Chronic Conditions and Physical Activity



There is a myth that if you have a chronic condition, or are unhealthy, you should avoid physical activity.¹

The fact is that many conditions and their symptoms can be controlled through properly performed physical activity.¹

Make sure to consult your physician before starting any new form of physical activity.

> Healthy aging depends on how we live each day.



Arthritis

The biggest barrier for being physically active with arthritis is pain and stiffness. Yet, research shows that regular exercise, performed properly, can decrease pain and increase flexibility and overall fitness. When you are active, you are feeding your joints. Therefore, when you are inactive, you are starving the cartilage in your joints. Cartilage covers the ends of your bones to protect and cushion them. This cartilage needs you to move your joints so it can absorb nutrients and remove waste.

Regular physical activity manages arthritic pain. If you are inactive, your muscles and other soft tissues around your joints will shrink and stiffen. This will cause extra stress on your joints and increase the pain when you do move.

Also, physical activity can help control weight and therefore reduce the stress placed on your joints by your body. Those with severe arthritis or joint deformity should consult a physiotherapist before beginning an exercise program.² For more information go to www.arthritis.ca.

1. Miller, C. (2004). Nursing for Wellness in Older Adults: Theory and Practice. Philadelphia, PA: Lippincott Williams & Wilkins.

2. The Arthritis Society. (2007). *Exercising Regularly*. Retrieved March 27, 2008 from http://www.arthritis.ca/tips%20for% 20living/exercise

Cancer

The American Cancer Society recommends exercising 30 minutes a day, five days a week to help in the prevention of cancer. Some excellent activities to try are walking, yoga, dancing, Tai Chi, and swimming.³

Exercise can also help people cope with cancer treatment. However, make sure to consult your doctor before starting any new form of physical activity. Exercise can help to:

- Increase your energy level
- Improve digestion and reduce constipation
- Increase heart and lung function
- Increase strength and flexibility
- Reduce stress and improve your mood
- Control your weight⁴

Cardiovascular Disease

Cardiovascular disease is a leading cause of death in North America for both men and women. $^{\rm 5}$

Physical activity can help prevent and control many of the risk factors for cardiovascular disease. It can help control high blood pressure, body weight and reduce stress. Exercise also helps control cholesterol levels by reducing the amount of bad cholesterol (LDL - low density lipoproteins) and increasing the amount of good cholesterol (HDL - high density lipoproteins). Physical activity also improves the efficiency of the heart, lungs and muscles, keeps blood vessels healthy and improves circulation.¹

5. HealingWithNutrition.com. (n.d.). Cardiovascular Disease: Facts, Disease Prevention and Treatment Strategies. Retrieved March 28, 2008 from http://www.healingwithnutrition.com

Miller, C. (2004). Nursing for Wellness in Older Adults: Theory and Practice. Philadelphia, PA: Lippincott Williams & Wilkins.
About.com. (2007). Prevent Cancer: Top Ten Ways To Prevent Cancer Through Exercise. Retrieved March 28, 2008 from http:// www.cancer.about.com/od/causes/tp/exercise.htm?p=1

^{4.} The Cancer Council Victoria. (2005). Exercise may help you recover: Nutrition & Exercise. Retrieved March 28, 2008 from http:// www.cutyourcancerrisk.org.au

Chronic Pain

Exercise isn't usually the first thing that people with chronic pain imagine when they think about pain relief. However, exercise may be more important than you think. It has been proven that regular exercise is a great tool to manage chronic pain.⁶

Exercise tells the brain to release endorphins which are our body's natural pain relievers. These chemicals temporarily block pain signals and reduce anxiety and depression. These are conditions that may make chronic pain difficult to control.⁶

Starting an exercise program may be difficult if you are experiencing chronic pain. However, you must look at all the positive benefits that being physically active has to offer:

- Increasing flexibility
- Improving sleep quality
- Boosting your energy level
- Helping to maintain a healthy body weight
- Enhancing your mood
- Protecting your blood vessels and heart muscle⁶

Exercising with Chronic Pain

A great way to exercise with chronic pain is with regular aerobic exercise such as swimming, cycling, and walking. Water exercises may

be extremely useful in reducing pain that gets worse during weight-bearing activities such as walking. Also, remember to stretch after to loosen up your muscles and joints.⁷

 MayoClinic.com. (2007). Exercise takes the edge off chronic pain. Retrieved March 27, 2008 from http://www.mayoclinic.com
WebMD. (2007). Pain Management Health Center: Chronic Pain - Home Treatment. Retrieved March 27, 2008 from http:// www.webmd.com/pain-management/tc/chronic-pain-home-treatment





Diabetes

Ten percent of people that have Diabetes have Type 1 diabetes. This is when the pancreas no longer produces insulin for the body to use. Insulin helps manage blood sugar levels. Type 1 diabetes is generally a genetic condition.

Type 2 diabetes is when the body does not respond to insulin the way it should. This means that the body needs help to manage its blood sugar levels. For more information go to www.diabetes.ca.

Both aerobic (walking, running, dancing, swimming) and resistance (weight training) exercises are good for individuals with diabetes. Physical activity in combination with healthy eating is often recommended by doctors.⁸



Exercise and Type 1 Diabetes

For individuals who have Type 1 Diabetes, it is extremely important that they match their carbohydrate and insulin intake with their exercise plan because there are many factors that can influence blood sugar levels.⁸

Some benefits of physical activity for individuals with Type 1 diabetes include:

- Improved lung and heart function
- Weight control
- Better cholesterol levels
- Decreased rates of stroke, heart disease, cancer
- Decreases stress
- Stronger muscles and bones

Exercise and Type 2 Diabetes

Physical activity helps to improve blood sugar levels and decreases insulin resistance in individuals with Type 2 diabetes. Also, exercising muscles use glucose (sugar) more efficiently. Furthermore, studies have proven that if you exercise your muscles, they are able to take up glucose more quickly. Therefore, physical activity is extremely important for individuals with Type 2 diabetes.⁸

For more information and resources for Older Adults, contact Forever...in *motion* at (306)844-4080

8. The Canadian Diabetes Association. (n.d.). *Physical Activity and Type 1 Diabetes*. Retrieved March 27, 2008 from http://www.diabetes.ca