

Three Steps to Fitness

We are bombarded today, on one hand, by news items stressing the importance of a healthy lifestyle, and on the other by pictures of glamorous celebrities. Can you ever look that good? Yes, but not by wishing for it – it takes determination, motivation and knowledge.

As everyone knows – or should – there is no such thing as overnight success in any walk of life, and certainly not in the area of health and fitness. Unfortunately, we live in a culture of conflicting messages that do nothing to nourish our wellbeing. On the one hand, it is impossible to escape media images of thin, toned, buffed and sculpted role models of quite out-of-reach physical perfection. On the other, advertising and the food industry pump fat-filled, sugar-coated, carbohydrate-rich food at us from every direction. Consequently, we



Below: Hours of training steps up all the systems in your body and helps you to run faster.

Above: You don't need to be in the gym for this type of floor exercise; you can easily do it at home.



Above: The buzz you get from being supremely fit will help you continue your fitness regime.



have become an unfit society in thrall to endless aspiration, and sold on the promise of nips, tucks, jabs, instant gratification and quick fixes. Quite simply, becoming fit and healthy – safely, effectively and in the long term – does not and will not happen quickly. You will, however, get real results if you follow this three-step plan:

Determination Look at other areas of your life in which determination has been a force for change, such as passing exams, bringing up your children in the best way possible, getting a better job or making more money. Transfer some of this determination to the job of making yourself fit and healthy.

Motivation Have a goal in mind, such as running a half-marathon, fitting into a wedding dress or simply getting up the stairs without being out of breath.

Fitness can't be bought

Simply paying a monthly subscription to a gym is not enough to help you get fitter. You can buy many things in life, but fitness involves regular, hard work.

Correct training

Watching people exercising in the gym and copying them is not the way to get the best results, because many people cheat to make the exercise easier.

Use this chapter to determine your goals by analysing all aspects of your life and making a note of your strengths and weaknesses. Once you have set your goals, keep visualizing how great you will feel once you have achieved them. This is something you are doing for yourself and no one else. Family and friends can try to motivate you but until you actually want to do it for yourself, it won't work. After all, no one is asking them to make sacrifices – you are the one who has to change your lifestyle and do the physical training.

Knowledge Gather as much knowledge as possible to plan your new personal training plan. It is not possible to get results without understanding how your

Below: If you want to succeed in your aims quickly, get help and advice from professionals in the field.



body works and what type of training will be best for you. Be aware, though, that a little knowledge can be a bad thing. For example, the suggestion that resistance training will make you gain weight is a myth. The truth is that resistance training will make you gain lean muscle mass, which will have a positive effect on your metabolism and therefore make you lose fat.

Knowing what to eat, and when to eat it, is also essential. Without good nutrition, you won't have the energy to train, recover from training or see the benefits of your training. There are no short cuts or quick fixes – your nutrition plan will require preparation to make it practical for you to stick with it every day.

Know yourself

Once you have the basic knowledge, you can apply the correct training to achieve your goals. In some ways you have far more knowledge of yourself than a gym instructor because they have only known you for a matter of hours, whereas you have known yourself since the day you were born. You know how determined you can be and what your motivation is. You know what you enjoy and what you dislike. You can be honest with yourself about how you look and

Above: Just a little extra fitness can mean the difference between winning and losing.

how you want to look. You know how much energy you have and how much more energy you would like to have. Your exercise plan has to suit you and no one else.

Plan ahead

Be practical and think ahead. For example, if you are travelling for business or on holiday, plan your training to be harder in the week before and after you are away. Don't use the time away as an excuse – there is always some kind of training you can do, whether it's going for a run or doing exercises in your hotel room. Keep your goal in sight and remember that consistency is the key to achieving it.

No excuses

There are two types of people who want to get fit: those who think about results and those who think of excuses. If you look for excuses, you are setting yourself up to fail. If you focus on achieving results, you will win. From the moment you pick up this book, the excuses stop and you set yourself on the path to success – to fitness and health.

Weight Training for Sprinters

When training with weights, sprinters lift much heavier amounts than distance runners, but they should not attempt this kind of training without a general background in strength and conditioning.

Strength and fitness for sprinters might be achieved through special running workouts – for example, running on hills or sand; by using core strength exercises; or with regular bodyweight exercises. Plyometric sessions are also vital for sprinters. Strength training programmes need to be tailored to the individual sprinter, with particular attention to their specialist distance and training goals, but here are some of the basic exercises they might perform. It is important to have at least one spotter – a training partner to help you catch the weight if you become unsteady – during all weighted exercises. As you become stronger and the weights you use are heavier, this is especially important since there is a real risk of serious injury if you are unable to control the weight.

Weights and repetitions

It is important to have someone work out a weight-training programme for you: getting your weights wrong could lead to injury. The weights you lift and number of repetitions you perform will vary depending on where you are in your training year. Before you start it is useful to know your Repetition Maximum or 1RM: the heaviest weight you can lift once for a particular exercise. You need a spotter to help you work this out, an exercise professional who can make an estimate from your size and training history.

Once you know your 1RM, use it as a base measurement for deciding your workouts and for progressing to heavier weights.

Dumbbell arm swings



This will improve arm drive. With light dumbbells, watching your action in a mirror, stand up straight with your feet fixed and core engaged to hold your torso steady. Bend your elbows and pump your arms back and forth as quickly as possible, as if you were sprinting for 1 minute; rest 1 minute then repeat. Complete 4–6 sets.

Power clean

Watch points: Try to keep your abdominal muscles and back tight throughout this exercise to protect your back. Try not to push the weight out in front of you, instead jump it straight up.



1 Start the exercise with your feet hip-width apart and the barbell on the floor just in front of you. Slowly bend down to grip the barbell with both hands – you should have your hands over the bar (with your knuckles pointing down) and about shoulder-width apart.



2 Lift the weight at a controlled speed by straightening your knees and back, keeping the bar close to your legs. Once the barbell has passed your knees, accelerate your motion. As the bar reaches mid-thigh level, jump the weight up, taking care not to push it out in front of you, but straight up.



3 Flip your elbows forward so you have an under-bar grip, and bring your body under the weight, allowing it to rest on your shoulders at the top of the movement. Drop into a half-squat to take the force of the weight, before immediately straightening up. Lower the barbell back to the ground slowly.

Snatch

Watch points: Make sure you are steady before beginning the lift. Make the final flip movement of the weight as quick and smooth as possible.

1 The start is very similar to the power clean: feet hip-width apart, bend down to grip the barbell with your hands just wider than shoulder-width. Lift the barbell in a smooth motion as before, keeping it very close to your legs.

2 When you are standing straight, continue to lift the weight, keeping the same grip and allowing your elbows to move out to the sides.



3 As the weight reaches shoulder level, quickly flip it and drop underneath the bar, extending your arms and dropping right under the weight into a squat.



4 Slowly and steadily stand out of the squat to complete the lift.

Weighted step-up

Watch point: If the weight makes you lose control of the action, use a lighter one until you are able to step up straight.



1 The step-up exercise described earlier in this section can also be performed using a barbell. Lift the weight on to the back of your shoulders, using a towel to protect your neck if necessary.



3 Slowly and steadily, bring your back leg up to stand square on the bench next to your lead leg.



2 Ensure you are steady and in control of the weight, with your feet hip-width apart and core tense. Step up on to a strong bench, slowly bringing your lead leg up onto the bench.



4 Finally, lower the same leg down followed by the lead leg, so that you are back in the starting position.

Other weighted exercises

Since general strength and good overall conditioning is very important to all sprinters, you will also find it useful to include some of the standard weighted exercises used by other types of runners in your regular training sessions.

Alternatively you may decide to use heavier weights and fewer reps. Try to include different general exercises like weighted squats, lunges, calf raises and bench presses in your regular training routine.

Wheels

Your bike is not going to get very far without these vital pieces of equipment. As with frames, the lighter and stronger the wheels are on your bike, the faster you will go. A little bit of maintenance of the wheels will give you a smoother ride.

Most wheels are designed along an arrangement of spokes radiating outward from the hub to the rim. The spokes are kept in tension, which makes the structure extraordinarily strong for its weight. Some specialized bikes for time trialling use solid carbon fibre bodies for superior aerodynamics, but the basic design of bike wheels has remained remarkably constant.

The two attributes of wheels that will affect the speed of your cycling the most are aerodynamics and weight. Even on a thin racing wheel there is a significant slowing effect from the spokes passing through the air. Manufacturers try to get around this by making the rims deeper.

Bike wheels are not particularly heavy compared with other parts of your bike, but the rotational movement increases their 'weight' through a phenomenon called gyroscopic inertia, whereby the momentum of the wheel resists changes to its orientation. In short, the less material there is in the wheel, the less energy it takes to brake and accelerate.

Racing-bike wheels are narrow and light, often containing 32, 28 or even 24



spokes – weight saved by cutting the number of spokes is significant, but the compromise is in the strength of the unit. Touring bikes, which carry much heavier loads, have 36- or 40-spoke wheels. Mountain bike wheels have a slightly smaller diameter, and they range between 28 and 36 spokes.

Spokes can be arranged in different patterns, which maintain lateral stiffness.

Above: Hybrid bikes need stronger wheels – they have an increased number of spokes, which add strength.

Looking after your wheels

Wheels are your bike's point of contact with the road and they consequently take a great deal of abuse, especially from rough road surfaces. Potholes, ruts and bumps in the road can put your



Above: Check your wheels for alignment by spinning them and watching the rim – if it moves, you may need to straighten your wheels.

Top middle: Prevent dirt building up on the hubs by wiping them every few days.

Top right: Apply grease to the axles on a regular basis.

Right: Wipe spokes down regularly.

wheels out of alignment, which affects your speed and leads to uneven braking. Learning to make wheels straight again is one of the great arts of bike maintenance. It involves mounting the



Wheel maintenance

Task	Frequency	Time taken
Clean rims, hubs and spokes	Once a week	5 minutes
Check alignment	Once a week	30 seconds
Take axles out to clean and lubricate	Once a month	3 minutes
True your wheels (if you know how)	When misaligned	30 minutes+



Above: Narrow-section racing wheel.



Above: Carbon fibre racing wheel.



Above: Solid wheel for time trialling.



wheel on a jig and tightening or loosening the spokes with a spoke key – called 'truing' the wheel. When all of the spokes are at the correct tension, the wheel will be true, or straight, again.

Tyres

The fatter your tyres, the more comfortable the ride. The thicker your tyres, the less likely you are to suffer from punctures. But these benefits come at the cost of speed.

When choosing tyres for your bike, you must decide which kind of tyres best suit your needs. A racing bike needs slick, narrow tyres, although

Left: Thick tyres with a deep tread are used on mountain bikes.

punctures are more frequent. A touring bike needs slick tyres too, but wider, to fit wheels designed to take heavier weights. Mountain bikes need knobby, thick tyres. These are good for puncture resistance, but much slower on a smooth surface.

Tyres are designated by size. Racing and touring tyres come in sizes between 700 x 20C and 700 x 28C (where 700 is the diameter of the tyre in millimetres and the second figure the width of the tyre in millimetres). But mountain bike wheels are generally 26in in diameter. Tyres are designated 26 x 1.5 (26in diameter x 1.5in wide) and upwards.

Always make sure you are buying the right size of tyre for your wheels, and choosing the right tyre for your needs.

The Importance of Exercise

Regular exercise leaves you full of vitality and a get-up-and-go attitude. People who do physical training regularly already know that if they skip a few days they start to feel tired and lethargic, which is how many people feel who never exercise.

The right exercise and nutrition can dramatically reduce the risk of many common illnesses and diseases, including cardiovascular disease, various cancers and type II diabetes:

Heart disease Exercising three to four times a week and eating healthily have a positive effect on your heart. Exercise also lowers cholesterol levels and blood pressure, which considerably reduces the chances of suffering a heart attack.

Osteoporosis Regular weight-bearing exercise helps to build bone tissue and prevent age-related bone-density loss.

Cancer Exercise reduces the risk of some cancers. Two ovarian hormones that are linked to breast cancer, estradiol and progesterone, are reduced by exercise. Studies have shown that regular exercise can help prevent breast cancer by up to 60 per cent. Several studies also show that obese people who live sedentary lives are at increased risk of endometrial, colon, gall bladder, prostate and kidney cancers.

Below: If you attempt to practise a healthy lifestyle, you are less likely to worry about the doctor's findings.



Type II diabetes Regular exercise will dramatically reduce the risk of developing type II diabetes. A weight increase of 5–10kg/11–22lb doubles the risk of developing type II diabetes. More than 80 per cent of people with type II diabetes are overweight or obese, which is why it is also referred to sometimes as 'diabesity'.

Joint and back pain These common ailments can be reduced with the correct physical training, which will build muscle and increase flexibility and core stability.

Obesity A combination of cardiovascular and strength training will increase the metabolism and improve the body's capacity to burn calories. This helps to

Right: Regular physical exercise can greatly reduce unpleasant neck pain and headaches.

Above: Sporting injuries should always be assessed by a professional.



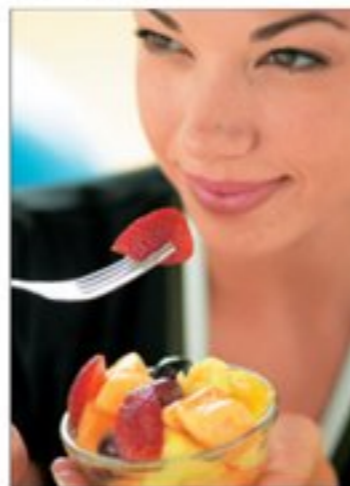
reduce the risk of developing one of the many obesity-related diseases as well as increasing wellbeing.

Psychological health The symptoms of depression and anxiety can be reduced by regular exercise. Stress is part of everyday life but exercise can equip you to cope with it. Exercise will give you greater endurance to tackle daily tasks, improve your sleep, increase your energy and give you an improved body shape, which will improve your self-esteem.



Above: Lack of exercise can have the effect of making you feel lethargic and demotivated.

Below: Fruits are a healthy alternative to sugary or fatty snacks.



General health Regular exercise has many health benefits. It can boost some vital processes in the body, such as stimulating your digestion, liver function and your glycogen system (stored glucose, mainly in the muscles and the liver). Exercise will lead to an improved immune system, it can revitalize and enhance your sex life, and may well add some years to your life. Strength training has the ability to tone, build and improve the speed of muscle contraction and reaction time through the development of strong neuromuscular pathways. You will also become more agile and benefit in many ways from improved co-ordination and balance.

Don't put it off

Fear is one of the biggest factors in motivating exercise. If you were to stand in a line of 100 people waiting for a heart attack, where in the queue would you be? If you are near the front, then fear will probably be the motivating factor that drives you to a healthier lifestyle, but why should it be this way? Be healthy before you get to the fear stage. Most importantly, respect your body – it's the only one you've got – and aim to feel good on the inside and the outside by exercising regularly.

Below: Regular strength, flexibility and core-stability training can help to prevent back pain.



Advanced Core Exercises

When you get to an advanced stage of your core-stability training, you can start to involve dynamic exercises that will simulate the movements you might use in your sport. These exercises make it hard to balance, so that your core muscles have to work hard.

Most people believe that you are either naturally blessed with having good balance or not, when in fact it really comes down to your core muscles giving you enough stability to achieve really good balance.

Most sporting movements call for good balance to cope with changes in direction and transferring weight and stress from one limb to another. Some of the following exercises use weights to make the exercise harder and to help build core muscles. If you want to move your limbs

with strong, rapid movements, you will need to have very strong core stability with great balance.

For each exercise, take 2 to 3 seconds for each direction of the movement. Breathe out at the beginning of the movement, continue breathing through the hold, and breathe in as you return to the start position.

For all of these exercises, begin with three sets of repetitions each side of the body, gradually building up to five sets of ten repetitions each side.

Exercise to stay injury-free

When you have reached the advanced stage, just build the exercises into your normal training programme. Do them between cardiovascular exercises and resistance exercises to help keep your core muscles switched on through all of your movements. It will also help you avoid injuries in training and make the core muscles focus and become recruited to support your limbs as they start to fatigue.

Two-point superman

Muscles used Erector spinae; gluteus maximus; rectus abdominis



1 Start on all fours on a mat, with both hands and knees on the floor, hands palm down. Try to prevent your lower back from arching.



2 Raise and straighten your right leg out behind you. At the same time, raise and straighten your left arm in front of you. Pull your belly button in toward your spine.



3 To make this a two-point superman, lift the foot of your supporting leg off the floor to work your core muscles harder.



4 Hold for 5 seconds, then bring your right leg and left arm in until the knee and elbow touch. Repeat on the other side.

Press-up plank to side waves

Muscles used Rectus abdominis; obliques – internal and external; pectoralis major



1 Start in a standard press-up position.



2 Lower your body toward the floor by bending your elbows out to the sides.



3 With elbows bent at 90 degrees, hold for 2 seconds then push back up.



4 Take one arm out to the side and twist your body until you are side-on to the floor in a side plank position. Think of your trunk as a brace and don't let your hips drop in the rotation. Let your feet rotate over on to their sides.

Single-leg cable wood chops, high to low

Muscles used Erector spinae; gluteus – maximus, medius; rectus abdominis



1 Stand on one leg, with the other foot raised just slightly off the floor, side-on to the cable machine. Turn your upper torso slowly toward the machine and grip the rope with both hands. Try doing this exercise sitting on a fit ball, with only one foot on the floor.



2 Slowly rotate your upper body, keeping your arms straight out in front of you until the handle is level with your opposite knee. Pause for a second, then slowly rotate back to the start position. Keep your hips facing forward to put greater emphasis on the core muscles.

Superman row

Muscles used Erector spinae; rectus abdominis; obliques; latissimus dorsi



1 Stand on one leg and hold your other leg straight out behind you, and your opposite arm straight out in front of you. Hold a dumbbell in the other hand at knee height. Keep your back parallel to the floor.



2 Pull the dumbbell up to your ribs, taking your elbow past your ribs and back behind the line of your body. Avoid twisting your trunk as you pull the weight up. Pause for 1 second, then return to the start position.