

Carrying Work Home- Painlessly!

Many of us carry mini-offices around with us. The internet has not relieved us of the need to bring tablets, laptops, water bottles, file folders, pens, books, chargers and other objects with us.

Many devices have been invented to allow us to carry pounds/kilos of (weight) and volumes- cubic inches/ liters (of objects) including Backpacks. Rucksacks. Sidepacks. Frontpacks. Briefcases. Messenger Bags. Shoulder packs. Rollerpacks. Pack baskets.

Carrying the load on your back, shoulder or hand- which is the best?

The Consumer Product Safety Commission reports that 7300 person seek medical attention in emergency rooms for bruises and strains and sprains to back and shoulder.

Many scientific and medical organizations have studied the problem of injuries and diseases associated with human transport of materials and equipment and have recommendations. These include the American Physical Therapy Association, the American Occupational Therapy Association, American Chiropractic Association, and American Academy of Orthopedic Surgeons.

In 2004, the U.S.Army Soldier System Center in Natick MA conducted battlefield research and confirmed that highly fit soldiers were often exceeding the 48 pound backpack limit specified in the Field manual(1990).



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This is more than previous research which limited carry load to 40 pounds between 1920 and 1950. This is about 23% of the average body weight. For the average worker, the recommended load is 15% of body weight. Hence a 175 pound person should limit the carry weight to 26 pounds. The average commuter backpack weighs 3 to 5 pounds hence the load should be limited to 21 pounds.

Back carry:

Back packs should have padded, wide shoulder straps. They should also have both chest and waist belts to hold the pack against the back. Heaviest object should be packed against the back. Multiple compartments allow weight to be distributed evenly on both shoulders.

Weigh the filled bag. If you change posture, have trouble donning the backpack, have any muscular pain while wearing the pack, have tingling or nerve numbness or it leaves red marks-It is probably too heavy.

NOTE: Back carry is healthier than shoulder or hand carry of loads.

Shoulder carry:

The problem with shoulder carry is the angle of the shoulder. Normal posture in general causes straps to fall off the shoulder and persons adjust posture to prevent this. Limit weight to 15% fit- body weight.

Hand carry:

Briefcases are equipped with a padded or unpadded handle and hand carried and can vary in size with the largest typically called a tote with a weight of 5 lbs. and a volume of 32 liters. Limit weight to 15% fit-body weight.

NOTE: Fit body weight is the weight you would be if you were reasonably fit for your height, body type and age. Overweight people cannot stand heavier bags.