# healtsmarts

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## Fasting & SCI

#### The holiday season is over, and

January is usually when many people think about starting off the new year by putting more emphasis on their health.

Diet is a common focus when it comes to that emphasis, and intermittent fasting is currently one of the most popular health and fitness trends. Intermittent fasting is being used to help lose weight, improve health and to live longer. It isn't about



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following a diet, but more about following a diet pattern.

The idea of fasting isn't as farfetched as one may think. Humans have evolved to withstand short periods of time without food. Our hunter-gatherer ancestors naturally fasted when they couldn't find anything to eat.

## **Basic Principles**

The most common methods involve eating all your meals in an eight-, six- or four-hour window while fasting the rest of the day, or fasting for 24 hours twice per week. Water, tea and coffee without added sweeteners or milk are fine while fasting, but no calories are allowed.

Intermittent fasting isn't that difficult to achieve. Many people may already be doing it naturally without even realizing it. If you stop eating at

7 p.m. and don't eat breakfast until 10 a.m. the following day, you've already achieved 15 hours of fasting.

Consider the word "breakfast." This refers to the meal that breaks your fast, which you already do daily.

Fasting is associated with many health benefits:

- 1. Lowers insulin levels and increases growth hormone levels, which assists with fat loss and muscle gain, resulting in weight loss. Lower insulin levels protect against insulin resistance and the development of Type 2 diabetes. Those with spinal-cord injury (SCI) have a three times greater risk of diabetes than their ablebodied counterparts.
- 2. Increases the release of the fatburning hormone norepinephrine (noradrenaline). Short-term fasting may increase your metabolic rate by 3.6% to 14%, which is great for those with SCI since metabolic rates slow down after injury.
- 3. A study in 2000 from Kyushu University in Japan found that intermittent fasting extended the lifespan of rats. These results, combined with the known benefits on other health markers, are quite promising for humans too.
- **4.** Reduces inflammation in the body. With SCI, the body is in constant low-grade inflammation.
- 5. May reduce bad (LDL) cholesterol, blood triglycerides, inflammatory markers, blood sugar and insulin resistance, which are all risk factors for heart disease.
- **6.** A 2005 French study of mice suggests that intermittent fasting may prevent cancer.

- 7. Fasting increases the brain hormone called brain-derived neurotrophic factor and may aid the growth of new nerve cells. It may also protect against Alzheimer's disease.
- **8.** Improves mental clarity and concentration.
- 9. When fasted, your cells initiate cellular repair processes. This includes autophagy, where cells digest and remove old and dysfunctional proteins that build up inside cells.

Besides the health benefits, there are also several practical advantages of fasting, including:

- No extra cost to buy food. You may actually save a few bucks because you'll need to buy less food.
- No recipes to follow.
- No time needed to prepare meals or clean up afterwards.

### Is It OK for SCI?

Consult with your health practitioner before starting intermittent fasting.

If you need to take medications with food in the morning, ask your practitioner if you can take your medications at a different time of day. You will also need to talk with your practitioner if you have diabetes, hypoglycemia or other blood sugar disorders, low blood pressure, gout or high uric acid.

Following SCI, the body requires less calories, so implementing intermittent fasting may be an easy way to help achieve this.

However, it's important to note that even if you skip breakfast as part of your fasting protocol, you're not making up for this with late-night eating (which will reduce your fasting window) or binge eating (because you didn't consume enough food during the day).

It's also necessary that during your eating window that you're consuming nutrient-dense, whole foods. Intermittent fasting isn't an opportunity to fill up on junk food when you do eat. Individuals with SCI are at greater risk of nutrient deficiencies, so if you're skipping breakfast or dinner while fasting, then make sure the other meals you consume are loaded with vegetables, clean proteins and good fats.

## **Differences For Women**

Women, in particular, tend to respond differently because of metabolic and hormonal differences.



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Fasting can mess up women's hormones and affect menstruation. fertility and can worsen eating disorders. It shouldn't stop your cycle or cause more stress. If you experience these changes, it's likely a sign that fasting doesn't work for you.

Some women find fasting a few days a week instead of every day works best for them. For example, they would fast 16 hours on Monday, Wednesday and Friday, while eating normally on the other days. Experiment and see what works best for you.

Not everyone will react the same way to intermittent fasting. Listen to your body and pay attention to any

changes you may experience.

For more information on nutrition specific to SCI, visit eatwelllivewellwithsci.com.

Kylie James and Joanne Smith are certified nutrition practitioners and co-authors of the Paralyzed Veterans of America-supported book Eat Well, Live Well with Spinal Cord Injury and Other Neurological Conditions.



