

The Scoop on Snow Shoveling Safety

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It happens every winter in the Midwest: Snow falls, usually leaving piles of the stuff to clear from your sidewalks and driveway. Consider the following before you grab your shovel after a major snowfall:

The good news is that 15 minutes of snow shoveling counts as moderate physical activity. We all should aim for at least 30 minutes of moderate physical activity of some kind on most days of the week. A 170-pound person shoveling for 30 minutes will burn about 250 calories. Brisk walking or social dancing are other ways to fit in moderate physical activity during cold winter months.

The bad news is that researchers have reported an increase in the number of fatal heart attacks among snow shovelers after heavy snowfalls. This rise may be due to the sudden demand that shoveling places on an individual's heart. Snow shoveling may cause a quick increase in heart rate and blood pressure. One study determined that after only two

minutes of shoveling, the heart rates of sedentary men rose to levels higher than those normally recommended during aerobic exercise.

Shoveling may be *vigorous* activity even for healthy college-aged students. A study performed by researchers at North Dakota State University determined that, based on heart rate, shoveling was a moderately intense activity for college-aged subjects most of the time but was vigorous activity during about one-third of their shoveling time of 14 minutes.

The weather can make shoveling more difficult. Cold air makes working and breathing hard, which adds some extra strain on the body. Shovelers also are at risk for hypothermia, a decrease in body temperature, if they are not dressed correctly for the weather conditions.

Who should think twice about shoveling snow?

Those most at risk for a heart attack include:

- Anyone who already has had a heart attack
- Individuals with a history of heart disease
- Those with high blood pressure or high cholesterol levels
- Smokers
- Individuals leading a sedentary lifestyle



A Pile of Snow-shoveling Tips

Should you rush out and buy a snow blower?

Not necessarily. Not everyone who shovels snow is going to have a heart attack. Snow shoveling can be good exercise when performed correctly and with safety in mind.

Also consider back safety when shoveling snow. Even if you exercise regularly and are not at risk for heart disease, shoveling improperly could lead to a strained back. If you've been inactive for months and have certain risk factors, use some common sense before taking on the task of snow shoveling.

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Be heart healthy and back friendly while shoveling this winter with these tips:

- If you are inactive and have a history of heart trouble, talk to your doctor before you take on the task of shoveling snow.
- Avoid caffeine or nicotine before beginning. These are stimulants, which may increase your heart rate and cause your blood vessels to constrict. This places extra stress on the heart.
- Drink plenty of water. Dehydration is just as big an issue in cold winter months as it is in the summer.
- Dress in several layers so you can remove a layer as needed. Synthetic fibers help wick away perspiration better than natural fibers.
- Warm your muscles before shoveling by walking for a few minutes or marching in place. Stretch the muscles in your arms and legs because warm muscles will work more efficiently and be less likely to be injured.
- Pick the right shovel for you. A smaller blade will require you to lift less snow, putting less strain on your body.
- Begin shoveling slowly to avoid placing a sudden demand on your heart. Pace yourself and take breaks as needed.
- Protect your back from injury by lifting correctly. Stand with your feet about hip width for balance and keep the shovel close to your body. Bend from the knees (not the back) and tighten your stomach muscles as you lift the snow. Avoid twisting movements. If you need to move the snow to one side, reposition your feet to face the direction the snow will be going.
- Most importantly, listen to your body. Stop if you feel pain.

For more information about nutrition and health, visit the NDSU Extension website www.ag.ndsu.edu/food

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