

# Can I Treat My Back Pain?

**T**herapy is often viewed as costly, a luxury (especially massage therapy), time-consuming, and can also be limited by access to a professional therapist. These challenges have been exacerbated in recent years due to Covid-19 restricting face-to-face therapy, forcing people to manage at home. Athletes, and the general public, have bought into 'time-saving', 'money-saving', and 'convenient' (any-time, anywhere) massage tools hoping to achieve the same benefits as traditional massage. In addition, the internet or YouTube offers many solutions to curing back pain. Sadly many of the 'quick fixes' advertised may leave you wanting.

Remember, a back pain specialist is trained in their profession and their skills are based on scientific evidence. The benefits of manual therapy are believed to go beyond the skilled treatment technique to the virtues of touch and physical connection with another person that can also impact healing. So, while many of the home treatment options may be beneficial, make sure they are well-researched and ensure that you perform them correctly with sufficient skill so as not to do more harm.

## HOME MASSAGE THERAPY

Massage is proven to reduce pain, improve flexibility, reduce swelling and inflammation, induce relaxation, and therefore reduce stress and anxiety. Massage can also aid recovery after exercise, reducing muscle pain and stiffness from a workout. The solution for home

massage comes from foam rollers and electric massage devices or instruments.

### 1. Foam Rolling

Foam rolling has become common practice and is not only used in the sporting arena. It is promoted to help recovery, but also to reduce muscles spasm, pain and stiffness. By increasing the flexibility of the tissues, foam rolling is thought to improve the range of motion. Depending on the size and firmness of a foam roller, you can target smaller or larger areas and muscle groups. Its benefit stems from the principles of traditional massage, where increased blood flow to the area, promotes healing and increases elasticity (or flexibility) in the muscles. There are not a lot of studies proving its benefits, although some research does show it effectively decreases muscle pain.

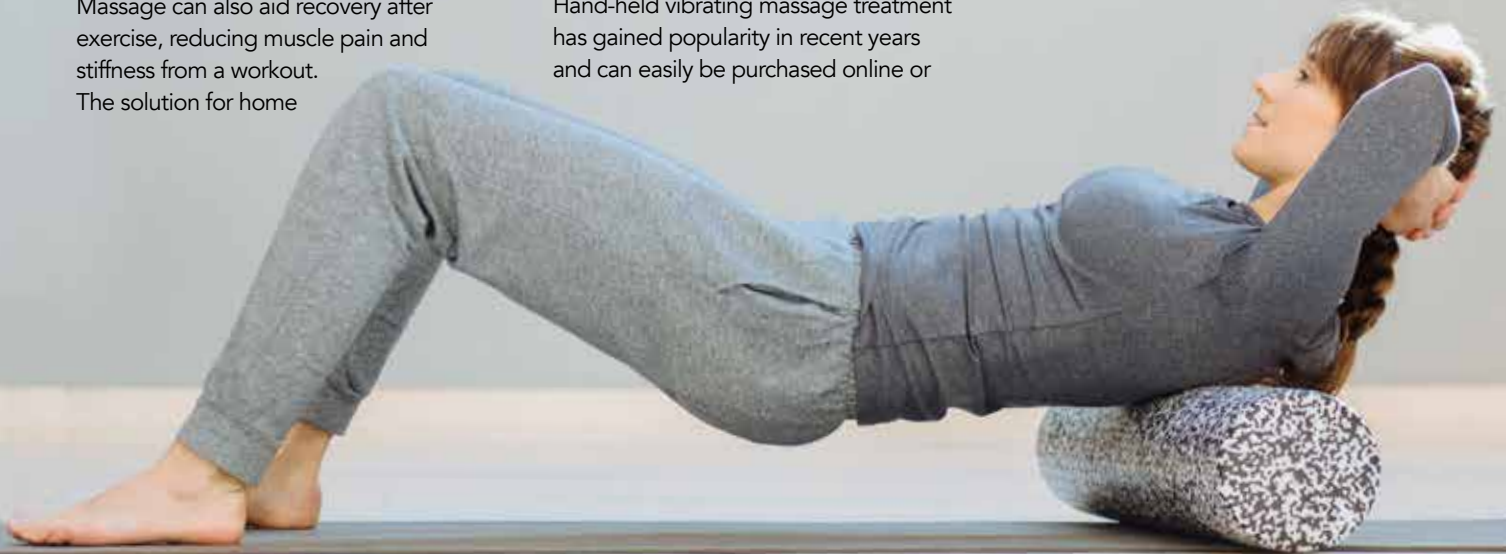
Foam rolling is generally well-tolerated and easy to use. Start off with just 30 seconds to a maximum of 2 minutes per area, as overdoing it can result in bruising and pain. Take care not to 'roll' over bony prominences or painful nerve areas as this may aggravate your symptoms. Care should be taken in people with diabetes, varices or osteoporosis who may be at greater risk of tissue damage as a side effect of mechanical pressure from the roller.

### 2. Percussive (Vibrating) Massage Devices

Hand-held vibrating massage treatment has gained popularity in recent years and can easily be purchased online or

in local pharmacies. Examples of brand names are the Theragun by Therabody® and the Hypervolt by Hyperice. Different devices are made to vibrate at different frequencies, and as such may penetrate different tissue depths. Many of the devices come with different attachments for treating larger or smaller areas. The research on percussive massage application is very limited. It is presumed that using such devices will combine the beneficial elements of conventional massage and vibration therapy. They are therefore believed to reduce pain, increase blood flow, improve scar tissue, reduce muscle spasms, increase lymph drainage, and increase range of motion. Increases in range of motion have been shown when performing whole-body vibration therapy (by standing on a vibrating plate) or using a vibrating foam roller for specific muscle groups. In one study, daily percussive massage (5 minutes daily for 1 week) applied across the hamstrings and lower back reduced pain and increased lower back flexibility.

The vigorous massage action may cause bruising, inflammation and tissue damage. They should not be used directly over an area of muscle strain or ligament sprain, nor where a suspected broken bone may be. This is important for elderly people with osteoporosis and fragile spines. Monitoring proper use and time as well as following the instructions carefully can reduce risk of side effects.



### 3. Instrument-Assisted Soft Tissue Mobilisation

Tools used to facilitate massage and tissue mobilisation are referred to as 'instrument-assisted soft tissue mobilisation' (IASTM). In the past, some professionals used a spoon or butter knife. Nowadays therapists use specifically manufactured tools usually made of stainless steel, titanium, plastic or stone. These tools allow for specific, deep, direct pressure on a muscle or tendon. The tools are designed to allow the therapist to apply the appropriate pressure throughout the injured or painful area. It also assists therapists in 'saving' their thumbs from performing the hard work. These tools, however, have made home deep tissue massage possible.

The deep pressure achieved with these tools is thought to break down restrictions, adhesions and scar tissue. The deep tissue pressure also stimulates an inflammatory response in the area, which triggers the healing process. It also increases blood flow to the area, promoting healing. Studies have shown that the correct use of tools can reduce pain and improve mobility in muscles and around joints.

Bruising and soreness are the most common side effects. Care should be taken in people with varicose veins, osteoporosis, fractures, blood clotting issues, skin infections, cancer, kidney dysfunction, pregnancy, lymphoedema and rheumatoid arthritis.

#### CRYOTHERAPY (COLD THERAPY)

This is treatment using cold or ice. It may include the application of a localised ice pack, use of cold sprays, an ice bath or even fancy ice machines for full body immersion. Ice has traditionally been used for all injuries to reduce pain and swelling. However, new research shows that most ice applied to the skin surface barely penetrates deep enough to be effective. And usually causes superficial ice burn on the skin as people apply the ice directly and for too long. In addition to this, icing an injured area and reducing the blood supply actually impedes or stops the inflammatory response which is critical to start the healing process. So, studies have shown that icing can actually delay healing and recovery.

For chronically swollen joints with severe inflammation, cryotherapy can

help reduce long-standing stubborn inflammation. Cryotherapy in the form of immersing an entire limb or both legs or your body has been shown to be very effective in reducing post-exercise pain and stiffness, therefore speeding up recovery. This is very popular with athletes.

#### HEAT THERAPY

Heat therapy works by improving circulation and blood flow to a particular area due to increased temperature. Increasing the temperature of the afflicted area even slightly can soothe discomfort and increase muscle flexibility. Heat therapy can relax muscle spasms and promote healing through the improved blood supply.

There are two different types of heat therapy:

- dry heat (or 'conducted heat therapy'), which includes using electric heating pads, dry heating packs, microwave bean bags, infrared lamps and even saunas; and
- moist heat (or 'convection heat'), which includes sources like steamed towels, moist hot packs or hot baths.

Local therapy is essentially treating a small area, where you could use small heated gel packs or a hot water bottle. Regional treatment is best for more widespread pain or stiffness, and could be achieved with a steamed towel, large heating pad, or heat wraps.

Care should be taken to avoid burns. People with diabetes, nerve damage, dermatitis, vascular disease, deep vein thrombosis (DVT) and multiple sclerosis should not use heat therapy.

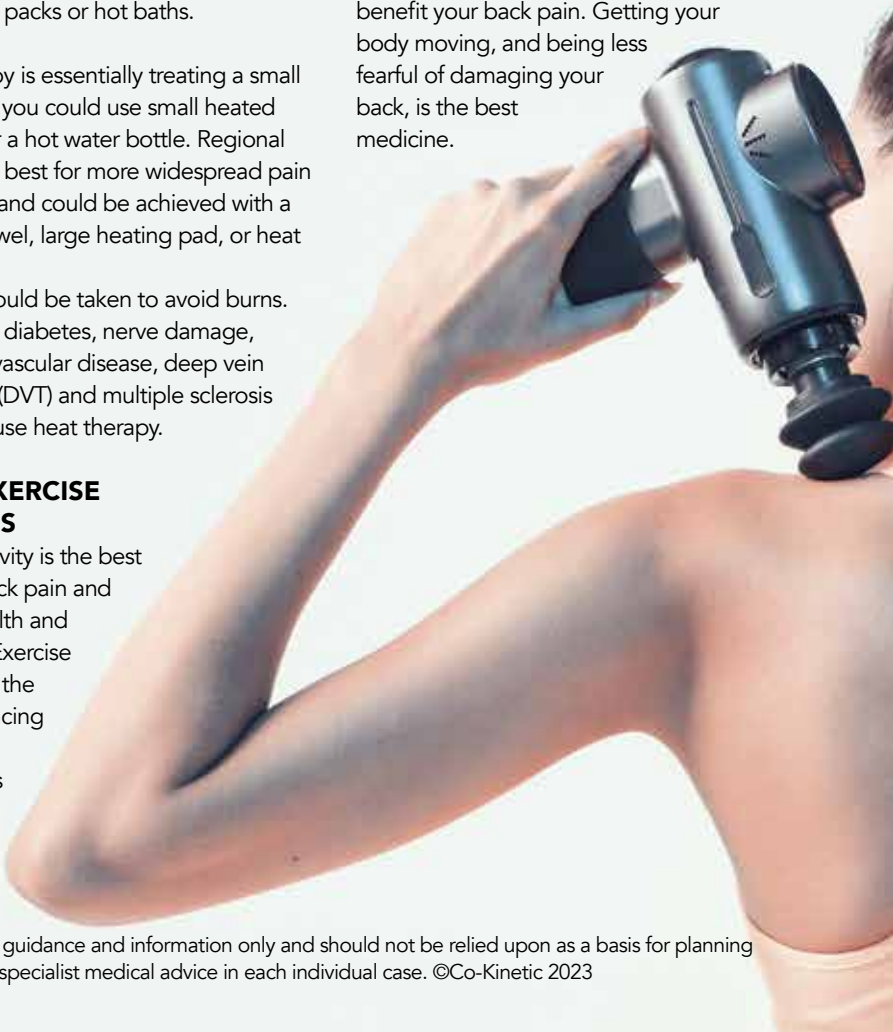
#### HOME EXERCISE ROUTINES

Physical activity is the best thing for back pain and general health and wellbeing. Exercise therapy has the most convincing evidence from studies proving its efficacy in reducing

pain and improving function in people with back pain. Exercise helps improve blood circulation, increase muscle strength and restore balance and mobility to your body. Exercise also strongly improves mental health, reducing stress and anxiety – often associated with back pain – by reducing cortisol levels (stress hormones) and increasing endorphins (happy hormones).

Specific exercises are often prescribed by physical therapists and customised to the individual's needs. Exercise therapy can be supervised in a one-on-one setting or in a group class, or performed at home and adjusted under the therapist's guidance when needed. Care should be taken if starting new exercises you are unfamiliar with. Doing too much and performing the exercise incorrectly can aggravate your back symptoms.

Traditional core strengthening exercises (your abdominal muscles) are proven to help reduce back pain. However, recent studies have also shown that any form of physical activity (that you enjoy and will stick to), be it walking, yoga, Pilates, aerobic exercises, swimming, cycling, strengthening or resistance exercise will benefit your back pain. Getting your body moving, and being less fearful of damaging your back, is the best medicine.



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