IONIC GEAR FOR ACTIVE LIFESTYLES

TRION:Z®

HOW MAGNETIC THERAPY & NEGATIVE ION TECHNOLOGY CAN REDUCE OSTEOARTHRITIS PAIN

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INTRODUCTION

Arthritis is an umbrella term that literally means inflammation of the joints. Over 100 different types exist, of which the most common is osteoarthritis (OA).

One in two people over the age of 60 show X-ray evidence of this process in which cartilage protecting the bone ends weakens and flakes away. This triggers an inflammatory response in which the underlying bone swells and the joint space narrows. Eventually, the bone ends may rub together, causing increasing pain, stiffness and deformity. Any joints can be affected, but it is most common in the larger, weight-bearing joints such as the hips, knees and spine.

Treatment options are limited
Until recently, osteoarthritis pain was mainly treated by oral painkillers such as paracetamol or non-steroidal anti-inflammatory drugs such as ibuprofen. Their prolonged use is now limited by concerns that they may increase the risk of heart attack or stroke. The long-term use of non-steroidal anti-inflammatory drugs is also limited by their intestinal side effects and peptic ulceration risks.

As oral painkillers have fallen out of fashion, topical painkilling creams and gels are gaining in popularity, as are natural approaches such as taking food supplements and using magnetic therapy to reduce pain and aid healing.

I have used magnetic therapy for over twenty years, and found personal benefit from wearing a Trion:Z bracelet that generates both a magnetic field and negative ions.

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MAGNETIC THERAPY FOR OSTEOARTHRITIS PAIN

Magnetism is a natural phenomenon in which certain materials have the ability to attract or repel each other. These physical effects, due to the spin of unpaired electrons, can interact with body cells whose biological processes involve interactions between magnetic fields and electric charges.

Each cell generates its own electromagnetic field as ions are pumped in and out across the cell membrane, creating an electrical potential which is vital for life. This allows cells to function, nerves and brain cells to transmit messages, and muscles to contract, as well as regulating your heart beat.

The electrical function of cells, and the electromagnetic field they generate, is disrupted by inflammatory conditions such as osteartheritis. Inflammation alters the transport of ions across cell membranes, leading to swelling, stiffness, redness and heat as well as tenderness and pain.

Magnetic therapy is gaining increased acceptance among the medical profession as it has been shown to stimulate blood flow, reduce pain and hasten the healing of damaged tissues. Within the UK, a magnetic device containing static magnets is even available on NHS prescription to treat chronic leg ulcers.

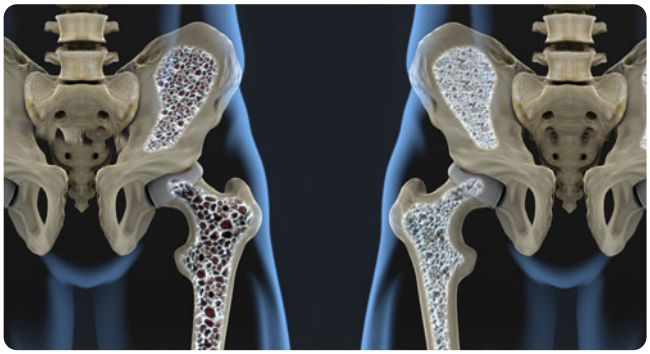
Magnetic therapy is also used in orthopaedics, where pulsed electromagnetic fields are used to help bone fractures heal, and to reduce pain, inflammation and swelling after knee, ankle, shoulder and hip surgery.

Magnetic therapy for osteoarthritis
Several studies have investigated the effects of electromagnetic therapy for osteoarthritis pain.

A pilot study involving 25 people showed that pulsed electromagnetic therapy produced improvements in pain and functional performance of 23-61% compared with 2% to 18% with placebo.

A larger trial involving 86 people with knee osteoarthritis (and 81 with osteoarthritis of the neck) showed ‘extremely significant) improvements with electromagnetic therapy compared with placebo for pain, pain on motion, and tenderness.

As in most areas of medicine, some studies did not find benefits, and the best way to assess the overall picture is to pool the data and analyse it to get an overall result. This is known as a meta-analysis, and when performed on the results of high quality trials involving a total of 86 people with osteoarthritis of the knee and 81 with osteoarthritis of the cervical spine (neck), this showed that pulsed electromagnetic therapy was significantly more effective than placebo for improving osteoarthritis symptoms within 4 weeks of treatment.



HOW DOES MAGNETIC THERAPY WORK?

Magnetic therapy is traditionally believed to boost the electromagnetic field of ailing cells so they can function more easily. Modern research suggests that one way in which magnetic therapy works is by increasing blood flow through tiny capillaries. This provides cells with more oxygen, nutrients and immune factors, and flushes away cell wastes to promote normal function and, in the case of stiffness, soreness or wounds, to hasten recovery.

Magnetic therapy is especially effective for reducing pain – even when this is due to nerve damage which is notoriously difficult to treat. The effects were due to the magnetic fields penetrating up to 20mm into body to target and reduce the activation of pain receptors in the skin and underlying tissues and joints to produce an analgesic effect.

Magnetic therapy can also improve the activity of cartilage-producing cells (chondrocytes). Cartilage removed from arthritic joints during knee replacement surgery were cultured and exposed to pulsed electromagnetic fields for 60 minutes a day on 3 consecutive days. Those exposed to the highest field intensity showed the most favourable response in producing new cartilage building blocks and growth factors. This is an exciting finding as loss of joint cartilage is one of the key features of osteoarthritis.

Negative ions add positive benefits

Negative ions are one of the reasons you experience feelings of well-being when you breathe clean mountain air, stand near a waterfall, or inhale sea breezes by the coast. These feelings are in sharp contrast to the heavy, 'close' feelings you experience when the concentration of negative ions is low, and that of positive ions is relative high, just before a thunderstorm.

Inhaling negative ions can increase your perception of relaxation, reduced feelings of irritability, depression, and tenseness, while promoting calm and general alertness. Negative ions also boost recovery after moderate exercise, and have beneficial effects on body temperature, blood pressure, heart rate and oxygen uptake both during rest and light exercise. These effects appear to result from changes in the level of brain chemicals (serotonin and dopamine) and interactions with the body's daily (circadian) rhythms. All these factors might help to reduce the perception of joint pain.

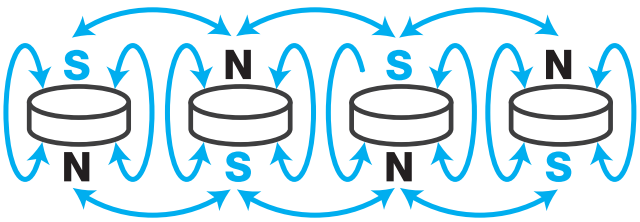
Combining the ancient practice of magnetic therapy with modern negative ion technology has a natural synergy, offering greater benefits than either approach alone.

NATURAL SYNERGY BETWEEN MAGNETIC THERAPY AND NEGATIVE ION TECHNOLOGY

The physiological effects of magnets and negative ions both have beneficial effects on well-being and exercise recovery. But magnetic therapy comes in many shapes and sizes - some devices use weak magnets with minimal magnetic field penetration which will not achieve the desired benefits.

The alignment of the magnetic poles is also important, and when magnets are aligned to allow 'like' poles to repel, they are less effective as this creates magnetic voids.

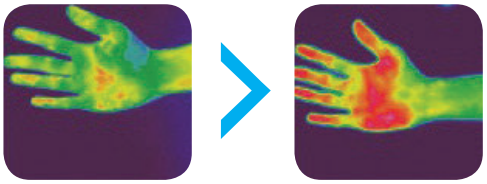
What makes Trion:Z unique?
Trion:Z products are Class 1 Medical Devices that only use high-strength (1,000 Gauss), anisotropic, neodymium, permanent, medical grade, Colantotte magnets. These magnets are aligned in a unique, alternating north-south polarity orientation (ANSPO) to create a fluctuating magnetic flow pattern without significant magnetic voids. This unique orientation is created using four magnets charged to 1000 Gauss each – a total of 4000 Gauss.



ANSPO TECHNOLOGY

Trion:Z devices are also unique in releasing negative ions at a rate of up to 2,000cc negative ions per second. This provides the benefits of both magnetic therapy and negative ion technology to aid well-being and exercise recovery within an attractive, wearable bracelet or necklace that both looks good and provides medical grade benefits.

Thermal scans show that, after wearing a Trion:Z Colantotte device for 90 minutes, blood flow to the hand is significantly increased.



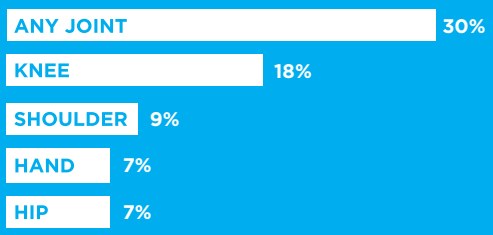
Trion:Z products are used by a wide range of sports stars and elite athletes as well as people who exercise regularly or are experiencing age-related aches and stiffness. As well as helping to promote exercise performance and well-being, wearing a Trion:Z device has the potential to help reduce pain and stiffness and improve joint function in people with osteoarthritis.

THE TRION:Z / COLANTOTTE CLINICAL TRIAL

The beneficial effects of wearing a magnetic device that generates negative ions were tested in a placebo-controlled, clinical trial.

A total of 260 people were divided into three groups: one group wore the genuine Trion:Z / Colantotte bracelet for one month, one group wore an identical-looking, unmagnetised 'dummy' bracelet, while a control group did not wear any bracelet.

120MILLION PEOPLE IN EUROPE SUFFER FROM JOINT PAIN, THE MOST COMMON AREAS ARE:



At the beginning and end of the trial, each volunteer completed a validated questionnaire (Western Ontario & MacMaster Universities Osteoarthritis Index, or WOMAC) which is widely used in clinical trials to evaluate the severity of pain, stiffness and physical function in people with osteoarthritis affecting their hips or knees. When using the WOMAC questionnaire, an improvement of 20% in pain and stiffness scores is considered a clinically significant result which provides meaningful benefits for quality of life.

After one month, the group wearing the genuine Trion:Z bracelet enjoyed a significant 24.5% decrease in pain, 21% decrease in stiffness and 15.3% improvement in physical functioning compared with the control group, who experienced significantly increased stiffness over the course of the 30 day trial.

RESULTS

The results have shown that in the real bracelet condition there is a significant difference (a positive improvement) for all 3 tests of pain, stiffness and ease of functioning. The mean differences of before wearing the bracelet to after wearing it are as follows;

TOP TIPS FOR IMPROVING OSTEOARTHRITIS PAIN

It's natural to want to stop exercising if a joint aches, but muscle conditioning and aerobic exercises can significantly reduce symptoms in people with osteoarthritis (OA) of the knee. People with OA who exercise regularly experience less stiffness and pain in their lower limbs than those who don't .

Daily exercise helps to maintain a joint's range of movement, even if this is limited, and helps to avoid muscle weakening and contractures. If you stop exercising you will quickly notice a decrease in muscle bulk. In fact, exercises designed to strengthen the quadriceps muscles in the front of the thigh appear to be as effective in reducing symptoms of knee osteoarthritis as non-steroidal anti-inflammatory painkillers .

For overweight people with osteoarthritis of the knee, the combination of losing body fat and increasing physical activity is more effective at improving pain and physical function than either approach alone.

In the Arthritis, Diet and Activity Promotion Trial (ADAPT), which involved over 300 sedentary, overweight people with OA, those who combined exercise with a weight loss diet did significantly better than those using exercise or weight loss alone, or who just followed a healthier lifestyle. They reported less knee pain, an improved ability to climb stairs and were able to walk further during a 6-minute test period .

Avoid exercising if a joint is inflamed or swollen, however, until symptoms have subsided. Low impact, aerobic exercises such as swimming, cycling and walking are most beneficial. If you find exercise triggers persistent joint pain, however, reduce the intensity of the activity or change to another form of exercise. Avoid prolonged kneeling, squatting or walking more than 2 miles per day, which may have an adverse effect on joints. You should also avoid walking on rough or uneven ground.

Here are some of the most effective ways I've found to reduce knee pain:

- Wear your Trion:Z device!
- Use hot or cold packs to reduce pain before and after exercise.
- Pain-relieving creams and gels are as effective as oral pain-killers for reducing muscle and joint aches and pains but with less risk of side effects.
- A variety of supplements are used to help maintain healthy joints – having reviewed all the evidence, I believe the most effective are glucosamine, chondroitin, collagen, vitamin C, turmeric, rosehip, ginger, krill oil, and cherry extracts.

IONIC GEAR FOR ACTIVE LIFESTYLES

TRION:Z

IS JOINT PAIN AND STIFFNESS STOPPING YOU ENJOYING YOUR SPORT?

TRION:Z CAN HELP YOU

INCREASE MOBILITY | PAIN REDUCTION | REDUCE STIFFNESS

TRION:Z MAGNETIC THERAPY BRACELETS FEATURE POWERFUL COLANTOTTE MAGNETS, INFUSED WITH NEGATIVE IONS. THE UNIQUE POLARIZED MAGNETIC IONIC TECHNOLOGY IS AN EXTREMELY POWERFUL FORM OF ALTERNATIVE THERAPY.

Magnetic Therapy is considered by many professionals to be an extremely powerful form of alternative medicine, offering a wide range of benefits.

Trion:Z is the only health and wellness product of it's type, accepted and certified as an approved medical device by the Ministry of Health, Labour and Welfare Government of Japan. As well as holding a European Class 1 CE Mark medical device accreditation.

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ENGLAND INTERNATIONAL CRICKETER

NICK MATTHEW
3 TIME WORLD SQUASH CHAMPION

YULIYA YELISTRATOVA
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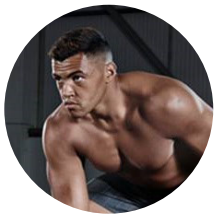

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