

[IMAGE]

Packing a Wallop

If you have children in elementary or middle school, you are probably used to seeing them trudge to and from school with backpacks stuffed with heavy textbooks. What you may not know is that children who regularly carry backpacks and schoolbags generate a substantial force on their spines, which may lead to low back pain.

A study appearing recently in the journal *Spine* evaluated whether children's perceptions of backpack weight or actual backpack weights are related to back pain, and uncovered personal, familial, and school factors that determine backpack weight. In the study, involving 11-year-old schoolchildren in Milan, Italy, researchers recorded the backpack weights of nearly 250 students over six days; 115 of these children completed a questionnaire on their feelings about carrying their backpacks.

Backpack-related activities led to low back pain in almost half of the students; four out of five felt their backpacks were heavy; and two-thirds responded that they felt fatigue when carrying their backpack. Surprisingly, low back pain was not linked to backpack weight or proportion of backpack-to-student weight, but was "clearly" associated with fatigue while carrying a backpack. Lifetime prevalence of low back pain was related to the amount of time children carried backpacks on their shoulders.

In this study, the average backpack weighed 20 pounds. The resulting spinal loads on the 11-year-old children proportionally surpassed the legal occupational limits set for adults, according to the authors of this study. To reduce your child's backpack weight, examine the daily contents to assure only necessary items are within, and have your children leave what they can in their lockers at school.

Reference:

Negrini S, Carabalona R. Backpacks on! Schoolchildren's perceptions of load, associations with back pain and factors determining the load. *Spine* 2002;27(2), pp. 187-195.

To learn more about pediatric health, go to <http://www.chiroweb.com/find/archives/pediatrics/index.html>.

Page printed from:

http://www.toyourhealth.com/mpacms/tyh/article.php?id=417&no_paginate=true&no_b=true