Investigating the Health Benefits of Earthing A Research Review – Written by Marley Betts

Introduction

This paper looks at seven credible (peer-reviewed) journal articles that discuss earthing (also known as grounding), and how it can be used to improve health and wellness.

The research in this paper has been used to write the Earth Legacy book series (particularly book two: *The Silver Shepherd*), which is a fictional story set against the backdrop of a society that is prevented from accessing the health benefits of earthing (visit www.marleybetts.com for more information).

What is Earthing & How do you do it?

Earthing is the time that a person spends connected to the surface of the Earth, either by touching the ground, skin to Earth, or by using special conductive equipment which can connect a person with the ground without the need for direct contact. This equipment can be used to earth a person in regular shoes, indoors, and even when lying in a bed (Chevalier, 2015; Chevalier et al., 2012), and allows a free flow of electrical current between Earth and body (which will be discussed later).

Do you wear shoes whenever you go outside? Chevalier et al (2012) explain that our "modern lifestyle" (which includes wearing shoes and spending time indoors), prevents us from earthing. It is worth noting that Chevalier et al (2012) talk not only about the health benefits of earthing, but they also make the point that *not* earthing may actually *contribute* to ill health.

The Health Benefits of Earthing

Chevalier (2015) found that earthing can **improve mood** significantly, Menigoz et al (2019) tell us that it can **improve vitality**, and Chevalier et al (2012) discuss how grounding can cause activation of the rest and relaxation response (parasympathetic nervous system) and deactivation of the fight-or-flight response (sympathetic nervous system), which can help to **reduce stress**, **anxiety**, **depression**, **and irritability**.

More than one study looked at blood markers such as white blood cell counts and creatine kinase, which showed measurable differences in grounded and ungrounded people (Chevalier et al. 2012). Grounding also appears to positively affect **cardiovascular health**, having positive effect on heart rates (Chevalier et al. 2012) while also reducing blood viscosity and clumping. Grounding is also shown to have "beneficial effects on various cardiovascular risk factors" (Chevalier, Sinatra, Oschman & Delany, 2013).

Lin et al (2022) list some of the positive health effects of grounding as **improving:** "inflammation, free radical damage, blood pressure, sleep quality, pain, stress, mood, and wound healing".

Oschman, Chevalier & Brown (2015) confirm wound healing and add "prevention and treatment of chronic inflammatory and autoimmune diseases", explaining that earthing produces measurable beneficial changes relating to the inflammatory response within a grounded body. Menigoz et al (2019) list **improved energy** and suggests that earthing causes an **increase in overall well-being**.

Madvin and Khalid (2021) discuss how grounding **can increase blood flow** which helps skin absorb skincare when applied, which may improve skin health and appearance, or what they refer to as "**improved facial beauty**".

It is worth noting that the positive effects of earthing on inflammation, sleep, stress, and pain came up repeatedly during research.

How does Earthing work?

Okay, I confess, I am no scientist, so I am unable to dive in deep here, but I will give you a bit of an idea about what I have read and understood, and the references listed can give you a good starting point if you wish to do your own research.

So, from what I understand, the way earthing works has to do with flow of electrical charge. Chevalier et al (2012) talk about an exchange of electrons and explain that the earth's electrical qualities (negative potential) can affect the electrical qualities of a human body ("internal bioelectrical environment") which can aid in homeostasis, resulting in regulating normal body functioning and impacting on things like our sleep-wake cycle and hormone production. Menigoz et al (2019) say that "bodily contact with the earth's natural electrical charge stabilizes the physiology at the deepest levels", which is a statement also supported by Oschman, Chevalier & Brown (2015). Chevalier et al (2012) tell us that a body's electrical environment can influence biochemical and physiological processes, such as pH levels of body fluids and cell production, while not grounding ourselves means that we are unable to get rid of electrical charges in our bodies, which may be detrimental to health. Sinatra, Oschman, Chevalier & Sinatra (2017) refer to grounding as being "electric nutrition". They summarise 12 peer-reviewed reports which all show significant health benefits as a result of grounding and they explain that grounding is useful to help treat certain health problems, but may also be useful for preventing them in the first place, and improving the results of other treatments.

How long does a person need to earth themselves for to see any benefit?

Madvin and Kkalid (2021) tell us that "even a brief touch" can aid blood flow, while Chevalier (2015) had results which showed that 1 hour of grounding can improve mood. Chevalier et al (2012) had results at between 30 minutes and two hours of grounding time, but also mention multiple studies where participants were grounded in their beds while they slept overnight. Results indicate that grounding should be practiced regularly to receive the most benefit.

The positive effects of grounding are still being researched and more research is still required to determine the full scope of benefits that can be gained, how we can best access those benefits, and why grounding works to produce those effects. Lin et al (2022) is a more recent study that is looking at how grounding may be used to help people with dementia, and it is exciting to think about how accessible grounding is and how it may be used to improve health, quality of life, general wellbeing, and even skin appearance.

Conclusion i.e. A Quick Summary

Earthing involves a transfer of a kind of electricity from body to earth and earth to body which can produce a large number of health and wellness benefits. It is a simple thing to do that costs nothing and carries no risk and no potential side effects. Menigoz et al (2019) suggest that "earthing should be recommended by health professionals to patients" and the research that has been done indicates that earthing should be something that we should make an effort to include in our everyday lives.

There are many more websites and articles on the internet that discuss the studies that have been done on grounding, and the research that is being done now. There is plenty more research to be done, but the message is clear: Earthing is good for you.

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