



The following excerpt has been taken from the Christopher & Dana Reeve Foundation Paralysis Resource Center website.

[http://www.paralysis.org/site/c.erJMJUOxFmH/b.1297525/k.86B3/Active\\_Living.htm](http://www.paralysis.org/site/c.erJMJUOxFmH/b.1297525/k.86B3/Active_Living.htm)

## **Fitness and Exercise**

Exercise is good for everyone, regardless of functional capabilities. Some people exercise to lose weight or shape up. Others do it to get stronger, to build endurance and stamina, to help keep joints loose and flexible, to reduce stress, to get more restful sleep, or just because it makes them feel better. Whatever motivates you to exercise is a good reason.

There is an epidemic of obesity in the U.S. Unfortunately, people with disabilities are even more prone to carrying excess weight – this is due to a combination of changed metabolism and decreased muscle mass, along with a generally lower activity level.

There are compelling reasons to shed the extra pounds. Research shows that people in wheelchairs are at risk for shoulder pain, joint deterioration, even rotator cuff tears, due to the amount of stress they place on their arms. Quadriplegics, too, have pain in their shoulders. The more weight to push, the more stress on the shoulder. Plus there's the risk the skin faces: as people gain weight, skin folds develop which trap moisture, greatly increasing the risk of skin sores.

It's never too late to get a fitness program going. According to the President's Council on Physical Fitness and Sports, people with disabilities are less likely to engage in regular moderate physical activity than people without disabilities, yet they have similar needs to promote their health and prevent unnecessary disease. Here's more:

- Physical activity need not be strenuous to achieve health benefits. Significant health benefits can be obtained with a moderate amount of physical activity, preferably daily. The same moderate amount of activity can be obtained in longer sessions of moderately intense activities (such as 30–40 minutes of wheeling oneself in a wheelchair) or in shorter sessions of more strenuous activities (such as 20 minutes of wheelchair basketball).
- Additional health benefits can be gained through greater amounts of physical activity. People who can maintain a regular routine of physical activity that is of longer duration or of greater intensity are likely to derive greater benefit.

- Previously sedentary people who begin physical activity programs should start with short intervals of physical activity (5–10 minutes) and gradually build up to the desired level of activity.
- People with disabilities should first consult a physician before beginning a program of physical activity to which they are unaccustomed.

Source: The President's Council on Physical Fitness and Sports, Craig Hospital

### Web Sites

[www.ncpad.org/](http://www.ncpad.org/)

#### **The National Center on Physical Activity and Disability (NCPAD)**

The National Center on Physical Activity and Disability (NCPAD), based at the University of Illinois at Chicago, believes everyone can reap benefits from regular physical activity. NCPAD offers numerous resources to help people with disabilities become more active, plus resources for health, fitness and exercise professionals. See also their database of fitness trainers for people with disabilities at:

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

Also see their factsheet on ergometers:

[http://www.ncpad.org/exercise/fact\\_sheet.php?sheet=5&view=all](http://www.ncpad.org/exercise/fact_sheet.php?sheet=5&view=all)

[www.incfit.org](http://www.incfit.org)

#### **Inclusive Fitness Coalition**

Addresses the policy, environmental and societal issues associated with the lack of access to physical activity among people with disabilities

[www.craighospital.org/SCI/METS/exercise.asp](http://www.craighospital.org/SCI/METS/exercise.asp)

#### **Craig Hospital: SCI Health and Wellness**

With funding from the US Department of Education's National Institute on Disability & Rehabilitation Research, Craig Hospital has developed educational materials to help people with spinal cord injuries live in the community maintain their health. Topics include exercise, heart disease, diet, weight control, alcohol abuse and conditions related to the aging paralyzed body.

[www.cdc.gov/nccdphp](http://www.cdc.gov/nccdphp)

#### **Centers for Disease Control and Prevention (CDC): Chronic Disease Prevention**

Features numerous articles and resources on fitness, nutrition and healthy living.

<http://www.ilru.org/html/publications/SCI/information/index.htm>

#### **ILRU: RRTC on SCI: Exercise Information**

<http://www.themiamiproject.org/Page.aspx?pid=430>

### **The Miami Project to Cure Paralysis**

The Miami Project to Cure Paralysis has studied functional electrical systems for exercise.

<http://calder.med.miami.edu/pointis/upper.html>

### **The University of Miami School of Medicine**

Offers clinical information on stretching and range of motion exercises for people with paralysis.

<http://fescenter.org/index.php>

### **Cleveland FES Center**

Promotes advanced techniques to restore function for persons with paralysis. The focus is on functional electrical stimulation (FES) systems that improve health, productivity and quality of life. FES exercise can be beneficial to persons with paralysis.

[www.fitness.gov/disab.htm](http://www.fitness.gov/disab.htm)

### **The President's Council on Physical Fitness and Sports**

Information on making exercise an important part of your life.

[www.yogainchairs.com](http://www.yogainchairs.com)

### **Yoga in Chairs**

## **Exercise Equipment**

[www.Flexiciser.com](http://www.Flexiciser.com)

### **Flexiciser**

800 Grand Ave.

Suite B2

Carlsbad, CA 92008-1805

888-353-9462

[www.restorative-therapies.com](http://www.restorative-therapies.com)

Restorative Therapies

### **The RT300-S**

A motorized FES system pioneered by Dr. John McDonald.

[www.exercycle.com/](http://www.exercycle.com/)

### **Theracycle**

Exercycle Company manufactures and sells the Theracycle, the only motor-driven stationary exercise bike designed for people with disabilities that lack strength but need exercise. The Theracycle is different from other exercise bikes and home exercise equipment because the motor detects when to help you to exercise. If you are looking for a piece of fitness equipment that will help you to exercise, Theracycle is for you. Many people who have purchased the Theracycle are using it to help with Multiple Sclerosis,

Parkinson's and other neurological disabilities. The Theracycle can help in rehabilitation, physical therapy, and maintaining fitness.

[www.gpk.com](http://www.gpk.com)

### **The Uppertone System**

Introduced in 1990 by a C4-C5 quadriplegic, the Uppertone System allows people with C4-C5 paralysis and below to do upper body exercises necessary for rehabilitation and maintenance, without assistance.

[www.WheelFlex.com](http://www.WheelFlex.com)

### **Wheel Flex**

Allows for exercising/rehab of arms while seated in wheelchair

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 the Lending Library tab.

### **Books**

Fishman, Loren M. and Eric L. Small. **Yoga and Multiple Sclerosis: A Journey to Health and Healing**. New York: Demos, 2007.

Horvat, Michael et al. **Developmental and Adapted Physical Activity Assessment**. Champaign, Ill.: Human Kinetics, 2007.

Lieberman, Lauren J. **Paraeducators in Physical Education: A Training Guide to Roles and Responsibilities**. Champaign, Ill.: Human Kinetics, 2007.

### **Videos**

**Basic Strength Training For Wheelchair Users**: Monterey, Ca: Healthy Learning, 2002. [www.healthylearning.com](http://www.healthylearning.com) 25 min.

**Carol Dickman's Bed Top Yoga**. New York, NY: Yoga Enterprises Inc., 1999. 33 min.

**Carol Dickman's Seated Yoga**. New York, NY: Yoga Enterprises Inc., 1999. 43 min.

**Chair Aerobics for Everyone**. Endless Graphics, 2004. DVD features Nikki Glazer. Please note that this product is not necessarily marketed to people with disabilities, please consult your physician first. There are others in this series: Chair Boxing, Chair Salsa, Chair Yoga, Chair Tai Chi, Chair Circuit Training, Chair Bellydance.

**Chair Aerobics for Everyone: Exercises for the Bedridden and Physically Challenged.** Endless Graphics, 2008. DVD features David Stamp  
[www.chairaerobics.com](http://www.chairaerobics.com)

**Circuit Resistance Training for Persons with Spinal Cord Injuries.** Patrick Jacobs. Monterey, Calif.: Healthy Learning, 2002. 25 minutes VHS

**Dr. Chen's Tai Chi GongFa 001: Tai Chi Qigong Workout for Wheelchair People Level I.** Crystal Tai Chi Co., 2004. [www.ctaichi.com](http://www.ctaichi.com) (23 minutes) DVD

**Dr. Chen's Tai Chi GongFa 002: Tai Chi Qigong Workout for Wheelchair People Level II.** Crystal Tai Chi Co., 2004. [www.ctaichi.com](http://www.ctaichi.com) (27 minutes) DVD

**Exercise for the Body, Mind, and Soul: A Cardiovascular Workout with Jann Gillespie.** Seat-A-Robics Inc., 1999.  
Gillespie is a paraplegic fitness instructor.

**Exercise Program for Individuals with Spinal Cord Injuries: Paraplegia.** National Center on Physical Activity and Disability, 2004. DVD or VHS. Distributed by NCPAD [www.ncpad.org](http://www.ncpad.org) and Reeve Foundation [www.paralysis.org](http://www.paralysis.org)

**Exercise Program for Individuals with Spinal Cord Injuries: Tetraplegia.** National Center on Physical Activity and Disability, 2006. DVD or VHS. Distributed by NCPAD [www.ncpad.org](http://www.ncpad.org) and Reeve Foundation [www.paralysis.org](http://www.paralysis.org)

**Jodi Stolove's Chair Dancing: A New Concept in Aerobics Fitness.** Del Mar, Calif.: Chair Dancing International, 1991. VHS 45 min.  
Please note that this product is not necessarily marketed to people with disabilities, please consult your physician first.

**Keep Fit While You Sit: An Aerobic Workout for the Physically Challenged.** Slabo Productions (available from Amputee Coalition of America [www.amputee-coalition.org](http://www.amputee-coalition.org)). 1986 40 min.

**Lisa Ericson's Seated Aerobic Workout!** Aspen Fitness Associates 1992 60 min. (available from the Amputee Coalition of America [www.amputee-coalition.org](http://www.amputee-coalition.org))

**Liz Franklin's Yoga in Chairs: The Journey Begins—Beginning Practice.** [www.yogainchairs.com](http://www.yogainchairs.com) DVD

**Liz Franklin's Yoga in Chairs: New Possibilities—Intermediate Practice.** [www.yogainchairs.com](http://www.yogainchairs.com) DVD

**MS Exercise Series: Compilation DVD.** (Yes You Can!, All About Awareness, Balance in Motion). MS Awareness Foundation, 2004. DVD

**Pathways: Exercise Video for People with Limited Mobility.** Morro Bay, CA: MobilityLimited, 1993. (available from Demos Medical Publishing [www.demosmedpub.com](http://www.demosmedpub.com))

For those with multiple sclerosis and other mobility restrictions.

**Richard Simmons: Reach for Fitness: A Complete Fitness Program for the Physically Challenged.** Irvine, CA: Karl-Lorimar Home Video, 1986. VHS 40 minutes.

**Richard Simmons Sit Tight.** Good Times Entertainment, 2001. VHS 25 minutes.

**The ROM Dance Seated Version: For Wheelchair Use.** St. Mary's Hospital Medical Center 1993 45 min. (available from Amazon [www.amazon.com](http://www.amazon.com))  
ROM stands for Range of Motion.

**Sesame Street: ElmoCize.** Sony Wonder, 1996. Approx. 30 minutes on DVD or VHS. Features a young wheelchair user in "Workout in a Chair" segment.

**Sit and Be Fit for MS.** Sit and Be Fit Inc. [www.sitandbefit.com](http://www.sitandbefit.com) 1993. 30 min.

**Sit and Be Fit for Stroke.** Sit and Be Fit Inc. [www.sitandbefit.com](http://www.sitandbefit.com) 1993. 30 min.

**Tai Chi in a Chair.** Health Media Productions, 2004. 50 minutes.  
[www.21stcenturymed.org](http://www.21stcenturymed.org)

**Walkerobics.** West Long Branch, NJ: Scott & K.C. Enterprises Inc., 1986. Distributed by Flaghouse (phone 800-793-7900). 30 min.  
Maura Casey is a PT who designed this daily exercise program to be followed after rehabilitation. For those who use walkers.

**Wheelchair Workout with Beginning Karate.** Senkai Productions. (available at Amazon [www.amazon.com](http://www.amazon.com))

**Wheelercise.** West Long Branch, NJ: Scott & K.C. Enterprises Inc., 1986. Distributed by Flaghouse. 30 min.  
Maura Casey is a PT who designed this daily exercise program to be followed after rehabilitation.

**Yogability and You with Shelly Sidelman: A Therapeutic and Rehabilitative Approach to Yoga,** 2003. [www.yogabilityandyou.com](http://www.yogabilityandyou.com) 60 minutes  
"Chair" yoga for those with MS and other physical conditions or those recovering from surgery.

**Please consult your physician before beginning any exercise program.**

**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.**