build up gradually, always try to warm up and cool down after activity and stretch to reduce pain.
I am worried my symptoms will get worse	Very rarely do peoples' symptoms stop them from undertaking regular physical activity. Being more active has been shown to reduce pain and fatigue, improve function, wellbeing and joint stiffness. If you feel your symptoms are worsening it may be that you have increased your activity too quickly. Reduce it and then start to gradually build up again. Always increase your activity by time first and then by intensity. If you are still concerned, maybe change exercise type (for example change to a lower impact activity, such as swimming) and ask advice from your physical therapist on what exercise would be best for you).
I have been told from my scans that I have joint damage. Won't exercising be damaging them more?	There is no evidence to prove that doing exercise causes damage to your joints. Research shows that pain, function and other symptoms are improved with regular physical activity. Don't be put off by what is seen on scans and X-rays. From 50% up to as much as 93% of individuals, if scanned, will show degeneration (damage) to joints in their body or spine without having any symptoms. They are essentially unaware of their 'damage.' What is seen on a scan doesn't always equate with what you will feel.
I have been diagnosed with spinal fractures from osteoporosis and fear I can't exercise or I might cause more fractures	Exercise is vital for you, after the spinal fractures have healed. Gaining muscle strength will better support your back, reduce muscle spasm and improve your posture. Activity will improve your balance and reduce your risk of falls and fracture. Weight-bearing exercises will also benefit your bones, improving their density making them stronger. It is advisable to discuss exercises with your physical therapist about the best types of activity, how to bend and lift, and reduce strain.

Ideally with any musculoskeletal pain you will need some specific exercises to target that painful area, for example core exercises for low back pain, neck strengthening exercises for posture and ergonomic corrections, quadriceps and gluteus strengthening for knee pain.

This is where a physical therapist is invaluable. They can also talk through what you want to achieve by being more active and what type of physical activity may be best for you.

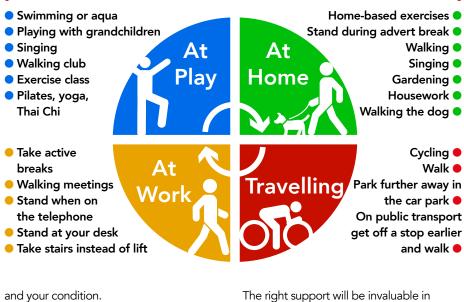
#### The Last Word

A good idea before starting an activity is to sit down with your therapist or even a family member or friend and write down what it is you want to achieve. Set goals, easy achievable ones initially. These will help build self-esteem and confidence. Then you can start looking from short-term easier goals (which may be as simple as walking 10 minutes every day, or achieving a walk around the block 3 times a week) to middle- and long-term ones, extending over the coming months and year.

'Action planning' is the next step. Write down what you are going to do each day or as a weekly plan. Keeping these plans, together with a daily diary, will help you stay motivated and see the improvements over time. You can use self-monitoring devices like pedometers, wrist-worn accelerometers or smartphones to keep track of your daily step count. There are also many activity apps that can be downloaded to mobile phones to help you monitor your activity levels, motivate you or provide you with daily exercise routines. Get help and advice from your physical therapist about what would best suit you

## Making everyday life more active

Apart from formal exercise or group activities, you can build activity into your everyday life. Small changes will ultimately make big differences to your quality of life. Ideas for making everyday life more active include:



Make sure you have support – be it family and friends or a physical therapist, support group or exercise programme.

The right support will be invaluable in keeping you motivated and encouraged, particularly on those bad days, and make you accountable for changing your life!



01454 54 00 66

www.thephysioclinicbristol.co.uk

# Gold Standard Exercise **Recommendations for Health**

#### If Exercise Was A Pill



#### What Activity Should I Be Doing If I'm Between the Ages of 5-17?

- 60 minutes of moderate to vigorous-intensity physical activity - every day
- > 60 minutes daily will give even better health benefits
- Most of the daily physical activity should be aerobic
- But should incorporate vigorous intensity activities that strengthen muscle and bone, at least 3 times per week

#### What Activity Should I Be Doing If I'm Between 18-64?

- 150 minutes of moderate-intensity aerobic physical activity each week, or 75 minutes of vigorous-intensity aerobic physical activity
- Aerobic activity should be performed in bouts of at least 10 minutes
- 300 minutes of moderate-intensity or 150 of vigorous-intensity aerobic physical activity brings even greater health benefits
- Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.

#### What Activity Should I Be Doing If I'm Over 65 Years of Age?

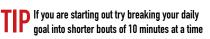
- 150 minutes of moderate-intensity aerobic physical activity each week, or 75 minutes of vigorous-intensity aerobic physical activity
- Aerobic activity should be performed in bouts of at least 10 minutes
- 300 minutes of moderate-intensity or 150 of vigorous-intensity aerobic physical activity brings even greater health benefits
- Activities that enhance balance and prevent falls on 3 or more days per week Muscle-strengthening activities should be done involving major muscle groups, on 2 or more days a week
- The goal is to be as physically active as your abilities and conditions allow.

Reference: Global Recommendations on Physical Activity for Health, World Health Organisation 2018

#### What is Moderate Intensity Versus Vigorous Intensity Activity?











activities you find fun and mix them up



Join friends

to make

it more

The information contained in this article is intended as general guidance and information only and should not be relied upon as a basis for planning individual medical care or as a substitute for specialist medical advice in each individual case. ©Co-Kinetic 2019

#### THE PHYSIO CLINIC Movement Health Performance



🖄 01454 54 00 66

www.thephysioclinicbristol.co.uk

