



14 Stiles Road ~ Suite 104 ~ Salem, NH 03079  
(603) 894-5654 www.drholly.net

## **Your Health & Wellness Series By Dr. Holly Ruocco, D.C.**

---

### **BACKPACK SAFETY**

Backpacks are a necessary part of a student's life. They contain everything kids need to get through their school day – lunch and snacks, books, supplies, homework – all manner of 'stuff'. Backpacks come in an endless array of sizes and styles and, like clothing, provide students with a way to express their personal style. Although backpacks may seem like an innocuous item, that may not be the case. Consider this, "AS THE TWIG IS BENT, SO GROWS THE TREE." This ancient Korean proverb conjures a perfect mental picture to convey the point that a child's posture is KEY when correcting, maintaining and preserving their spinal health. Unfortunately, many of our school-aged children are carrying far too much weight in their backpacks – and to make matters worse, not wearing their backpacks properly – and the resulting poor posture can have a direct negative effect on their spinal health.

Dr. Shelley Goodgold, backpack researcher and associate professor of physical therapy, says, "I challenge any doubting adults to try wearing their child's backpack loaded to 15% of their (the adult's) weight. Quickly they'll realize that adults need to take action to reduce these unreasonable loads. To tackle this problem, parents need to work collaboratively with health professionals, school officials, and children."

*Did you know. . .*

12 pounds in your child's backpack  
x 10 lifts per day  
= 120 pounds per day  
x 180 school days per year  
**= 21,600 pounds lifted in one school year!**

**That's nearly 11 tons of weight, or 6 mid-size automobiles, in one school year!**

To help understand how heavy backpacks can affect a child's body, it helps to understand how the back works. The spine is made up of 33 bones called vertebrae, and between the vertebrae there are discs which function as shock absorbers. When a heavy weight is incorrectly placed on the shoulders, the weight's force can pull a child's posture backward. To compensate, a child may bend forward at the hips or arch the back, which can cause the spine to compress unnaturally. Some children even develop shoulder, neck and back pain just from the use of backpacks. Kids who sling their packs over one shoulder often end up leaning to one side and can end up with similar problems. Also, backpacks with tight, narrow straps can interrupt proper circulation and nerve flow.

Be proactive! These quick steps will help you detect or eliminate problems relative to your child's posture and spinal health:

### **Conduct A Quick, At-Home Screening**

- 1.) Standing behind your child, have the child close his or her eyes.
- 2.) Check the level of his or her head, ears, shoulders, and hips. If they are level, the spine is usually straight. If one side is higher than the other, a spinal curve exists which may result in pressure on the joints, discs and nerves.
- 3.) Now check from the side view. The ears should be directly over the shoulders. Shoulders should be directly over the hips. Hips should be directly over the knees. When this is not the case, there is stress on the natural spinal curves.
- 4.) Now check your child wearing his or her backpack. Posture should still be correct.
- 5.) If you see any signs of posture imbalance or if your child has been complaining of neck, shoulder or back pain, call us right away for a FREE, no obligation consultation. We are participating Backpack Safety America™ Doctors of Chiropractic.

### **Make Sure Your Kids Choose And Wear Their Backpacks Properly**

- 1.) Make sure your child avoids messenger-style bags as they do not properly distribute the weight of the bag – their design is inherently poor.
- 2.) Choose a lightweight pack – you do not want the pack itself to add to the weight load your child must bear.
- 3.) Choose a pack that has two, wide, and padded shoulder straps.
- 4.) Choose a pack with a padded pack – this provides increased comfort and safety.
- 5.) Choose a pack with a waist belt – and be sure your child uses it!
- 6.) Choose a pack with multiple compartments. Compartments can help distribute the weight load more evenly.
- 7.) And finally, do whatever you can to help your child lighten his or her backpack load!

Children have one chance to grow properly. Do whatever you can to help ensure that your child's skeletal structure is forming as it should – doing so will help his or her growing body get off to a great start, thus building the foundation for a lifetime of health!

For more information on backpack safety, please go to [www.backpacksafe.com](http://www.backpacksafe.com).