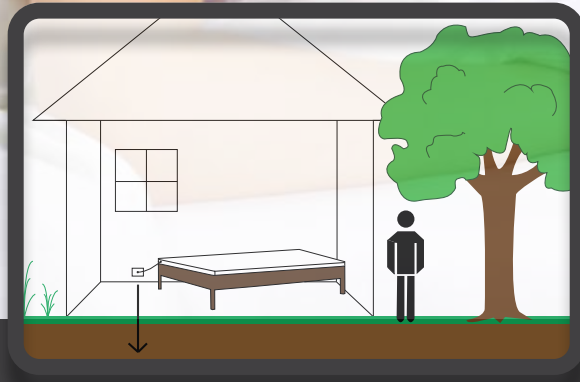


Prof. Dr. med. h.c. Günther W. Amann-Jenison



# CURING SLEEP DISORDERS THROUGH BODY EARTHING THERAPIES

Body earth (Earthing) - a millenia old  
healing secret for better sleep, improved well-being,  
health and activation of your self-healing powers.

**PROTECTION FROM ELECTROMAGNETIC FIELDS (EMF)**

[Translated from original German language.]

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## INTRODUCTION

I have been involved in sleep-healthy research for 30 years. Based on my experience and the state of science, I can say with confidence that sleep is the most important single factor for well-being, health, vitality, creativity, zest for life and success. Over 90% of our physical, mental, and spiritual health depends on sleep! Yet sleep quality has deteriorated so much in recent decades that from a biological point of view, nobody is actually sleeping healthy anymore. My research has resulted in numerous sleep-healthy concepts and products, as well as a special form of healthy-sleep coaching.

I have always dealt with one fundamental question: „What supports our sleep, our health and our healing?“ This is the concept of „Salutogenesis“ (Origin of Health), the dealing with health-promoting factors and aspects of our lives. My vision was not only to provide the best sleep (Bioenergetic Sleep®), but also to treat people while they are asleep (sleep therapy).

During all this research, and through my experiments and studies, I came across one single natural cure. This cure supports the whole body, the brain and nervous system, as well as, all organ systems. This goes as deep as the interior of each cell and thus activates the self-regulatory, self-repair and self-healing powers. These healing powers contribute and promote any medical therapeutic treatment. In all these years, I have not come across any other natural healing methods, which favor and benefit all the processes in our organism. Even wound healing after surgery is positively influenced. This universal, natural energy is called „body Earthing“ (Earthing). Who would have thought that our Earth and especially the Earth's surface are charged with natural electricity, which is one of the most powerful healing energies for us humans! At the beginning of the 80s, I was looking for a natural method to improve sleep. And in my work as a psychologist and healing therapist, I had noticed that people who walk barefoot a lot, would noticeably sleep better. There were some Hypothesis at that time, but no scientific explanations of this phenomenon.

Today, we know from research and through studies that our Earth actually functions like a giant battery. This „Earth energy“ has always been there. Ever since the development of artificial electricity it has been providing safety. This is because almost everything that has to do with electrical energy,

relates to the “Earth energy”. From electrical utilities to electrical appliances in our homes, offices or industry. In electrical engineering, we use the term „grounding“. Another use of the term is when we describe a person „that is well grounded“. By that, we describe a person who is centered, feels energetic, is relaxed, and is in harmony with their environment. This feeling of being grounded is exactly what we develop when we stand barefoot in the open air, out in the middle of nature. Touching the Earth immediately affects the conductivity of the entire body and supports the entire bioelectric process.

This positively affects the healthy functioning of our heart, our circulatory system, our brain, including the nervous system, our bone metabolism, our thyroid function, our adrenal function, our skin conductance, and the pro-



duction of the protective sleep hormone melatonin. Today's research no longer leaves any doubt that the Earth's pulsation with an average of 7.83 hertz (Schumann frequency) is a perfect electrical match with the fundamental frequency of our brain. Especially in low and REM dream sleep, this frequency will activate all important functions for self-regulation, self-repair and self-healing. But there is still a long way to go. And this path starts with the right information!

## **SLEEP DISORDERS, DISCOMFORT AND ILLNESSES ARE INCREASING**

In our modern civilization, most people feel stressed, exhausted, unwell and often suffer from pain. Anxiety disorders, depression and panic attacks impact the lives of hundreds of million people worldwide. Only one in 20 people, which is only 5% of the world's population is healthy, at least from a medical point of view. Thousands of different diseases burden people. Less and less, Western medicine can locate the causes of disease, and can only combat symptoms with medicine. These medications in turn can significantly disturb sleep patterns. Chronic and neurodegenerative diseases especially have skyrocketed in the last 20 years. Just like autoimmune diseases. 400 million people worldwide suffer from diabetes and depression.

## **WHAT IS THE MISSING LINK?**

Hardly anyone still believes that this development has to do exclusively with our rather unhealthy lifestyle. It indicates that it is a combination of an unhealthy lifestyle and negative environmental factors that lead to reduced sleep quality or even promote sleep deprivation. This in turn triggers more diseases and creates a reason why the "WHO" classifies sleep disorders as „carcinogenic“. What is completely overlooked by science, physicians and therapists, is a real „missing link“: We humans are bio-electrical beings, right down to our cells and the DNA.

We have long been able to measure the electricity of our brain and nervous system, our heart and or our muscles. Since we know that our Earth works like a giant battery, one circumstance shouldn't be overlooked: we humans

are the only living individuals which are no longer connected to the electrical energy of the Earth's surface. We live, work and sleep isolated from the Earth, without this important electrical contact. We rarely walk barefoot in the wild, that's what would produce this important electrical connection between our bodies and the Earth's surface.

For decades, humans have relied on shoes and footwear, almost exclusively equipped with rubber and PVC soles. An excellent insulator between our body and the Earth's surface. We have been living in buildings that also shield and isolate us from the Earth's energy. To break it down, we are no longer Earthed!

Could this disconnect from our Earth energy really be the #1 missing link for a variety of disorders and diseases - especially for sleep disorders and deprivation?

## **SCIENCE UNLOCKS THE SECRET FOR THE HUMAN BODY. IT'S EARTH!**

It has been known for decades, that staying connected to nature and being in direct contact with the Earth's surface is healthy for us humans. It allows for the use of healing energy from the Earth. At the forefront of this healing energy is swimming in the sea, lakes or rivers or the act of "Kneippen" [This is a term of German origin which means, to walk in natural cold water up to the knee]. All of this has to do with grounding (Earthing). In this new millennium, some well-known scientists have turned to researching this phenomenon. The results of this research are groundbreaking.

Here are just three impressive examples, that are documented and backed up by scientific research.

1. As soon as we sleep grounded, the quality of sleep improves, and the level of rejuvenation is measurable.
2. Our autonomic nervous system reacts within four seconds to our body being grounded, which results in a measurable state of relaxation.

### 3. Body grounding reduces inflammation and pain.

Our Earthly bond is thousands of years old. Thousands of years ago, we all walked barefoot, or wore footwear made of natural materials such as leather. We lived, worked and slept in contact with the Earth. Today this natural factor is missing, and we are not grounded anymore. There is much to suggest that it is precisely this factor - directly or indirectly - that could be responsible for several of our health and sleep disorders, including modern diseases. The good news is that with today's knowledge we can re-activate this connection. Why not walk barefoot more often, sit on the grass, or walk on the beach. Wherever there are conductive natural surfaces, you can interact with the Earth's energy.

## GROUNDING PEOPLE IN THEIR SLEEP FOR OVER 35 YEARS

Stress, increased cortisol levels, joint pain, dementia, cancer, and age-related changes.

- all of these are the effects of „chronic micro-inflammation in the body“  
– many people have experienced these symptoms for their entire lives or since they have started to live isolated from the Earth's surface. The question arises „How can we reconnect with the Earth's energy?“

Sleep is the best way to connect ...

if we do sleep in a bed for eight or nine hours, we can utilize this time to dock our bodies electrically into the supportive form of the Earth.

Sleeping all night...

these hours of recovery are hours of healing... hours of restoring our energy, lifting our spirits and allowing us to wake up in a healthier body. Here is the most effective way to sleep: the grounded mattress.

Sleep is so important ...

sleep is important for everything: from losing weight to preventing dementia,

to just feeling alive! Sleep should be a priority, and grounding or Earthing is my number one healing method - because grounded sleep is a win-win situation.

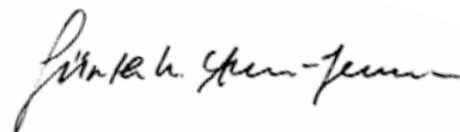
Aside from being grounded, there are many ways to arrive and connect directly to the Earth. This started in 1981, with the idea of grounding people while sleeping with a conductive grounding sleep pad, connected through an electric socket.

1985 was the starting point for the implementation of the „Lokosana@ grounding technology“. This implementation was intended to improve sleep quality and protect the health from electromagnetic fields (EMF) during sleep. The feedback affected all areas of body health and proved a positive shift. Did this happen through the improvement of sleep or was there other mechanisms?

Today, we know from our research that the contact with the Earth is a universal healing secret. Studies prove impressively that Earthing triggers almost 40 biological effects in our body and thus offers numerous valuable health benefits. That's exactly what this e-book is about.

I hope you enjoy reading this book and that you find the motivation to apply this healing principle into your life. In the best-case scenario every night. Not only can you improve your sleep at all levels, but you can also improve your health and start healing therapeutically.

Günther W. Amann-Jennson



## WHAT DOES EARTHING MEAN? AND HOW DOES IT WORK?

The term „Earthing“ originally comes from electrical engineering and describes an electrically conductive connection to the ground. As soon as we stand barefoot in nature, we receive the electrical potential of the Earth. This is ideally 0.0 (zero). When we are grounded, electrical fields and electrostatic charges then drain against the Earth. However, most of the time we are not grounded because our shoes function as insulators against the Earth. Even when we sleep, we are usually isolated from the Earth.

With the research completed over the last 15 years, the act of “walking barefoot” or grounded walking, has developed a whole new value within the health industry. US scientists have discovered that upon contact of the body with the Earth’s surface free electrons in the body flow and numerous biological and physiological effects are being triggered. The previous experiments referencing over 20 studies show that grounded sleeping („barefoot through the night“) trigger about 40 measurable biological and physiological effects. These effects can be used as a precautionary measure (preventive) as well as in a therapeutic way. As soon as our feet, hands or whole body meet the negatively charged energy of the Earth’s surface we are grounded. We live and sleep in a positively charged ionosphere. For bioelectrical charge exchange (+ plus / - minus) free electrons flow into our body and release a series of positive biological and physiological effects. These effects activate our self-healing powers. That’s why running barefoot is so healthy. As walking barefoot is not practical for many, biotech products have been developed that offer people the benefits of „body grounding“ (Earthing) at work or in bed. These include Lokosana® grounding products for your work or sleep environment.

Ideally, Lokosana® grounding technology is used both at work and at home while sleeping. Grounding via the Lokosana® socket causes the same biological and physiological effects as walking barefoot. This is confirmed by scientific studies. The studies have shown that this is a surprisingly effective way to improve sleep, reduce pain, inflammation, improve blood circulation

and normalize blood pressure. The health benefits of Earthing can be far-reaching. That’s because Earthing supports your body’s ability to heal itself. It improves the immune response, reduces inflammation and speeds up the process Recovery from injuries.

## THOUSANDS OF YEARS OF KNOWLEDGE ABOUT THE PHENOMENON OF GROUNDING

Surprisingly, there have always been methods of „natural grounding“, but we have lost sight of these useful natural phenomena. Many cultures believe in the healing power of the Earth - including Egyptians, the people of Greece, Indigenous Australians, Indians and Native Americans. In the 19th century, the German physiotherapist and scientist Sebastian Kneipp argued, that barefoot walking could help prevent illnesses. Over the past 15 years, notable scientists have studied the health benefits of connecting the body to the Earth.

## RESEARCH AND STUDIES ON BAREFOOT TECHNOLOGY AND BODY GROUNDING (EARTHING)

Since 1983, I’ve worked with the phenomenon and health benefits of barefoot running. 30 years later, US researchers found out why barefoot running is so healthy for us humans. It is a bioelectric process between the Earth’s surface and the body. I had already used this exact principle for more than 30 years. The vision was to utilize numerous positive biological effects through a special, grounded sleeping pad (Lokosana®) Initially, the improvement of the quality of sleep and physical-psychological regeneration was the focus. The feedback from the clients proved that Earthing not only improved sleep but improved well-being in many areas like general health, vitality, performance, zest for life etc.

This enormous potential of the bio-technology developed under my guidance has been confirmed by numerous scientific studies. Over the past 15 years there have been over 20 studies published in journals that confirm much of what I did in the 90’s through measurements and feedback from

my clients.

Today there are more than 20 studies, thousands of references and tens of thousands of reports worldwide about the advantages of large-scale Earth grounding. (Earthing). Simple lifestyle changes like restful sleep (SAMINA), a healthy diet and regular exercise can significantly affect your health and well-being.

The research shows that barefoot technology can positively affect the whole organism. The most frequent feedback noticeable is stress reduction, better sleep and more energy during the day.



## NUMEROUS HEALTH BENEFITS BACKED UP BY SCIENTIFIC STUDIES

Here are some of the health benefits that were retrieved from the scientific exploration of “Earthing” over the last 15 years. Above all, nocturnal and large-scale Earthing have proven the best and most sustainable effects to:

- Calm the nervous system
- Normalize the cortisol level

- Protect against electrosmog (EMF)
- Reduce emotional stress faster
- Help falling asleep easier and faster
- Improve quality of sleep
- Reduce inflammation
- Increases energy and motivation
- Improve the mood
- Reduce or eliminates pain
- Dilutes the blood, which improves blood circulation and blood pressure
- Accelerate the repair of micro injuries in the muscle system
- Improve glucose or blood sugar metabolism
- Prevent the loss of calcium and bone density
- Reduce indicators of osteoporosis
- Improve cardiovascular function
- Shorten recovery after athletic performance

Most people benefit quickly from the grounding the body, yet it can take longer for others. People with a lot of stress, stress-related sleep disorders, pain or chronic health problems usually notice positive effects very quickly. Even if they don't see any noticeable changes, the research shows that many things in your body will change positively.

This means that you too can experience positive affects with the Lokosana® grounding technology. Measurements show that our body reacts within only 4 seconds to the act of “Earthing”. Especially the autonomic nervous system. This system reacts immediately and calms down, as the relaxing part (parasympathetic) is activated. Even muscle tension caused by stress improved immediately and the muscles relax measurably. After only a few minutes, your cardiovascular system also reacts to the body's grounding (Earthing) and heart rate variability (HRV) is increased.

## MANKIND LOST DIRECT CONTACT TO THE EARTH

Environmental medicine usually deals with environmental factors that have a negative impact on human health. However, the emerging scientific research has revealed a surprisingly positive and previously overlooked environmental

factor for our health: which is the outcome of direct physical contact with the huge supply of free electrons on the Earth's surface. Our modern lifestyle (wearing shoes and living in buildings) has separated man from direct contact with the Earth. Research from the last 15 years shows that this energy deficiency can make a significant contribution to malaise, functional disorders, sleep disorders and physical illnesses. Studies and empirical data prove that the restoration of the connection with free electrons of the Earth's surface lead to fascinating physiological changes and promote well-being and health.

In 2012, an interesting study was published in the Journal of Environmental and Public Health, "Earthing: Health Implications of Reconnecting the Human Body to the Earth's Surface Electrons". It gives a good overview of the research around the phenomenon of body Earthing (Grounding).

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3265077/>

## FURTHER RESEARCH RESULTS AND STUDIES

Below is a series of studies that examine the effects and show the mechanisms of this so-called "barefoot" technology. It examines Earthing in sleep, protection against electrosmog, relaxation, regeneration, microcirculation, pain, inflammation, wound healing, stress, immune reactions and much more. Today, due to its unique design (capacitor principle), the Lokosana® grounding technology is amongst the best grounding technologies worldwide. This is being confirmed by more and more international users, experts, doctors and therapists. Most of the research is written using technical terms, which are often difficult to understand. To make it easier, here is a summary:

## EARTHING PROTECTS AGAINST ELECTROSMOG (EMF)

For many people, the grounding principle is still new. It is not surprising that both the people and experts are confused when it comes to the connection between "Earthing" and Electro-Smog, or electromagnetic fields (EMF)

and electromagnetic radiation (EMR). Particularly when it comes to whether body grounding (Earthing) protects against these technical radiation fields or not. The short answer is YES. Body Earthing (Grounding) can protect us from some electromagnetic fields, especially low frequency electromagnetic fields. But there are also positive reports that show grounding protects us against high frequency fields of mobile radio, WLAN, etc.

The Earthing Institute (USA) has published an article on this subject to refute the often-contradictory statements of Building Biologists (Bau-Biologists) and Electro-Biologists. The authors are Prof. Gaéтан Chevalier, Ph.D. and Prof. James L. Oschman, Ph.D. Both are scientists and longtime researchers in the field of "Earthing". Prof. Gaéтан Chevalier is a Doctor of Electro physics and Prof. James L. Oschman holds a Ph.D. in Biology and is a member of the Scientific Advisory Board of the National Foundation for Alternative Medicine, Washington D.C. Both scientists conclude that grounding (Earthing) is a largely overlooked factor in today's health industry. The Grounding effects are important and are a largely overlooked link between medicine and rehabilitation - with far-reaching and significant health benefits.

Before we go into more detail on the reflections of the two scientists, we will explore two basic terms around the technical radiation fields, the so-called electrosmog. EMF is the abbreviation for electromagnetic field. It is an invisible field or energy zone for us humans that consists of waves / frequencies. Electromagnetic fields are also referred to as electromagnetic radiation (EMR).

## TODAY, THERE ARE MANY MORE NATURAL ELECTROMAGNETIC FIELDS THEN EVER BEFORE

Electromagnetic fields have existed since the creation of our universe. Some examples of Natural electromagnetic fields are, sunlight, infrared and ultra-violet light. Another very important field for all living creatures is the Earth's magnetic field. In contrast, 150 years ago, humans had started to use artificial electricity and began generating technical radiation fields. Whenever electricity is generated, transported or is transformed, magnetic or electromagnetic fields are created. In our homes, apartments and offices, we



are constantly exposed to the so called „house current“ holding a 220 Volt current and a frequency of 50 hertz, that is 50 oscillations per second. Today, we are surrounded by numerous high-frequency fields and microwaves (mobile, WLAN, DECT cordless phones, etc.). These radiations can reach frequencies from one million (megahertz / MHz) up to more than a billion oscillations per second (gigahertz /GHz).

## OUR BODY, BRAIN AND NERVOUS SYSTEM ARE CONDUCTORS

The human body is a good electrical conductor, much better than the air, and that is why the fields charge or even penetrate our body, just as they do the magnetic fields. We humans are bioelectric beings, our brain, heart or muscle tissues are measurable. In our organism are a large number of charged ions (electrolytes), which can be found in the blood as well as within the body cells. Through the technical fields in our environment, the body's electricity is disturbed, having an impact all the way into our cells and DNA. In addition, these electric fields increase our own body tension; this can easily be measured with one high-impedance multimeter.

## HOW BODY EARTH (EARTHING) PROTECTS AGAINST RADIATION

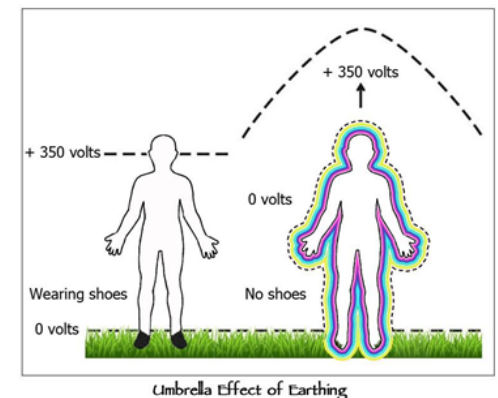
Prof. Chevalier and Prof. Oschman point out in their latest executions that the body's own electricity is protected as soon as you ground yourself. The researchers have made their measurements clear and demonstrated reproducible results. The moment the body has direct contact with the Earth (bare-foot or with the Lokosana® grounding pad), the electromagnetic fields no longer penetrate the body, due to an invisible protective screen that's built up around your body (umbrella effect).

## EARTHING AND THE UMBRELLA EFFECT

Once grounded with Lokosana®, the AC field in your body is reduced; in most cases down to even 0.0 volts or ideally in the electrobiological threshold range of 100 millivolts. At the same time this triggers an electrophysical phenomenon that is often misunderstood. Especially by building- or bau-biologists and electro-biologists. This is because the electrical alternating fields over and around the body increase. If you were to take an electric field strength meter to measure your own body during grounding, you would notice that the 50 Hz AC field is higher than the body grounding. This is because the electromagnetic fields (EMF) around your body are „pushed away“ or distracted when grounded. This electrophysical phenomenon is called the „umbrella effect“, named after the classical lectures of the Nobel laureate Prof. Richard Feynman on Electromagnetism in the 1960s.

There is an article in the Journal of Environmental and Public Health mentioning the following explanation: Prof. Feynman said that if the potential of the body is the same as the electrical potential of the Earth (and thus grounded), it becomes an expansion of the gigantic electrical system of the Earth. The potential of the Earth becomes the „working agent“, which repels, reduces, or pushes away the electric field from the body. Body Earthing (grounding) effectively protects the body from low frequency electromagnetic fields (EMF), such as those produced by AC electrical equipment and wiring.

This same protection is met with the Lokosana® grounding pad. This is also very important as researchers have found that our pineal



gland (epiphysis) is very sensitive to technical radiation fields. Therefore, the necessary production of the sleep and protective hormone melatonin is often delayed, reduced or suppressed with exposure to such fields.

## **EARTHING CAN IMPROVE THE HEALTH OF PREMATURE BABIES**

Further proof of the biological effect of technical Earthing (grounding) is provided by another interesting study from 2017. The results prove once again that electric grounding (Earthing) lowers the effects of electromagnetic fields (EMF) on babies in the intensive care unit. At the same time, this study highlighted the benefits of grounding for health development, especially with premature babies. This study was conducted by pediatrician Prof. Dr. med. Charles Palmer in a neonatal intensive care unit. The main facility at such a station is the incubator. Measurements of Environmental Physicians at the Medical Center of Penn State University (Pennsylvania / USA), in the neonatal ward have revealed that the existing low-frequency electromagnetic fields (EMF) influence the autonomic nervous system (ANS).

According to this study, premature babies are particularly vulnerable to these technical fields. Previous Research has already confirmed that electromagnetic fields (EMF) can have a negative effect on adults, especially on the vagus nerve (nervus vagus). The vagus nerve is the most important part of the parasympathetic nervous system, which is the dampening and calming part of the autonomic nervous system. The „counterpart“ is the sympathetic nervous system (sympathicus), which, when in distress, triggers the fight-or-flight reflex and activates the entire organism, especially heart activity. Scientific measurements and studies have repeatedly shown in the past that grounding the body measurably reduces electromagnetic fields and charges within the body. Much more interesting than the electrophysical measurement results, however, are the biological effects of electrical grounding of the body. It has already been proven in other studies, that functioning of the autonomous nervous system (ANS) and especially the vagus nerve (parasympathetic) improved.

Another important consequence of this is a measurable increase in heart

rate variability (HRV), which is a very valuable indicator of overall health. Heart rate variability (HRV) essentially describes the change in distance between two heartbeats. The distances are measured in milliseconds. For this reason, the heart rate variability (HRV) is calculated with high-precision ECG measuring instruments (electrocardiogram), ideally in one 24-hour measurement. The greater the variability between two heartbeats, the better the autonomic nervous system (ANS), or the interaction of activity (sympathetic) and recovery, rest and relaxation (parasympathetic). Our sleep plays a special role, in which the parasympathetic part must be very pronounced. The Chinese doctor Wang Shuho (3rd cent A.D.) is considered a pioneer in the field of heart rate variability documentation. He realized that an irregular heartbeat testifies to poor health.

## **HEART RATE VARIABILITY (HRV) IN BABIES**

The parasympathetic and especially the vagus nerve are responsible for the control of our internal organs, our heartbeat, breathing and digestion during sleep. As soon as the activity of the parasympathetic nerve fibers predominates, they control the heart rate and the sympathetic and stimulating nerve fibers are inhibited. This slows down the heart rate from about 60 beats per minute to 70 beats per minute in adults. At the same time the so-called heart rate variability (HRV) increased, also known as the variable size between two heartbeats. Newborns are known to have a much higher heart rate, between 100 and 140 beats per minute. The heart beat decreases by 15-20% as soon as the vagus nerve is activated. Since newborns and pre-term infants sleep between 16 and 18 hours in the first few weeks, the activation of the parasympathetic nerve fibers are very important. This activates regeneration and repair mechanisms as well as strengthens the immune system and reduces inflammatory processes etc. For a long time, it has been known in science that the inner and external influences resulting in a „subfunction“ of the parasympathetic nerve fibers, leads to an „inflammatory reflex“ in the body.

In a previous study at Penn State University, scientists found that low heart rate variability (HRV) also in premature babies is a marker for susceptibility to stress and even represents a risk factor for the development of the inflam-

matory bowel disorder „necrotizing enterocolitis“. This intestinal disorder can be very dangerous especially for premature babies. Subsequently, it shows that strengthening of the vagus nerve can reduce the inflammation and, at best, even protect preterm infants against the development of this intestinal inflammation. The researchers emphasize in this context that the activation of the parasympathetic nervous system protects from a host of other negative physical-psychological processes to which premature babies can be exposed to. A separate study with premature babies in the neonatal intensive care unit showed impressively that when switching off the electrical supply of the incubator (incubator), the heart rate variability (HRV) of the infants immediately improved. With these measurements, it was also recognized that there is a clear relationship between electromagnetic fields (EMF) and the heart rate variability of a premature baby. This study was incidentally, the first of its kind, which had measured and evaluated the direct effect of the electrical grounding of the body especially in premature babies. To assess this connection between an electrical ground and heart rate variability (HRV) in preterm infants, researchers conducted a prospective observational study. For further explanation – a prospective study (Lat. Prospecto: look) examines the efficacy of a treatment method, with a pre-defined hypothesis that should be tested.

## GROUNDING (EARTHING) IN BABIES IN THE INCUBATOR

For this reason, between 2012 and 2014, a total of 26 premature babies between 6 and 60 days old were observed at Penn State Health Milton S. Hershey Medical Center. The head of the neonatal department at the Penn State Pediatric Clinic, Prof. Dr. Charles Palmer, summed up the initial situation like this: „Premature babies in the neonatal intensive care unit have a number of health challenges to deal with. This is due to the immaturity of their lungs, their intestines and all their organs. Therefore, we decided to check if grounding could contribute to reduce the burden on the vagus nerve. Everything we can do to improve the resilience of the babies, would be a positive.“

Premature babies must often be cared for several weeks in the intensive

care unit in the incubator, however, the incubator does not replace the spatial limitation nor the stimuli of the uterus. Children born as premature babies often find it difficult to orient themselves in a room or to adjust their muscle tension so that complex movements are possible. Long-term consequences that need to be dealt with are not excluded. After the exact measurement of the electromagnetic load in and around the incubators (incubators), the researchers have electrically grounded the babies.

According to the study, „**Electrical Grounding Improves Vagal Tone in Preterm Infants**“, measurements were performed, calculating the direct skin tension in 26 infants and at the same time a separate HRV measurement was performed, to assess the activity of the vagus nerve (parasympathetic). These measurements were performed before, during and after grounding. Six Infants were only measured for skin tension. Study leader, Dr. Palmer Explained: „When we saw the signal on the skin, it was an oscillating (fluctuating) signal with a fundamental frequency of 60 hertz, which corresponds to the signal of the power supply. When connecting the Baby to the ground, the skin tension dropped by about 95% and the activity of the vagus nerve was increased by 67% „. The other measurements confirmed the result - as soon as the grounding was interrupted, the load and the associated reduction returned the parasympathetic nerve activity back to the original value. The Scientists conclude based on these results that a baby's autonomic nervous system (ANS) is aware of the electromagnetic pollution and the babies immediately relax as soon as they are grounded. Furthermore, one can conclude from these results that the load on the vagus nerve by environmental electromagnetic fields are an important risk factor for the inflammatory bowel disease. Future new findings could offer the option to additionally protect premature babies and babies in general.

<https://www.ncbi.nlm.nih.gov/pubmed/28601861>

## DOES GROUNDING ACT LIKE AN ANTENNA?

DThis argument is repeatedly brought up by building- or bau-biologists, electro-biologists and „radiation experts“. This naturally creates uncertainty, especially when people believe that a grounding pad will „attract“ electroma-

genetic fields such as a radio signal or antenna to a work, therapy or sleeping place. Parents often have these fears when it comes to their children's grounded sleep. Numerous building-biologists and electro-biologists claim out of ignorance, that electromagnetic fields (EMF) are attracted towards a grounded body.

In other words, that a grounded body acts as antenna as the fields seek the path of least resistance and this is a grounded body. The study with the premature babies in the incubator shows that these arguments have long since been refuted. To repeat: The measurement results have shown that the grounding (Earthing) reduced the electrical tension of the skin immediately by 95%. Heart rate variability (HRV) improved by 67%. This turned the electric skin tension and heart rate variability (HRV) back to those bad measurements as soon as grounding was interrupted. Nevertheless, in a separate article, the scientists Prof. Chevalier and Prof. Oschman take position to this „misunderstanding“ that grounding contributes to a deterioration of all sleep places.

Here are some important comments from the article: First, electromagnetic fields (EMF) are not electricity or electrical currents, they do not seek the shortest route to the ground or the path of least resistance. In concrete terms, this means that electromagnetic fields (EMF) never seek the path towards a human body, whether grounded or not. It is just the opposite, one would have to go exactly where these electromagnetic fields (EMF) are. Secondly, once you are grounded - naturally by contact with the Earth's surface (meadow, beach) or through the Lokosana® grounding pad - the „Umbrella effect“ comes into play. Grounding (Earthing) shields your body physically from electromagnetic fields and pushes the fields upwards and away from your body. And last, but not least, here is something important: when you ground yourself with the Lokosana® Bio-Technology, you cannot get an electric shock. The so-called „capacitive“ contactless grounding with the Lokosana® products prevents this in every case.

In the following essay, Dr. Gaétan Chevalier, Ph.D. explains common misinterpretations regarding body grounding (Earthing): **“Beware of Earthing Misinformation”**.

<http://www.Earthinginstitute.net/wp-content/uploads/2017/12/beware-of-Earthing-misinformation.pdf>

## A VERY BIG BENEFIT IS THAT YOUR SLEEP WILL IMPROVE

The research over the last 20 years clearly shows that over 90% of our health depends on sleep (Prof. Dr. William C. Dement, Stanford University). Especially with nocturnal body grounding (Earthing). Nocturnal grounding helps to reduce the stress hormone cortisol more rapidly, calms the autonomic nervous system (parasympathetic nervous system), increases muscle tension, lowers the sleep hormone to activate melatonin as well as to synchronize the internal clock. These are all ideal conditions to fall asleep faster, sleep better, get enough deep sleep, produce REM sleep phases, and to regenerate and recover during sleep.

The research results confirm that both daily barefoot running (20-30 minutes) and technical body grounding (Lokosana®) synchronizes the internal clock and thus supports the wake-sleep cycle. The studies show that body grounding (Earthing) affects the regulation of the stress hormone cortisol positively. Above all, a stressful day leads to an elevated cortisol level in the evening and makes it difficult to fall asleep. Through grounding (Earthing) the stress hormone cortisol degrades faster, thereby improving the quality of sleep. Getting up in the morning is easier and you feel more awake throughout the day and have more energy. The #1 Missing Link is that mankind has lost contact with the Earth and usually also sleeps isolated from the Earth.

In a 2004 study, **“The biologic effects of grounding the human body during sleep as measured by cortisol levels and subjective reporting of sleep, pain, and stress”** published in the Journal of Alternative and Complementary Medicine, measured cortisol levels in twelve subjects for a period of six weeks before the grounding (Earthing) and after sleeping with a grounding system (such as Lokosana®). It turned out that the cortisol levels after grounding (Earthing) returned to a normal 24-hour profile. The subjects also reported that they fell asleep easier and faster and woke up less at night. <https://pubmed.ncbi.nlm.nih.gov/15650465/>

## GROUNDING (EARTHING) REDUCES INFLAMMATION

Inflammatory processes are natural and healthy reactions to an injury or infection. Once the body is attacked by pathogens, the immune system uses free radicals to ward off these pathogens. In healthy people, the self-healing powers are activated, the pathogens are destroyed, and the damaged tissue degrades. These reactions can also cause classic inflammatory symptoms: redness, heat, swelling, and pain. However, if the inflammatory processes do not subside, they can become chronic. The free radicals suddenly increase drastically and begin to attack healthy tissue or cells. It is assumed that this is the cause of numerous chronic diseases. These include cardiovascular diseases, heart attack, stroke, diabetes, depression and even some cancer species.

Large-scale grounding (Earthing) acts as a natural antioxidant and supports the organism, in this example the human body, to reduce inflammation and damage through free radicals.

## HOW GROUNDING FIGHTS INFLAMMATION

Studies have revealed the secrets of barefoot technology: as soon as our body is connected to the Earth, free electrons flow into your body. These negatively charged particles are located on the Earth's surface and they are mainly produced by lightning strikes. The free radicals, however, have a positive charge because they are missing an electron. They are constantly trying to get this electron from another molecule snatch. This creates a chain reaction and it comes to the dreaded oxidative stress, which leads to inflammatory processes, which in turn lead to cell and tissue damage.

A study by the University of California, Irvine (CA, USA), explores the effects of grounding (Earthing) on inflammation, immune response, wound healing, prevention and treatment of chronic inflammatory and autoimmune diseases. This study, **“The effects of grounding (earthing) on inflammation,**

**the immune response, wound healing, and prevention and treatment of chronic inflammatory and autoimmune diseases”** was published in 2015 in the Journal of Inflammation Research.

[https://www.dovepress.com/articles.php?article\\_id=21001](https://www.dovepress.com/articles.php?article_id=21001)

Summary: The beneficial antioxidants, e.g. in fruits and vegetables, are nothing but free electrons. As soon as a negatively charged free electron meets a positively charged free radical, the harmful effect of the free radical is neutralized. This is exactly what happens through a large-scale body grounding (Lokosana® Grounding Edition)

Once the free radical chain reaction is stopped, it reduces the inflammation. This, in turn, can decrease the risk of a serious illness and therefore has a preventive effect.

Oschman, Ph.D. (biologist and biophysicist) studied three subjects who suffered from chronic inflammatory pain. They measured the blood viscosity of these subjects using a method called „zeta potential measurement“. This measures how quickly the red blood cells wander into an electric field. The researchers found out that by grounding (Earthing) the negative charge of the red blood cells (erythrocytes) was elevated. Thus, the negative charge causes the red blood cells to repel each other, as they do with poled magnets. This will prevent clumping of the blood (hemagglutination), the blood becomes thinner and can flow easier in the blood vessels. This clearly reduces the risk of cardiovascular disease, high blood pressure, heart attack and stroke. The biological effect of grounding (Earthing) was detected with a dark field microscopy. The pictures on the left side were taken before grounding (Earthing) and those on the right are 45 minutes after grounding (Earthing). The pictures show a clear resolution of the clumping of the red blood cells.

In a study published in 2013, published in the Journal of Alternative and Complementary Medicine, “Earthing (Grounding) the Human Body Reduces Blood Viscosity—a Major Factor in Cardiovascular Disease”, they measured the charge potential (zeta potential) of red blood cells in ten healthy volunteers before and after two hours of grounding (Earthing). After Eart-

hing (grounding) it was found that the blood of the test persons had more clusters (Accumulation, clumping) for one or two red blood cells and fewer clusters for three or four blood cells. This indicates an improved zeta potential and thereby reduced blood viscosity. It is the flow property or viscosity of the blood that is reduced and thus improves blood circulation.

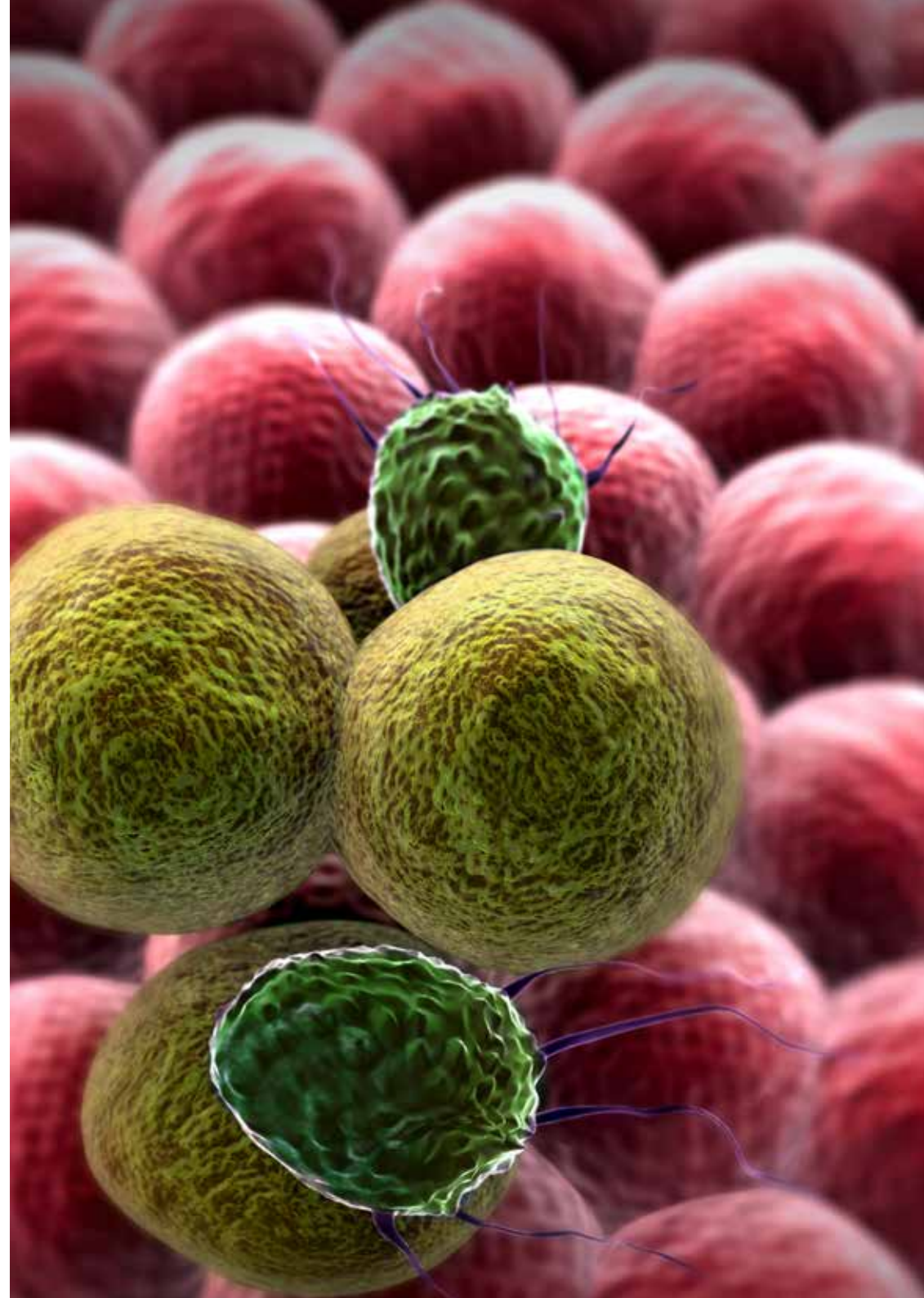
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576907/>

## **BODY GROUNDING (EARTHING) IMPROVES CARDIOVASCULAR FUNCTION**

Due to research, grounding (Earthing) can even help to improve cardiovascular function, thereby reducing the risk of heart attacks and strokes. This is because grounding reduces inflammation and improves blood circulation, especially in the smallest blood vessels (capillaries) which improves heart rate variability (HRV). Over two decades of heart rate variability (HRV) research shows the close connection between cardiovascular diseases and risk factors such as obesity, smoking and stress. A bad Heart rate variability (HRV) indicates an increased vegetative activity in the Nervous system (sympathetic), which can additionally burden the heart. A 2013 study published in the Journal of Alternative and Complementary Medicine, “Earthing (Grounding) the Human Body Reduces Blood Viscosity—a Major Factor in Cardiovascular Disease”, found that 40 minutes of grounding (Earthing) had already significantly improved Heart rate variability (HRV).

<https://www.liebertpub.com/doi/pdf/10.1089/acm.2011.0820>

The authors summarized the results as follows: „This study showed a positive trend in HRV, which persisted and continuously improved until the end of a 40-minute grounding treatment, indicating a larger benefit from prolonged use. „

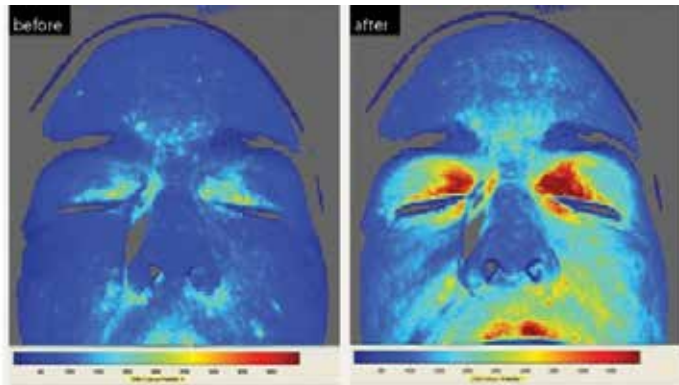


## BODY EARTHING IMPROVES THE REGULATION OF BLOOD FLOW IN THE FACE

As described above and in more than a dozen studies documented, the benefits of grounding (Earthing) are an improved blood viscosity and improved blood circulation. One of the more recent studies published in „Online Journal of Cosmetics, Dermatological Sciences and Applications”, showed for the first time that grounding (Earthing) improved the circulation of the facial skin significantly. In the 2014 study, “Grounding the Human Body Improves Facial Blood Flow Regulation: Results of a Randomized, Placebo Controlled Pilot Study”, the electro-physiologist Gaétan Chevalier, Ph. D., Department of Developmental and Cell Biology at the University of California in Irvine studied changes in the facial circulation of 40 volunteers, using thermal laser contrast imaging. The subjects sat in a comfortable armchair for one hour. The participants were randomly assigned: 27 were received the grounding treatment, the other 13 participants received only a „dummy grounding“ (placebo).

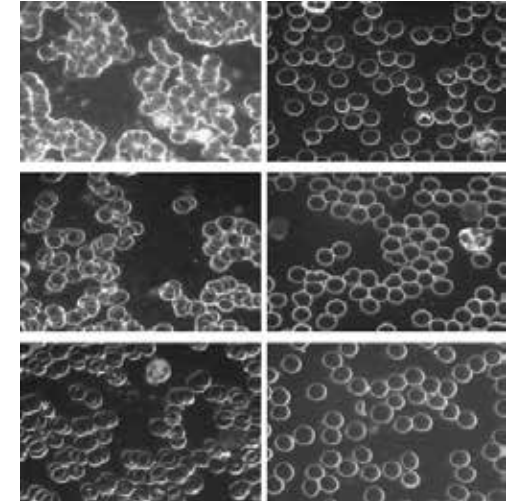
[https://file.scirp.org/pdf/JCDSA\\_2014111211461709.pdf](https://file.scirp.org/pdf/JCDSA_2014111211461709.pdf)

Both laser and thermal imaging techniques showed significant impro-



*Verbesserte Durchblutung der Gesichtshaut (rechtes Bild) nach 20 Minuten Erdung, dokumentiert durch die Laser-Speckle-Kontrast-Analyse (LASCA).*

vements only in the subjects that were grounded. The laser camera revealed indeed a fascinating and clear rhythm in the flow of blood of the grounded subjects. Such a rhythm refers to a more efficient and regulating effect on blood flow through the autonomic nervous system. Prof. Chevalier stated in his work, that the regulation of the dynamics of the flow of the blood through the autonomic nervous system is



similar to an efficient thermostat which enables or disables the heating or cooling system depending on temperature fluctuations within the controlled environment. They help to restore the regulation of the blood circulation through the autonomic nervous system and therefore distribute oxygen and nutrients to the various organs and systems according to their needs. „For the first time, the results show that even a one-hour contact with the Earth restores the blood flow in the face. This effect can optimize the repair, health and vitality of the skin tissue, as well as optimize the appearance of the face.

”

## GROUNDING STRENGTHENS THE BONES AND PREVENTS OSTEOPOROSIS

The basis for healthy bones and above all good bone density, is the balance of minerals in our body, especially calcium. If we do not have enough calcium, our bones will become weak and brittle, resulting in an increased risk of fractures and diseases such as osteoporosis. Diseases that affect bone and mineral metabolism, include a wide range of skeletal and soft-tissue disorders. Recent research suggests regulatory interactions between the

skeleton, adipose tissue and the energy metabolism.

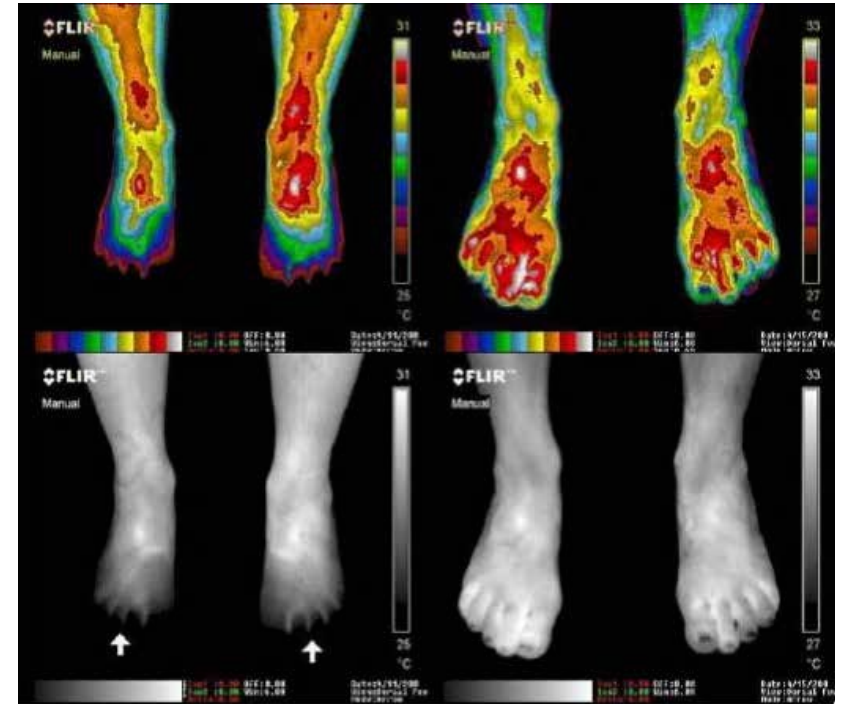
Diabetes also lowers the bone density through a previously unknown mechanism. Indigestion can disrupt the intestinal absorption of calcium and phosphorus. Besides calcium, phosphorus is the most important mineral in the body, essentially vital for the building of the bone and teeth structure. Similarly, there are associations between asthma, multiple sclerosis, lupus and rheumatoid arthritis with the development of osteoporosis. The randomized study „Earthing of the human body influences physiological processes“ examined the effects of grounding on the concentration of calcium, phosphorus and iron in the blood. In this experiment, 84 subjects were randomized into two groups - Grounding and „dummy grounding“ (placebo).

<https://www.ncbi.nlm.nih.gov/pubmed/21469913>

Grounding during sleep led to statistically significant changes in the concentration of minerals and electrolytes in the blood serum: iron, ionized calcium, inorganic phosphorus, sodium, potassium and magnesium. There was also a statistically significant reduction of renal excretion (via the kidney) of calcium and phosphorus during a single seven- or eight-hour night of sleep, grounded or ungrounded. The observed reductions of calcium and phosphorus in the blood and urine correlate directly with osteoporosis. Already one single night with body grounding reduced the primary signs of osteoporosis.

## CASE STUDIES PROVE PAIN RELIEF

The cause of non-organic pain is often caused by inflammatory processes in the body. These include joint pain like arthritis, back and neck pain, strains and sprains. As soon as the body is grounded, inflammations are cleared and that's why it comes with a reduction of the pain. In 20 case studies, Dr. William Amalu, President of the International Academy for Clinical Thermography, studied the effects of grounding (or Earthing) on inflammation and pain with medical thermography. With this technology, the areas of inflammation and the bad blood circulation within the body can be depicted. The



subjects of these case studies had various types of pain, including back pain, knee pain or poorly healing wounds. In all cases, the inflammatory areas in the body of the subjects could be significantly reduced by grounding (Earthing), which has led to a reduction in pain and other symptoms.

As an example, from the 20 case studies, this is a before and after comparison of a 57-year-old male patient. He suffered from chronic foot and ankle pain (both sides). After two nights of Earthing, he reported a pain reduction of more than 80%. After four weeks, the patient said, his pain disappeared, only with an occasional stiffness. The pictures before (left) and after (right) show a clear improvement of the blood circulation and a decrease in inflammation. It is important to note that his toes are initially invisible due to poor blood circulation and low room temperatures.



## GROUNDING (EARTHING) RELIEVES STRESS SYMPTOMS

Grounding has a direct effect on the autonomic nervous system. It triggers a measurable shift of the stimulating and stress-causing sympathetic nervous system, relaxing and regenerative parasympathetic. This is how negative stress symptoms can be significantly reduced. To support this, two studies that have examined the activity in the autonomic nervous system and the effects of emotional stress, were published. The first study, **“Emotional Stress, Heart Rate Variability, Grounding, and Improved Autonomic Tone: Clinical Applications”** measured heart rate variability (HRV) as a marker for the activity of the parasympathetic nervous system. It turned out that only 40 minutes of body grounding improved heart rate variability (HRV), indicating increased relaxation and recovery and less stress.

[http://imjournal.com/pdfarticles/imcj10\\_3\\_p16\\_24chevalier.pdf](http://imjournal.com/pdfarticles/imcj10_3_p16_24chevalier.pdf)

The second study, **“Changes in pulse rate, respiratory rate, blood oxygenation, perfusion index, skin conductance, and their variability induced during and after grounding human subjects for 40 minutes”** was published in the Journal of Alternative and Complementary Medicine and showed that the electrical skin conductivity decreased immediately after the grounding (Earthing). This is a marker for relaxation and activation of the parasympathetic nervous system, in other words the calming part of the autonomic nervous system. The findings on skin conductance are of interest since they happen within a few seconds of grounding, indicating a shift from a sympathetic to a parasympathetic (relaxing) activity. Furthermore, the researchers found out, that by grounding the oxygen saturation increased in the blood. In summary, these are clear indications that through grounding, the reactions of the body to stress can measurably be reduced. This is especially valuable during sleep, due to an improvement of the physical and mental regeneration.

<https://www.ncbi.nlm.nih.gov/pubmed/20064020>

## BENEFITS FOR THE IMMUNE SYSTEM FROM GROUNDING

**“Earthing the Human Body Influences Physiologic Processes”**, a study from 2011 focuses on the processes and functions of the human body. This study examined the effects of grounding (Earthing) on a series of these physiological functions, including the immune system. Thirty-two subjects received one dose of typhoid vaccine and tetanus toxoid (detoxified toxins added in addition to vaccines). Then the subjects were observed over a period of four days. Between the third and fourth day, half of the subjects were grounded overnight, while the other half received a placebo (dummy grounding). The subjects did not know which group they were assigned to. After seven hours of overnight Earthing, the subjects in the grounded group, experienced an increased level of antibodies.

<https://www.liebertpub.com/doi/full/10.1089/acm.2010.0687>

## QUICKER REGENERATION AND HEALING OF INJURIES, RELIEF OF SORE MUSCLES

Globulins/proteins produced by the liver and the immune system is an indication that the immune system is positively influenced by grounding.

## BETTER REGENERATION AND HEALING OF INJURIES AND MUSCLE SORENESS

Earthing can also help to speed up recovery time and relieve the symptoms of muscle soreness. Typical symptoms are a disturbed muscle function, longer-lasting muscle pain, reduced efficiency and a heightened sense of effort during exercise. Constant stress, e.g. by sports can thus lead to chronically increased inflammatory levels. The 2010 **“Pilot Study on the Effect of Grounding on Delayed-Onset Muscle Soreness”** shows the effects of grounding (Earthing) on the symptoms from sore muscles.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3116537/>

There were eight healthy volunteers, who had to perform unfamiliar, strength exercises to trigger the symptoms for muscle soreness. Half of the subjects were grounded both overnight and during the day and the other half received „placebo groundings“. Overall, the subjects were tested for 48 biological markers before and after grounding. This was especially important for the determination of the strength of the inflammatory processes. The study found consistent differences in 30 of these markers between the two groups after the grounding treatment. The grounded volunteers also reported reduced pain and faster recovery time in comparison to those who had only a „false grounding“. This is consistent with my own experience in working with top athletes. I recommend the nocturnal grounding (the so-called „Barefoot through the night“ effect) to support any medical therapeutic treatment for a faster healing of injuries, including micro-injuries in musculature or after surgery. Years of observation show that this can significantly reduce the healing and rehabilitation time. Grounding is also very valuable as a preventative measure after sports training or competitions.

## GROUNDING (EARTHING) POSITIVELY INFLUENCES THE BLOOD SUGAR LEVEL

Earthing also helps to regulate blood sugar levels. This is outlined by the study “Earthing the human body influences physiologic processes” that shows the grounding of the human body positively influences physiological processes.

<https://www.ncbi.nlm.nih.gov/pubmed/21469913>

Twelve patients with non-insulin-dependent diabetes (Diabetes 2) were either grounded continuously for 72 hours, or they received „Dummy grounding“ (placebo). The researchers wanted to find out if grounding (Earthing) influences the blood sugar level. By the blood sugar level, one understands the quantity of glucose in the blood. In grounded patients, “fasting” blood

glucose was significantly reduced, indicating better blood glucose regulation. This shows that continuous grounding (Earthing) during sleep in patients with diabetes lowers blood sugar levels and could be a valuable weapon in the fight against widespread disease.

## GROUNDING PATIENTS DURING TREATMENT

It is known that manually operating therapists, such as massage therapists often develop a range of health problems relatively early within their careers. A preliminary study featuring a massage therapist shows that it brings significant benefits to “ground” patients during work. As other studies have shown, after four seconds of grounding, there are measurable positive biological and physiological effects in the body. Some of the health problems would be better treated and alleviated faster. At the same time, it is beneficial when people in medical-therapeutic professions sleep grounded.

A double-blind, randomized, controlled trial was designed to investigate the effects and impact of four weeks while working and sleeping on the blood viscosity, stress (by HRV), inflammation and biomarkers for the oxidative stress of massage therapists. The results show a reduction in stress as measured by cardiac and respiratory rates and heart rate variability (HRV). **“Effects of Grounding (Earthing) on Massage Therapists: An Exploratory Study”** also showed a positive effect on blood viscosity, which persisted for at least one week after the end of the study.

<https://www.scirp.org/Journal/PaperInformation.aspx?PaperID=82706>

*Author’s Note: We have developed a special Lokosana® grounding pad for examination rooms, treatment couches and massage tables. This is so both, the patient and the practitioner are grounded, which has a very positive effect on both their health and vitality. Therefore, more and more wellness and medical wellness hotels, as well as private clinics equip their therapy rooms and couches with our Lokosana® technology. At the same time, the doctors and therapists themselves sleep grounded. Therefore, the feedback*



*is very positive.*

## UNIQUE ADVANTAGES OF THE LOKOSANA® BIOTECHNOLOGY

My research and cooperation with experts such as Prof. Dr. med. DI András Varga (University of Heidelberg) has led to a special biotechnical design of the Lokosana® products (condenser principle). The central working principle is the large-scale body grounding (Earthing). In addition, there are other positive effects due to the stabilization of the Earth's magnetic field (bio-magnets) with a bio-resonance of 8.41 Hertz, which is close to the Schumann resonance frequency (Ø 7.83 Hertz).



Every Lokosana® product is carefully manufactured and metrologically checked for functionality before delivery. The products are completely de-energized and do not require maintenance. The Lifespan and duration of use is 20 years, when used correctly.

## NOCTURNAL GROUNDING WITH LOKOSANA® CAN BRING YOU RAPID SUCCESS

Most people quickly report a much better, calmer and more restful sleep. In addition, there is a heightened feeling experienced during the day. People feel more relaxed, less responsive to stress and feel more energy. In the first few nights, a slight tingling and /or feeling of warmth are normal sensations.

Some feel that nothing has noticeably changed. The research and study results show even in these cases, there are a series of positive biological effects. Remember, after just four seconds of grounding (Earthing), the autonomic nervous system calms down and the muscles start to relax. According to many studies, pulse rate, respiratory rate, blood oxygen saturation, electrical skin conductance, heart rate variability (HRV) and perfusion index change during grounding (Earthing) or after 40 minutes. The perfusion index is an indication of the pulse strength at the sensor site. The PI values range from 0.02% for very weak pulses up to 20% for extremely strong pulses. The perfusion index (PI) varies depending on patients, physiological conditions and monitoring points.

According to the study, **“Earthing (Grounding) the Human Body Reduces Blood Viscosity—a Major Factor in Cardiovascular Disease”** 30 minutes to two hours daily grounding or barefoot running or technical grounding (e.g., Lokosana® Office and Therapy Chair Cushions) can improve blood flow and the study **“The effect of grounding the human body on mood”** concludes it also results in a more positive mood. A decreased level of pain due to grounding (Earthing) can be experienced quickly, although it depends on individual factors.

<https://www.liebertpub.com/doi/pdf/10.1089/acm.2011.0820>

<https://pubmed.ncbi.nlm.nih.gov/25748085/>

## OPTIMAL ADAPTATION TIME 60 - 90 DAYS

The positive biological effects and benefits after prolonged use are the same as described in the studies. Due to the extensive grounding (Earthing) during sleep (Lokosana® grounding pad) additional benefits can be achieved after an adaptation period of 60 - 90 days.

Here is a summary of the benefits of grounding/Earthing research as referenced throughout this book:

- You fall asleep measurably faster and sleep through the night better.
- When you wake up at night and return to sleep, you'll sleep better.
- People sleep better due to reduced pain
- The sleep architecture is greatly improved, deeper REM sleep.
- Better regeneration in less time
- Noticeably more energy during the day
- You can deal with emotional stress much better, psychologically stable.
- You have a better mood during the day, less depressed.
- Significantly less pain in the back, neck, as well as within the joints and muscles
- Stress-induced teeth grinding greatly reduced or disappeared
- Less stress related gastrointestinal problems
- Menstrual cramps have been greatly alleviated
- Reduction or disappearance of tinnitus
- Better blood pressure regulation, less medication



## WHAT THE GROUNDING PRINCIPLE (EARTHING) IS NOT

Both, the natural (barefoot on the ground) and technical grounding principle (Lokosana®) is neither a fad nor a cure in the meaning of the law. It is also not a drug or even a medical device. It does not require long clinical visits or treatments. The grounding principle is a natural and safe way to harness the forces of nature and to use the free electrons of the soil. This naturally triggers several positive biological and physiological effects in the body and nervous system. These in turn support the self-healing powers to be or stay healthy. There is only one possible contraindication if you are sleeping in a grounded environment - if you have a disease and take blood-thinning medications, consult your doctor prior to a regular grounding or test your blood regularly after grounding. As scientific studies have shown, grounding (Earthing) is a natural blood thinner and it may be necessary and make sense to reduce the dosage of your medication. Talk with your doctor or therapist – he or she is your health partner # 1.



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