

“Psychology Works” Fact Sheet: Physical Activity, Mental Health, and Motivation

The Canadian Society for Exercise Physiology (CSEP) recommends that adults aged 18 or older, who do not have a suspected or diagnosed medical condition, do at least 150 minutes/week of moderate-to-vigorous intensity exercise, with each session lasting at least 10 minutes. All adults should also do muscle and bone-strengthening exercises at least twice/week. Older adults (65+) with poor mobility should regularly do activities that help to improve balance and prevent falls (e.g., yoga, tai chi). Women who are or think they may be pregnant, should check pregnancy guidelines with their doctor.

Canadian statistics show that most adults don’t meet these requirements, with levels of physical activity decreasing as people age. Further, statistics show that only 15% of children (5-11 years) and 5% of youth (12-17 years) meet their recommended level of physical activity (60 minutes/day). As children and youth look to adults for behaviours, engaging children in exercise can be helpful to increase the likelihood that these behaviours will become habits that will continue into adulthood.

What Do “Moderate” and “Vigorous” Mean?

The definitions of “moderate” and “vigorous” physical activity depend on your age, health status, current level of activity, and relative level of (dis)ability. For example, a young, able-bodied athlete might not be affected by a brief walk, while an older, generally inactive person with poor mobility might experience this as “vigorously intense.” The following guidelines can help:

- **Moderately intense physical activities** should noticeably raise your heart rate. While you’re doing moderately intense physical activity, you should be able to have a conversation, but not be able to sing your favourite song.
- Your resting heart rate increases a lot while doing **vigorously intense physical activity**, although you shouldn’t feel uncomfortable as a result. While doing a vigorously intense activity, you shouldn’t be able to say more than a few words without having to take a breath.

What Are the Mental Health Benefits of Physical Activity?

Regular physical activity comprised of both cardiovascular and resistance exercise, has many mental health benefits. The longer you stick with your exercise schedule and the more often you exercise, the more benefits you’ll see. For example, research shows that regular physical activity can help:

Increase Brain Health

- Boost **academic performance** (e.g., grades) in children, youth and young adults
- Individuals perform better than others their age on tests of **cognitive ability** (e.g., memory, attention, processing speed)
- Particularly among middle-aged individuals, reduce the risk of **cognitive decline**, measured as a slowing in attention, memory, and concentration, later in life

Enhance Wellbeing

- Boost **self-esteem**, itself a key sign of good mental health and overall wellbeing, from early childhood straight through older adulthood
- Reduce **day-to-day stress**
- Increase self-reported **happiness** and lower levels of **sadness and loneliness**, both in the short-term and later in life
- Reduce feelings of **fatigue**, improve **sleep quality**, and lower your risk of **insomnia** (provided vigorous exercise is not done too soon before bed)

Reduce the impact of Chronic Diseases

- Can reduce symptoms of **depression** and **anxiety** and may reduce the likelihood of future depressive episodes
- Improves **vascular health**, meaning it reduces the risk of stroke, coronary heart disease, atherosclerosis, hypertension, and vascular dementia
- Lowers blood sugar, reducing the risk of developing **type 2 diabetes** and diabetic complications
- Lower the risk of developing **neurodegenerative diseases** (e.g., Alzheimer’s Disease) and can make the symptoms of these diseases less severe (e.g., issues with memory, concentration, attention)
- Enhance the impact of the treatment of **addictions**, particularly in the reduction of cravings
- Aid in the treatment of **chronic pain** (tailored to your physical abilities), **post-traumatic stress disorder**, **schizophrenia**, and **body dysmorphic disorders** (i.e., being obsessed with a real or imagined physical “flaw”).

Why Does Physical Activity Have These Benefits?

There is no single reason why physical activity has mental health benefits. Instead, research suggests that benefits come from the combined physiological, psychological, social, and neurological effects of exercise.

- **Physiological:** Physical activity both boosts your body’s production of endorphins and endocannabinoids, which are chemicals that help you to relax, feel more pleasure, and feel less pain, and reduces the amount of cortisol (i.e., “stress hormone”) that your body produces.
- **Psychological:** Regular physical activity helps to increase feelings of self-esteem and self-efficacy, or how much you believe in yourself to accomplish important goals. Short bursts of exercise can also make you happier in the moment by interrupting negative trains of thought.
- **Social:** People who exercise regularly tend to have bigger social networks and stronger relationships with friends and family. The regular face-to-face interaction that comes from group exercise (e.g., fitness classes, team sports) boosts your mood and can help to prevent depression.
- **Neurological:** Physical activity helps your brain to use and produce more dopamine and serotonin, which interact with receptors in your brain that can activate positive emotions. People who exercise regularly also have more blood flow to the brain and reduced inflammation. Exercise stimulates the release of growth factors, which optimize the growth of new blood vessels in the brain, and of existing brain cells. This can be observed as better brain functioning, and some research has found, more brain matter in certain areas (e.g., hippocampus, which is associated with memory).

How Do I Get Started and Stay Motivated?

Before you get started, you should ask yourself why you want to exercise, and what types of exercise might be best for you based on your physical (dis)abilities, personality, and goals. Consult your family physician for help in developing a healthy and realistic exercise plan.

Some of the most common reasons for not exercising include not having enough time, not having enough money, not having enough energy, and feeling uncomfortable (physically or socially). Solutions for these can include:

- Planning to exercise frequently, but in short bursts (i.e., 10 minutes or more).
- Scheduling your day so you exercise when you tend to have more energy, and always try to do what you can.
- Finding free or low-cost activities that you enjoy (e.g., walking, cycling, or pick-up sports).
- Not pushing yourself too hard and trying to find an environment where you feel comfortable and motivated (e.g., home, outdoors, with a buddy).

Once you've started your exercise program, there are many ways to help you stick with it. Researchers from numerous areas of psychological research (e.g., clinical, sport, and social psychology) suggest that you:

- Make a plan and set regular, concrete goals.
- Don't delay.
- Be realistic in choosing and committing to an exercise regimen.
- Remind yourself why exercise is important to you every day and whenever you're facing difficulties.
- Ensure you eat regular, well-balanced meals and sleep regularly.
- Focus on you and your accomplishments, not what other people are doing.
- Track your progress and celebrate small gains.
- Make physical activity part of your daily routine.
- Don't do the same thing every time and try to do activities you enjoy.
- Plan for how you'll deal with potential obstacles or distractions.
- Practice self-compassion, especially when you haven't met your daily or weekly goals.
- Find an exercise buddy who is similar to you (e.g., age, fitness level, ability level).

Where Can I Go for Help or to Learn More?

Visit the CSEP website for physical activity guidelines: <http://www.csep.ca/en/guidelines/get-the-guidelines>.

Community and recreation centres offer a variety of programs that can help you add physical activity to your daily routine.

Drop-in sports and fitness classes are a great way to sample what's available before committing to anything.

See a psychologist to discuss motivational tips, concerns you may have related to self-image and exercising, and strategies specific to your needs.

Where Can I Get More Information?

CPA Sport and Exercise Psychology Section: <https://cpa.ca/aboutcpa/cpasections/sportandexercise/>

American Psychological Association (APA) Division 47: <http://www.apadivisions.org/division-47/>

You can consult with a registered psychologist to find out if psychological interventions might be of help to you. Provincial, territorial and some municipal associations of psychology often maintain referral services. For the names and coordinates of provincial and territorial associations of psychology, go to <https://cpa.ca/public/whatisapsychologist/PTassociations/>.

This fact sheet was originally prepared for the Canadian Psychological Association by Matthew Murdoch, Canadian Psychological Association.

Revised: October 2021

Your opinion matters! Please contact us with any questions or comments about any of the *Psychology Works* Fact Sheets: factsheets@cpa.ca

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