HEALTH BASICS

Fitness & exercise

Fitness describes your capacity for physical activity, while exercise is planned movement used to maintain or improve it.

WHAT IT IS
Planned movement that develops or maintains physical fitness

WHERE IT COMES UP
Daily activity, sports, rehabilitation, and health assessments

WHY IT MATTERS
Supports heart, muscle, bone, metabolic, and mental 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 history and fitness measures; no single test

Overview

Physical activity means any body movement that uses energy. Walking to a bus stop, gardening, housework, active play, and manual work all count.

Exercise is a type of physical activity. It is planned and repeated, usually with the aim of improving or maintaining fitness. Examples include brisk walking, swimming, strength training, cycling, and exercise classes.

Fitness is your ability to perform physical tasks. It includes several different qualities:

Fitness is not a disease, diagnosis, body shape, or clothing size. Someone can also be fit in one area but not another. For example, a strong weightlifter may have limited endurance, while a distance runner may have less upper-body strength.

- Cardiorespiratory fitness: how well your heart, lungs, blood vessels, and muscles support continued activity
- Muscular strength: how much force your muscles can produce
- Muscular endurance: how long your muscles can keep working

- Balance and coordination: how well you control your body and movements
- Flexibility: how far your joints can move comfortably

How it works

During aerobic activity, your muscles need more oxygen and energy. Your heart beats faster, your breathing becomes deeper, and more blood flows to working muscles. Aerobic means activity that relies mainly on oxygen to produce energy over time.

With regular activity, the body adapts. The heart may pump blood more efficiently, muscles become better at using oxygen, and everyday tasks may require less effort.

Strength exercise places resistance against muscles. The resistance can come from weights, exercise bands, machines, water, or your own body weight. Recovery after training helps muscles and related tissues adapt.

Weight-bearing activity, such as walking, running, or resistance training, also places controlled stress on bones. This helps maintain bone strength. Balance activities train your ability to stay steady and respond to changes in position.

Exercise intensity describes how hard your body is working. A simple way to estimate aerobic intensity is the talk test :

Heart-rate monitors and fitness watches can provide estimates, but their readings are not exact medical measurements. Medicines, temperature, stress, hydration, and health conditions can also affect heart rate.

- During moderate activity, you can usually talk but not sing
- During vigorous activity, you may only manage a few words before pausing for breath

Why it matters for your health

Regular physical activity supports cardiovascular health, meaning the health of your heart and blood vessels. It can help manage blood pressure, cholesterol, and blood glucose. It also supports muscle strength, bone health, sleep, mood, and the ability to complete daily tasks.

For older adults, strength and balance are especially relevant to maintaining mobility and reducing falls. For children and teenagers, movement supports physical development, fitness, and bone health.

Public health guidance for most adults recommends at least 150 to 300 minutes of

moderate-intensity aerobic activity each week, or 75 to 150 minutes of vigorous activity, or an equivalent combination. Muscle-strengthening activity is recommended on at least two days each week.

These are population-level targets, not a personal prescription. Any amount of activity can be useful, especially when it replaces time spent sitting. Your appropriate starting point may be lower if you are inactive, recovering from illness or injury, pregnant, disabled, or living with a long-term health condition.

Rest matters too. Training causes temporary stress, while recovery allows adaptation. Sleep, food, hydration, and easier days can all affect how well you recover.

What can go wrong

Exercise can be adapted for many people, but problems can occur when the activity, environment, or workload exceeds what the body can currently manage.

Muscle soreness often develops one or two days after unfamiliar exercise. This is called delayed-onset muscle soreness. Mild soreness usually settles, but sharp pain, major swelling, or loss of movement may indicate an injury rather than ordinary soreness.

Sprains, strains, tendon problems, and stress fractures can follow falls, poor technique, repeated impact, or a rapid increase in training. Pain that keeps returning, changes how you walk, or does not improve with reduced activity deserves routine clinical assessment.

Heat exhaustion and heatstroke can occur during activity in hot or humid conditions. Heatstroke is an emergency. Confusion, collapse, seizures, or very hot skin during or after exertion require immediate emergency help and rapid cooling.

Exercise-related low blood glucose can affect some people who use insulin or certain other diabetes medicines. A diabetes care team can explain how activity, meals, medicines, and glucose monitoring fit together.

Exercise-induced airway narrowing can cause coughing, wheezing, or chest tightness during activity, particularly in people with asthma. These symptoms can be assessed and managed; they should not be assumed to mean that exercise must stop permanently.

Relative energy deficiency in sport , often shortened to RED-S, happens when the body does not receive enough energy for both training and normal body functions. It can affect hormones, menstrual periods, bone health, immunity, mood, and performance. Persistent fatigue, repeated injuries, disrupted periods, or restrictive eating should be discussed with a clinician.

Arrange routine follow-up if you have persistent joint or muscle pain, repeated dizziness, unusual breathlessness, palpitations, or a marked decline in exercise ability.

Stop exercising and seek emergency help for chest pressure or pain, fainting, severe difficulty breathing, signs of stroke, or confusion or collapse in the heat. Severe muscle pain or weakness with dark brown urine after intense exertion also needs urgent medical assessment.

What you can do

Choose activities that fit your current ability, interests, environment, and goals. Enjoyable and practical activities are often easier to continue than a plan built around a single "best" exercise.

If you are currently inactive, begin with manageable sessions and increase gradually. Duration, frequency, or intensity can be changed separately rather than all at once. A warm-up can prepare you for harder movement, while a gradual cool-down allows breathing and heart rate to settle.

Keep a simple record if it helps. You might note:

Technique matters during strength or skill-based exercise. A physiotherapist or appropriately qualified exercise professional can help adapt movements, equipment, or progression.

Ask a clinician before making a major increase in intensity if you have symptoms during exertion, a known heart or lung condition, significant mobility limitations, or recent surgery or serious illness. Useful questions include:

No single fitness test is necessary for everyone. Walking tests, timed chair stands, strength measurements, balance tests, and laboratory exercise tests are used for specific purposes. Consumer fitness scores should be treated as estimates, not diagnoses.

- The activity, duration, and approximate intensity
- Strength exercises and resistance used
- Pain, dizziness, unusual breathlessness, or other concerns
- Sleep, recovery, and how the session felt
- Are there movements or intensity levels I should modify?
- Could my medicines affect heart rate, blood glucose, hydration, or balance?
- Would physiotherapy, cardiac rehabilitation, or another supervised service help?
- What warning signs should make me stop?

Common questions

Is walking enough exercise?

Brisk walking can provide moderate-intensity aerobic activity. It does not train every part of fitness, so strength and balance activities may still be useful. The right mix reflects your goals and abilities.

Do I need a gym?

No. Walking, stair climbing, active travel, resistance bands, household objects, and body-weight exercises can all be used. Safe surroundings and suitable footwear or equipment may matter more than the location.

Does exercise have to happen in long sessions?

No. Activity can be spread across the day and week. Short sessions still count toward your total and may be easier to fit into daily life.

Is soreness proof that exercise worked?

No. Soreness mainly shows that a movement or workload was unfamiliar. Fitness can improve without significant soreness, and severe pain is not a goal.

Should children follow adult targets?

No. Guidance for school-aged children and teenagers generally calls for an average of at least 60 minutes of moderate-to-vigorous activity each day, including vigorous, muscle-strengthening, and bone-strengthening activities on several days each week.

Can I exercise with a long-term condition?

Often, yes, with appropriate adjustments. The safest type and amount relate to the condition, current symptoms, medicines, and physical ability. Condition-specific rehabilitation or physiotherapy may provide a supervised starting point.

Sources

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