

evolve

The Body Dynamics Monthly Newsletter

Prevent Back-to-School Back Pain! Smart Tips for Spine Safety

Jennifer Gamboa, DPT, OCS, MTC

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 incorrectly.

Research studies have shown that forwardhead posture, rounded shoulders, and gait imbalance increase when students wear backpacks that are more than 15 percent of their body weight. These postural deviations tend to be greater in children and preadolescents. Improper backpack use can also lead to the development of bad postural habits during childhood that can continue for a lifetime. For all of these reasons, it's important to select a backpack carefully and to teach your child to wear it properly.

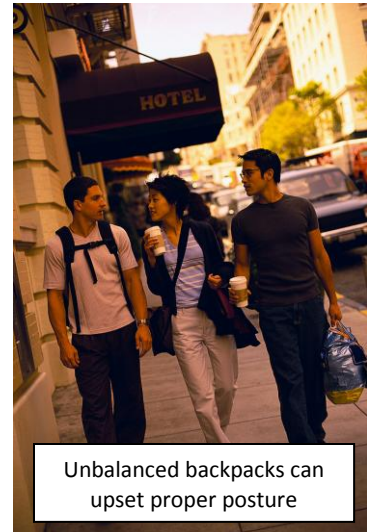
The following tips are recommended for safe backpack use:



Check your children's backpacks to make sure they adhere to safety tips!

- Wear both straps. This better distributes the weight of the backpack and promotes more symmetrical alignment.
- Wear the backpack over the midback. The muscles of the midback are strongest and best able to support a heavy load. Never let a pack extend below the lower back, regardless of what fashion dictates!
- Lighten the load. Keep the back pack at 10 to 15 percent or less of your child's body weight. Only those items required for the day should be included in the pack.
- Stay strong! The more fit your child is, the better she/he is able to support a heavy backpack

When choosing a backpack, consider the following ergonomic features:



Unbalanced backpacks can upset proper posture

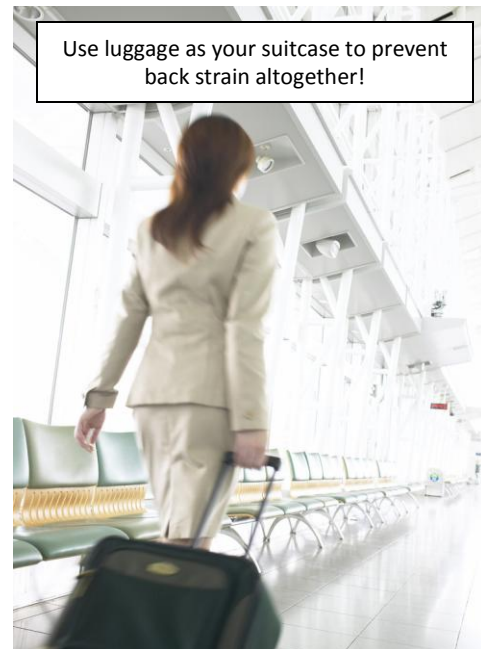
- Size. The larger a backpack is, the greater the potential for filling it up! And heavy backpacks cause muscle fatigue and soreness. Choose a size that is adequate for the amount of books—but no larger.
- Padded back and straps. This will reduce pressure on the back and shoulders and improve comfort.
- 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.

There are a variety of signs that your child’s backpack may be too heavy or is being used incorrectly. These signs include red marks across the shoulders, 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. Check in with your child to see if the backpack is causing pain! We are happy to help get them in top form with a Fitness Evaluation and training program. If pain persists after making the adjustments described here, see your pediatrician.

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!



With a few simple adjustments you can keep your back healthy all year round! Have any questions? We are happy to help! Give us a call at 703 527 9557 to schedule or for more information.

