

CHOOSING THE RIGHT BACKPACK FOR YOUR CHILDREN

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Carrying a poorly designed or overloaded backpack can place excessive weight on a child's growing spinal column. This type of daily physical stress can lead to irritation and injury of the spine, joints, and muscles, which can potentially result in postural changes, back pain, and headaches.

Parents and children can avoid injury by following these simple rules with respect to choosing, packing, and carrying a backpack.

- 1. Pick the correct size:** Choose a backpack that is proportionate to body size and not larger than 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.
- 2. Choose lightweight material:** Select a backpack made of light material. For example, nylon, vinyl or canvas instead of leather.
- 3. Strap it up:** 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 and under the arms. A hip strap or waist belt helps to effectively redistribute as much as 50 to 70 percent of the weight off the shoulders and spine onto the pelvis, balancing the backpack weight more evenly.
- 4. Padding goes a long way:** A backpack should have a padded back for added protection and comfort. Pack odd-shaped items on the outside so they do not dig into the back.
- 5. Pack it right:** Contents should be evenly distributed, with the heaviest items packed closest to the body. This reduces the strain, as the weight is closer to the body's centre of gravity.
- 6. More pockets are better:** 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.
- 7. Wheels and handles:** Explore other backpack options such as a backpack with wheels and a pull handle for easy rolling.
- 8. Weight is everything:** Backpacks should never exceed 15 percent of a secondary school child's body weight or 10 percent of an elementary school child's body weight.
- 9. Handle with care:** Children should learn to squat or kneel to pick up their backpacks, and use their legs by bending at the knees and not twisting the back when lifting. Backpacks can be placed on a counter, chair or table before they are put on. Slinging backpacks on one side of the body may place excessive stress on the joints and muscles of the mid and lower back.



Parents should ask their kids to report any pain or other problems resulting from carrying a backpack. If the pain is severe or persistent, seek care from a qualified health professional. For more information, visit www.nhwc.ca. The author credits the Ontario Chiropractic Association (OCA) in the preparation of this educational information for use by its members and the public.

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