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]

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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 weight control 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.

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

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/default.asp?s=1

Cancer

The American Cancer Society recommends exercising 30 minutes a day, 5 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 weight [4]

Cardiovascular Disease

Cardiovascular disease is a leading cause of death in North America for both men and women. [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). [1]

Physical activity also improves the efficiency of the heart, lungs and muscles, keeps the vessels healthy and improves circulation. [1]

1. Miller, C. (2004). *Nursing for Wellness in Older Adults: Theory and Practice*. Philadelphia, PA: Lippincott Williams & Wilkins.
3. 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. Cancervic.nutrition_and_exercise/org.au/about-cancer/living-with-cancer/rcise_may_help_you_recover.htm
5. HealingWithNutrition,com. (n.d.). *Cardiovascular Disease: Facts, Disease Prevention and Treatment Strategies.* Retrieved March 28, 2008 from http://www.healingwithnutrition.com/cdisease/cardiovascular/cardiovascular.htm

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 bodies 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 exercise has to offer that include:

- 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 muscle [6]

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 before and after to loosen up you muscles and joints. [7]

6. MayoClinic.com. (2007). *Exercise takes the edge off chronic pain.* Retrieved March 27, 2008 from http://www.mayoclinic.com/print/chronic-pain/AR00017/METHOD=print
7. 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

Some people 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 he body no longer responds 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 best for individuals with diabetes. [10]

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Exercise and Type 1 Diabetes

For individuals who have Type 1 diabetes it is extremely important that they match their carbohydrate and insulin intake to 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 lipid profile (ex. Cholesterol)
- Decreased rates of stroke, heart disease, cancer
- Stronger muscles and bones
- Decreased stress . [8]

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. As well, studies have proven that if you exercise your muscles, they are able to take up glucose more quickly, therefore making physical activity extremely important for individuals with Type 2 diabetes. [9]

For more information and resources for Older Adults, contact in motion (306)655-DoIt or visit our website www.in-motion.ca .

8. The Canadian Diabetes Association. (n.d.). *Physical Activity and Type 1 Diabetes.* Retrieved March 27, 2008 from http://www.diabetes.ca/Section_About/type1exercise.asp
9. The Canadian Diabetes Association. (n.d.). *Physical Activity and Type 2 Diabetes.* Retrieved March 27, 2008 from http://www.diabetes.ca/Section_About/firststep.asp

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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/default.asp?s=1
3. 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. Cancervic.org.au/about-cancer/living-with-cancer/nutrition_and_exercise/exercise_may_help_you_recover.htm
5. HealingWithNutrition,com. (n.d.). *Cardiovascular Disease: Facts, Disease Prevention and Treatment Strategies.* Retrieved March 28, 2008 from http://www.healingwithnutrition.com/cdisease/cardiovascular/cardiovascular.htm
6. MayoClinic.com. (2007). *Exercise takes the edge off chronic pain.* Retrieved March 27, 2008 from http://www.mayoclinic.com/print/chronic-pain/AR00017/METHOD=print
7. 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
8. The Canadian Diabetes Association. (n.d.). *Type 1 diabetes: the basics.* Retrieved March 27, 2008 from http://www.diabetes.ca/Section_About/type1.asp
9. The Canadian Diabetes Association. (n.d.). *Type 2 diabetes: the basics.* Retrieved March 27, 2008 from http://www.diabetes.ca/Section_About/type2.asp
10. The Canadian Diabetes Association. (n.d.). *Physical Activity and Type 1 Diabetes.* Retrieved March 27, 2008 from http://www.diabetes.ca/Section_About/type1exercise.asp
11. The Canadian Diabetes Association. (n.d.). *Physical Activity and Type 2 Diabetes.* Retrieved March 27, 2008 from http://www.diabetes.ca/Section_About/firststep.asp

For more information and resources on chronic conditions call 655-DOIT