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### **DOCTORS ARE EMBRACING MAGNETIC THERAPY**

Many people assume that magnetic therapy and the use of negative ions are alternative treatments yet, far from being a bit 'woo', they are used in mainstream medicine with valuable results.

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 to stimulate blood flow, and the regeneration of damaged tissues. Within the UK, a magnetic wrap containing static magnets is even available on the NHS Drug Tariff as a medical device and can be prescribed by doctors to treat chronic leg ulcers. In 2006, it was estimated that continuing to use this magnetic device after the leg ulcers had healed could save the NHS £153.7 million per year by helping to prevent leg ulcer recurrences.

Magnetic therapy is gaining ground in orthopaedics, too. Pulsed electromagnetic fields have proven success in helping bone fractures knit together – even those that have failed to unite with standard care. This approach has also shown success in reducing inflammation, swelling and pain, and speeding recovery after knee, ankle, shoulder and hip surgery.

The use of negative ions has also been trialled in hospitals and found to reduce infection rates with some troublesome strains of bacteria . Negative ionisers can even neutralise airborne influenza viruses to help prevent the transmission of infection.

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. Although many people like to rubbish the use of these innovative approaches for well-being, I urge you to try it for yourself and form a genuine opinion without jumping to a knee-jerk conclusion.

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### **MAGNETIC ATTRACTION AIDS RECOVERY**

Almost all 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 over use and injury. The resulting inflammation alters the transport of ions across cell membranes, leading to swelling, stiffness, redness and heat as well as tenderness and pain.

#### 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.

A study involving 375 people with peripheral nerve pain related to diabetes investigated the effects of wearing magnetic insoles for 4 months against a similar unmagnetized device. Those wearing the real magnetic device experienced significant less burning, numbness, tingling and exercise-induced food pain – even in those experiencing severe pain – than those wearing the placebo. The researchers concluded that these 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. This produced an analgesic effect which took 3 to 4 months to fully develop.

Magnetic therapy also encourages red blood cells to line up in the same direction so they pass through tiny blood vessels more easily to improve peripheral blood flow. One study, in which a donated blood sample was exposed to a magnetic field for one minute, found that blood stickiness was reduced by 20% to 30% and this beneficial effect lasted for around 2 hours.

Latest research shows that magnetic therapy also reduces excessive inflammation so that repair, healing and recovery can occur more effectively.

All these beneficial effects can improve well-being and help your muscles recover after light to moderate exercise – ready for the next session.





### **NEGATIVE IONS HAVE POSITIVE EFFECTS**

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.

#### **Emotional benefits**

Studies show that inhaling negative ions can increase your perception of relaxation, reduced feelings of irritability, depression, and tenseness, while promoting calm and general alertness. These benefits are something most people would welcome into their life, and negative ion generators are becoming increasingly popular in the home.

#### **Physical benefits**

Negative ions also have physical effects on the body to boost recovery after moderate exercise. Researchers from Tokyo Metropolitan University have found that exposure to negative ions significantly reduces blood pressure during the recovery period after exercise, for example, and this effect was associated with physiological changes in the level of brain chemicals (serotonin and dopamine).

Researchers from Liverpool John Moores University have also found that negative air ions produce beneficial effects on body temperature, heart rate and oxygen uptake both during rest and light exercise. They concluded that negative air ions are biologically active and that their effects may partly be explained by interactions with the body's daily (circadian) rhythms. Combining the ancient practice of magnetic therapy with modern negative ion technology has a natural synergy, offering greater benefits than either approach alone.



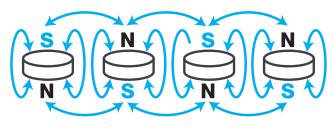
### NATURAL SYNERGY BETWEEN MAGNETIC THERAPY AND NEGATIVE ION TECHNOLOGY

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.

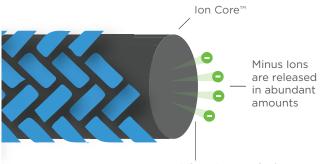
#### What makes Trion:Z unique?

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.



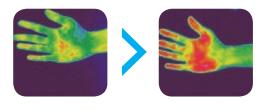
ANSPO TECHNOLOGY

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.



Minus-Ion producing minerals

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 can help to reduce stiffness and aid recovery after exercise or injury.



### THE TRION:Z 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 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:

ANY JOINT			30%
KNEE		18%	
SHOULDER 9%			
HAND	7%		
HIP	7%		

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.

Those wearing the placebo bracelet also showed benefits compared with those not wearing a device, suggesting that the very act of putting on a 'therapeutic' bracelet helps to harness the body's own healing mechanisms to reduce pain perception.

But the devices aren't just for people with pre-existing pain, soreness or stiffness. They are widely used to support every-day wellness and performance, not just by elite athletes and weekend warriors, but by people like me who walk a lot and want to say fit and well, as naturally as possible, for as long as possible.

#### 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 BOOSTING RECOVERY AFTER EXERCISE

Regular exercise can lead to aches and stiffness during the recovery period. If you overdo it, you can also develop delayed onset muscle soreness (DOMS) which typically comes on 12 to 24 hours after a vigorous exercise session, with pain peaking between 24 and 72 hours after the exercise was performed. DOMS can even result from repetitive daily activities and light sports in some people. According to the American College of Sports Medicine, activities known to cause DOMS include walking down hill, jogging, step aerobics, jumping and strength training exercises.

Here are some ways to help boost your recovery after exercise:

- Wear your Trion:Z device!
- Allow your muscles time to adapt to the stress of a new exercise. Start slowly and gradually build up the level of intensity.
- Allow muscles time to recover after exercise by avoiding the same type of exercise on sequential days.
- While 'warming up' is often advised before exercise, it is better to stretch after you have warmed up, and after exercise when you are cooling down.
- Maintain good hydration drinking coconut water is more effective than plain water or even commercial sports drinks for rehydration after exercise – it tastes better too.
- Cherry juice has been shown to reduce inflammation and muscle damage, maintain muscle strength and speed recovery after exercise – most likely by reducing oxidative damage.

- Turmeric has natural anti-inflammatory and pain-relieving effects that can aid your recovery.
- A variety of supplements are used to help maintain healthy joints including omega-3 fish oils, glucosamine, chondroitin and rosehip extracts.
- 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.

IONIC GEAR FOR ACTIVE LIFESTYLES



REDUCE STIFFNESS

## IS JOINT PAIN AND STIFFNESS STOPPING YOU ENJOYING YOUR SPORT?

# TRION:Z CAN HELP YOU

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.



### TRION:Z BELIEVERS AND AMBASSADORS



JAMES ANDERSON ENGLAND INTERNATIONAL CRICKETER



NICK MATTHEW 3 TIME WORLD SQUASH CHAMPION



YULIYA YELISTRATOVA OLYMPIC TRIATHLETE



LUTHER BURRELL ENGLAND RUGBY UNION PLAYER



CHARLEY HULL GOLF SUPERSTAR



ANDY SULLIVAN EUROPEAN PGA TOUR GOLFER





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