HEALTH BASICS

Exercise

Exercise is planned physical activity that supports fitness, function, and health.

WHAT IT IS
Planned physical activity that challenges or strengthens your body

WHERE IT COMES UP
Daily routines, sport, rehabilitation, and health advice

WHY IT MATTERS
Supports physical fitness, mental wellbeing, and long-term health

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Primary care clinician, physiotherapist, or qualified exercise professional

HOW IT IS CHECKED
Activity records and fitness measurements when useful

Overview

Exercise is planned physical activity done to improve or maintain health, fitness, strength, mobility, or skill. It is not a disease or a diagnosis.

Exercise is one part of physical activity. Physical activity includes any movement that uses energy, such as walking to work, gardening, housework, or active play. Exercise is usually more structured, such as a scheduled swim, strength session, or brisk walk.

Common forms include:

Intensity describes how hard your body is working. During moderate-intensity activity, you can usually talk but not sing. During vigorous activity, speaking more than a few words without pausing for breath is difficult. The same activity may feel moderate to one person and vigorous to another.

Exercise can be adapted for age, disability, pregnancy, health conditions, available equipment, and personal goals. It does not have to involve a gym or organised sport.

- Aerobic exercise , such as brisk walking, cycling, or swimming
- Strength exercise , such as lifting weights or using resistance bands

- Balance exercise , such as standing on one leg or practising tai chi
- Flexibility exercise , such as controlled stretching

How it works

When you move, your muscles need more energy and oxygen. Your heart beats faster, your breathing increases, and blood flow shifts toward the working muscles. These are normal short-term responses to activity.

With repeated exercise, the body adapts. Aerobic activity can help the heart pump blood more efficiently and improve how muscles use oxygen. Strength training challenges muscles to produce force, which can support muscle strength and function. Weight-bearing activities, such as walking or resistance training, also place controlled stress on bones.

Exercise affects how the body handles glucose, the main sugar in the blood. Active muscles can take up more glucose, and regular activity can improve insulin sensitivity. Insulin is the hormone that helps move glucose from the blood into cells.

Movement also affects the nervous system and brain. It may support sleep, mood, attention, and the ability to manage stress. Balance and coordination exercises train communication between the brain, nerves, and muscles.

Benefits build through regular activity, but a session does not need to be long to count. Activity can be divided into smaller periods across the day.

Why it matters for your health

Regular physical activity is associated with a lower risk of several long-term conditions, including cardiovascular disease, type 2 diabetes, and some cancers. It can also support blood pressure, cholesterol levels, body function, sleep, and mental wellbeing.

Exercise may help people remain independent by maintaining strength, balance, and the ability to perform everyday tasks. For older adults, activities that challenge balance can help reduce the risk of falls.

Health guidance for adults generally recommends a combination of aerobic and muscle-strengthening activity. US and World Health Organization guidance recommends at least 150 minutes of moderate-intensity aerobic activity each week, or 75 minutes of vigorous activity, with additional benefits at higher amounts. Muscle-strengthening activity is recommended on at least two days each week.

These figures are population targets, not a test you must pass. Some activity is better than none, and people who are inactive can begin with manageable amounts. Your starting point, health, ability, and goals help determine what is realistic.

Children, pregnant people, older adults, and people with disabilities or long-term conditions have more specific guidance. An adapted plan may focus on function, safety, symptom control, or rehabilitation rather than general fitness targets.

What can go wrong

Exercise can be related to injuries or medical problems, particularly when activity increases too quickly, technique is poor, conditions are extreme, or an existing condition is not well controlled.

Muscle soreness after unfamiliar activity is common. A sudden injury may cause a sprain, muscle strain, tendon problem, or fracture. Pain that continues, worsens, changes how you walk, or limits normal movement deserves routine assessment.

Hot or humid conditions can contribute to heat exhaustion or, more seriously, heatstroke. Cold conditions can contribute to hypothermia or frostbite. Dehydration can affect performance and may cause headache, weakness, or dizziness.

People who use insulin or certain diabetes medicines can develop hypoglycaemia , meaning blood glucose that is too low, during or after activity. Exercise can also bring on breathing problems in some people with asthma. A clinician can help plan monitoring, food, medication, or inhaler use.

Very intense or unfamiliar exercise can rarely be associated with rhabdomyolysis , a serious breakdown of muscle tissue. Severe muscle pain or swelling with dark brown urine needs urgent medical assessment.

Stop exercising and seek emergency help for chest pressure or pain, severe difficulty breathing, fainting, sudden weakness on one side, new confusion, or signs of heatstroke such as altered behaviour or loss of consciousness. These are not routine exercise effects.

A racing or irregular heartbeat with fainting, chest discomfort, or severe breathlessness also needs urgent assessment. Less severe concerns, such as repeated dizziness, unusual breathlessness, joint pain, or reduced exercise tolerance, can usually be discussed through routine healthcare unless they become sudden or severe.

What you can do

Choose activities that match your current ability and that you are reasonably likely to continue. If you are starting from a low activity level, increase time, frequency, or intensity gradually rather than changing everything at once.

A simple record can help you see patterns. You could note:

You do not usually need a fitness test before beginning light or moderate activity. Medical review may be useful if you have unexplained chest discomfort, fainting, significant breathlessness, a known heart or lung condition, a recent injury, or concerns about increasing to vigorous exercise.

Ask what kinds of activity are suitable if you are recovering from surgery or illness, are pregnant, or have a condition affected by exertion. A physiotherapist can assess movement and function. Cardiac, pulmonary, or other supervised rehabilitation services may be appropriate after certain diagnoses or treatments.

Fitness can be measured with walking tests, strength tests, heart-rate monitoring, or laboratory testing of oxygen use. These tests are useful in some clinical, rehabilitation, or athletic settings, but there is no single test that everyone needs.

- The activity, duration, and approximate intensity
- Strength exercises and the resistance used
- Pain, dizziness, breathing difficulty, or unusual fatigue
- Blood glucose readings if your diabetes plan requires them
- Progress toward a practical goal, such as walking farther comfortably

Common questions

Does walking count as exercise?

Yes. Walking can be aerobic exercise when it is planned or done at an intensity that challenges you. A slower walk still contributes to overall physical activity and may be an appropriate starting point.

Do I need to feel sore for exercise to work?

No. Soreness is not required for improvement. Mild soreness can follow unfamiliar activity, but severe or persistent pain is a reason to reduce the activity and consider assessment.

Is vigorous exercise always better?

No. Vigorous activity can provide benefits in less time, but it is not suitable or enjoyable for everyone. Moderate activity can provide substantial health benefits and may be easier to

maintain.

Do household tasks count?

They count as physical activity when they involve movement and energy use. Tasks that raise your breathing and heart rate may also contribute toward aerobic activity targets.

Should I track calories or heart rate?

Not necessarily. These measurements can be useful for specific goals, but they are estimates and are not required for general health. Time, distance, repetitions, or how hard the activity feels may be enough.

Can I exercise with a long-term condition?

Often, yes, with suitable adjustments. The appropriate type and intensity relate to the condition, current stability, treatment, and your usual activity level. Ask the clinician or rehabilitation service involved in your care if you need condition-specific limits.

Sources

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- US Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition . 2018.
- Centers for Disease Control and Prevention. Measuring Physical Activity Intensity .
- American College of Obstetricians and Gynecologists. Physical Activity and Exercise During Pregnancy and the Postpartum Period . Committee Opinion No. 804, 2020.
- Riebe D, Franklin BA, Thompson PD, et al. Updating ACSM's Recommendations for Exercise Preparticipation Health Screening . Medicine & Science in Sports & Exercise. 2015;47(11):2473-2479.