

Back to School Backpack Safety

One of the more unfortunate trends I see is an increase in children and adolescents with low back pain. There are a number of different causes for this trend. These include a decrease in physical activity, poor diets, childhood obesity, and improper use of backpacks and the carrying of excessive weight in those backpacks.

Back pain is not a problem exclusively of adults. Back pain in children is a serious condition. As many as one third of children who complain of low back pain have a serious condition such as an infection, tumor, or an injury. When children complain of back pain it is more serious than when adults do.

The incidence of children and teens who report having back pain is surprisingly high. A Danish study demonstrated that by the age of eighteen 50% of girls had experienced low back pain and by the age of twenty, 50% of men experienced low back pain. It has been reported that 23% of school absenteeism is related to low back pain and that number jumps to 29% of absenteeism when athletic injuries are also considered. In addition, it has also been reported that up to 75% of children who developed psychological problems, including depression, had low back pain as a triggering cause.

Many of the conditions that cause low back pain in adults also cause low back pain in children. This may include sports injuries, other traumas, emotional or psychological stressors, poor posture, and spinal misalignments. An extreme example of spinal misalignment is scoliosis. In this condition, there is a significant sideways curve of the spine. At its worst, scoliosis can cause not only pain and deformity, but it can also interfere with the function of internal organs such as the heart, lungs, or liver.

Poor posture is a leading cause of back pain in children. All one has to do is look around wherever children and teens congregate and see them slouching or standing with poor posture. While seemingly insignificant, these postures increase the stress and strain on the soft tissues around the spine. This in turn, will alter the way the spinal segments, called vertebrae, move and function. This in itself can cause pain. These dysfunctional spinal segments can lead to degenerative changes in later life and stress the intervertebral discs increasing the risk of disc herniation.

Another leading cause of back pain in children is the improper use of backpacks. Kids are expected to carry a significant amount of weight to and from school. The number and size of their school books gets progressively greater as they move from elementary school to middle school to high school. They often use backpacks to carry these books. While the backpack will indeed make transporting the student's school materials easier, when used improperly, they also increase the risk of back injury.

The total weight of the backpack and school supplies carried by students should not exceed 15% of the student's weight. Therefore, if the child weighs 100 pounds the backpack should not exceed 15 pounds. Once this percentage of body-weight is exceeded the likelihood of the child developing back pain is increased.

Parents can help their children prevent back pain by teaching them to limit their backpack weight. They should make sure the backpacks contain only what is needed for school. This weight issue becomes harder to manage when the student is also involved in after school sports. In many situations it is impractical or impossible to actually limit the weight to only 15% of the body weight. This may include students who have to carry sports equipment, extra books for after school music lessons, or any of a number of other after school activities. Parents and teachers should encourage students to only carry those materials they will need during the day and to place the remainder of their books and supplies in their locker until they need them.

The student should also be shown how to appropriately wear the backpack. They should use both the shoulder straps and not just throw the pack over one shoulder. They should also wear the waist strap. This helps stabilize the load while the student is wearing the backpack. If used appropriately, the backpack can be a safe and effective way for children to transport their books and supplies.

Your chiropractor will be able to determine if your child's back complaints are due to a serious medical condition, or due to poor posture or spinal alignment. They will also be able to teach your child how to use his or her backpack. If the child's back pain is due to a serious medical condition your chiropractor will direct you to the appropriate treatment for your child.

For more information on backpack safety go to www.drleokenney.com.