

Think you're fit?
Accredited exercise
physiologist **Caitlin
Reid** explores what
physical fitness
really means – it's
not just how far or
how fast you can run

Fitness fundamentals

BEING PHYSICALLY FIT is often defined by the ability to run a marathon or to complete an ironman competition. People who lift heavy weights or can touch their toes are also considered fit.

There's no doubt fitness has a lot to do with how often you exercise (frequency), how hard you do it (intensity), how long you do it for (time) and what activity you do (type), but these only relate to aerobic fitness. For total physical fitness and general wellbeing, other areas need to be addressed such as muscular strength and flexibility.

PHYSICAL FITNESS

Defined as "a set of attributes people have or achieve that relates to the ability to perform physical activity", physical fitness is reflected in your ability to cope well with daily life and reduce your risk of developing chronic conditions such as obesity, heart disease, osteoporosis and diabetes, which are all associated with an inactive lifestyle. To achieve optimal physical fitness, you need to focus on five key areas.

1. Aerobic fitness

Aerobic fitness (also known as cardiovascular fitness) is the

ability of the heart to pump oxygen-rich blood to the muscles being used during sustained exercise. Simply speaking, it's the physical ability to maintain a steady pace of exercise without reaching a high level of fatigue or tiredness. Aerobic fitness also reflects the ability of the body and heart to remove carbon dioxide from the muscles and expel it via the lungs.

When you think of aerobic fitness, activities such as running, swimming, aerobics and cycling usually come to mind. However, aerobic fitness can also be defined by your capacity to

tackle everyday physical tasks such as climbing stairs or keeping up with your kids. If you're aerobically fit, you're able to use high levels of energy over extended periods of time while maintaining a lower heart rate.

2. Body composition

Your body is made up of two components: fat mass and fat-free mass. Fat mass includes all the body's fat stores, while fat-free mass comprises the muscles, tendons, ligaments, bones, water and organs. The relative amounts of these

determine your body composition. When fat mass is high compared to fat-free mass, you're considered to be overweight or obese, which places you at risk of developing diabetes, heart disease and other conditions.

Wanting to change or maintain your appearance is one of the main reasons most people exercise. When you're trying to lose weight, it can be extremely disheartening if the bathroom scales don't seem to change, despite all the hard work you've been doing. But that doesn't


mean your body composition has remained the same. Ordinary bathroom scales can't distinguish between fat mass and fat-free mass, so any fat lost or muscle gained will not show on the scales. Sometimes it's better to let your clothes be the judge.

3. Muscular strength

The ability of muscle to exert force is known as muscular strength. The stronger you are, the greater the amount of force you can generate. Muscle mass contributes to strength: generally speaking, the more muscle you have, the stronger you are. Having good muscular strength applies tension through the tendons and bones and this tension helps to maintain strong, healthy bones. Maintaining strong bones is important for slowing the process of age-related bone loss.

Having a greater amount of muscle mass also increases the kilojoules you burn, even when at rest. So exercises that focus on maintaining or increasing muscle mass should be included in your weekly training program.

4. Muscular endurance

A sign of fitness is the ability of the muscles to perform an exercise over and over again, without fatiguing. Carrying boxes upstairs is an example of muscular endurance: your arms, shoulders and legs may tire before you fatigue aerobically. 

"EFFICIENCY OF EFFORT" ZONE

The "efficiency of effort" zone is the minimum amount of exercise you need to do to get the most gains in aerobic fitness. Ideally, you should exercise every day, but with today's hectic lifestyle most of us complain we are too busy to find the time. To get the most gains in fitness in the least amount of time, follow the FITT principle:

- Frequency – 3 to 4 times per week
- Intensity – moderate intensity (your breathing and heart rate increases but you can still talk)
- Time – at least 30 to 40 minutes per session
- Type – anything that uses all the large muscle groups and you enjoy doing; for example, running, rowing, swimming, cycling, dancing or skipping.



Common exercises focusing on muscular endurance are crunches, push-ups and chin-ups.

5. Flexibility

By definition, flexibility refers to the capacity of the joints to move through a full range of motion and it's as important for daily life as it is for sport and exercise. Flexibility is specific to each joint in the body – the muscles, ligaments and tendons at each joint determine the amount of movement possible.

Maintaining or increasing flexibility helps to reduce muscle-tendon injuries, protects the joints and reduces the appearance and effects of arthritis.

Without regular stretching, tendons and joints can become tight and hard, reducing flexibility levels throughout the body. Poor flexibility increases your risk of injury and disability, which both reduce your quality of life.

WAYS TO IMPROVE YOUR PHYSICAL FITNESS

Considering the five components of physical fitness discussed above, here are some suggestions for how you can address all components in your workouts:

Aerobic fitness: participate in activities that use all the major muscle groups and increase your heart rate. You could take up swimming, running, cycling, dancing, soccer, touch footy or any other sport you enjoy. Include at least three 30-minute sessions each week.

Body composition: to maintain a healthy level of body fat, do some form of physical activity every day. Think of physical activity as an opportunity for better living, not an inconvenience.

Muscular strength: take part in a minimum of two resistance training sessions each week. You can use weights, your own body weight or perhaps therabands. Any method of resistance training is fine. Just be sure to work out for at least 20 minutes.

Muscular endurance: you can work on your muscular endurance by doing both aerobic exercise and resistance training. All exercises, both aerobic and resistance-based, need to be continuous in order to promote muscular endurance. Yoga is another great way to improve muscular endurance.

Flexibility: include 10 to 12 minutes of stretching exercises each day. Stretch first thing in the morning so you don't have to think about it for the rest of the day. Another great way to improve your flexibility is to take part in one or two yoga or Pilates classes each week.

Remember: Before starting a new exercise program, consult your doctor for a full check-up.

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Caitlin Reid is an exercise physiologist and health writer. For references, see page 95 or visit www.healthyfoodguide.com.au

Have you tried...

Therabands: made from natural rubber latex, therabands are tubings that offer resistance and can be used for an all-over body workout. They're light, convenient and cheap.

Pilates: a series of gentle, muscle-strengthening and flexibility exercises. Pilates also improves balance. A Pilates class generally lasts for 45 minutes.

Yoga: a scientific system of physical and mental practices aimed at healing the body and bringing peace of mind. Yoga uses breathing practices to stretch, strengthen and tone the body.

Resistance training: a method of conditioning the muscles, joints and bones using resistance to exert force. Resistance progressively increases, forcing the muscles to strengthen.