

A PARENT'S GUIDE TO BACKPACK ERGONOMICS



Parents, did you know that according to the Australian Physiotherapy Association, up to 70% of Australian school children wear backpacks that exceed the recommended weight limit? Research from the University of South Australia found that nearly half of all Australian students experience back pain related to heavy or incorrectly worn school bags.

Improper backpack use can lead to:

- Poor posture and abnormal spinal alignment.
- Back, neck, and shoulder pain.
- Muscle strain and fatigue.
- Long-term musculoskeletal issues.

This guide will help you select the right backpack and teach your child proper usage habits to protect their developing spine.



ESSENTIAL FEATURES TO LOOK FOR:

✓ **Lightweight:**

Try and reduce the overall weight before adding any contents, aim for <1kg.

✓ **Proper Size (child size, not adult size):**

The total height should match the torso length of your child: it should sit below their shoulders and not go past their hips.

✓ **Look for padded straps and a padded back:**

This distributes weight evenly and reduces pressure on shoulders, provides comfort and protects them against sharp objects.

✓ **Pack it right:**

Pack heavier items near their body. This creates a stable center of gravity, reducing strain on their back muscles. Purchase a laptop sleeve if needed.

✓ **Wear it tight:**

Tighten the straps so the backpack fully contacts with their back, with the bottom at waist level.

✓ **Always wear 2 straps, not 1:**

It's much better for their growing spines to have the weight evenly distributed.

TIPS:

The 10% Rule:

A child should never carry more than 15% of their body weight in their backpack. The Australian Spinal Research Foundation recommends an even more conservative 10% for primary school children.

Quick Weight Guide:

- 20 kg child: maximum 2-3 kg backpack weight
- 30 kg child: maximum 3-4.5 kg backpack weight
- 40 kg child: maximum 4-6 kg backpack weight
- 50 kg child: maximum 5-7.5 kg backpack weight

Practical Solutions:

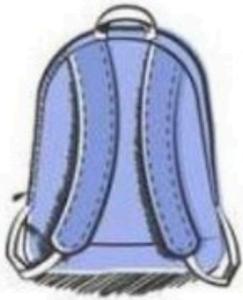
- **Weekly cleanouts:** Schedule Sunday evening backpack cleanouts.
- **Digital alternatives:** Use electronic versions of textbooks when available.
- **School storage:** Use lockers or tote trays for items not needed all day.
- **Double sets:** Consider purchasing a second set of textbooks to keep at home.
- **Roller bags:** For children with existing back issues or heavier loads, consider a trolley bag (where school policies permit).

THE 10-POINT BACKPACK CHECKLIST

Teach your child to follow this checklist. Consider posting it near where they keep their backpack or inside their school diary:

- I wear BOTH shoulder straps.
- My backpack has padded, wide straps.
- I wear my straps done up tight so that my backpack has full contact with my back.
- My backpack is the right size for me: being below my shoulders, and above my hips.
- My backpack weighs between 10% of my body weight.
My weight: _____ kg \times 0.1 = _____ kg (maximum backpack weight).
- I bend my knees (not my back!) to pick up my backpack.
- I take my backpack off when standing in a line or at the bus stop.
- I clean out my backpack every week to remove items I don't need.
- I use all the compartments to distribute weight evenly.
- Heavy items are placed closest to my back.
- My backpack stands up by itself when placed on the ground.

10 TIPS ON GOOD BACKPACK ERGONOMICS



1. Choose a backpack with wide padded shoulder straps.



2. Wear both shoulder straps to prevent shoulder alignment issues.



3. Never overpack! Backpack should never weigh more than 15% of your body weight.



4. Always lift your backpack by squatting down and using your legs to lift, not your back.



5. Look for backpacks with a waist and chest belt to better distribute heavy loads.



6. Position the backpack below your shoulders and above your hips.



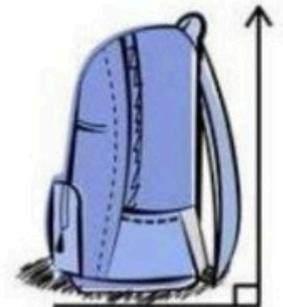
7. A backpack with multiple compartments can better distribute the load.



8. Encourage your child to remove their backpack when waiting in line or standing for a long time.



9. Every few weeks, clean out your backpack for unused items that may be weighing you down.



10. Look for backpacks that stand upright when placed on the ground.

THIS PAMPHLET WAS DEVELOPED BY ALLY REYNOLDS,
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