

## Back to School Doesn't Have to be a Pain in the Back

*A message brought to you by the members of the College of Chiropractors of Alberta*

With kids back at school, parents are faced with purchasing school supplies for their children, where the best bargain is often the best buy. You've worked hard to find the best deals on school supplies, clothes and shoes - without compromising fashion – now that's something to be proud of!

Now is the time to consider purchasing that all important backpack. Stick to your guns, function takes precedence over fashion on this one. While form and function are of utmost importance you may wish to consider the issues of comfort, support and appropriate size. Just like children - backpacks come in all shapes and sizes. Don't be tempted to purchase the biggest, cheapest pack, as this could actually be harmful to your child's back.



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Some of the statistics below may influence your decision when purchasing your child's backpack.

- ☞ By the end of the teen years, more than 50 per cent of youth experience at least one low back pain episode (Spine 1998; 23:228-34). Research indicates that this may be due in part to improper use of backpacks.
- ☞ Research has found that carrying a backpack alters the mobility of spinal bones, leading to restricted movement - a risk factor for back pain (Spine 1999; 15; 24:1015-22).

What do you look for in a backpack? How do you know what makes a good backpack? Here are some tips for choosing a backpack:

- ☞ Choose a backpack that is proportionate to body size and not larger than what is needed. The top of the backpack should not extend higher than the top of the shoulder, and the bottom should not fall below the top of the hipbone.
- ☞ Select a backpack made of lightweight material (vinyl or canvas instead of leather).
- ☞ The shoulder straps should be at least two inches wide, adjustable and padded. Ensure that they do not cut into or fit too snugly around the arms and arm pits. Poorly designed shoulder straps can dig deep into the muscles and put strain on the nerves.
- ☞ A backpack should have a padded back for added protection and comfort.
- ☞ A hip strap or waist belt helps to effectively redistribute as much as 50 to 70 per cent of the weight off the shoulders and spine onto the pelvis, equalizing the strain on the bones, joints, and muscles.
- ☞ Choose a backpack that has several individual pockets instead of one large compartment, this will help to distribute the weight evenly and keep contents from shifting.
- ☞ Explore other backpack options such as one with wheels and a pull handle for easy rolling.

Now that you've purchased a strong, suitable sized backpack for your child, be sure your child uses it properly and does not overload it. The more your child adds to their pack, the bigger the load on their back. A heavy pack on the back can:

- ☞ Injure their neck, shoulder, back, cause numbness in the arms, and reduce blood flow to the surrounding muscles and tissues.
- ☞ Create poor posture by encouraging the carrier to lean forward, reducing their ability to maintain balance and restrict movement.
- ☞ Distort the natural curve in the middle and lower back, which leads to muscle strain along with irritation of the spine, joints and muscles.
- ☞ Cause rounding of the shoulders.
- ☞ Put stress on neck muscles, contributing to headaches and neck pain.

**What's the best way to carry a pack?** Pack it light. Wear it right. Help your child get in and out of their backpack. Place the pack on a table, and help them put it on one strap at a time. Ensure that your child wears both straps. Slinging a backpack on one shoulder or carrying an overloaded shoulder bag can put a lot of strain on your child's growing body and spine. Arrange your child's backpack so that the heaviest items are closest to their body. Encourage them to use their waist belt, and adjust the straps.



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**So how much is too much?** Elementary-aged children who weigh 50 – 80 lbs (22 – 36 kg) should not carry more than 10% of their body weight in their pack. For secondary school kids, 90 – 130 lbs (41 – 59 kg), only 15% of their total body weight should be carried on their back. For example, a 60 lb (27 kg) child should only carry a maximum of 6 lbs (2.7 kg) on their back. This equates to one large textbook or a laptop computer. Factor in the extras like sports gear and a lunch, and your child could be carrying up to 18 lbs (8 kg) on their back! For a 60 lb (27 kg) child, that's 30% of their body weight!

To ensure that your child's back is healthy and strong consult a Chiropractor. A Chiropractor can teach you and your child how to pack, lift and carry their backpack properly to prevent injury. Regular spinal check ups for children can prevent back problems before they start.

For more information on chiropractic and the proper use of backpacks visit [www.albertachiro.com](http://www.albertachiro.com).

