



Age well Into the future

Our aging population is increasing. In fact, adults over 65 years of age are the fastest growing age group. By 2035, about one in four Canadians will be 65 years of age or older (Statistics Canada, 2010). The aging baby-boomer generation is a major reason for this. The first group of baby-boomers turns 65 in 2011. Our bodies change as we age. Some changes are more obvious than others (e.g., wrinkles and grey hair). Less visible and gradual changes often occur within the muscles, bones, and joints.

Normal Age-Related Changes

As we age, muscles lose size (mass) and strength.

Reason Why

- There's a decrease in the amount of muscle tissue, and in the size and number of muscle fibres.
- The amount of growth hormone and testosterone (in males) produced by the body decreases. These hormones help maintain muscles.

Possible Effects

- Weakness and fatigue.
- Affect one's ability to carry out daily tasks (e.g., opening a jar, turning a key, taking stairs).

As we age, bones become weak and more brittle.

Normal bone loss due to aging can be divided into two types:

- Rapid bone loss that affects women after menopause (usually in the first 5 to 10 years).
- Slow bone loss that begins in both men and women after mid-life (between 40 and 50 years of age).

- Bones are more likely to break.



As we age, joints become stiff.

- Cartilage, which lines joints, wears away and tears with age.
- The amount of lubricating fluid in joints decreases over time.
- The ligaments and tendons, which hold joints together, lose elasticity.

- Discomfort or pain.
- Less flexible.
- Limited movement or range of motion.

Normal age-related changes can affect one's quality of life. These changes can cause physical pain, limit one's daily activities (e.g., turning a key to open a door), and increase one's risk of falls and serious injury. The good news is physical activity, along with a healthy balanced diet, can help slow down age-related changes. Regular physical activity helps to strengthen muscles and bones, and keeps joints mobile.

The new *Canadian Physical Activity Guidelines* released in January 2011, outline the amount and type of physical activity recommended for older adults.



Below is an overview of these guidelines

(Canadian Society for Exercise Physiology, 2011):

- Get at least 150 minutes (2.5 hours) of moderate- to vigorous-intensity aerobic physical activity per week. Moderate-intensity aerobic physical activity includes any activity that causes older adults to sweat a little and breathe harder, such as brisk walking, water aerobics, ballroom dancing, and bicycling. Vigorous-intensity aerobic physical activity includes any activity that causes older adults to sweat and be out of breath, such as cross-country skiing, jogging, fast swimming, and fast dancing.
- These physical activity guidelines can be achieved in various ways. For example, going for a brisk walk five days a week. Activity can also be broken into shorter sessions, but needs to be at least ten minutes long to achieve health benefits.
- Add muscle and bone strengthening activities at least 2 days per week. Some examples of muscle and bone strengthening activities include weight training, working with resistance bands, activities that use the body as resistance (e.g., push-ups, curl-ups), heavy digging and shoveling in the garden, and yoga.

USEFUL LINK: Canadian Society for Exercise Physiology
<http://www.csep.ca/english/view.asp?x=804>

- Those with limited mobility should engage in activities that improve balance and reduce the risk of falls. These activities include stretching, tai chi, and yoga.
- These guidelines outline the minimum level of activity older adults need to achieve health benefits. The guidelines also stress that the more physical activity one engages in, the better it is for one's overall health.
- These guidelines recommend starting off slow, and gradually building up to at least 150 minutes per week. There are many exercise programs designed for older adults. Contact your local recreation department or local seniors centre to get started. Also, if you have specific health concerns about exercising, talk with your doctor.

By following these new physical activity guidelines, you're taking steps to strengthen your muscles and bones, while keeping your joints mobile. This helps slow down normal age-related changes and their effects. It improves overall physical and mental health, and helps you remain independent as long as possible.



BodyBalance

References

- Besdine, R.W., MD. (2007). *The Merck Manual: Changes in the body*. Retrieved November 15, 2010 from <http://www.merckmanuals.com/home/sec26/ch320/ch320b.html>
- Canadian Society for Exercise Physiology. (2011). *Canadian Physical Activity Guidelines*. Retrieved January 24, 2011 from <http://www.csep.ca/CMFiles/Guidelines/CSEP-InfoSheets-older%20adults-ENG.pdf>
- Statistics Canada. (2010). *Health-promoting factors and good health among Canadians in mid- to late life*. Retrieved November 15, 2010 <http://www.statcan.gc.ca/pub/82-003-x/2010003/article/11289-eng.pdf>
- Tabloski, Patricia A. (2010). *Gerontological Nursing*. New Jersey: Pearson Education Inc.