

Demonstrating How Helmets Affect Impulse and Impact Force

A medicine ball is dropped on to a force platform twice from the same height.

(a) Without a “helmet” and (b) with a “helmet”.

FYI: The “helmet” is a cloth diaper, which serves the exact same function as a helmet for our medicine ball.

$$\Delta \vec{p} = \vec{F}_{avg} \Delta t = \text{Impulse}$$

Remember, a helmet will increase the time during the collision to decrease the average force during the collision, however, it should not affect Impulse.



