

# ELECTRICITY AND THE BODY

According to extensive research, applying a mild electric current can help accelerate the healing process by promoting cell growth, blood flow, and tissue regeneration, making it a potential treatment to aid in faster healing of injuries.

Provided below is an accumulation of answers to the question...

Does electricity speed up healing?

- Research from Chalmers University of Technology and the University of Freiburg shows that wounds on cultured skin cells heal three times faster when stimulated with an electric current.
- Electrical stimulation uses a mild electrical current to stimulate the nerves and muscles, promoting healing and reducing inflammation.
- Wound healing is a complex process – put simply, it is the process of replacing injured tissue with new tissue produced by the body which demands an increased consumption of energy and particular nutrients, including protein and kilojoules.
- Some of the most common conditions treated with electrical stimulation include:
  - Repetitive stress injuries
  - Ligament sprains
  - Neurological conditions, such as a stroke.
- Long ago, scientists determined that electrical signals in the body could be channeled to promote healing. And today, because of advances in technology, we can help address debilitating medical conditions such as chronic pain and cancer — all thanks to the power of energy.
- Electrical stimulation (ES) is widely used to strengthen muscles following ligament and meniscal injuries.
- Electrical stimulation is a highly effective method for blocking pain signals and providing much-needed relief. This technique is often utilized to trigger the release of endorphins, which are natural pain-relieving chemicals produced by the brain.
- For Nerve Damage: Electrical stimulation induces axonal regeneration via CAMP pathways. It also reduces regeneration time via enhanced cell body physiology and has been successfully applied for nerve injury treatment. It is believed that electrical stimulation has a synergistic role when used to reduce pain and aid in healing.