

# Supplementary Material to January 22, 2006 Press Release “Healing Magnetic Therapy’s Quality Scientific Evidence Ignored by Conservative Medical Researchers”

## **The British Medical Journal Editorial:**

### **“Magnet therapy: Extraordinary claims, but no proved benefits”**

The first 150 words of the full text of this article appear below.

Magnetic devices that are claimed to be therapeutic include magnetic bracelets, insoles, wrist and knee bands, back and neck braces, and even pillows and mattresses. Their annual sales are estimated at \$300m1 (£171m; 252m) in the United States and more than a billion dollars globally.<sup>2</sup> They have been advertised to cure a vast array of ills, particularly pain. A Google search for the terms "magnetic + healing" omitting "MRI resonance" yielded well over 20 000 pages, most of which tout healing by magnets. The reader is invited to insert "magnetic healing" into a web browser, and evaluate these spectacular claims.<sup>3</sup>

Many "controlled" experiments are suspect because it is difficult to blind subjects to the presence of a magnet. An example is a randomised trial of powerful magnetic bracelets for the relief of hip and knee osteoarthritis, which reports a significant decrease in pain because of the . . .

**From:** BMJ 2006;332:4 (7 January), doi:10.1136/bmj.332.7532.4

[http://bmj.bmjournals.com/cgi/content/extract/332/7532/4?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=magnets&andorexactfulltext=and&searchid=1137814131915\\_20739&FIRSTINDEX=0&sortspec=relevance&volume=332&resourcetype=1](http://bmj.bmjournals.com/cgi/content/extract/332/7532/4?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=magnets&andorexactfulltext=and&searchid=1137814131915_20739&FIRSTINDEX=0&sortspec=relevance&volume=332&resourcetype=1)

**“A controlled trial of arthroscopic surgery for osteoarthritis of the knee.”**

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**BACKGROUND:** Many patients report symptomatic relief after undergoing arthroscopy of the knee for osteoarthritis, but it is unclear how the procedure achieves this result. We conducted a randomized, placebo-controlled trial to evaluate the efficacy of arthroscopy for osteoarthritis of the knee. **METHODS:** A total of 180 patients with osteoarthritis of the knee were randomly assigned to receive arthroscopic debridement, arthroscopic lavage, or placebo surgery. Patients in the placebo group received skin incisions and underwent a simulated debridement without insertion of the arthroscope. Patients and assessors of outcome were blinded to the treatment-group assignment. Outcomes were assessed at multiple points over a 24-month period with the use of five self-reported scores--three on scales for pain and two on scales for function--and one objective test of walking and stair climbing. A total of 165 patients completed the trial. **RESULTS:** At no point did either of the intervention groups report less pain or better function than the placebo group. For example, mean (+/-SD) scores on the Knee-Specific Pain Scale (range, 0 to 100, with higher scores indicating more severe pain) were similar in the placebo, lavage, and debridement groups: 48.9+/-21.9, 54.8+/-19.8, and 51.7+/-22.4, respectively, at one year (P=0.14 for the comparison between placebo and lavage; P=0.51 for the comparison between placebo and debridement) and 51.6+/-23.7, 53.7+/-23.7, and 51.4+/-23.2, respectively, at two years (P=0.64 and P=0.96, respectively). Furthermore, the 95 percent confidence intervals for the differences between the placebo group and the intervention groups exclude any clinically meaningful difference. **CONCLUSIONS:** In this controlled trial involving patients with osteoarthritis of the knee, the outcomes after arthroscopic lavage or arthroscopic debridement were no better than those after a placebo procedure.

**From:** N Engl J Med. 2002 Jul 11;347(2):81-8.

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12110735&query\\_hl=12&itool=pubmed\\_docsum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12110735&query_hl=12&itool=pubmed_docsum)

**“A critical review of randomized controlled trials of static magnets for pain relief.”**  
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**OBJECTIVE:** The aim of this review was to establish whether there is evidence for or against the efficacy of static magnets to produce analgesia. **METHODS:** A systematic literature review was undertaken of studies that compared the use of static magnets with an appropriate control for the treatment of pain. Study methods, their quality, and outcome were also reviewed. **RESULTS:** Overall, 13 of the 21 studies reported a significant analgesic effect due to static magnets. Of the 18 better quality studies with 3 points or more on the quality assessment, 11 were positive and six were negative, and in one there was a non-significant trend towards a positive analgesic effect. In two of the negative studies, there are concerns over adequacy of magnet power for the type of pain, and in the other study of duration of exposure to the magnetic field. If these two studies are excluded on the grounds of inadequate treatment, then 11 out of 15 (73.3%) of the better quality studies demonstrated a positive effect of static magnets in achieving analgesia across a broad range of different types of pain (neuropathic, inflammatory, musculoskeletal, fibromyalgic, rheumatic, and postsurgical). **CONCLUSIONS:** The weight of evidence from published, well-conducted controlled trials suggests that static magnetic fields are able to induce analgesia.

**From:** J Altern Complement Med. 2005 Jun;11(3):495-509.

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1592236&query\\_hl=20&itool=pubmed\\_docsum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1592236&query_hl=20&itool=pubmed_docsum)

**(Extra copy of press release follows on next page)**

## Healing Magnetic Therapy's Quality Scientific Evidence Ignored by Conservative Medical Researchers

**A January 2006 medical journal article generated a rash of negative press against magnetic therapy. Yet quality medical studies and reviews contradict the authors' stance. These authors also neglect to mention that many common conventional medical procedures and surgeries have not been studied to the degree to which they expect magnetic therapy to submit.**

The recent January 2006 issue of the British Medical Journal suggested patients be advised that magnetic therapy has no proved benefits. They argued that only blinded randomized controlled trials can prove medical benefit, and that it is difficult to study magnets in a blinded fashion.

"The article obscures an important truth about research and real world healing," says Brian B. Carter, MS, LAc, an acupuncturist and professor at the Pacific College of Oriental Medicine in San Diego. "If we were to apply this standard to all medicines, we'd also have to point out that many common surgeries and medical procedures also have no proved health benefit. Few of them have been studied in randomized controlled trials, and they cost at least as much as magnetic healing does. But no one complains about that. This exemplifies the double standard the medical establishment applies to alternative medicine."

A randomized controlled trial of arthroscopic knee surgery for osteoarthritis found it to be no more efficacious than placebo, yet this surgery is performed on more than 600,000 people per year. This study appeared in the New England Journal of Medicine in July 2002.

The British Medical Journal article is at odds with the results of more than 300 favorable studies of powerful magnetic therapy for diseases including arthritis, fibromyalgia, migraine, multiple sclerosis, pain, sinusitis, and insomnia. Abstracts of these studies are available for free at The FeelGood Store ([www.feelgoodstore.com/Products/Magnetics/AdvancedBiomagneticsDB.aspx](http://www.feelgoodstore.com/Products/Magnetics/AdvancedBiomagneticsDB.aspx)). What's more, an expert review of 18 high quality randomized controlled trials of magnetic therapy for pain concluded that the weight of the evidence favors magnetic pain relief. This review was published in June 2005 in the Journal of Alternative & Complementary Medicine.

"The authors of the BMJ study forget that consumers are shrewd," says Carter. "If magnets don't work, they'll demand a refund or spread negative word of mouth. Plus, recent research continues to explain close relationship between nerves, the brain, and the immune system. The same neurovasculoimmune mechanisms that make acupuncture work explain how magnets heal the body. Nerves work via electricity and magnetic fields affect the flow of electricity."

About The FeelGood Store:

The FeelGood Store has been providing customers with superior pain relief, beauty, fitness, and wellness products via mail order and the internet since 1993. A variety of magnetic products including bracelets and joint supports is available at [www.feelgoodstore.com/Categories/Magnetic%20Therapy/1038.aspx](http://www.feelgoodstore.com/Categories/Magnetic%20Therapy/1038.aspx).

About Brian Carter, MS, LAc:

Brian Carter is a California licensed acupuncturist and herbalist. He teaches in the Pacific College of Oriental Medicine's masters program and is the author of Powerful Body, Peaceful Mind. His complete bio is available at [www.pulsemed.org/briancarterbio.htm](http://www.pulsemed.org/briancarterbio.htm).

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