

Humans are designed to do a wide range of motions at differing intensities and paces. Much of our movement is necessitated by actions we need at particular moments throughout our day, like walking up the stairs or running for a bus, but our primal movement patterns evolved from varied movement and speed: walking upright for nomadic long distances, sprinting for the hunt, running away from predators, and building shelters and other life-saving activities.

Modern exercise programmes often look to replicate these features, but most of us simply don't have the time to

for anywhere from 20 minutes upwards, building stamina and endurance. A regime of 15–20 minutes a day of moderate-intensity exercise, often cited as a foundation for basic fitness, can include walking, doubles tennis, physical tasks like housework and gardening, jogging, swimming, weight-training, cycling and yoga.

High-intensity training raises your heart rate very quickly; one distinct characteristic is that when you're working so hard, you lose the ability to speak. This can involve any moderate activity but ramped up in intensity: running faster, cycling quickly or uphill, swimming continual laps, a singles tennis game or any other activity requiring that you train harder and faster. Although

Burning high and low

Which is best for your body—quick and dirty or slow and steady exercise? Charlotte Watts investigates

cover the full range required, and so we gravitate towards a regime that suits our own inclinations—moderate intensity for those who have less energy to spare and high intensity for those wanting more of a buzz or a fast-track to a firmer body. How hard and fast should you exercise? And should it be a hard or slow burn?

These very questions are under constant discussion in the fitness world, with some preferring the steady pace of moderate-intensity training and others attracted to the rush of high-intensity exercise.

Exercise—fast or slow?

Moderate-intensity training includes any steady-state training where the heart rate is raised, but kept relatively constant

moderate-intensity activities are a kinder transition to body tissues, joints and the heart, one minute of high-intensity exercise is said to offer the same results in half the time, a big draw for those who don't like exercise or can't seem to fit it in.

Take the HIIT

High-intensity interval training (HIIT) is a particular form of high-intensity workout that has become popular recently as an especially quick route to weight loss and improved muscle tone. It involves performing high-intensity exercises (like squats, star jumps, burpees) for about 50 seconds, followed by about 10 seconds of rest, so some five different exercises can be covered in just five minutes.

There's no question that high intensity



outperforms slow and steady when it comes to weight loss. High-intensity workouts have been shown to lose more fat and weight (especially around the middle) than traditional aerobic exercise for hours on end,⁴ and this may be related to its benefits on glucose regulation.²

Another study examining the impact on heart health and metabolic status (functioning of biochemical processes) of long and slow running vs HIIT running found that the latter significantly increased oxygen consumption (VO₂max), despite performing the same amount of work.⁵ In fact, as little as three 10-minute sessions per week, with only three 20-second bouts at high intensity, can have significant effects on muscle oxidative capacity and several markers of

cardiometabolic health, including blood sugar in overweight men.⁶

Nevertheless, when it comes to improving overall fitness, more intense does not always mean better, even in young people. One 2015 study compared three groups of untrained college students: one group did steady-state cycling, and others did HIIT with two different programmes: one working at 70 per cent over their maximum capacity (VO₂max), the other at exactly their maximum.

While all groups showed gains in VO₂max and peak power, the HIIT group working the hardest was “still visibly distressed at the end and often required an extended period of time to recover to the point where they could again pursue normal activities”, noted the researchers.⁷ And after eight weeks of training, the HIIT participants reported far less enjoyment doing their training than those doing the moderate-intensity exercise—a key factor for maintaining any activity.

While many studies show advantages of high intensity over moderate intensity, it doesn’t necessarily improve overall fitness. In fact, one study reports that “it remains ‘unclear’ whether one type of exercise training regimen elicits a superior improvement in cardiorespiratory fitness” (the ability of the blood circulation and lungs to supply oxygen during exercise).⁸ An earlier

review of six randomized controlled trials showed that high intensity is superior to moderate intensity in improving exercise capacity, but further high-quality studies with larger populations are needed “to confirm this finding in adults with cardiometabolic disorders”.⁹

Charlene Hutsebaut, an experienced personal trainer who devises individually tailored programmes for her clients, recommends that beginners don’t jump right into HIIT, as they can injure their hearts or other parts of themselves, if they’re not ready for it. She favours moderate intensity for many of her city-dwelling clients, as most of them suffer from some level of stress, and she’s keen to avoid client burnout, even lowering the intensity when necessary.

“Whether you’re an athlete or a total beginner, if you’re going through a period of stress, mixing up different training methods is even more important to avoid body burnout and fatigue”

“If someone is doing HIIT continually and is constantly fatigued, they need to change what they are doing,” says Charlene. Not only is such a regime tiring, but it can cause injuries, particularly in those driven by constant achievement who may tend to ignore their body’s warning signals and push even harder.

Even when not injurious, harder is not always better when it comes to exercise, and varying your programmes may actually result in far better fitness. One study showed that adding just one HIIT session into a week of moderate-intensity exercise can bring about meaningful improvement in cardiorespiratory fitness, while being well-tolerated by previously inactive overweight individuals.¹⁰

The healthiest approach, according to Hutsebaut, is to combine medium- and high-intensity exercise in what athletes call periodization. As both have their

merits and effects, a smart blend can create the most sustainable effective training. The switch from slow to faster allows time for bodily repair, which ultimately increases muscle mass and reduces the likelihood of injury.¹¹

Much injury is rooted in muscle held in stress patterns or due to inflammation caused by the stress response. Indeed, a US study of 276 volunteers found that prolonged stress brought about changes in glucocorticoid receptors, which regulate metabolism and immune response, so interfering with normal regulation of inflammation.¹² Inflammation, characterized by swelling, heat, redness and pain, is the body’s natural attempt to induce healing by increasing blood and lymph flow to bring nutrients to damaged areas, while also flushing away harmful pathogens, irritants and damaged cells.

So whether you’re an athlete or a total beginner, if you’re going through a period of stress, mixing up different training methods is even more important to avoid the body burnout and fatigue that can come from overtraining.

The right level of intensity depends on your level of fitness—if you’re out of practice, a moderate activity can become high intensity pretty quickly. If your typical day’s journey is from bed to car to desk to car to sofa to bed, then suddenly switching to a high-intensity activity is likely to be a serious shock to the system.

Listening to your own body and trusting what you feel, rather than mindlessly following instructions barked at you to ‘go for it’, is a mindful skill to cultivate towards fitness. This is particularly important if you mainly work out to videos that simply tell you what to do, and the instructor isn’t there in the room to give you individual attention.

By slowing down or doing fewer repetitions where appropriate, you may ultimately get more benefit and be able to keep up without injury or exhaustion.

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Charlene Hutsebaut's 25-minute medium- intensity strength training routine

The following routine is designed for all-body toning and strengthening. For those happy to stay at medium intensity, this is a great sequence to return to if your fitness level drops and you need to build it up again. And if you want to move towards HIIT, but have a sedentary lifestyle, this sequence is also a good entry route.

Many HIIT movements need a decent amount of strength and flexibility, which are best built up at medium intensity so your body can do them without strain or injury. If you're pumped full of adrenaline during a HIIT session, it can be easy to overlook the harm you're doing to yourself.

Doing the following sequence about four or five times a week for eight to 12 weeks alongside other moderate-intensity activities, including daily walking (minimum 15 minutes), can build up a fitness base so that, after this first block of time, you can try a block of HIIT and see how you do.

If you're a beginner, aim to do this quick strength workout once or twice a week. If you're intermediate or advanced, go for up to four times a week, ensuring that you have rest days or perform different physical activities between workouts. And make sure you warm up first by walking, gently jogging or marching, or walking up and down stairs or on the spot, for five minutes.

It should take you around 25–30 minutes to complete this exercise series, depending on the number of sets you do. Beginners can begin with a lower number of reps and work up to 12, while the intermediate or advanced can do the higher number of reps listed, but everyone should complete all sets. The weight used for each set should challenge but not exhaust you by the end of the sequence.

Finish with a relaxing stretch.

Press-ups

3 sets of 6–12 reps

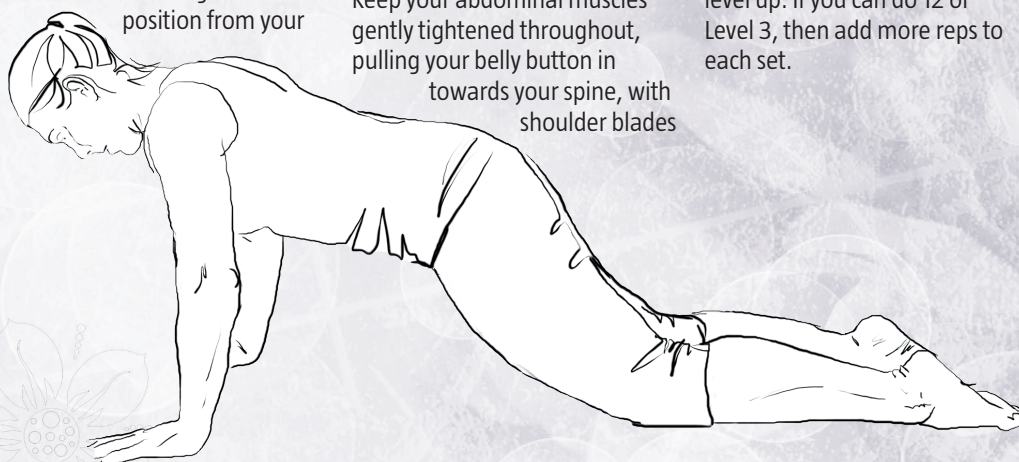
Level 1: Start on your hands and knees, hands just wider than shoulder-width apart, hips over knees

Level 2: Start on your hands and knees, hands just wider than shoulder-width apart, and form a long board position from your

shoulders to knees (imagine a straight line from shoulders through hips to knees)

Level 3: Start on hands and toes, keeping the body straight like a board from shoulders to toes.

All levels: Inhale and move chest towards the floor or mat, bending your elbows to a 90-degree angle. Exhale back up, straightening your elbows. Keep your abdominal muscles gently tightened throughout, pulling your belly button in towards your spine, with shoulder blades

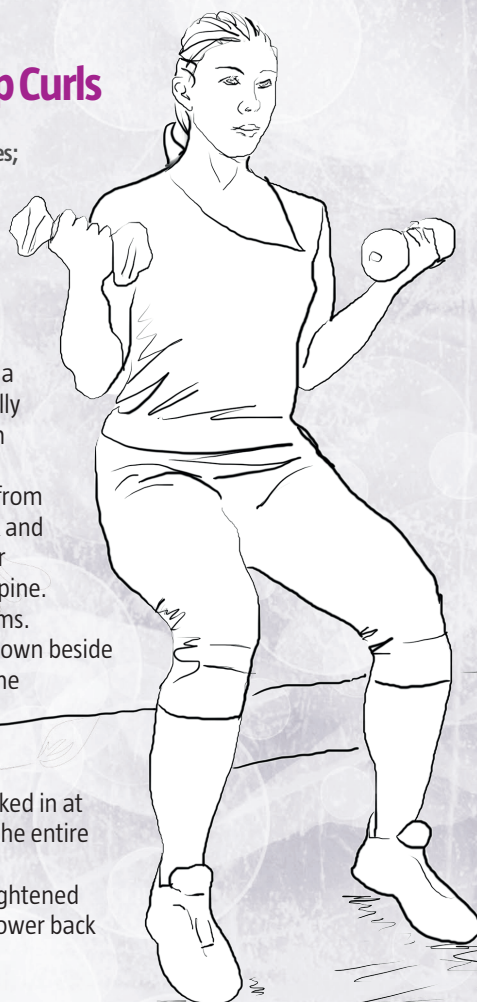


Wall Squats with Bicep Curls

3 sets of 10–15 reps

Equipment: dumbbells or plastic water bottles; use a weight that challenges you without making your muscles hurt (beginners: 1.5-kg dumbbells or a small filled water bottle; intermediate/advanced: 3-kg dumbbells or more, 750-mL to 1-L filled water bottle)

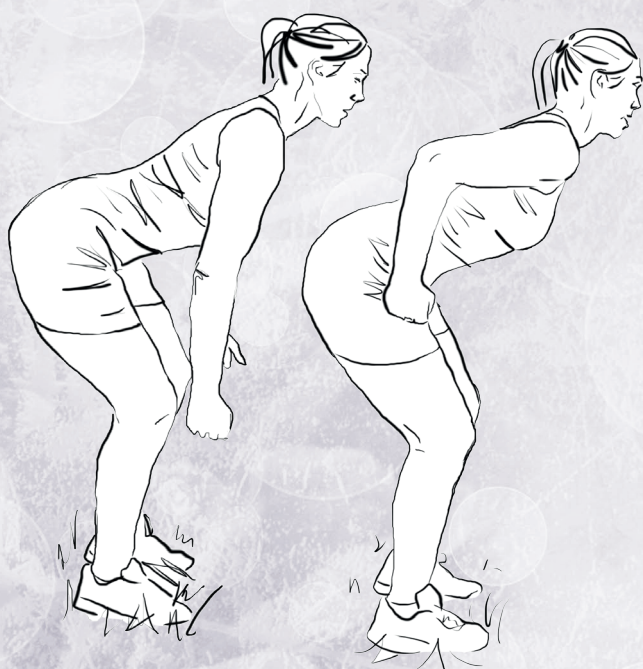
- Start in the position shown against a wall. Your legs will work isometrically (without movement) to keep you in position.
- Your feet should be at least 30 cm from the wall, with your pelvis, mid-back and shoulder blades against the wall for support as you lift up through the spine.
- The only movement is with your arms. Inhale as you ease the dumbbells down beside your legs, then exhale as you pull the dumbbells back up, bending your elbows back to the start position.
- To get the most efficient use of the arm muscles, keep your elbows tucked in at the sides of your body throughout the entire movement.
- Keep your abdominal wall gently tightened throughout without pushing your lower back into the wall.



floating flat on the back/rib cage and pointing down towards the hips.

Lead with your chest, keeping your head and neck in line with your spine. The old-school 'take your nose to the floor' can overstretch your neck.

First set: 6–12 press-ups at your chosen level. If you can do 12, then try some reps at the next level up. If you can do 12 of Level 3, then add more reps to each set.



Double Arm Rows

3 sets of 8–12 reps

Equipment: dumbbells, food tins, kettlebells or bags of groceries

- Bend both knees, then bend forward from the waist so that your torso is at a 45-degree angle to the floor.
- Engage your abdominal and lower-back muscles to work your core muscles safely.
- Begin with cans, dumbbells, kettlebells or bags of groceries below your shoulders (above left), arms hanging; inhale, then exhale to pull both arms up at the same time, hands towards the hips, elbows at a 90-degree angle (above right).
- Inhale and move arms back to start position.

Oblique Abdominal Rollback

2 sets of 3 reps on each side

- Begin in a seated position (1).
- Breathe in, staying centred, then breathe out, drop the sacrum (triangular bum bone) down to floor as you twist to the left, pulling your belly button and breastbone through your back to create strong belly support (2).
- Extend your left hand (3), following it with your eyes.
- Breathe in and return to starting position (1).
- Repeat the movement, but twisting to the right.



Lunges

3 sets of 6–12 reps on each side

Equipment: dumbbells, tins or kettlebells

- With feet together and holding dumbbells, cans or kettlebells in hands, take a long step forward with one foot.
- Keeping your torso upright, inhale to the position shown, but just to where your knees feel comfortable. You will still achieve a good (joint-safe) workout even if you can only do a quarter or half of the position shown.
- Return to standing start position on an out-breath.
- Complete 6–12 reps on one side, then switch to the other leg.
- Keep abdominal muscles gently tightened while moving and keep your torso upright.



The Bridge

3–6 reps held for 10 seconds each

- Lie down with knees bent, feet a hip-width apart and comfortably close to the buttocks; settle the lower back here for at least 10 breaths.
- Inhale and lift the pelvis off the floor, one vertebra at a time.
- Push back from the base of the big toe, roll the thighs in, flatten the belly and lift the breastbone towards the chin.
- Stay as long as you can keep lifting your chest with easy breaths.
- Roll the spine down and rest until the back muscles settle.

