



OPTIMAL HEALTH UNIVERSITY™

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Issue 1, September 2026

Back to School, Exercise, Low Back Pain & Backpacks

Presented by:

Introduction

Yes it is that time of year again. Summer vacation is over, and it's time for kids to get back to school. But your chiropractor wants you to keep in mind several things that can impact your child's health when he or she returns to school.

Low back pain in children is a significant concern. According to a survey of school-aged children, the lifetime prevalence of low back pain is over 40%. And up to 26% of children missed school because of low back pain - with over 13% of cases including recurring and/or disabling pain!¹

From Activity to Inactivity

Once out of school, a good number of kids spend the summer being more physically active. With the warmer weather many kids take to the swimming pools, the baseball fields and the tennis courts. Activity is great for keeping the joints moving and healthy. Since joint surfaces don't receive any blood supply, their tissues need to receive nutrients from the synovial fluid within the joint. To keep refreshing and replenishing these nutrients, a pressure gradient is required to help disperse these substances into the fluid.

Movement is the key ingredient for this pressure gradient.

When they go back to school, kids' levels of activity often decrease significantly. While a minimum amount of exercise is required in most curriculums, kids spend the majority of their time sitting at desks. This is unhealthy for the joints, as the joint cartilage can begin to atrophy, which may lead to degenerative changes over time. So, during the school year, it's important for children to have a healthy amount of physical activity planned for after school. This could include sport activities or regular family exercise outings a minimum of 2-3 times per week.



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QUESTION:

To decrease the chance of back pain, you should:

- A) Carry your backpack in front of your body
- B) Put heavier items in backpack outer pockets
- C) Use backpack waist strap
- D) Carry backpack with one shoulder strap

ANSWER:

C) Use the waist strap - it distributes weight more evenly

TRUE OR FALSE:

Wearing a backpack with 2 shoulder straps prevents back pain

ANSWER:

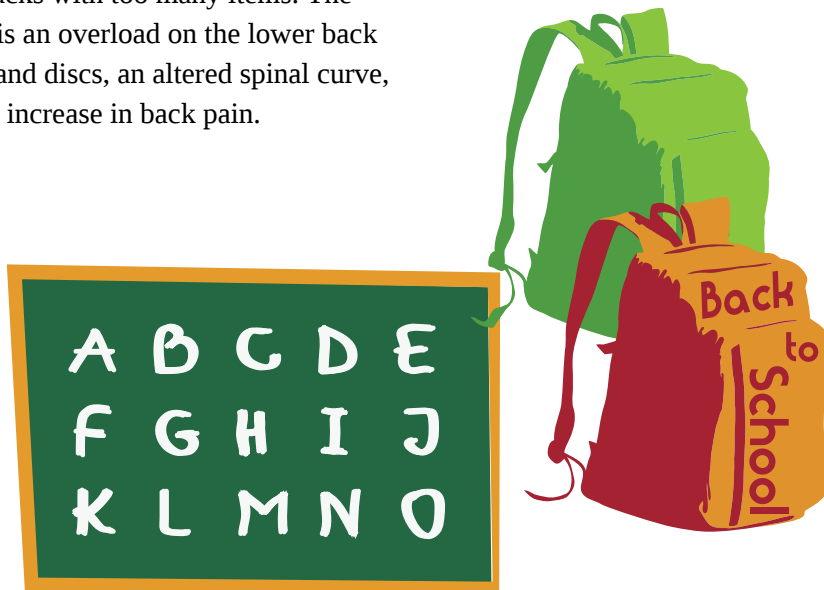
False – if backpack is too heavy or improperly worn

Posture, Posture, Posture

The autonomic nervous system is used to maintaining a steady state of physical function within the body. Any repetitive activity or position, if repeated enough, will become normal for the body, even if it's unhealthy. The majority of the time spent at school is sitting at a desk. Incorrect sitting positions can place an abnormal amount of pressure on the joints and discs of the lower back, and this can contribute to bouts of back pain. Ask your chiropractor for advice on how to sit properly, and whether your child should use a back support when sitting at school.

Backpacks Can Be Burden

According to many researchers, backpacks are a major contributor to back pain in school-aged children.^{2,3,4} Most children use backpacks that are too big for them, and they don't wear them properly. They also fill their backpacks with too many items. The effect is an overload on the lower back joints and discs, an altered spinal curve, and an increase in back pain.

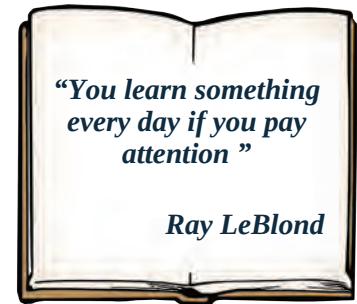


Be sure your child has a proper backpack. Your chiropractor can provide tips on the correct type, size and usage of these bags for kids.

When Your Child Suffers Low Back Pain

Recurring bouts of back pain not only require treatment, but also investigation regarding the cause of the symptoms, and tips on how to prevent it. If your child reports an acute incidence of back pain, rest and ice should be considered as your first options to decrease the symptoms. If the pain persists past one or two days, you should take your child to a chiropractor for an assessment. Irritation of the spinal joints, muscles and discs can be as much of a problem for a child as it can be for an adult. Vertebral subluxations are not age dependent. Your chiropractor is specially trained in the conditions that can affect the spine, and often a single visit can create a significant amount of pain reduction for your child.

Quote to Inspire



1. Jones MA, Stratton G, Reilly T & Unnithan VB. A school-based survey of recurrent non-specific low-back pain prevalence and consequences in children.

Health Education Research 2004 (June); 19(3): 284-289.

2. Negrini S & Carabalona R. Backpacks on! Schoolchildren's perceptions of load, associations with back pain and factors determining load. *Spine* 2004; 27, 187-195.

3. Neuschwander TB, Cutrone J, Macias BR, Cutrone S, Murthy G, Chambers H & Hargens AR. The effect of Backpacks on the Lumbar Spine in Children: A Standing Magnetic Resonance Imaging Study. *Spine* 2010 (January); 35(1): 83-88.

4. Siambanes DO, Martinez JW, Butler EW & Haider T. Influence of School Backpacks on Adolescent Back Pain. *J Pediatr Orthop* 2004; 24: 211-217.

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