

evolve

The Body Dynamics Quarterly Newsletter

Unraveling the Mysteries of Pain

Demystifying the Physiology of Pain Improves Coping Skills and Management Strategies

We've all seen football players jump up and dance in the end zone immediately after being crushed by more than 10 players weighing over 250 pounds a piece. At the same time, we have all experienced the extraordinary pain of a paper cut. How can the body react so differently to such opposite situations? Why does it matter?

There are many among us who spend years dealing with debilitating pain—long after the triggering incident (major or minor) has occurred. To those individuals and their family, friends, and caregivers, the body's pain management system can seem confusing, variable, and out of proportion. Demystifying the physiology of pain can improve coping skills and management strategies by removing the fear that is often associated with pain.



First of all, pain is essential. It's our body's warning system that helps us get out of the way of danger and causes us to seek treatment so that we can heal. When pain persists and feels like it is ruining one's life, it is difficult to see how it could be serving a useful purpose. In reality, pain is a signal that the brain has somehow concluded, often subconsciously and sometimes incorrectly, that the body is in danger. The secret

is to find out why the brain has come to this conclusion.

It is important to realize that pain is the brain's way of interpreting an experience. If the brain does not perceive the body to be in danger, there will be no pain. This may explain why a person may have a degenera-

tive disc, an arthritic knee, or even a cancerous tumor and feel no pain.

Conversely, even when there are no problems in joints, muscles, or other body systems, a person will experience pain if the brain believes there is danger. This does not mean that the pain is "made up" or any less real. The brain's perception of an experience is immensely powerful, even if it is not always accurate!

Millions of sensors are present throughout the body in the walls of the nerves. Among these

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Gravity™ Training Sweeps Body Dynamics

The ratings are in. Here is what some of you are saying about the effect of Gravity training:

- I can get a full workout and elevate my heart rate in only 30 minutes.
- Classes fly by!
- Fun, interesting, big changes in my muscle tone in a short time.
- Great instructors.
- My cardio reserve is much improved.
- I've seen huge changes in my muscle tone and strength in a short amount of time.
- The instructors are very motivating.

The program speaks for itself—it's fun, it's effective, it's a challenge.

Some of you would like to see more classes added, different attendance options, and even greater challenges. We are working to meet those needs and more as the program grows.

So sign up early to reserve your spot for next session. And spread the word—we have ongoing introductory classes and will be adding classes to the schedule shortly. ■

sensors are nociceptors or "danger receptors" that send information to the brain along with the many other messages that are being transmitted. Messages from the nociceptors indicate danger, but they do not always end up being interpreted by the brain as painful.

New research in pain physiology indicates that when a severe pain problem exists, the body is actually able to increase the number of nociceptors in the painful area. The number of nociceptors in the area will continue to increase as long as the brain has determined that increased sensitivity is important for the body's survival. In rare situations, this system goes haywire and continues to increase the number of

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From the Body Dynamics Director



Warm wishes for a lovely holiday season and a new year that is pain free, healthy, and fit. And a note of thanks to you all for your patience with our construction dust this fall. I'd like to say we are all done, but these things have a way of taking on a life of their own. So, we are *almost* done.

Despite our construction zone, we've managed to keep busy. In addition to seeing many of you in the clinic, Jason and Carrie collaborated with D.C. Fit to provide education and cross-training for a multitude of runners training for the Marine Corps marathon. We all rotated in and out of supporting the health and wellness programs at the Washington Ballet Company and School and the Universal Ballet Academy. Amy Humphrey continues to build a following of ice skaters at Skatequest in Reston, Virginia.

We have had wonderful responses to much of our new programming this past fall. Our fight against gravity with

Gravity™ training has been very effective—an overwhelmingly positive response from the participants. If you don't know what Gravity training is all about, stop by the front desk for details.

Our "Talking About Wellness" lecture series has also been well attended. In response to your requests, we will repeat our fall topics in the winter-spring and add a lecture on back pain and living with chronic pain. These lectures are generally the last Saturday of each month from 2 to 3:30 pm. There is no cost to attend, but RSVPs are greatly appreciated. This spring will also see the return of many of our annual workshops, including golf, running, partner massage, and a long-time favorite—the Pilates retreat.

The staff and I are looking forward to a fruitful spring and to continuing to help support you, your family, and friends in your healing and your healthy fitness goals.

Peace and Joy in the New Year!!!

Jennifer M. Gamboa, MPT, OCS, MTC

Body Dynamics, Inc.

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Body Dynamics, Inc. (BDI)

is a comprehensive center for orthopaedic and manual physical therapy and a leader in training elite athletes and performing artists. BDI's highly evolved programs address musculoskeletal needs through a multidisciplinary approach that integrates rehabilitation with Pilates-evolved fitness programs and massage therapy.

Director

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Unraveling the Mysteries of Pain

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nociceptors, even when the tissue has healed and the physical danger has passed.

Many factors influence how the brain determines that a sensation is painful. The context in which the pain is experienced, the individual's history with pain, and the speed at which a tissue is damaged (a slowly deteriorating joint usually does not result in the same amount and type of pain as a recently traumatized one) all influence the body's reaction. Pain, gone out of control, can cause sleeplessness, depression, weakened immune system, skin temperature changes, and a severely altered lifestyle.

As you might guess, the approach to managing a complex pain problem is, in itself, complex. One of the first steps is for the patient to have a good understanding of pain physiology and the factors that are specific triggers to their individual problem. Once the trigger is identified, it is easier to gain control over the experience of pain by removing or managing the trigger, as well as, the symptoms of pain.

Many approaches have been found to be successful in managing pain. Movement, manual therapy, meditation, massage, acupuncture, medication, nutritional support, and specialized desensitization programs have all been successful in different ways for different individuals. Not every approach works for every person. Additionally, timing can be critical in deciding when it is appropriate to exercise, when it is better to rest, and when it is appropriate to include other interventions. It is important that those with pain problems find health care professionals who understand the complexities of pain management and have the patience and persistence to find solutions to this challenging problem.

The staff at BDI has a lot of experience working with those in chronic pain. We have found the book *Explain Pain* by David Butler and Lorimar Moseley to be immensely helpful to us and to our patients. Please let us know if you would like to browse through our copy or order one for yourself.

For more information on living with chronic pain, register for our free lecture on this topic, scheduled for February 25 from 2 to 3:30 pm. ■

Winter Wellness Lectures

BDI Lecture Series To Address Chronic Pain, Complementary Medicine

While winter is the perfect time of year for nestling under the covers with a good book, it's also an ideal time to attend to your health.

Body Dynamics' "Talking About Wellness" lecture series will help you do just that. Lecture topics this winter range from managing chronic pain to exploring alternative therapies such as acupuncture and massage.

All lectures are free and will be offered Saturdays 2 to 3:30 pm. Mark your calendar now, and tell your friends!

January 28: About Back Pain

Presented by Jason Grandeo, this lecture is for all individuals currently living with back pain or for those who would like to avoid developing low back pain. You will learn how to protect your back by using correct posture at your desk, use correct technique when lifting heavy objects, position yourself for comfortable sleeping, and treat your back when you have pain.

February 25: Living With Chronic Pain

Jennifer Gamboa and Andrea Watkins will present a framework for dealing with chronic pain based on the work of David Butler and Lorimar Moseley. This lecture will include information to help you understand the physiological adaptations of pain and to

develop physical and mental coping mechanisms. There will be plenty of opportunity for discussion.

April 1: Women's Health

Carrie James, a BDI physical therapist with a focus on women's issues, will discuss techniques for preventing and managing urinary incontinence, uterine prolapse, and osteoporosis. She will also provide prenatal and postpartum exercises to strengthen the abdominals and pelvic floor.

April 22: Massage for Wellness

Certified Massage Therapist Kristin Silvestro will lead a discussion on a variety of topics including the benefits of massage, different modalities of bodywork, and self-care techniques for headaches, neck tension, and low back pain.

May 27: Chinese Medicine

Licensed acupuncturist Ausra Kaminskas will present a workshop on health and stress from the perspective of Chinese medicine, which views a person as an energy system in which body and mind are unified, each influencing the other.

See the front desk for further information or to register. ■

2006 Workshop Series

Stay healthy this winter by staying active! Workshop topics range from a golf clinic to a rejuvenating Pilates retreat. And remember: A gift certificate for a Body Dynamics workshop makes a great holiday gift!

February 11: Golf Workshop

Take this opportunity to get into shape before the golf season tees-off. Learn the concepts of proper set-up and stance position before you swing, and be guided through Pilates-based exercises that condition the muscle groups used by golfers to get the most out of your swing. All levels of golfers are encouraged to attend. 2-4 pm, \$60 per person.

March 4: Partner Massage Workshop

Grab a friend and join us for a hands-on workshop as Kristin Silvestro, Certified Massage Therapist, teaches simple massage techniques that will alleviate headaches, neck and shoulder tension, and hand and foot discomfort. 2-4 pm, \$75 per couple.

March 25: Running Workshop

Learn how to improve your running technique; get the most out of your footwear; establish and progress your training program; and manage common running injuries including ITB syndrome, plantar fasciitis, and runner's knee. 2-4 pm, \$60 per person.

April 2: Pilates Retreat

Take your movement experience to a whole new level during a half-day retreat that will combine Mindful Mat, Pilates, stretch, and relaxation. Perfect for those wanting to relieve stress and deepen their mind-body connection. 8:00 am-2 pm, \$150 per person. ■

Mindfulness on the Mat

Explore Your Full Range of Motion While Challenging Core Control!

No one said connecting the mind to the body was easy, but BDI's Mindful Mat class has blossomed into a wonderful experience. This class focuses on unlocking your movement potential as well as exploring and controlling a full range of functional motion.

Many core control programs require you to hold your trunk in a static position while moving your arms and legs, or focus on progressively more demanding single-plane trunk motion (e.g., flexion/extension and rotation activities). Mindful Mat teaches you

segmental control over your spine, arms, and legs as they move through multiple planes at any given time.

This class has garnered quite a following on Wednesday evenings and Saturday mornings. Many of BDI's long-time clients have experienced the "ah-hah!" moment, when they finally understand and are able to change a long-standing movement habit. Lots of exciting discoveries and it's not too late to join the journey. See the enclosed schedule for details or to register. ■

WANTED:

A Few Good Men...and Women!

BDI is always looking for good people. If you or someone you know is looking for an opportunity within Office Administration, Personal Training, or Group Class Instruction, please contact Stephanie at 703.527.9557.

Body Dynamics, Inc. Services and Fees

Winter-Spring 2006

PILATES

Initial evaluation	\$100
55-minute private session	\$70

PHYSICAL THERAPY

Fees available upon request

ACUPUNCTURE

90-minute initial evaluation	\$140
60-minute follow-up sessions	\$90

MASSAGE

30-minute massage	\$50
60-minute massage	\$90

PACKAGE DEALS

10-pack of 60-min massages	\$810
10-pack of private Pilates sessions	\$630
20-pack of private Pilates sessions	\$1190

FITNESS AND SPORTS ASSESSMENTS

90-min golf assessment and video	\$140
90-min running assessment and video	\$140
60-min cardiovascular fitness assessment	\$70
60-min dancer's health profile	\$100

GROUP CLASSES

9-wk/18-wk Session

Early bird registration	\$126/234
Regular registration	\$135/252
Gravity pass (three 30-min workouts/wk)	\$351/675
Drop-in rate	\$16
Flash pass (unlimited classes)*	\$675

* Excluding Gravity classes

Other Happenings

- ▶ After nearly six and a half years with BDI, we sadly say goodbye to Leigh Roberts as she settles into her new home in Columbia, MD, and works within a "10-minute drive" from home. She will continue to work with us on our performing arts research and other special projects throughout the year.
- ▶ We welcome Nancy White to a more full-time status. Nancy will be increasing her clinical hours as well as taking on some management responsibilities.
- ▶ We also welcome Julie Miles, who will be teaching beginner and rehab ballet at BDI. A founding member of Washington Ballet, Julie danced with the company for 20 years. She has been teaching ballet locally for most of the last 10 years, specializing in preprofessional, professional, and adult levels. She began teaching rehabilitation ballet classes for BDI last year, and she joined us earlier this year for work on our Performing Arts Institute project. Julie has a particular fondness for teaching adult beginners and often works with physical therapists to help transition dancers from therapy back to class.
- ▶ Congratulations to Carrie James on becoming the Virginia Representative to the Women's Health Section of the American Physical Therapy Association. She will act as a liaison between Women's Health Specialists in Virginia's Physical Therapy Association chapter and our national association.

Winter-Spring 2006 Calendar of Events

12.19 Session 1 Early Bird Registration Deadline	3.12-18 Spring Break for Group Classes
1.9 Session 1 Classes Begin	3.17 BDI Wine and Cheese Party 6-9 pm
1.28 Lecture: About Back Pain 2-3:30 pm	3.19 Session 2 Classes Begin
2.11 Golf Workshop 2-4 pm	3.25 Running Workshop 2-4 pm
2.25 Lecture: Living With Chronic Pain 2-3:30 pm	4.1 Lecture: Women's Health 2-3:30 pm
2.27 Session 2 Early Bird Registration Deadline	4.2 Pilates Retreat 8:30 am-2 pm
3.4 Partner Massage Workshop 2-4 pm	4.22 Lecture: Massage for Wellness 2-3:30 pm
3.11 Session 1 Classes End	5.20 Session 2 Classes End
	5.27 Lecture: Chinese Medicine 2-3:30 pm

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