

Healing Back Pain with Inversion Therapy

COPYRIGHT © 2012 The Healthy Back Institute®

Information in this document is the property of The Healthy Back Institute®.

No part of this document can be stored in a retrieval system,
reproduced or transmitted in any form or by any means
(electronic, photographic or mechanical),
recorded, translated, or used to produce derivative works,
without written permission from

The Healthy Back Institute®. All rights reserved.

First Edition Published and COPYRIGHT © 2012

Published by: The Healthy Back Institute® 431 Pine Street - Suite 312 Burlington, VT 05401 USA

10 Seconds to Pain Relief

Imagine having relief from your back pain... 10 seconds from *right now*.

It might take you more than 10 seconds to walk to your medicine cabinet. And much longer before that pain pill starts to take the edge off your pain.

But when you take advantage of the unique therapy I'm about to describe, you'll experience back pain relief faster and safer than virtually any drug on the planet... simply by harnessing the gentle power of gravity.



Inside the pages of this report you'll discover why millions of people worldwide have used inversion therapy to relieve their back pain and sciatica. You'll see how inversion improves your health, fitness and even rolls back the clock on aging.

I'll tell you what to look for when evaluating inversion therapy options so you can make an informed decision should you decide to give inversion a try. And even share some insider tips for making the most of your inversion table if you do.

But first, let me explain why inversion is even necessary...

The Curse of Gravity

Do you ever feel like the whole world is on your shoulders? In a way, you're right – we all suffer the harmful effects of gravity.

I know that sounds funny, but hear me out...

The same force that holds the moon in orbit and controls the ocean tides also pulls our bodies mercilessly downward – placing every muscle, bone, ligament, and joint in your body under constant stress and strain.

By far, the part of the body affected most by gravity is your spine.

Between every pair of vertebrae in our spine is a soft, spongy protective disc made of over 70% water. These discs give our spine the flexibility and cushioning essential for daily activities like sitting, standing and exercising.

All day long gravity pulls your vertebrae downward, squeezing those spinal discs like a vice grip. Your discs thin out as spinal compression forces the fluid out of them.

During a typical day you can lose as much as 3/4 of an inch in height from spinal compression.¹ You've probably noticed the effects of this yourself... though you may not have known the cause... when you find yourself adjusting the rearview mirror up in the morning then back down later in the day.

But guess what happens when you remove the constant downward pull of gravity from your spine?



NASA discovered astronauts grow taller in space

Astronauts on extended early space missions like Skylab and the Apollo-Soyuz Test Project found they grew as much as 2 ½ inches taller after a week in zero gravity.² But it didn't occur immediately upon entering the weightlessness of space.

According to the Apollo-Soyuz Test Project post-mission medical report³, the astronauts only noted a half inch of height gain during the first few days. This was attributed to a loss of spinal curvature after removing the load of gravity.

But after a week in zero gravity, they rapidly gained new height. Lost fluids were reabsorbed into their spinal discs leaving them fully hydrated - restoring the astronauts' true natural height.

Every night when we sleep we undergo a similar transformation. Much of the compressive weight of gravity is removed from our spine. Fluid is slowly absorbed back into our spinal discs. And similar to the astronauts we regain some of our lost height as our spinal discs recover while we rest.

This is one of the big reasons we need eight hours of sleep each night to prevent and relieve back pain. Only we don't get the benefit of zero gravity to take the entire load off our spine. At best we only experience about a 75% reduction in spinal compression when we sleep.⁴

This means each night our spinal discs can recover most of their lost fluid... but there's still a gradual accumulating deficit thanks to the slight compression that's present even while we sleep.

Over the course of a lifetime, this deficit can add up to two or more inches of lost height.⁵

So where does all that height go? You still have the same body mass after all.

Think of your body like a balloon. The air inside represents everything under your skin. Now envision yourself holding that balloon with a hand on both the top and bottom - then squeeze your hands closer together.



What happens to the balloon? The air bulges out the sides.

That's what gravity does to your body. As spinal disc compression causes your height to decrease throughout the day, your midsection expands to accommodate the change.

As your discs shrink, less distance between your vertebrae can result in nerve root pressure – leading to back pain, neck pain and sciatica. Enough pressure and a slight twist the wrong way and a herniated disc is almost a given. Not to mention radiating pain from pinched nerves.

And that doesn't even begin to discuss muscle-based back pain which is far more common than nerve-based back pain. Everyday muscle strains, poor posture and muscle imbalances caused by everything from sitting to golf are major contributors to back pain.

Your body was made to naturally heal itself. It brings in oxygen- and nutrient-rich blood through your arteries and removes waste through your veins and lymphatic system.

But sometimes there's a problem.

Your body may become overwhelmed by gravity during the healing process.

Blood stagnates in your legs as gravity pools it into varicose veins. Lymph drainage from your lower body is hindered. And waste byproducts like lactic acid build up in muscle tissue causing a vicious circle of increased muscle tension and soreness. All made worse by the pull of gravity.

So, short of taking a rocket to outer space, what can you do about gravity?

You turn it from a problem into a solution.

Reverse Gravity to Heal Your Back Pain

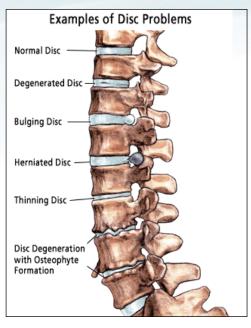
Reversing gravity to improve your health is the principle behind inversion therapy in a nutshell. You can reverse the harmful effects of spinal compression simply by reversing the direction gravity pulls on your body.

Gravity inversion begins when your hips are raised above the level of your shoulders. And contrary to common misperception, you don't have to hang completely upside down. As little as a 25° angle can give you near instant pain relief while only a 60° angle is needed to completely remove the load of gravity on your spine.

Inversion's gentle stretch melts away muscle tension and tightness in moments.

Researchers at Marquette University in Milwaukee proved this scientifically. When studying the effect of inversion on the lower back they found an average 35% drop in measured EMG activity - an indicator of muscle tension and pain - in the first 10 seconds.⁷

And muscle tension continued to drop until a maximum benefit was reached in just over 60



Inversion helps most spinal disc problems

seconds thanks to inversion's gentle stretching action and ability to improve circulation!⁸

Space between vertebrae once compressed increases. Pinched nerves find room to exit the spinal column without pain. And pressure on spinal discs is relieved often allowing even herniated discs to heal themselves. 9, 10, 11, 12

Inversion therapy has a nearly unprecedented ability to heal back pain. A recent study out of Newcastle University in England followed two groups of surgical candidates receiving physiotherapy. One group added regular inversion therapy and **reduced the need for back surgery by 70.5%**. ¹³

But as great as all of this is... back pain relief is only one of many benefits you'll experience when you invert regularly.

Unique Benefits of Inversion Therapy

Restore flexibility and mobility

Inversion puts gentle reverse loading on your joints and ligaments. This promotes an increase in collagen content in ligaments making them more resistant to strain. Weight-bearing joints in particular are loosened up and allowed to naturally rehydrate for better shock absorption - and less pain.

Retain natural height

Our spinal discs are 90% water at birth, but by age 70 the water content has typically decreased to about 70% thanks to a lifetime of compression. Regular inversion reduces pressure on your spinal discs, allowing them to reabsorb lost fluids. As your discs recover you get to retain more of your natural height.

Boost brain power

According to Dr. Robert Martin, who helped introduce inversion therapy to the American public, the brain operates 14% more accurately when operating on an inverted, inclined plane. It certainly works for some, including Da Vinci Code author Dan Brown who inverts every day to increase mental clarity and break through writer's block.



Restore a thinner waistline

When your spine is compressed that body mass has to go somewhere. It gets pushed outward around your midsection as your internal organs get mashed together - possibly leading to bladder, kidney and digestion problems. Inversion helps overcome these effects.

Better posture

Inversion provides a gentle stretch to muscles, tendons and ligaments. This improves spinal mobility and sometimes results in dramatic changes in posture as your body begins to recover from learned imbalances.

Improve immune system

Your lymphatic system is critical to your immune system. It clears waste from your tissues by carrying it up to your chest where it gets flushed from the body by other processes. It's the alternating contracting and relaxing of your muscles that push lymph to your upper chest -but gravity can hinder this flow. Inversion helps gravity flush waste carried by your lymphatic system out of your body.

Relief from varicose veins

Varicose veins occur when blood stagnates in the veins, commonly in your legs where blood has to travel farther to reach the heart and recirculate. Inversion improves circulation and can help clear this stagnant blood from varicose veins.

Sleep better

Relieving back pain, relaxing tight muscles and improving circulation all promote better sleep.

Faster workout recovery

Lymph is responsible for clearing away much of the built up lactic acid and carbon dioxide which causes sore muscles after a workout. Inverting helps lymph clear away these waste byproducts of exercise, helping you to recover from workouts faster. Plus, inversion helps relieve the compression that occurs while running, doing aerobics and playing sports.

Relieve menstrual cramps

Some women have reported inversion helps relieve menstrual cramps. At any rate, inversion is perfectly safe during your period.



Stop scoliosis

Inversion can be helpful in slowing or reversing the effects of scoliosis. This is particularly helpful in children whose bones have not fully hardened (around age 12 to 14). Of course, children should always be supervised during inversion.

What to Look For in an Inversion Table

The first key to safe, effective inversion therapy is to use only a high quality inversion table.

Since inversion therapy has become more "mainstream" in recent years, it seems you can find inversion tables at Walmart or just about any sports equipment store.

But all inversion tables are NOT made the same - especially if you're dealing with back pain. So let me give you some pointers on what to look for.

Manufacturing quality

Let's face it. If you shop for Walmart prices you're probably going to get Walmart quality. And I'll say most of the inversion tables I've seen - and personally tested in many cases - from sports stores are not much better.

Some of these inversion tables were laboratory tested and failed miserably in less than six months of use!

When looking for a quality table you start by looking at what's supporting you: the frame. Steel alone is not enough. Accept nothing less than a **high carbon steel frame** and you'll never have to worry about it falling apart. Or you falling to the floor while using it.

Ease of assembly

After struggling with inversion tables that took over an hour to assemble, this point went high on my list. If it takes more than 15 minutes to put together then it's too complicated. Simple assembly also means there's less of a chance that you'll put it together wrong.

Ease of use

Ease of use is paramount when you're suffering from back pain. That's exactly why Gravity Boots (where you just hang from a bar instead of lie on a table) never entered this discussion.

When you're in pain, you don't want to contort your body to get inverted. Look for an extended handle on the table that will let you lock your ankles securely in place without having to "touch your toes" and injure your back in your quest to help your back.

Comfort

When inverted, your weight will be supported by your ankles. So for comfort's sake make sure you get a table with foam-based ankle grips. These reduce the amount of pressure on your ankles while you're still secure and safe. And your ankles will thank you for not using a hard molded variety.

Control

Those who are new to inversion almost universally have the same two questions. A good inversion table will answer both of those questions for you.

1) How can I control how far (upside) down I go?

Your inversion table should have a simple mechanism to allow you to set the maximum angle you want to invert before you start. Usually this comes in the form of a tether strap that allows you to select a particular angle. Remember - you do NOT need to go completely upside down to get the full benefit of inversion! Between 20-30 degrees is enough to gently stretch and relax tight muscles while 60 degrees takes the entire load of gravity off your spine.

2) How can I make sure I can get back up?

Getting back up from an inverted position is super easy once you know how. But the first time or two might be a little nerve wracking if you forget the "trick" to it. So make sure for ease of mind to get a table with big, easy to reach handles you can use to help yourself up if you ever need them.

Guarantee

If your table doesn't come with at least a 1-year warranty, keep looking. That simply means

the manufacturer knows they're selling junk that will break in less than a year if you use it every day.

Besides the regular warranty, look for a satisfaction guarantee that allows you to try the table out at home and return it if you're not satisfied. There's no point in getting stuck with a piece of equipment that won't work for you.

So far we've tested dozens of inversion tables at the Healthy Back Institute. And we did find one very high quality table that I can recommend that includes every feature I just mentioned: the Teeter EP-950.

There's only one problem. The retail price on this model is \$549. That's a lot for many people to come up with, especially in this economy. So I added one more item to look for to my list.



Teeter EP-950 Inversion Table



Price

A good, sturdy, high-quality inversion table for home use normally runs between \$400 - \$800. But I only found the one table from Teeter that had all the features I was looking for.

I figured there had to be a table out there with all those features for less money. But we couldn't find one - so we designed our own. It's called the Healthy Back Institute Premium Inversion Table.

In a nutshell, it has all the top-of-the-line features of the Teeter EP-950... only we can price it about 25% less because we're selling direct without the extra overhead. Or extra hands going into your wallet.

> You can find the HBI Premium Inversion Table on our website here: click here

We made it super easy to assemble. You should be up and inverting in under five minutes. Plus we include free phone support in case you have any questions. Just give us a call on the toll-free number.

Compare Inversion Tables

There are currently hundreds of inversion tables on the market. In our experience, they typically fall into one of three categories:

- 1) Inexpensive but poorly made with questionable safety
- 2) Fully featured and well-made for most users
- 3) Expensive models with specific features for non-standard users

Let's examine the features of four common inversion tables falling across the entire range of options by creating a comparison chart.

The first table from Stamina® exemplifies your typical Walmart-brand table, cheaply priced - and cheaply made. Similar tables priced up to \$300 from the same company have been recalled due to multiple reports of weld failures posing a fall hazard.¹⁴

The second and third tables we compare we already spoke about earlier but have included for comparison sake. Similar features, but different prices and service offerings.

Finally, we show a high-end table which is built to accommodate taller and heavier individuals. But as you'll see, a higher price often isn't the only trade-off when looking at more expensive tables.

	Stamina® Inversion System 55-1528B	Healthy Back Institute® Premium Inversion Table	Teeter® EP-950	Mastercare® Back-A-Traction CN-B1
INVERSION TABLE COMPARISON CHART				
List Price	\$179	\$399	\$549	\$1,000
Max. Height	6'6" (198 cm)	6'6" (198 cm)	6'6" (198 cm)	7'1" (215 cm)
Max. Weight	250 lbs (113 kg)	300 lbs (136 kg)	300 lbs (136 kg)	330 lbs (150 kg)
Frame Construction	Steel	High Carbon Steel	Reinforced Steel	Steel
Quick Assembly	×	✓	✓	→
Comfortable Ankle Clamps	×	✓	✓	→
Extended Reach Ankle Lock	×	✓	✓	→
Max. Inversion Angle Control	~	~	✓	✓
Allows Full Inversion	✓	~	✓	×
Folds for Storage	×	>	✓	✓
90-Day Personal Phone Support	×	~	×	×
90-Day Money Back Guarantee	×	~	×	×
1+ Year Full Warranty	×	~	✓	×
Recommended	×	Best Value	✓	×

Making the Most of Inversion

Getting started

We suggest inverting for 1-3 minutes, 1-3 times per day at only a slight inversion for the first week or two. As you become more comfortable with inverting, gradually adjust the amount of time and degree of inversion you use.

Remember this rule of thumb: always listen to your body. If you feel uncomfortable, simply stop inverting and try again later.

The degree of inversion you choose affects how long you need to invert for the same results. For example, the shallower the degree, the longer the inversion time. The higher degree of inversion, the shorter the inversion time.

Try oscillating, or slowly rocking back and forth to and from the inverted position. During this movement you'll invert for 20-30 seconds, then return upright for 20-30 seconds and repeat the rhythm. Many doctors recommend this movement pattern during inversion as it helps stimulate circulation of blood and lymph for faster healing.

Full inversion

You do NOT need to fully invert to get the health benefits of inversion. Take your time and work up to 60 degrees for maximum benefit.

After you are comfortable at 60 degrees of inversion for a few weeks, go ahead and try a full inversion if you want - but start out for only 30 seconds. Our experience is 95% of all discomfort comes from trying to invert too much, too fast, for too long. Again, listen to your body and take your time.

Inversion exercises

Movement while inverted is particularly helpful for decompressing the spine while increasing your mobility and flexibility. Once you're comfortable inverting, try introducing these gentle stretches and exercises to your inversion routine.

Lower back

You may perform gentle stretching exercises to help move the muscles and connective tissues in your lower back area.

In partial inversion, try rotating gently from side-to-side or slowly rocking your pelvis forward and backward.

If you have worked up to full inversion, abdominal exercises (sit-ups, crunches) can be beneficial for your lower back since strong abdominal muscles are important for proper posture.

Also try a gentle back extension by placing your hands behind your head on the bed frame and pushing your body in an arch away from the table.

Upper back

Many people experience upper back pain as a result of stress and muscle tension. The key to relieving this pain is to totally relax while inverting.

Try deep breathing exercises while inverted. Partner work can be very helpful - nothing is more relaxing than an inverted back and shoulder massage!

Movement is also very beneficial. Try rounding your shoulders forward and pushing them back. Then stretch one arm at a time across your torso to extend those upper back muscles for a gentle stretch.

Neck

Similar to your upper back, movement can be beneficial for neck pain.

Try rotating your head from one side to the other. Partner massages to the base of your head and back of your neck are very relaxing (do not apply pressure to the front of the neck).

Try adding gentle inverted traction to your neck by resting your arms behind your head at the base of your skull (don't pull, just add the weight of your arms).

When Should You NOT Invert?

You should not invert before getting your licensed physician's approval if you have any of these medical conditions:

Use of anti-coagulants Conjunctivitis (Pink eye)

Bone weakness/recent fractures/ skeletal implants

Glaucoma

Heart/circulatory disorders Extreme obesity (300+ pounds)

Hiatal hernia/ventral hernia Retinal detachment

Middle ear infection Stroke

Pregnancy Transient ischemic attack

Severe spinal cord trauma

Uncontrolled high blood pressure

Total hip and/or knee replacement Any spinal surgery

Osteoporosis

What Others Are Saying About Inversion

"We recently received the inversion table. **Assembly was surprisingly easy**, instructions were great, and the quality of this product is amazing for the cost we paid for it. We're looking forward to experiencing the benefits. Thanks for an outstanding product in a time when so many others are cheaply made, yet overpriced. Yours is the way it should be."

- S. Barnhart, Lititz, PA

"After 35 years flying helicopters, constant sitting with a 6 pound helmet and vibrations, I was constantly feeling pain in my spine. After 2 days of inversion, 10 minutes in the morning and again at night, the pain is gone. The difference is amazing. **Best purchase of my life.** Thanks!"

- D. Matthews, Salisbury, NC

"I am a diagnostic radiologist who abused his back through sports, hard work and horses for years. About seven years ago, I began to experience back and left leg pain that progressed rapidly. An MRI revealed a lot of degenerative changes in my lumbar spine with two intervertebral discs that were herniated and for all practical purposes 'worn out.' Five years ago I began to experience numbness in some of my left toes with sciatica in the left hip and leg, which progressed to constant pain, loss of feeling and then loss of motor function in my left toes.

A friend who is a sales rep for radiographic equipment, whom I have known for 15 years, told me he had become pain free in about two months using an inversion table. I ordered one that day. In one week of use, twice to three times per day, the numbness in my toes improved 100%. During the second week, I **slept my first pain free night in five years.**"

- Ken Hamilton, M.D.

"In May, I herniated the L5-S1 disc. My doctor recommended drugs and pain management, but the meds made me sick and I had a several week wait to go to pain management. The pain was intolerable, and I was having a hard time being pleasant at work. Home was a whole other story! I was telling a neighbor about it, and she suggested I come to her house and try her inversion table. **The first time I tried it, the pain down my leg almost completely disappeared.**

I borrowed her table and as long as I use it, I feel good. I have gotten better and better. I take Aleve when I do have pain, cancelled pain management and am my sweet old self at home and work. Since I couldn't keep my neighbor's table forever, I have purchased my own and have a couple of friends anxious to try it. I am sooooo happy. I am 60 years old and never expected to feel this well again."

- J. Grieder, The Villages, FL

"After doing my own research I came upon your site and the suggestion of an inversion table. Reading the literature for inversion all made a lot of sense to me, and for what I paid for three visits to the chiropractor (since the insurance did not cover this) I had myself an inversion table. I used it as recommended and started out at about 45 degrees for two weeks each day for 10 to 15 minutes right before bed.

After two weeks I was a little better and I was ready to go fully inverted, which I did for another month 10 to 15 minutes almost each day right before bed. After that month I was 100%. I could not believe the results, and today I tell everyone of this wonderful table that has given me my life back, as I enjoy volleyball and softball at my age of 51.

The pain used to be so bad, sitting was the worst and what really scared me was the fact that my left foot tingled almost continuously. I thought for sure surgery was going to be once again the only solution. I am so thankful for your site and the information that you provide so people like me can get relief from one of the worst types of everyday pain one can experience. Today I use the table as a relaxation and stretch after a workout or a sport activity, which is usually 3-4 times per week. I would never give it up and will certainly use it the rest of my life. I now do crunches using the table and the results really show. Thank you again for a wonderful product that really works as advertised."

- Brent

"Interesting...I am one of those patients who **cancelled my back surgery because the inversion therapy worked for me**!! I suffered with chronic back pain and sciatica for three years! I have a herniated disc (L4-L5), had 5 epidural injections, physical therapy, chiropractic therapy...you name it!! This was my last resort before surgery... I bought my inversion table about 6 weeks before my surgery. Two weeks before I was to go "under the knife" for microdiscectomy, my pain diminished by 90% ...good enough for me, and glad to be off anti-inflammatory medications as well. I'm a believer!!"

- Diane T.

"I suffered for 5 months and I now know it was needless suffering because **the inversion table got rid of the pain in less than a month**. I'm sure there are many people out there suffering who could also benefit but are reluctant to spend the money because it was not recommended by their doctor. I do not understand why chiropractors do not have this table in their office. It makes no sense."

- *Joe M.*

I have the Inversion Table, which is a great hit with my whole family (son and grandchildren) and for me. I am seriously disabled with back problems (degenerative disc disease) but use the

Inversion Table which provides great relief. I am not able to do very many exercises, but, optimistically, hope to become better. In any event, the expenditure, which was a stretch for me, has proven to be a worthwhile investment, given the number of people who have benefited.

- Shirley Allen

References

- ¹ Foreman TK, Troup J. Diurnal variations in spinal loading and the effects on stature: a preliminary study of nursing activities. Clinical Biomechanics. 1987; 2:48-54.
- ² Thornton WE, Hoffler GW, Rummel JA. Anthropometric Changes and Fluid Shifts. The Proceedings of the Skylab Life Sciences Symposium, Vol II. NASA TM X-58154. 1974;637-658.
- ³ Brown J. The Apollo-Soyuz Test Project Medical Report. NASA SP-411. 1977;119-121.
- ⁴ Nachemson A, Elfström G. Intravital dynamic pressure measurements in lumbar discs. A study of common movements, maneuvers and exercises. Scandinavian Journal of Rehabilitation Medicine. Supplement. 1970;1:1-40.
- ⁵ Tanner J. Beating Back Pain. 1987.
- ⁶ Nachemson A, Elfström G.
- ⁷ Nosse LJ. Inverted spinal traction. Archives of Physical Medicine and Rehabilitation. 1978 Aug;59(8):367-70.
- 8 Ibid., 367-70.
- ⁹ Gianakopoulos G, et al. Inversion devices: their role in producing lumbar distraction. Archives of Physical Medicine and Rehabilitation. 1985 Feb;66(2):100-2.
- ¹⁰ Judovich BD. Lumbar traction therapy and dissipated force factors. The Journal-lancet. 1954 Oct;74(10):411-4.
- ¹¹ Mathews JA. Dynamic discography: a study of lumbar traction. Annals of Physical Medicine. 1968 Aug;9(7):275-9.
- ¹² Sheffield FJ. Adaptation of Tilt Table for Lumbar Traction. Archives of Physical Medicine and Rehabilitation. 1964 Sep;45:469-72.
- ¹³ Prasad KS, et al. Inversion therapy in patients with pure single level discogenic disease: a pilot randomized trial. Disability and Rehabilitation. 2012;34(17):1473-80.
- ¹⁴ U.S. Consumer Product Safety Commission. Inversion Therapy Tables Recalled by Stamina Products Due to Fall Hazard. Alert #08-538. 2008 Jan 16.