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# Nutrition and Spinal Cord Injury

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Good nutrition is one of the many ways to decrease possible complications of your spinal cord injury (SCI) and improve your overall well-being. Proper nutrition can also help prevent chronic diseases associated with SCI.

Many of the recommendations for nutrition and SCI are the same as the general population. The Healthy Plate method of eating can be an easy way to achieve balanced meals. A balanced meal contains:

- Protein: meat/meat substitute; milk/dairy
- Fat: nuts, seeds, healthy oils
- Color and Fiber: a serving of fruit, vegetable, and/or whole grain

## Weight Management

Your metabolism is decreased after a SCI. You are more likely to gain weight if continuing your normal eating habits you had before your injury.

Talk with your Registered Dietitian about how many calories you should eat in a day.

There are many ways to help control your weight

- Watch your portions
- Limit “empty calories” such as sugary beverages, alcohol, fried foods, sugary cereals, yogurts and snack bars
- Choose fruits and vegetables more often
- Limit snacking or mindless eating
- Aim for 150 minutes of exercise per week and try to move more throughout the day
- Limit ordering out, dining out or fast food

## Diabetes, Heart Disease, & Metabolic Syndrome

People with SCI have an increased risk of developing Diabetes, Heart Disease, and Metabolic Syndrome. This is due to decreased physical activity, muscle mass and metabolism. It is important to maintain a healthy body weight and healthy eating patterns in order to prevent unwanted health conditions.

- **Eat 3 meal balanced meals per day**

If you skip a meal, you may overeat at your next meal which can lead to weight gain. Remember to choose healthy foods following the Healthy Plate method of eating.

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- **Remain physically active**

Physical inactivity can lead to excessive weight gain with SCI. Our bodies will burn more calories during exercise.

The more muscle our bodies have, the more calories we burn at rest. After SCI your muscle mass will decrease. It is important to maintain your muscle mass with physical activity to burn calories while active and at rest. Work with your therapy team to determine what activities will work for your lifestyle.

- **Achieve a healthy weight**

Maintaining a healthy weight or losing weight if you are overweight is one of the best ways to help manage blood sugar, blood pressure, and cholesterol levels.

Talk with your Registered Dietitian about what a healthy weight range is for you.

- **Avoid high stress**

Too much stress can cause your body to create hormones that can cause weight gain. This stress can also lead to emotional eating which also causes weight gain. Work with a psychologist to find creative ways to deal with any stress you may be dealing with. Consider relaxation techniques, reading, playing music, gardening, or participating in physical activity.

## **Bowel Management**

A healthy, consistent diet can be helpful in regulating your bowel program. Here are some nutrition tips to keep your bowel program on track.

- **Include fiber in your diet**

Fiber helps move the stool through the bowel. Gradually increase your fiber intake and monitor your tolerance. Be sure to increase your water intake when you increase fiber intake to prevent constipation.

Good sources of fiber include:

- Fruits and vegetables
- Whole grains such as whole wheat bread
- Brown rice
- Quinoa
- Oatmeal
- Legumes and beans

- **Drink plenty of water**

Enough water keeps the stool soft, making it easier to pass. Aim for 64 ounces of water per day.

If you can't get enough water in your diet, water is found in juices, jello, soup, and non-caffeinated beverages. Follow your healthcare team recommendation if you need to limit or increase your water intake.

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- **Pay attention to your body**

If experiencing accidents between your scheduled bowel routine, identify if any foods or eating patterns may be contributing. Commonly, caffeine, fried, spicy or rich foods can cause accidents. Large meals may also cause incontinence.

Watch for intolerance to any certain foods. Certain foods can cause gas, bloating or change the consistency of your stool.

If having problems with your stools or bowel program, consider keeping a food and bowel record to assess how foods and fluids affect you. Turn this into your healthcare provider for review.

## **Urinary Tract Infection (UTI) Prevention**

People with SCI may also be at higher risk for urinary tract infections.

- **Get enough water**

Drink plenty of water, to help flush your bladder and keep your urine light in color. This also helps prevent kidney and bladder stones. Caffeinated beverages will not count toward your water intake. In rare cases, you can drink too much water. Talk to your doctor or Registered Dietitian about your individual water needs to determine if you are consuming the right amount.

- **Cranberry Juice and Extract**

Research doesn't support drinking cranberry juice to prevent UTIs. If you do choose to drink cranberry juice, drink pure 100% cranberry juice. Often, cranberry juice is high in sugar and calories.

Cranberry extract supplements are not recommended for people with SCI. Cranberry products may increase your risk of kidney stones, so talk with your doctor if you are taking these.

## **Bone Health and SCI**

People with SCI perform fewer weight bearing activities. This can lead to loss of bone health causing fractures and osteoporosis. It is important to maintain the proper nutrition in your eating pattern in order to maintain bone health. Vitamin D and calcium are involved in maintaining healthy bones.

- **Vitamin D**

The best form of vitamin D available is from sunlight. The skin creates vitamin D from the sun's rays. If you do not spend regular time outdoors year-round, you may not be getting enough vitamin D. You can also find vitamin D in foods; however, if you are vitamin D deficient you will typically need more vitamin D than can be provided by the sun or your diet.

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Foods high in vitamin D include:

- Fatty fish (salmon, tuna, and mackerel)
- Low-fat dairy products
- Fortified orange juice
- Egg yolks

If you have a deficiency, you may be required to take a vitamin D supplement. Your primary care doctor will order this for you.

- **Calcium**

Calcium is important in maintaining the structure and hardness in your teeth and bones. Calcium is also important in sending the appropriate signals through your body as well as helping lower blood pressure levels. Like most nutrients, it is best to get calcium through food instead of supplements. Try to include a high calcium food at least two times per day to get enough.

High calcium foods include:

- Dairy products and calcium-fortified milk alternatives
- Green leafy vegetables
- Fish with soft bones that you can eat
- Fortified foods (such as cereals, grains, juice, and soy products).

Talk with your doctor and Registered Dietitian if you think you are not getting enough calcium in your diet. If you cannot get enough calcium from food alone, your doctor may prescribe a calcium supplement. If you take a calcium supplement, make sure you are working with a doctor or Registered Dietitian. Too much calcium can be harmful to your heart and kidneys.

## **Wound Prevention**

Those with a spinal cord injury are at risk for pressure injuries. It is important to eat a nutrient rich diet to keep your skin healthy. Proper hydration helps with circulation and skin health.

Maintaining a healthy weight is important. If you are overweight, this will put more pressure on your skin. If you are underweight, there will be less cushion and protection around the boney areas of your body.

If you develop a pressure injury, it is important that you follow with a Registered Dietitian to ensure you are getting enough protein and other nutrients to heal.