

It's in the Bag: Purses, Backpacks, Briefcases and Back Pain

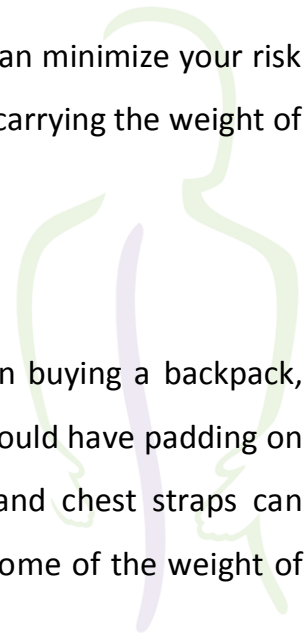
From purses to backpacks, briefcases to pocketbooks, our bags serve both as useful carryalls and fashionable accessories. Men, women, and children alike tend to overfill their bags with heavy items, including water bottles, books, laptop computers, organizers, umbrellas, even makeup and clothing, which begs the question, "What's in your bag?"

Toting a purse, backpack or briefcase in one hand or on one shoulder can distort your balance and posture by forcing you to raise your shoulder and lean sideways to support the uneven load on your body. Over time, the natural alignment of your spine may be altered, which can lead to muscle strains, headaches, back, neck, arm and shoulder pain. This can be particularly problematic for children and teenagers, since young people who experience back pain are more at risk of having back pain as adults [1].

Regardless of which type of bag you use, some simple tips can minimize your risk of injury or discomfort, so you don't have to feel like you're carrying the weight of the world on your shoulders. Consider the following factors:

Design of the Bag:

Opt for purses and bags with wide adjustable straps. When buying a backpack, look for one that is proportionately sized to your body. It should have padding on the back and shoulder straps. As well, adjustable waist and chest straps can reduce strain on the back and shoulders by redistributing some of the weight of



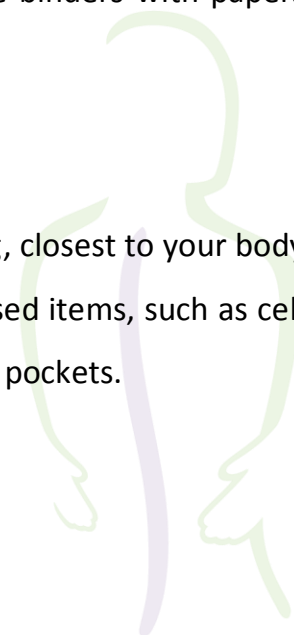
the bag onto the pelvis [2]. Choosing a bag with multiple front and side pockets rather than just a single compartment will allow for easier accessibility of items like spare change, pens, and water bottles. Multiple compartments help minimize the amount of twisting, reaching, and digging you must do to retrieve the contents of your bag..

Weight of the Bag:

Studies indicate that your bag should not exceed fifteen percent of your body weight for children and youth and twenty percent for adults [1]. Choosing a bag made out of a lightweight material, such as vinyl or canvas, will help decrease its overall weight. In addition, consider removing unnecessary items from your bag and downsizing your essential contents. Instead of lugging a large water bottle, for example, choose a small one, which you can refill periodically during your day. Choosing compact or travel-sized items, including computers, hairbrushes and pencil cases, can go a long way to lightening your load. Finally, try to consolidate your items; for example, instead of carrying three separate binders with papers and notes, switch to a single soft-cover binder with dividers.

Packing the Bag:

Heavier items should be placed toward the back of your bag, closest to your body in order to minimize the stress on your spine. Frequently used items, such as cell phones and wallets, should be packed in easy to reach front pockets.



Carrying Technique:

When using a backpack, be sure to carry it across both your shoulders and to make use of any waist or chest support straps. The straps should be adjusted so that the bag fits snugly and comfortably against your body. Wear your purse or shoulder bag with the strap over your head to better distribute the weight across your body and switch sides occasionally. If carrying a purse or briefcase by hand, make a point to switch hands regularly in order to avoid placing the entire burden on one side of the body.

Ten Tips to Help Prevent Injuries and Discomfort When Carrying Bags

1. Choose bags and purses made out of lightweight materials.
2. Pick bags with wide, adjustable straps or handles.
3. Select bags with multiple front and side pockets for easy access to frequently used items.
4. Opt for bags that are proportionately sized to your body.
5. Limit the weight of your bag to fifteen percent of a child's body weight or twenty percent of an adult's weight.
6. Use waist and chest support straps whenever possible to distribute the weight of the bag across your body.
7. Remove unnecessary items from your bag.
8. Downsize the contents of your bag by choosing compact or travel-sized items.
9. Pack heavier items in the back of your bag, closest to your body or back.
10. Switch shoulders and hands regularly when using single-strap bags to spread the weight across the body.

If you experience pain when carrying your bag, purse, or briefcase, your chiropractor can help. Doctors of chiropractic are specialists trained to treat and prevent disorders of the spine and extremities. They also offer gentle hands-on treatment to the joints and soft tissues, which has been shown to improve mobility and function. Your chiropractor will be able to provide you with tips and advice on how to choose, pack, and carry your bag, so that you can take a load off and get through your day safely and comfortably.

References:

1. Mackenzie WG, Sampath JS, Kruse RW, Sheir-Neiss GJ (2003). Backpacks in Children. *Clin Orthop Relat Res.* Apr; (409): 78-84.
2. Mackie HV, Stevenson JM, Reid SA, Legg SJ (2005). The Effect of Simulated School Load Carriage Configurations on Shoulder Strap Tension Forces and Shoulder Interface Pressure. *Appl Ergon.* March;36(2): 199-206.

