FITNESS & EXERCISE

How Much Does Exercise Really Change?

The answer depends less on finding a perfect workout than on deciding which change you want-and judging the evidence without the hype.

The gap between effort and evidence

You finish a walk, a swim or half an hour in the garden and wonder whether it counted. Nothing looks different. You may not feel transformed. Exercise culture loves dramatic promises, but your body does not issue a receipt after every bout of movement.

The honest answer is that exercise can change a great deal, but not every kind of movement changes every outcome. The National Heart, Lung, and Blood Institute defines physical activity broadly: movement that works your muscles and uses more energy than resting. Exercise is the planned, structured part of that larger category. Walking, dancing, swimming, yoga and gardening can all qualify as activity.

That distinction is liberating. Movement does not have to happen in a gym to count. Even modest amounts of physical activity are good for your health, and greater activity is associated with greater benefit. Small amounts can likewise be helpful, and activity can be divided into chunks.

But "more benefit" is not a promise that every additional effort produces a visible or immediate reward. Nor does it mean exercise works alone. The heart institute describes physical activity as one part of a heart-healthy life, alongside eating, weight, stress and smoking. Exercise matters. It does not have to carry the whole burden of your health.

First choose what you want changed

The question "Does exercise work?" is too blunt. Work for what? Aerobic activity raises your breathing and heart rate and supports the heart, lungs and circulatory system. Resistance work builds stronger muscles. Balance activity improves stability and coordination. Flexibility work helps joints move more easily and can improve posture.

Your body also adapts to the activity you practise most often. That makes specificity more useful than searching for the single best workout. If the change you value is strength, resistance work speaks directly to it. If it is stability, balance exercises belong in the conversation. Most people benefit from combining different kinds of activity rather than

expecting one form to do everything.

Regular physical activity may also help prevent or delay type 2 diabetes, heart disease, high blood pressure and stroke, according to the National Institute of Diabetes and Digestive and Kidney Diseases. It may reduce the risk of colon and breast cancer and help with weight maintenance. The same agency notes possible present-day gains, including a happier mood, less stress and a stronger body.

Notice the language: "may help," not "guarantees." These are population-level benefits, not a forecast of what you will notice after your next session. Weight change is especially easy to oversell. The NIDDK says weight maintenance depends on balancing energy used with energy taken in, while weight loss requires using more than you take in. Exercise does not make that arithmetic disappear.

Sometimes the most useful finding is that the evidence has not earned your confidence yet.

Some changes show up in trials

For depression, the evidence is more substantial than a vague claim that movement makes everyone feel good. A 2023 systematic review combined 41 randomized trials involving 2,264 adults with major depression or elevated depressive symptoms. Exercise interventions produced large reductions in symptoms compared with non-exercising control groups.

The result remained favorable when the researchers restricted their analysis to studies at low risk of bias, although the estimated effect became moderate. Supervised programs showed large effects. Still, many trials were small, and their methods differed considerably. That makes exercise an evidence-based option for depressive symptoms, not proof that a particular activity will work equally well for every person.

Chronic low back pain offers another useful lesson: the kind of exercise can matter, but rankings are less certain than they look. A 2022 network meta-analysis of 118 trials and 9,710 participants found that nearly all included exercise types improved pain and disability compared with control. Stretching did not reduce pain, and the McKenzie method did not reduce disability.

Pilates ranked highest for both pain and disability in that review, while mind-body and core-based exercise ranked highly for pain, and strength and core-based work ranked highly for disability. Yet an earlier network meta-analysis called the underlying evidence low quality, citing variation among studies and few studies at low risk of bias. "Best" here is a research ranking, not a universal winner.

Exercise is not a substitute for having persistent symptoms assessed. If movement brings

pain, extreme shortness of breath or dizziness, stop and seek help immediately. If you have trouble moving or balancing, health concerns, or doubts about whether exercise is safe, speak with a health care provider before starting.

A benefit is not a blank cheque

Evidence can be strong for one group and thin for another. During pregnancy, a 2022 review gathered 57 high-level studies, including 32 meta-analyses. It found that exercise could help prevent gestational diabetes, excessive pregnancy weight gain, hypertensive disorders, urinary incontinence, fetal macrosomia, lumbopelvic pain, anxiety and prenatal depression.

That review found no association between exercise and increased maternal or perinatal adverse outcomes. But it did not argue that every pregnant person should perform the same activity. Exercise type and intensity should reflect previous fitness, medical history and the characteristics of the pregnancy. The meaningful message is not "push through"; it is that appropriate movement can remain part of life without being treated as inherently dangerous.

Now compare that with endometriosis. A 2021 systematic review screened more than a thousand citations but found only three usable intervention studies, involving 109 patients. The activities included flexibility and strength work, cardiovascular fitness and yoga. Only one study reported improved pain, and the studies were too different and limited to combine statistically.

The reviewers could not determine whether physical activity or exercise treats endometriosis-associated symptoms. That uncertainty matters. Exercise may still be chosen for other reasons, but the available research does not support selling it as an established answer to endometriosis pain. Sometimes the most useful finding is that the evidence has not earned your confidence yet.

What counts next week

You do not need to wait for the perfect program, ideal equipment or a dramatic burst of motivation. Choose activities you enjoy, begin slowly if you have been inactive and build up rather than pushing hard all at once. Mix activities to keep them interesting and reduce injuries or burnout.

The more practical question is not whether today's movement changed everything. Ask whether it was movement you can return to and whether it matches something you care about: stronger muscles, steadier balance, easier joint movement, better fitness or support for a

health concern. Regular practice is what allows your body to adapt.

This week, notice the places movement already fits: a walk, a bike ride, gardening, dancing at home, a resistance band or a few balance movements. No single session needs to prove its worth. The goal is not to win exercise. It is to choose a form of movement that has a reason to be in your life-and can still be there when the novelty is gone.

Where this comes from

- Exercise and Physical Fitness

  MedlinePlus, U.S. National Library of Medicine · https://medlineplus.gov/exerciseandphysicalfitness.html
- Exercise for Older Adults

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  National Heart, Lung, and Blood Institute · https://www.nhlbi.nih.gov/health/heart/physical-activity
- Benefits of Physical Activity

  National Institute of Diabetes and Digestive and Kidney Diseases · https://www.niddk.nih.gov/health-information/weight-management/tips-get-active/benefits-physical-activity
- Physical exercise in pregnancy: benefits, risks and prescription.

  Journal of perinatal medicine, 2022 · https://pubmed.ncbi.nlm.nih.gov/34478617/
- Exercise as medicine for depressive symptoms? A systematic review and meta-analysis with meta-regression.

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- Best Exercise Options for Reducing Pain and Disability in Adults With Chronic Low Back Pain: Pilates, Strength, Core-Based, and Mind-Body. A Network Meta-analysis.

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  BMC women's health, 2021 · https://pubmed.ncbi.nlm.nih.gov/34627209/