# **European Code Against Cancer, 5th Edition**14 ways you can help prevent cancer



## **Recommendation 4 for Individuals on Physical activity**

Be physically active in everyday life. Limit the time you spend sitting.

### **Key summary**

- · Regular physical activity greatly reduces the risk of several cancers, such as breast, colon, endometrial, kidney, bladder, oesophageal, and stomach cancers.
- · In contrast, sedentary behaviour, that is spending long periods of time sitting or lying down during waking hours, increases the risk of certain cancers, including colon, breast, endometrial, and lung cancers, regardless of physical activity levels.
- · Incorporating physical activity into daily routines can make it easier to fit exercise into a busy schedule. Enjoyable activities are more likely to be maintained in the long term.
- · Limit the amount of time spent being sedentary. Replacing sedentary time with physical activity of any intensity provides health benefits.

# Physical inactivity and sedentary behaviour, and cancer

In the European Union, about 45% of individuals report that they never exercise or play sport, and 28% sit for 5–8 hours per day. Lack of sufficient physical activity contributes to 10% of colon cancers and 9% of breast cancers in Europe. Although more people are participating in recreational activities, a lot of people still spend a large amount of time without movement especially at work and during commutes.

Physical activity includes any movement that uses your muscles and burns energy.

Regular exercise plays a key role in cancer prevention by keeping the body's systems, such as blood sugar regulation and the immune system, running efficiently. It helps control weight, which is crucial because higher levels of body fat can increase risks of several cancers by changing hormone levels and causing chronic inflammation. Exercise boosts the immune system, making your body better at fighting off illness, including cancer.

Sedentary behaviour includes activities in which you are not moving much, such as sitting at a desk, lying on a couch, or watching television.

Excessive sitting, regardless of general physical activity levels, has been linked with an increased risk of several cancers. This suggests that it is not just the lack of exercise but also the prolonged periods of sitting that can contribute to cancer risk.

### Actions to reduce your cancer risk

Increase physical activity. Adults should aim for 150–300 minutes of moderate-intensity aerobic activity per week (such as brisk walking, dancing, gardening) or 75–150 minutes of vigorous-intensity aerobic activity per week (such as jogging, swimming laps, fast bicycling). Include muscle-strengthening activities involving all major muscle groups on 2 or more days per week for added health benefits. Find enjoyable activities to do, because you are more likely to sustain them over time.

Integrate physical activity into daily routines. This can make it easier to be active with a busy schedule. For example, choose active transportation, such as biking to work or walking to nearby destinations, taking the stairs instead of the elevator, walking during breaks, or parking further away from the shops. Organize weekend activities that involve movement, such as hiking, playing sports, or taking part in activities, like community clean-ups, that involve physical labour.

Reduce sedentary behaviour. Creative solutions, such as doing short workouts during TV advertisements or setting regular reminders to stand or stretch every hour, can help break up long periods of inactivity. Mobile phone applications that track sedentary time and prompt activity can also help.

Encourage movement at your workplace. Suggest "active breaks" and "walking meetings", and encourage group exercises, such as stretching or light aerobics, as part of workplace wellness programmes. Initiate friendly competitions and offer rewards for meeting fitness goals to motivate movement. Advocate for your employer to provide ergonomic tools, such as sit–stand desks, and to design office layouts so that walking to the printer, for example, becomes an incidental activity.

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Talk to your health professional and ask them for more information and resources that detail the benefits of exercise and outline step-by-step, age-appropriate exercise routines. They may also be able to encourage community health initiatives, such as walk-to-school days, senior exercise programmes, or family-oriented sports days that can foster an environment of active living.

#### Specific target groups that can benefit from physical activity

**Children and adolescents:** Early intervention can establish healthy habits that prevent childhood obesity, which is linked to an increased risk of cancer later in life.

**Women:** Regular exercise helps manage weight and hormone levels, reducing the risk of breast and endometrial cancers.

**Older adults:** Older adults typically engage in less physical activity and have higher rates of cancer. Increasing activity can help mitigate age-related muscle loss, improve mobility, and reduce cancer risk.

**People living in disadvantaged neighbourhoods:** Limited access to exercise facilities in disadvantaged neighbourhoods may contribute to higher cancer risks. Subsidized gym memberships and community-based fitness programmes can provide relevant support.

**Migrants:** Tailored health initiatives that encourage physical activity can help mitigate the increased risks of cancer that are associated with lifestyle changes after migration.

# Co-benefits for the prevention of noncommunicable diseases (NCDs) with similar risk factors and opportunities for health promotion

Exercise plays an important role in weight management (preventing or tackling overweight and obesity). It also strengthens the heart and improves circulation, reducing the risk of heart disease and stroke, lowering blood pressure and cholesterol levels, and regulating blood sugar, which is crucial for preventing and managing type 2 diabetes. Some types of exercise that put stress on bones, such as running, walking, and lifting weights, can also increase bone density and reduce the risk of osteoporosis. Regular exercisers also report better sleep patterns. Too much sitting can increase the risk of cardiovascular disease, type 2 diabetes, and sleep disturbances, highlighting how crucial a dynamic lifestyle is for overall health.



#### **Myths versus Facts**

MYTH: No pain, no gain.

**FACT:** Effective physical activity does not need to be painful. Moderate discomfort, such as muscle soreness or feeling out of breath, is normal when engaging in new activities. However, experiencing sharp or severe pain is a warning sign that you may be overexerting yourself or using improper technique.

#### MYTH: Lifting weights makes you bulk up.

**FACT:** Regular strength training, with proper repetitions and weights, tones muscles and increases strength without necessarily adding bulky muscle mass. It enhances metabolic rate and promotes fat loss, helping maintain flexibility and functional strength.

#### MYTH: Someone who is thin is physically fit.

**FACT:** Physical fitness involves more than appearance; it includes cardiovascular health, muscle strength, and endurance. A person of normal weight may still have poor cardiovascular health or muscle strength, highlighting the importance of regular physical activity for everyone, regardless of body size.

#### MYTH: When you stop strength training, muscle turns to fat.

**FACT:** Muscle and fat are completely different tissues; one cannot transform into the other. Stopping strength training leads to muscle loss and possibly a slower metabolism, which can result in fat gain if calorie intake remains unchanged.

#### MYTH: Exercise can erase the effects of a bad diet.

**FACT:** Although physical activity is beneficial, it cannot completely counteract the effects of poor dietary habits. Good nutrition is crucial for overall health and complements the henefits of exercise

# Learn about the policies that help support increasing physical activity

Effective policies that promote physical activity and create enabling environments that encourage movement have the potential to play a significant role in reducing the risk of cancer and improving overall health. Here are some examples:

- Urban planning: New developments should be required to include recreational spaces and safe, illuminated walking paths, which can make physical activity a more convenient choice for all residents
- Health-promoting community events: Local-level policies that support seasonal or annual events, such as walkathons or cycling tours, can promote physical activity and bring communities together.
- Public health campaigns: National health campaigns can highlight stories of individuals from diverse backgrounds who have successfully integrated more activity into their lives; these individuals are relatable role models and can provide practical tips.

## References

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