

Spinal Cord Injury and Weight Control

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Fact Sheet

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Why is Weight Control Important Following Spinal Cord Injury?

Heart Health

Individuals with a spinal cord injury are at a higher risk for becoming overweight due to a decrease in physical activity and a decrease in muscle mass after injury.^{1,2} With an increase in body weight, individuals are at a higher risk for developing conditions such as coronary artery disease, diabetes, lipid disorders and metabolic syndromes.³ There is an increased prevalence of these conditions in individuals with spinal cord injury, with an increased risk in those with a higher level and severity of injury.⁴

Skin Health

After a spinal cord injury, increased body weight can lead to an increased pressure placed on the skin during prolonged periods of sitting in a wheelchair.⁵ Individuals with spinal cord injury experience a decrease in muscle mass and composition. This combination of increased body weight with decreased muscle bulk places individuals at a higher risk for the development of skin breakdown and wounds.⁵

What Methods Are Available for Weight Control Following SCI?

The best method for weight management is via lifestyle modification of diet and exercise.

Management with Nutrition

The first step in weight management is controlling overall caloric intake. Individuals with spinal cord injuries have on average 10% less energy expenditure requirements than able-bodied individuals.⁶ Therefore, their overall caloric intake should be proportionally less. For men with chronic spinal cord injuries, approximately 1600 kcals would be recommended, and for women approximately 1150 kcals/day.⁶ On average, individuals with spinal cord injuries are eating a surplus of 300-500 kcals/day over their energy expenditure requirements, which over time leads to weight gain and higher risk for metabolic diseases.⁶

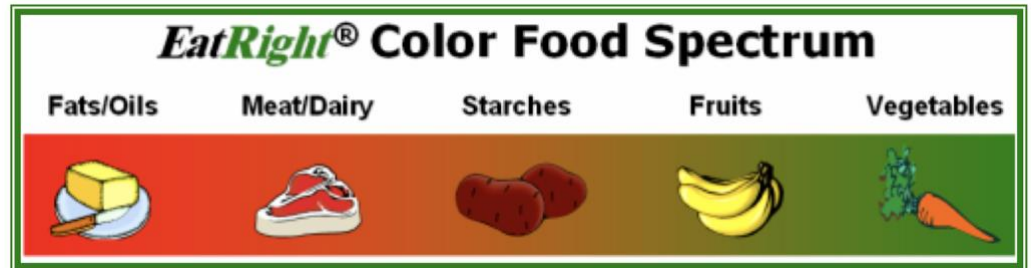
The next step is to control the types of foods that are being consumed. A Mediterranean-style diet with focus on increased whole grains, fruits, vegetables, and unsaturated fats is recommended.⁶ Decreasing overall intake of saturated fats, cholesterol and simple/processed sugars will aid in decreasing risk for cardiovascular disease.

Weight Management Programs:

UAB EatRight® Program for Weight Control

A 12-week program developed by the University of Alabama Birmingham for weight management for individuals with spinal cord injuries.⁷ Focused on eating more foods from the “right” and fewer from the “left” from the food spectrum (see below), and keeping track of intake in a food journal.⁷ Recommendations are to eat at least one extra serving of fruits, vegetables and whole grains each day.

The recommended foods from this program are similar to those included in a Mediterranean diet.



The EatRight food spectrum: Eating foods from the right side more often than foods from the left to improve healthy eating habits and feeling fuller for longer. The EatRight program is focused more on healthy food choices than calorie counting.

Managing weight through exercise

General guidelines advise to exercise at a moderate-intensity at least 150 minutes/week.⁶ Circuit resistance training 3x/week for 24 weeks has been demonstrated to decrease risk for cardiometabolic syndromes in individuals with spinal cord injury.⁶ One can keep track of workouts and log food intake on websites/apps such as myfitnesspal.com.⁸

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Patient Resources

- <https://www.uab.edu/medicine/sci/uab-scims-information/eatright-weight-management-program>
- www.eatright.org
- www.myfitnesspal.com

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