

evolve

The Body Dynamics Quarterly Newsletter

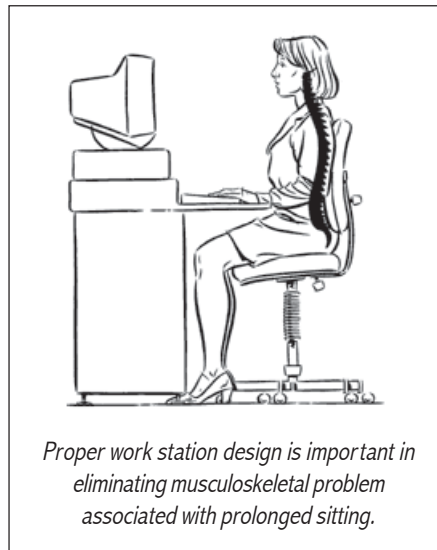
Washington, DC: Sitting Capital of the World! Workplace Ergonomics Prevents Wear-and-Tear Associated With Prolonged Sitting

Most people who work in the Washington-metropolitan area sit for a living. When time spent commuting, watching television, and tapping away on the home computer are combined with long hours at work, the total time we spend planted in a chair is often more than 12 hours a day!

Prolonged sitting positions take a toll on our bodies over the years—and the computer has not helped.

Many offices are still not set up to accommodate proper keyboard, mouse, and monitor positions. Chairs are still selected for their aesthetic value or for price rather than ergonomics. Even worse are many home offices, where a laptop computer on the dining room table serves as a work station, and the dining room chair as a desk chair.

There are many articles and books on proper sitting, computer positioning, and chair selection. Following are a few tips and resources to help you prevent some of the wear



and tear on your body that can come from long hours at a desk.

► FIRST AND FOREMOST, STAY FIT!

Long hours with your back and shoulders rounded, your head forward, and your knees and hips bent will make you look old before your time. It is essential to reverse sitting

positions by stretching out your front body and strengthening your back. An endurance, strength, and flexibility program will help avoid the aching muscles, painful joints, and postural problems that result from prolonged sitting.

► AVOID PROLONGED POSITIONS

Follow the 50-10 rule and take a 10 minute break after every 50 minutes of sitting. Do some stretches, get a drink, visit with coworkers—or work standing up if you must. Do whatever you want as long as you are not sitting! Use various cues to remind you to get up, such as standing up briefly every time the phone rings. Change sitting positions frequently.

► A SHOULDER IS NOT A HAND!

If you are on phone calls for more than 5 minutes at a time or if you must write or use the computer (or do other multitasking activities) while on the phone, get a headset. Holding the phone with your shoulder compresses the joints and nerves on the side of your neck; overuses your upper

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Body Dynamics Recognized as One of Arlington's Most Outstanding Businesses

This spring, Body Dynamics was awarded the prestigious ABBIES Award, which recognizes outstanding businesses in Arlington county.

Each year, the Arlington Chamber of Commerce presents ABBIES to businesses that deliver high-quality services to their customers, are industry leaders or offer a unique approach to delivery of goods or services, and display an interest in and

concern for the Arlington community. BDI was one of only nine Arlington businesses that received this honor this year.

BDI Director Jennifer Gamboa, along with BDI staff, accepted the award from WJLA anchor Alison Starling at a breakfast ceremony held on May 16 at the Sheraton in Arlington. Over 200 members of the Arlington business community attended. ■



From the Body Dynamics Director



Greetings to you all. It sure seems like summer went by in the blink of an eye, but we hope that everyone enjoyed some R&R and is ready to hit the fall circuit in a few weeks.

It's back to school and back to sitting more at work. To avoid the stress and strain of heavy backpack loads and longer hours at your desks, check out the tips on backpack and workplace ergonomics in this issue of *evolve*.

As September rolls around, we are celebrating the first anniversary of our Gravity Training and Mindful Movement fitness programs. Thanks to everyone who has helped make these classes such a success.

Feedback from the summer survey tells us that many of you would like to see more options in all of our fitness tracks (thanks to those who filled out a survey), so check out the class schedule as we begin to offer more Pilates, Mindful Movement, and Gravity Training classes as well as new offerings in ballet and stretch. We will continue to work throughout the year to expand your options in each of our curriculum areas.

I'd like to close with a special kudos for Jason Grandeo, Carrie James, and Ashley Templer, each of whom passed the American Board of Physical Therapy Specialties Exam to become a board-certified Orthopaedic Clinical Specialist. Congratulations to our newest OCSs!

Jennifer M. Gamboa, DPT, OCS, MTC

Body Dynamics, Inc.

evolve is a quarterly newsletter of Body Dynamics, Inc.

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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Workplace Ergonomics Prevents Pain From Prolonged Sitting

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back and shoulder muscles, which already tend to hold extra tension; and places your shoulder in an unstable position. Newer headsets and ear pieces are inexpensive, easy to use, and do not alter the quality of the conversation the way that speaker phones do. Get one today!

If you are on phone calls for more than 5 minutes at a time, get a headset.

► BE A "THREE-LEGGED STOOL"

Simply by raising the height of your chair a few inches, sitting slightly forward, and shifting weight onto your feet, you can take weight off of your back and maintain a more upright posture. Think of sitting like a tripod with 30 percent of your weight on each leg and 30 percent through your spine.

► WATCH HOW YOU USE YOUR LAPTOP

Using your laptop for prolonged periods requires that you either raise your hands too high or drop your head too low. Your body will eventually start to protest. Separate keyboards and an adjustable keyboard tray are helpful in allowing you to have a proper position for your arms and hands. An alternative is a separate

monitor at a proper height to prevent eye strain and forward-head posture. A good short-term solution is to place the keyboard on a portable TV tray and use a monitor on your desk or table.

► PRESSING COMPUTER KEYS DOESN'T TAKE A LOT OF STRENGTH

You'd never know this by the intensity with which many of us strike the keys. Forceful use of the fingers causes excessive overuse of the long tendons of the forearm. This can result in overdevelopment of the tendons, which can increase susceptibility to carpal tunnel syndrome. Curve your hands and fingers and tap the keys lightly.

If pain persists despite making the adjustments described here, see your physician or physical therapist. Massage and acupuncture can also be helpful in relieving pain associated with prolonged sitting, and an athletic trainer or movement educator can help you find optimal alignment by strengthening and stretching muscles that have become weak and tight from misuse. ■

LOOKING AHEAD!

BDI's 8-week ACL injury prevention training program for female athletes will begin late winter. Attention coaches, parents, and female athletes: Don't miss the free introductory ACL seminar on November 9 to find out more, and sign up early for the training program!

Back to School, With Comfort

Proper Backpack Selection and Use for Your Child

With the beginning of school just around the corner, many of us will soon be making our annual shopping trip for new backpacks and school supplies. This is a great time for us to consider the potential posture and pain problems that can come from wearing backpacks that fit improperly, are too heavy, or are simply worn wrong.

Research studies have shown that forward-head posture, rounded shoulders, and gait imbalance increase when backpacks are more than 15 percent of the student's body weight. These postural deviations tend to be greater in children and preadolescents. Heavy backpacks cause muscles to work harder over long periods of time. This results in fatigue and soreness, leaving the neck, shoulders, and back more vulnerable to injury.

Most importantly, improper backpack use can lead to the development of bad postural habits during childhood that can continue for a lifetime.

The following tips are recommended for safe backpack use:

- ▶ **Wear both straps.** Use of one strap causes one side of the body to bear the weight of the backpack. Wearing two straps allows the weight of the backpack to be better distributed and promotes more symmetrical alignment.
- ▶ **Wear the backpack over the strongest midback muscles.** The backpack should rest evenly in the middle of the back. It should not extend below the lower back—regardless of what fashion dictates!
- ▶ **Lighten the load.** Keep the load at 10 to 15 percent or less of the student's body weights. Only those items required for the day should be included in the pack. Many schools purchase class copies of heavier textbooks so that students may leave their books at home. Inquire about

this! Another option may be CD copies of text books. Always place heavier items closer to the body and distribute items evenly through the pack.

- ▶ **Stay strong!** As always, the more fit a child is, the better she or he is able to support a heavy backpack.

When choosing a backpack, consider the following ergonomic features:

- ▶ **Size.** A backpack is like a purse or briefcase. The larger it is, the greater the potential for filling it up! Choose a size that is adequate for the amount of books—but no larger.
- ▶ **Padded back and straps.** This will reduce pressure on the back and shoulders and improve comfort.
- ▶ **Multiple compartments.** These are helpful in distributing the load evenly throughout the backpack.
- ▶ **Extra hip and chest straps.** These straps can distribute the weight to the trunk and hips.

Signs that a backpack may be too heavy or is being used incorrectly include red marks across either shoulder, postural changes, difficulty putting on and taking off the backpack, tingling in arms and hands, or general aches and pains in the back, neck, or shoulders. If pain persists after making the adjustments described here, see your pediatrician. ■

Congratulations, Welcomes, and Other Happenings

Congratulations to [Jason Grandeo](#), [Carrie James](#), and [Ashley Templer](#) for passing their Orthopaedic Clinical Specialist (OCS) exams and becoming board-certified OCSs!

Welcome to [Jane Beddoe](#) and [Suzanne Koucheravy](#) as they join our staff of class instructors. Both spent their summer "in residence" at BDI and will bring their expertise to you all in the fall.

Carrying Tips for Adults

The loads we carry to work each day have become heavier, thanks in part to the laptop computer. Below are some tips on how to protect your body while hauling an overstuffed briefcase or computer bag to and from work.

1. **Remember that wonderful invention—the wheel!** The constant weight of a strap over the shoulder causes the muscles of the neck and upper shoulder to work overtime. This can lead to chronic shoulder and neck pain and postural impairments. Rolling carts and computer cases are everywhere. Get one today!
2. **Keep the size small and efficient.** A smaller purse and backpack will assure that you regularly remove unnecessary items and carry only what you need. Choose straps that are wide and padded for less shoulder strain.
3. **Use your core!** Using both straps on a backpack allows your stronger trunk muscles and your bone structure to support the load and is much more efficient. No strap? Carry the load as close to your body as possible.
4. **Use both hands.** If you have a lot to carry, distribute the weight between two bags—and two hands.
5. **Be reasonable about what you really need.** Frequently empty out your bag and consider carefully what you must have. If you absolutely must carry your laptop, gym clothes, and 3 liters of water, use wheels! This is essential if your body is starting to protest.
6. **Stay fit.** This helps more than you realize!

Body Dynamics, Inc. Services and Fees

Fall 2006

PILATES

Initial evaluation	\$100
55-minute private session	\$80
10-pack of private Pilates sessions	\$720

PHYSICAL THERAPY

Fees available upon request

ACUPUNCTURE

90-minute initial evaluation	\$140
60-minute followup sessions	\$90

MASSAGE

30-minute massage	\$50
60-minute massage	\$90
10-pack of 60-minute massages	\$810

GRAVITY TRAINING (GTS)

Custom GTS class (up to 7 people)	\$150
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FITNESS AND SPORTS ASSESSMENTS

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

GROUP CLASSES

See class schedule on BDI Web site

Fall Wellness Lectures

BDI continues its popular "Talking About Wellness" lecture series. See the front desk for further information or to register.

10.28 Women's Health

Carrie James, a BDI Physical Therapist who specializes in women's health issues, will discuss techniques for preventing and managing urinary incontinence, uterine prolapse, osteoporosis, and prenatal/postpartum issues. This interactive session will include instruction in exercises to strengthen and engage the abdominals and pelvic floor. 9-10:30 am, FREE!

11.4 Living With Chronic Pain

BDI Director Jennifer Gamboa and Movement Educator 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. 2-3:30 pm, FREE!

11.9 ACL Injuries in Female Athletes

BDI Physical Therapist Jason Grandeo and Athletic Trainer Christina Vink explain why women are at increased risk for ACL injuries and what injury prevention techniques have proven most successful. Coaches, athletes, and parents are encouraged to attend. 6-8 pm, FREE!

Check It Out! New Classes for Fall!

In response to your comments and suggestions, we've added some new selections to this season's schedule of group classes:

Mindful Cardio: Enjoy a low-level cardiovascular workout based on Mindful Mat principles and Nia techniques, which incorporate movement ideas from dance, yoga, and the martial arts.

Gravity Pilates Class: Challenge yourself to a full hour of advanced Pilates exercises on the Gravity Training equipment.

An old favorite, Pilates Ball, also returns to the schedule, and additional Ballet, Stretch, Mindful Mat, and Gravity Training classes have been added to the schedule as well. Enjoy!

Fall 2006 Events

8.22	Early Bird Registration Deadline
9.4	Fall Classes Begin
9.4	Labor Day—No Classes
10.28	Free Lecture: Women's Health
11.4	Free Lecture: Living With Chronic Pain
11.9	Free Lecture: ACL Injuries in Female Athletes
11.22	Thanksgiving—No Evening Classes
11.23-5	Thanksgiving—No Classes
12.23	Fall Classes End

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