



## **Nutrition and Weight Gain**

### **Nutrition**

It is important for people with disabilities to get proper nutrition. Some of the conditions that cause paralysis can also cause swallowing difficulties. Food may need to be pureed or made soft in those instances. While there are many fitness opportunities available to wheelchair users and people with paralysis, it may still be more difficult for people with mobility issues to maintain proper weight by exercising. People with mobility issues may also need specially adapted eating utensils.

### **What Are Overweight and Obesity?**

The terms "overweight" and "obesity" refer to a person's overall body weight and whether it's too high. Overweight is having extra body weight from muscle, bone, fat, and/or water. Obesity is having a high amount of extra body fat.

The most useful measure of overweight and obesity is body mass index (BMI). BMI is based on height and weight and is used for adults, children, and teens. For more information about BMI, see "How Are Overweight and Obesity Diagnosed" at <http://www.nhlbi.nih.gov/health/health-topics/topics/obe/diagnosis.html>.

### **Overview**

Millions of Americans and people worldwide are overweight or obese. Being overweight or obese puts you at risk for many diseases and conditions. The more body fat that you have and the more you weigh, the more likely you are to develop:

- Coronary heart disease (also called coronary artery disease)
- High blood pressure
- Type 2 diabetes
- Gallstones
- Breathing problems
- Certain cancers

Your weight is the result of many factors. These factors include environment, family history and genetics, metabolism (the way your body changes food and oxygen into energy), behavior or habits, and more. You can't change some factors, such as family history. However, you can change other factors, such as your lifestyle habits.

You can take steps to prevent or treat overweight or obesity. Follow a healthy eating plan and keep your calorie needs in mind. Do physical activity regularly and try to limit the amount of time that you're inactive.

Weight-loss medicines and surgery also are options for some people who need to lose weight if lifestyle changes aren't enough.

## **Outlook**

Reaching and staying at a healthy weight is a long-term challenge for people who are overweight or obese. But it also can be a chance to lower your risk of other serious health problems. With the right treatment and motivation, it's possible to lose weight and lower your long-term disease risk.

**Source:** <http://www.nhlbi.nih.gov/health/health-topics/topics/obe/>  
National Heart, Lung and Blood Institute

## **Websites**

### **Sites with general information on nutrition and weight management**

<http://www.heart.org/HEARTORG/>  
**American Heart Association (AHA)**

[http://www.heart.org/HEARTORG/GettingHealthy/FatsAndOils/Fats-Oils\\_UCM\\_001084\\_SubHomePage.jsp](http://www.heart.org/HEARTORG/GettingHealthy/FatsAndOils/Fats-Oils_UCM_001084_SubHomePage.jsp)

#### **American Heart Association: Fats & Oils**

This page has information on fats and oils and includes the AHA's Meet the Fats campaign which is designed to help people minimize trans fats in their diet without increasing consumption of more saturated fats.

[http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/Knowing-Your-Fats\\_UCM\\_305976\\_Article.jsp#.TvJIMnrQiuI](http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/Knowing-Your-Fats_UCM_305976_Article.jsp#.TvJIMnrQiuI)

#### **American Heart Association: Knowing Your Fats**

This page has information on various kinds of fats.

[http://www.heart.org/HEARTORG/GettingHealthy/FatsAndOils/Fats101/Fats-and-Oils-AHA-Recommendation\\_UCM\\_316375\\_Article.jsp#.TvJlkHrQiuJ](http://www.heart.org/HEARTORG/GettingHealthy/FatsAndOils/Fats101/Fats-and-Oils-AHA-Recommendation_UCM_316375_Article.jsp#.TvJlkHrQiuJ)

#### **American Heart Association: Fats & Oils – AHA Recommendation**

This page lists recommendations regarding the use of fats and oils, as well as links to information on various kinds of fats and cholesterol.

<http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>

**Health Canada - Santé Canada: Canada's Food Guide**

This site has information and tools to help people maintain healthy eating and activity habits.

<http://health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf>

**Health.gov: Dietary Guidelines for Americans, 2010.** 7<sup>th</sup> edition. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Washington, DC: U.S. Government Printing Office, December 2010.

This document provides information and advice to help people choose a healthy eating pattern to achieve and maintain a healthy weight.

[http://www.kidshealth.org/kid/stay\\_healthy/food/labels.html](http://www.kidshealth.org/kid/stay_healthy/food/labels.html)

**Kids Health: Figuring Out Food Labels**

This page has audio and text to help children understand food labels.

<http://lpi.oregonstate.edu/infocenter/foods/grains/gigl.html>

**Linus Pauling Institute: Micronutrient Information Center – Glycemic Index and Glycemic Load**

This page has information on the body's response to carbohydrates, measured through glycemic index, and disease prevention. The Micronutrient Information Center's pages on vitamins, minerals, supplements and other nutrients are easily accessible through the index on the left.

<http://fnic.nal.usda.gov/>

**U.S. Department of Agriculture: Food and Nutrition Information Center**

[http://fnic.nal.usda.gov/nal\\_display/index.php?info\\_center=4&tax\\_level=1&tax\\_subject=271](http://fnic.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=1&tax_subject=271)

**Food and Nutrition Information Center: Weight and Obesity**

This page has information and resources on a variety of topics related to weight and obesity, including treatment and prevention guidelines and practical advice for weight control.

<http://www.nal.usda.gov/fnic/pubs/bibs/topics/weight/consumer.pdf>

**Food and Nutrition Information Center: Weight Management and Obesity Resource List**

This list of resources (including articles, pamphlets, books, and Internet sites) was developed to provide reliable nutrition information about weight loss, weight management and obesity.

<http://www.choosemyplate.gov/>

**U.S. Department of Agriculture: MyPlate**

This site has information on healthy eating, weight management and physical activity. MyPlate replaced the food pyramid in June 2011.

<http://www.fda.gov/>

**U.S. Food and Drug Administration**

<http://www.fda.gov/Food/ResourcesForYou/Consumers/NFLPM/ucm274593.htm>

**U.S. Food and Drug Administration: How to Understand and Use the Nutrition Fact Labels**

<http://www.fda.gov/Food/LabelingNutrition/default.htm>

**U.S. Food and Drug Administration: Labeling & Nutrition**

<http://www.fda.gov/Food/DietarySupplements/ucm2006892.htm>

**U.S. Food and Drug Administration: Dietary Supplements**

**Sites with information specific to people with disabilities and/or spinal cord injury**

[http://www.ilru.org/html/publications/SCI/information/info\\_nutrition.htm](http://www.ilru.org/html/publications/SCI/information/info_nutrition.htm)

**NRH Rehabilitation Research and Training Center: Spinal Cord Injury Nutrition Facts**

This 6-part series has information on nutrition, including the major food groups.

<http://www.cdc.gov/ncbddd/disabilityandhealth/disabilityandobesity.html>

**CDC: Achieving Healthy Weight for People with Disabilities**

A report from the CDC.

<http://www.cdc.gov/ncbddd/disabilityandhealth/obesity.html>

**CDC: Disability and Obesity**

This page has information on overweight and obesity, including recommendations for healthy eating and physical activity.

<http://www.cdc.gov/ncbddd/disabilityandhealth/documents/obesityFactsheet2010.pdf>

**CDC: Overweight and Obesity Among People with Disabilities Factsheet**

[http://www.cdc.gov/ncbddd/documents/Obesity%20tip%20sheet%20\\_%20PHPa\\_1.pdf](http://www.cdc.gov/ncbddd/documents/Obesity%20tip%20sheet%20_%20PHPa_1.pdf)

**CDC: Tip Sheet on Obesity in People with Disabilities by State**

“Obesity and People with Disabilities: A Tip Sheet for Public Health Professionals”

[http://www.spinalcordinjury-paralysis.org/groups/fitness\\_and\\_nutrition/discussion](http://www.spinalcordinjury-paralysis.org/groups/fitness_and_nutrition/discussion)

**Christopher & Dana Reeve Foundation: Spinal Cord Injury and Paralysis Community - Fitness and Nutrition**

This online discussion group offers a place for people to share successes and struggles related to fitness, nutrition and maintaining a proper weight.

<http://www.craighospital.org/>

**Craig Hospital**

<http://www.craighospital.org/SCI/METS/weightGain.asp>

### **Craig Hospital: Weight Gain**

This page, geared towards people with spinal cord injuries, discusses the risks of weight gain and how to fight it through diet.

<http://www.craighospital.org/SCI/METS/fat.asp>

### **Craig Hospital: Cutting the Fat**

This page, geared towards people with spinal cord injuries, discusses body fat and dietary fat and how to fight weight gain through diet.

<http://www.easytoswallow.co.uk/>

### **Easy to Swallow**

This page has recipes (including soups, main meals, desserts and drinks) for adults who have swallowing difficulties. The page also has information on eating, drinking and feeding, including tube feeding.

<http://www.mealtimepartners.com>

### **Mealtime Partners**

1137 S.E. Parkway

Azle, TX 76020

Phone: 817-237-9991, 800-996-8607

E-mail: [info@mealtimepartners.com](mailto:info@mealtimepartners.com)

Mealtime Partners makes products that facilitate independent eating and drinking for people with disabilities who cannot independently feed themselves.

<http://www.ncpad.org/>

### **National Center for Physical Activity and Disability (NCPAD)**

[http://www.ncpad.org/disability/fact\\_sheet.php?sheet=488](http://www.ncpad.org/disability/fact_sheet.php?sheet=488)

#### **NCPAD: Children with Disabilities and Obesity**

This fact sheet discusses the risks of obesity and the benefits of physical activity.

<http://www.ncpad.org/nutrition/>

#### **NCPAD: Nutrition**

This page lists many articles on nutrition for people with disabilities.

<http://spinaltimes.org/foodnutrition.html>

### **Spinal Times: Food and Nutrition**

This page has information on diet, including tips for losing or gaining weight,

<http://www.24acorns.org/>

### **24 ACORNS (Adapting Community-based Obesity Reducing National Strategies)**

This site is dedicated to providing a compilation of adaptations to 24 community-based obesity reduction strategies for youth and young adults with cognitive disabilities (autism and intellectual disabilities) and physical disabilities (spina bifida and cerebral palsy).

<http://www.spinalcord.uab.edu/>

**Spinal Cord Injury Information Network (SCIIN)**

<http://www.spinalcord.uab.edu/show.asp?durki=21583>

**SCIIN: Nutrition**

This page lists pamphlets, articles and presentations related to nutrition and people with spinal cord injuries.

<http://www.spinalcord.uab.edu/show.asp?durki=121136>

**SCIIN: EatRight Weight Management Program**

This 12-week weight management program was designed for individuals with spinal cord impairments, which includes persons with spinal cord injury, dysfunction and disease. The program includes a workbook and video which participants can follow each week.

<http://sci.washington.edu/>

**Northwest Regional Spinal Cord Injury System (NRSCIS)**

<http://sci.washington.edu/info/forums/reports/nutrition.asp>

**NRSCIS: Nutrition Guidelines for Individuals with SCI**

This report by Harborview Medical Center dietitian Vickeri Barton was given on June 13, 2006. The presentation can be read online or viewed as a streaming video.

[http://sci.washington.edu/info/forums/reports/nutrition\\_2011.asp](http://sci.washington.edu/info/forums/reports/nutrition_2011.asp)

**NRSCIS: Everyday Nutrition for Individuals with Spinal Cord Injury**

This report by Harborview Medical Center dietitian Vickeri Barton and occupational therapy clinical specialist Susie Kim was given on April 12, 2011. The presentation can be read online or viewed as a streaming video.

**Websites from chefs with paralysis:**

<http://www.culinaryquad.com>

**Culinary Quad**

Gina Campbell is a C5-6 quad whose blog has recipes, restaurant reviews and gadgets that may help people with disabilities cook.

<http://erinscookin.com/>

**Erin's Cookin'**

This site by Erin Poyle, a quadriplegic cook, has recipes and information on her book Erin's Cookin' With One Hand Behind My Back (10% of the book's proceeds goes to the Christopher & Dana Reeve Foundation).

<http://www.theparaplegicchef.com/>

**The Paraplegic Chef**

Megan is a paraplegic who continued to follow her passion to cook after her injury. Her recipes are not necessarily for people who have physical limitations or swallowing disorders.

The following books and videos are available for free loan from the PRC library. For more information, please see [www.paralysis.org](http://www.paralysis.org) and click *Borrow from Our Lending Library* under PRC Quick Links.

### Books

- Achilles, Elaine. **The Dysphagia Cookbook: Great Tasting and Nutritious Recipes for People With Swallowing Difficulties.** Nashville, TN: Cumberland House, 2004.
- Appel, Vicki, Sandy Calvin and Imelda Otte. **ALS: Maintaining Nutrition.** Houston, TX: MDA ALS Center, 1991.
- Appel, Vicki, Sandy Calvin, Gena Smith and Donna Woehr. **MeALS for Easy Swallowing.** New York: Muscular Dystrophy Association, 1987.
- Blakeslee, Mary E. **The Wheelchair Gourmet: A Cookbook for the Disabled.** New York: Beaufort Books, Inc., 1981.
- Boroch, Anne. **Healing Multiple Sclerosis: Diet, Detox & Nutritional Makeover for Total Recovery.** Los Angeles: Quintessential Healing Inc. Publishing, 2007.
- Davies, Ken. **Wheelchair Diet Plan.** Preston, UK: Help4U Publishing, 2001.
- **The Disabled Gourmet.** Orange Coast College Campus Colleagues Club. Costa Mesa, CA. Cookbooks by Morris Press, 1998.
- Edney, Eric. **Eric Is Winning: Beating a Terminal Illness With Nutrition, Avoiding Toxins and Common Sense.** Xlibris Corporation, 2004.
- Evans, Henry and Jane Evans. **The Pureed Gourmet.** Scott Publishing, 2004.
- Fitzgerald, Geraldine and Fenella Briscoe. **Recipes for Health: Multiple Sclerosis: Over 100 Recipes to Help Control Symptoms.** San Francisco: Thorsons, 1996.

- Greer, Rita. **Soft Options: for Adults Who Have Difficulty Chewing.** UK: Souvenir Press, 1998.
- Klinger, Judith Lannefeld. **Mealtime Manual: For People With Disabilities and the Aging.** Thorofare, NJ: SLACK Incorporated, 1997.
- Riesz, Elizabeth D. **Let's Cook!: Healthy Meals for Independent Living.** Mankato, MN: Appletree Press, 2010.  
A pictorial cookbook to assist people with developmental disabilities to learn basic concepts of nutrition, food safety, and cooking skills.
- Sawyer, Ann D. and Judith E. Bachrach. **The MS Recovery Diet.** New York: Penguin, 2007.
- Schwier, Karin Melberg & Erin Schwier Stewart. **Breaking Bread, Nourishing Connections: People With and Without Disabilities Together at Mealtime.** Baltimore: Paul H. Brooks Publishing, Co., 2005.
- Swank, Roy Laver & Barbara Brewer. **The Multiple Sclerosis Diet Book.** New York: Doubleday, 1977.
- Thomas, Charles C. **So What You Can't Chew, Eat Hearty: Recipes and a Guide for the Healthy and Happy Eating of Soft Pureed Foods.** Springfield, IL: Charles C. Thomas Publisher, 1980.
- Weihoffen, Donna. L., Jo Anne Robbins and Paula A. Sullivan. **Easy to Swallow, Easy to Chew Cookbook: Over 150 Tasty and Nutritious Recipes for People Who Have Difficulty Swallowing.** New York: John Wiley & Sons, Inc., 2002.
- Williams, Montel. **Living Well: 21 Days to Transform Your Life, Supercharge Your Health, and Feel Spectacular.** New York: New American Library, 2008.  
Williams has MS and offers recipes in this book.
- Wilson, J. Randy. **I Can't Chew Cookbook: Delicious Soft-Diet Recipes for People With Chewing, Swallowing and Dry-Mouth Disorders.** Alameda, CA: Hunter House, Inc. Publishers, 2003.

### Videos

- **Living With ALS: Adjusting to Swallowing Difficulties and Maintaining Good Nutrition.** Calabasas Hills, CA: The ALS Association.

**The information contained in this message is presented for the purpose of educating and informing you about paralysis and its effects. Nothing contained in this message should be construed nor is intended to be used for medical diagnosis or treatment. It**

**should not be used in place of the advice of your physician or other qualified health care provider. Should you have any health care related questions, please call or see your physician or other qualified health care provider promptly. Always consult with your physician or other qualified health care provider before embarking on a new treatment, diet or fitness program. You should never disregard medical advice or delay in seeking it because of something you have read in this message.**