

Grounding: Exploring Earthing Science and the Benefits Behind It



Grounding, also called earthing, is a therapeutic technique that involves doing activities that “ground” or electrically reconnect you to the earth.

This practice relies on earthing science and grounding physics to explain how electrical charges from the earth can have positive effects on your body. This type of grounding therapy isn’t entirely the same as the technique that is used in mental health treatment.

In this article, we’ll explore the science behind grounding energy, the risks and benefits of using earthing techniques, and how to perform grounding.

What the science says

Grounding is currently an under-researched topic and there are very few scientific studies on the benefits. However, the most recent scientific research has explored grounding for inflammation, cardiovascular disease, muscle damage, chronic pain, and mood.

The central theory from one review study is that grounding affects the living matrix, which is the central connector between living cells.

Electrical conductivity exists within the matrix that functions as an immune system defense, similar to antioxidants. They believe that through grounding, the natural defenses of the body can be restored. Further research expands on this idea.

In a small study on grounding and heart health, 10 healthy participants were grounded using patches on the palms of their hands and soles of their feet.

Blood measurements were taken before and after grounding to determine any changes in red blood cell fluidity, which plays a role in heart health. The results indicated significantly less red blood cell clumping after grounding, which suggests benefits for cardiovascular health.

Another slightly larger study examined the role of grounding on post-exercise muscle damage. Researchers used both grounding patches and mats and measured creatine kinase, white blood cell count, and pain levels before and after grounding.

Blood work indicated that grounding reduced muscle damage and pain in participants. This suggests that grounding may influence healing abilities.

This research is supported by a recent study on grounding for pain reduction and mood improvement. Sixteen massage therapists alternated between periods of grounding and no grounding.

Before grounding therapy, physical and emotional stress and pain were common side effects of their physically demanding jobs. After the earthing therapy, pain, stress, depression, and fatigue were all reduced among participants.

Most of the studies on grounding are small and rely somewhat on subjective measures, such as self-reported feelings, mood, or even self-administered treatment.

Some studies also rely on blood markers, such as those that detect inflammation, but the size and shortage of these studies suggests that more research is needed.

Types of grounding or earthing

There are many types of grounding. All of them focus on reconnecting yourself to the earth. This can be done through either direct or indirect contact with the earth.

Walking barefoot

Have you ever been outside on a warm summer day and felt the urge to run barefoot in the grass? One of the easiest ways to ground yourself to the earth is to walk barefoot.

Whether this is on grass, sand, or even mud, allowing your skin to touch the natural ground can provide you with grounding energy.

Lying on the ground

You can increase your skin-to-earth contact by lying on the ground. You can do it in the grass by the park or on the sand at the beach.

If you're going to ground yourself in this way, be sure to take the proper precautions and never lie somewhere you could be injured.

Submersing in water

According to advocates for grounding, water may be used to ground in the same way the physical earth is used for grounding.

They suggest simply wading in a clear lake or swimming in the ocean as a way to ground yourself. As always, be sure to stay safe when swimming, especially in murky or deep waters.

Using grounding equipment

When going outside to ground yourself isn't an option, there are alternatives. One method of earthing involves connecting a metal rod to the ground outside and then connecting the rod to your body through a wire.

If you're not comfortable using a metal rod to ground yourself, there's other grounding equipment available. This equipment is an effective way to incorporate earthing therapy into your daily life and includes:

- grounding mats
- grounding sheets or blankets
- grounding socks
- grounding bands and patches

You can find grounding mats, sheets, blankets, socks, and bands online.

Why use grounding?

There's not much research on the benefits of grounding. However, people have reported improvement for conditions such as:

- **Chronic fatigue.** In the study on massage therapists, many reported a decrease in their fatigue levels after four weeks of treatment with grounding mats.
- **Chronic pain.** The study on grounding for exercise recovery found that those who used grounding patches reported lower pain levels.
- **Anxiety and depression.** In one small study, it was shown that even 1 hour of grounding therapy can significantly improve mood.
- **Sleep disorders.** The massage therapists also experienced an improvement in sleep length and reduce sleep disturbances with grounding therapy.
- **Cardiovascular disease.** Results of one treatment study found that long-term self-administered grounding therapy helped to reduce blood pressure levels in participants with hypertension.

As mentioned above, many of these studies are small and require further research. Still, some health professionals believe that the benefits of grounding therapy may come simply from feeling like you're reconnected to nature. Regardless, there is little harm.

Risks of grounding

Many of the grounding techniques performed in nature, such as walking through the grass or swimming at the beach, are relatively safe.

Conditions like chronic fatigue, pain, and anxiety may have underlying medical causes that need to be addressed. Always visit your doctor for these types of conditions first before relying on grounding therapy as the first line of treatment.

HOW TO PRACTICE GROUNDING

Grounding can be performed both outdoors and indoors, depending on the technique you choose to use.

- **Outdoors.** When you're outside, you can easily ground yourself by allowing the bottoms of your feet, palms of your hands, or entire body to touch the earth. Walk in the grass, lay in the sand, or swim in the sea. These are all easy ways to naturally reconnect.
- **Indoors.** When you're inside, grounding yourself requires a bit more effort and in most cases, equipment. Use a grounding sheet or socks while you sleep. Use a grounding mat in your home office chair. This equipment has been thought to help ground you throughout the day.

The bottom line

Grounding or earthing is a therapeutic technique that focuses on realigning your electrical energy by reconnecting to the earth. There's little research behind grounding but smaller studies have reported benefits for inflammation, pain, mood, and more.

Grounding can be performed inside or outside, with or without grounding equipment. No matter how you choose to perform grounding, make sure that you're always aware of your surroundings outside and use earthing equipment safely to reduce risks.