

Heavy rucksacks storing up back problems for many school-kids

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Significant numbers of teens regularly carry rucksacks for school which top 10 to 15 per cent of their body weight and risk back pain and other related disorders, finds research published online in the *Archives of Disease in Childhood*.

The problem is compounded by a predominantly [sedentary lifestyle](#), say the researchers.

They assessed the back health of 1403 [pupils](#) between the ages of 12 and 17, drawn from 11 schools in one province in North Western Spain.

The teens were weighed twice - once without coats and other items likely to add weight, such as mobile phones, keys, and change, but with the rucksack/backpack they normally carried - and the second time without their rucksack.

Their height was also measured and information obtained from their teachers about lifestyle, focusing particularly on sporting activities at school, [sedentary activities](#) at home and any underlying [health problems](#).

Information on back health was also sought, including a diagnosis of a spine disorder and the presence of back pain for more than 15 days in a row during the preceding year.

Most (92%) of the teens used a rucksack with two straps, which weighed almost 7 kg on average.

Well over half of the teens (61.5%) were carrying rucksacks that exceeded 10% of their own body weight, while almost one in five (18%) carried a rucksack that topped 15% of their body weight.

One in four (just under 26%) said that they had had back pain for more than 15 days during the previous year. The most common back problem (70% of those with a diagnosis) was [scoliosis](#) or curvature of the spine, followed by [low back pain](#), and contractures - continuous and involuntary muscle contraction.

Girls were more at risk of back problems than boys and their risk seemed to increase with age.

Those teens whose rucksacks were among the top 25% in weight were 50% more likely to have back pain for in excess of 15 days than those whose backpacks weighed the least.

The authors point to previous research linking rucksacks to altered gait and posture, which, over the long term, can result in chronic pain and other back problems.

Many children transport excessively loaded backpacks, which is harmful to a developing body, note the authors, who urge doctors and teachers to start advising parents and children on the risks of carrying heavy bags to school every day.

Provided by British Medical Journal

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