

## January 16, 2005: Deceptive Marketing in Medicine:

A Florida base company, Axiom Worldwide, along with marketing affiliate Altadonna Communications and many of its customers have been deceptively marketing the DRX-9000 and professional services by implying that The National Aeronautics And Space Administration (NASA) has been instrumental and directly involved in the design and development of their product. They are touting the byline that this 'discovery' by NASA easily solves 86% of back and neck pain.

Common headlines used on websites and "Free Reports":



***"How An Accidental Discovery by NASA In Outer Space Quickly and Easily Solves 86% of Back & Neck Pain And the Breakthrough Medical Technology That's Bringing It to You."***

### ***How Space Travel Cures Back And Neck Pain.***

The United States Space Exploration Program has had many intentions. Be the first to land on the moon, orbit the earth. Solving back and neck pain was not one of them. But that's exactly what was discovered just over 10 years ago ... completely by accident. Here's how: Over the years, NASA began to notice an unexpected result of space travel – astronauts that left with back pain would come back without it. So NASA, did what they are good at ...they investigated this new phenomenon. Here's what they found: During the antigravity state of the mission there were decompressive forces on the intervertebral discs and back pain was relieved!

The advertisement features a blue background with white and yellow text. At the top, it reads "The Amazing New Technology That Quickly Eliminates Back Pain". Below this, it says "Find Out How This Accidental Discovery By NASA Can Have You Living PAIN FREE Within 24-48 Hrs!". To the right is a small image of a person with arms raised in triumph. Below the main text, it says "NEW! Local Back Pain Expert Releases FREE REPORT! Get It Instantly By Completing The Form Below!". On the left is an image of a report cover with the same text as the advertisement. On the right, a white box contains the text: "'FREE REPORT Reveals An Amazing New Technology That Quickly Eliminates Back Pain!' Find Out How This Accidental Discovery By NASA Can Have You Living PAIN FREE Within 24-48 Hours! Get This FREE Report Instantly! You Don't Have To Live In Pain Anymore! Get it Instantly! Just Complete The".

These claims could not be further from the truth, and is actually opposite to the results reported by NASA. Studies released by the NASA Ames Research Center, Moffet Field, CA reveal that **68% of astronauts develop back pain during space flight**. NASA reported that back pain is one of the most frequently occurring medical problems during spaceflight, and 14 of the 19 Shuttle crewmembers (studied) experienced back pain, which they described as dull (62%), localized to the lower back (50%), and with an intensity of 2 on a 5 point scale.

Additionally, the claim "*Quickly and Easily Solves 86% of Back & Neck Pain...*" when footnoted, mentions the only known DRX9000 study "*Surgical Alternatives, Spinal Decompression*", Orthopedic Technology Review, Vol5 No6, Nov/Dec 2003. First off, the study did not include any neck pain patients. For low back pain the study does show 86% success rates, however, DRX marketers and providers fail to mention that the study provided interferential therapy – a major pain relief treatment – on every visit. Claiming the success rate was due solely to the DRX treatment is also deceptive.

As these claims and advertising are exposed to the general public (and in particular, Medicare beneficiaries), health providers are cautioned to perform a thorough due diligence and review before retaining DRX affiliated marketing firms and using DRX provided sales materials.

## References:

### **Depression, Mood State, and Back Pain During Microgravity Simulated by Bed Rest**

*Jorma R. Styf, MD, Karen Hutchinson, BS, Sven G. Carlsson, PhD and Alan R. Hargens, PhD  
Life Science Division (J.R.S., K.H., A.R.H.), NASA Ames Research Center, Moffet Field, CA; and Institute  
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**Back pain** is one of the most frequently occurring medical problems during space flight (1, 2). It has been reported by 68% of astronauts (3). The duration of pain varies from 14% to 100% of the flight, which may seriously jeopardize a crewmember's performance on orbit. Many microgravity-induced responses in humans, including total body height increase and back pain, have been studied in simulation using 6 degrees of head-down tilt (HDT) (4–7).

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2. Thornton W, Moore T. Height changes in microgravity. In: Bungo MW, Bagian TM, Bowman MA, Levitan BM, editors. Results of the life sciences DSOs conducted aboard the space shuttle 1981–1988. Houston: NASA, Johnson Space Center; 1987.p. 55–7.
3. Wing PC, Tsang IK, Susak L, Gagnon F, Gagnon R, Potts JE. Back pain and spinal changes in microgravity. *Orthop Clin North Am* 1991; 22: 255–62.[Medline]
- 4 Hargens AR, Tipton CM, Gollnick PD, Mubarak SJ, Tucker BJ, Akeson WH. Fluid shifts and muscle function in humans during acute simulated weightlessness. *J Appl Physiol* 1983; 54: 1003–9.
5. Parazynski SE, Hargens AR, Tucker B, Aratow M, Styf J, Crenshaw A. Transcapillary fluid shifts in tissues of the head and neck during and after simulated microgravity. *J Appl Physiol* 1991; 71: 2469–75.
6. Hutchinson K, Watenpaugh D, Murthy G, Convertino V, Hargens A. Back pain during 6 degrees head-down tilt approximates that during actual microgravity. *Aviat Space Environ Med* 1995; 66: 256– 9.[Medline]
7. Styf JR, Ballard RE, Fechner K, Watenpaugh DE, Kahan NJ, Hargens AR. Height increase, neuromuscular function, and back pain during 6 degrees head-down tilt with traction. *Aviat Space Environ Med* 1997; 68: 24–9.[Medline]

### **Back pain during 6 degrees head-down tilt approximates that during actual microgravity.**

*Hutchinson KJ, Watenpaugh DE, Murthy G, Convertino VA, Hargens AR. Gravitational Research Branch, NASA Ames Research Center, Moffett Field, CA 94035-1000, USA.*

**Astronauts often** experience back pain during spaceflight. Retrospectively, Wing et al. (14) found that during spaceflight, 14 of 19 Shuttle crewmembers experienced back pain, which they described as dull (62%), localized to the lower back (50%), and with an intensity of 2 on a 5-point scale. Further, the spine lengthens 4-7 cm in microgravity.