



A Beginners Guide To Running

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Welcome to the Couch to 5K programme. Over the next 8 weeks, we will guide you to run 5K (3 miles) comfortably no matter your current ability. Your body may grumble a little, but if you follow your coaches instructions, your transition from "coucher" to runner should be relatively trouble-free.

Please take note of the dates on the training schedule and make sure you plan to attend as many sessions as necessary.

Coach: Michael Sharpe

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Note from your coach Michael Sharpe.

I have been a runner since I was 11 years old. I spent most of my formative years running both track and cross country competitively. In midlife, I took to the roads and have run 13 marathons, 111 half marathons and countless 10 & 5Ks. Since retirement, my time has been spent helping coach club runners and developing a Couch to 5K programme that works.

Running should be free & fun. You can do it anywhere; it burns more calories than any other mainstream exercise.

The Couch to 5K Programme

Conceived by a guy named Josh Clark in 1996, C25K was a structured plan to get people to exercise 3 times a week.

Based on the original idea, the C25K programme associated with this booklet has evolved from coaching small groups of people of similar ability.

The coach + group system minimises the "dropout" rate typical of solo-based programmes. Having an experienced, dedicated coach to ensure help & guidance through those early stages and the benefits of group camaraderie ensure a successful passage to your 5K graduation run.

The Couch to 5K programme is free of charge.

This info booklet informs & helps make running a more enjoyable experience. Regular running can reduce your risk of chronic illnesses like heart disease, type 2 diabetes and stroke. It can also improve your mood, well-being and keep your weight under control.

The correct running technique will help reduce the risk of injury and make your runs feel less tiring and more enjoyable.

If at any time during your C25K sessions, you feel ill or have any pain, please stop IMMEDIATELY. Please ask if you find the C25K programme too uncomfortable.

Beginners Tips

Kit: Running requires little equipment, but cushioned running shoes are essential to help improve comfort and minimise joint shock effects. Many types of trainers are on the market, but until you're happy with your running and have no problems, don't buy expensive shoes. Ladies: you may need a good sports bra - these are widely available, and there's plenty of advice online.

Chaffing: Wearing clothes that chafe can be pretty painful – running tights for both men & women will minimise the chaffing below the waist.

When you start running, your body will protest at using muscles in your legs, shoulders, arms and diaphragm that are not used to the extra work.

It is very important not to do too much too soon & have at least 1 whole day between sessions to allow the body to recover.

You should also be aware of connective tissue issues – tendons that attach muscle to bone and ligaments that hold your bones/joints together. The connective tissue around hips, legs and feet may be the first to start "grumbling", and you should look after these areas by using compression socks, Tubing or applying "Deep Heat" to warm them up before running. You may need help choosing or modifying shoes to correct pronation on one or both feet – ask the programme leader to check your running style.

Diet

A runner's diet is not about weight loss but provides the body with the energy/nutrients lost during running and protein to help build new muscle. Running will change your lifestyle and well-being, so make your diet part of your training plan. As a runner, you need to hydrate (take in more liquids) to replace bodily fluids & minerals (electrolytes) lost during exercise and eat more healthily. A balanced runners' diet should look like this:-

- Drink More Water– Add electrolyte replacement tablets to make a flavoured drink.
- 50-60% Carbohydrates: Pasta, grains, beans, vegetables, fruit – the digestive system breaks these down into a form of sugar known as glucose which in turn is stored in the muscle tissue & liver as glycogen (the fuel that helps you run). Avoid the bad carbohydrates found in processed food.
- 20-25% Protein: Fish, Meat, chicken, beans and nuts. Try a handful of cashew nuts a day.
- 10 -15% Fats:– there are bad fats (saturated and trans-fatty acids) and good fats (monounsaturated, polyunsaturated and Omega-3). Avoid bad fats where possible. The good fats help keep your blood cholesterol levels down, help control blood sugar levels, help you absorb nutrients (vitamins and minerals), help with general well-being and lubricate your "running

machine". Good fats are found in olive oil, safflower oil, peanut oil & corn oil. Omega-3 is found in fish (tuna & salmon), seeds, avocados & nuts.

- If you are at all anaemic, you may need to add iron-rich foods to your diet or take an iron supplement. You can make smoothies with bananas, nuts, cereals, vegetables, fruit (frozen), non-dairy milk and liquid yoghurt that blend into an easily digestible drink. It tastes just like a rich milkshake. (add a multivitamin tablet for good measure)Breathing

Breathing

Learning to control your breathing is one of the most important factors for beginners

When you're new to running, you'll find you breathe more heavily or erratically – you will cover the basics of breathing techniques with your coach, but if you find breathing is a problem, please ask for some "one-to-one" help.

Breathe in and out through the **MOUTH** – this is a much bigger hole than your nose and will help you take in more oxygen & expel carbon dioxide for more efficient breathing.

Until you develop a comfortable breathing cycle, always blow out hard to expel the toxic carbon dioxide.

Practice the 4-step technique both when you walk and when you jog.

Four-Step Breathing Technique

The 4 step breathing technique is simple, easy to learn and perfect for those new to running.

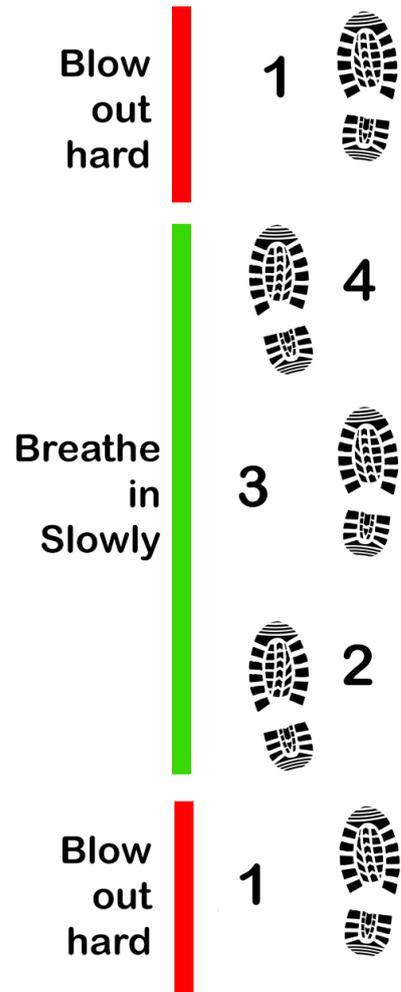
See the illustration right. Start with the left or right foot – 1. Blow out hard – 2 – 3 - 4 – blow out hard.

The “blow-out hard stage” is designed to expel as much carbon dioxide from the lungs as possible & also helps suck more air into the lungs.

If you feel dizzy, still feel out of breath, or your breathing is erratic, shorten your stride or start walking but keep counting 1 – 2 – 3 – 4.

I cannot stress enough that breathing is the most essential part of learning to run, and if done correctly, it will help you get fitter faster.

This technique also synchronises your running motion with your cardiopulmonary¹ system optimising the effort required to run and breathe



¹ The cardiopulmonary system includes the heart, blood vessels, blood and lungs. These are responsible for picking up and carrying oxygen to the muscle cells, transporting and discarding carbon dioxide (Blow out hard).

Shin Splints

New runners often suffer from Shin Splints – this term generally refers to pain felt in the lower leg connective tissue that connects the muscle to the shin bone (Tibia)

Cause: The pain is a symptom seen by many new to running or those that train excessively. Generally, this is caused by biomechanical irregularities that pull at the connective tissue making it sore or tender. Those new to running have weaker tendons/muscles, and Shin Splints are less likely to occur as they progress. If you suffer from shin splints, compression socks may help you minimise the problem until your legs & connective tissue get stronger.

Treatment

RICE: Rest, Ice, Compression, and Elevation Rest is the primary treatment – Apply ICE or gel pack to help reduce inflammation – Apply a COMPRESSION bandage — ELEVATE the leg.

Having your running technique checked by your coach in the early stages is a good idea. Pronation or Supination can be a contributory factor - the right shoe or an orthotic may be all you need.

Many swear by strapping up the lower leg to help contain the trauma on the muscle tissue.

Painkillers: These will help reduce inflammation but do not take them to mask the pain during running — this will only make it worse.

If the pain is terrible, you should rest it for a week or two and then start gentle training – If you have the right shoes and wear compression socks, you may not even experience the problem again. However, an underlying non-correctable biomechanical problem may cause the problem to recur or even cause permanent damage. If you're unsure, ask your GP or a sports injury specialist.

Running through an injury as a beginner is not a good idea. More experienced athletes do this to significant effect but only after many years of knowing their bodies.

As is usual with running injuries – let your body do the talking – pain is the body's way of telling you to stop.

Runners Stitch

"Stitch" is generally a muscle spasm associated with the diaphragm and its connective tissue that assists in breathing. The spasm can occur in either the muscle or the ligaments, and the primary symptom is typically a sharp pain, often on the right side, immediately below the ribs.

The diaphragm moves down when we inhale to "pull" air into the lungs. Conversely, when we exhale, the diaphragm moves up, and we "push" the spent

air and CO2 out of the lungs. Like other muscle cramps or spasms, diaphragm spasms or stitches are thought to occur from the strain & fatigue associated with the increased workload of the diaphragm & lack of oxygenated blood during accelerated breathing from exercise. Often those new to running get the stitch. More is asked of their diaphragm than usual, and the blood (oxygen) supply to the diaphragm is compromised.

Stitch may also be caused by not breathing correctly – synchronise your breathing with your leg cadence, e.g. Breathe out forcefully every other time your right (or left) foot hits the ground (see 4-step breathing technique)

The good news is that most muscle spasms are thought to be associated with muscle fatigue, and as your fitness level and overall conditioning improve, the risk of stitch decreases.

If you get stitch, slow your pace immediately, take really deep breaths & within 1 or 2 minutes the pain should subside.

Things for your kit bag to treat niggles and prevent further injury.

<ul style="list-style-type: none">• Tubigrip• Compression bandage• Knee or Ankle supports• Freezable blue gel• Voltarol gel	<ul style="list-style-type: none">• Ibuprofen• Deep Heat• 1000 mile socks• Electrolyte replacement drink/tablets
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Main causes of injuries – Don't get caught out!

Generally, most injuries are caused by:-

- Not hydrating correctly
- Poor breathing technique
- Running too far, too fast or too soon
- Running on uneven surfaces
- Changing direction or accelerating
- Lack of support for foot arches
- Running up and down hills with the wrong technique
- Trying to keep up with others

Running Hills

- If you see a hill coming up? **Take deeper breaths** 1 or 2 minutes before the base of the hill. Don't get halfway up and wait for your body to demand more oxygen – get in the habit of telling your body when you need it.
- **Shorten your stride** AND keep your breathing synchronised with your increase leg cadence (rhythm). This automatically increases oxygen intake.
- On steep hills, drive your arms harder
- Lean into the hill from your ankles, not from the hip
- Look forward rather than down at your feet

Helping Endurance

A spoonful of Sodium Bicarbonate (Baking Powder) in a glass of water (or squash) an hour before running helps boost endurance by neutralising lactic acid and Hydrogen ion build-up in the leg muscles.

Any questions about niggles, injuries or techniques, please ask

Running and the Importance of Hydration

Water is essential to maintain blood volume & viscosity, which helps regulate body temperature and, along with electrolytes, allows muscle contractions to occur. During exercise, the primary way the body regulates body temperature is by sweating. The body is cooled when beads of sweat on the skin evaporate – this results in a loss of body fluid. Sweat production and, therefore, body fluid loss increases with a rise in ambient temperature and/or humidity and an increase in exercise intensity.

Ambient Temperature: Running activity raises the body temperature and causes the body to sweat in an attempt to cool itself. Higher than normal ambient temperatures and/or direct sunlight heating the body will speed up the body's attempt to cool itself, resulting in an additional fluid loss.

Humidity: When air has an increased level of water molecules, it has by volume proportionately less oxygen & nitrogen and reduces the breathing cycle's efficiency that oxygenates the blood. This raises body temperature & fluid loss as muscles are starved of oxygen and have to work harder.

NOTE!: Alcohol is a diuretic. This means it encourages the body to lose more water than it takes on by halting the anti-diuretic hormone Vasopressin production. Without this hormone, you will feel the need to pee excessively as the kidneys send water directly to the bladder instead of reabsorbing it into the body. This speeds up the loss of fluid from the body and leads to dehydration.

The Benefits of Proper Hydration

Proper hydration helps or maintains:-

- The lubrication of the joints
- Blood (84% water) viscosity and the transportation of oxygen and nutrients to the muscles
- The effective removal of toxins and waste from the body
- The regulation of body temperature
- Protection of our internal organs, muscles and connective tissues.

Pre Run/Race: Hydrate well the day before - drink water, fruit juice, squash or Lucozade (NOT Alcohol see panel) until your pee runs clear.

Drinking fluid before (less than 10 mins), during and after running, is necessary to replace fluids and electrolytes lost in sweat. This will reduce the risk of heat stress, maintain normal muscle function, prevent performance decreases due to dehydration and minimise injuries.

The sweat loss rates will vary from person to person, and it is essential to **learn your sweat rate** and know how much you should drink. This is an integral part of distance training, particularly those running a half or marathon. However, you should understand that it is possible to over-drink during running. Too much water (or even sports drinks) may cause hyponatremia (low sodium levels in the blood). Sodium is an electrolyte, and it helps regulate the amount of water in and around your muscle cells.

Dehydration

When your body doesn't have enough water, performance will decline. The extra stress placed on muscles and connective tissue **may lead to a serious injury**. Dehydration starts to happen when you lose more fluid than you have taken in and it can exhibit mild to severe symptoms that can include the following:-

- Dizziness or light-headed feeling
- Nausea or vomiting
- Muscle cramps / spasms
- Dry mouth
- lack of sweating
- Hard, fast pulse
- **Weak or rapid heartbeat**
- Dark coloured urine
- Headaches
- **Confusion**
- Lack of energy
- Loss of strength
- Tiredness
- **Inability to pass urine**
- **Irritability**
- Reduced bowel movements
- Thirst

The items **marked with yellow** may suggest a serious underlying problem – visit your GP

Rehydration: How to replace fluid and electrolytes

There are easy ways to replace fluids levels and keep your electrolyte levels up, including:-

Water: This is not the most complete solution but will alleviate some of the symptoms above.

Sports drinks/gels: Isotonic drinks are often provided by big half and marathons. They are equally as useful during 5K and training sessions as they hydrate and replace electrolytes.

Powders: There are a few electrolyte powders available to mix with water. These are very effective and work out much cheaper than branded bottles.

Most importantly, you should replace fluids and electrolytes as soon as possible to minimise or totally avoid the symptoms above and get your body back to normal.

What are electrolytes?

Electrolytes are elements that conduct electricity when mixed with water. They contribute to regular nerve and muscle function, balance blood pressure, rebuild damaged tissue and keep you hydrated. In fact, the muscles and associated neurons in the human body are often referred to as the “electric tissues” of the body. That’s because they, in particular, rely on electrolytes to function correctly. The different types of electrolytes in the human body include:

- Sodium
- Potassium
- Calcium
- Bicarbonate
- Phosphate
- Chloride
- Magnesium

What do electrolytes do and why do we need them?

Electrolytes are essential for our bodies to function as they should. Many automatic processes in the body, such as muscle contraction, rely on the small electric current provided by electrolytes to interact with each other and the cells in the tissues, nerves, and muscles.

For example, muscles need calcium, sodium, and potassium to contract. When these substances become imbalanced, it can lead to either muscle weakness or excessive contraction. Another example is the nervous system, which relies on electrolytes to carry electrical impulses to other cells.

A balance of different electrolytes is vital for healthy function.

What happens when my electrolytes go down?

Several factors can cause your electrolyte levels to decrease. The predominant cause of low electrolyte levels or electrolyte imbalance is a change in your body's water levels. The concentration of electrolytes in your body can also be affected by diarrhoea or vomiting. There are many ways in which electrolytes are lost within the body, including:

Sweating	Age: kidneys of adults become less efficient over time	Diarrhoea
Dehydration	Lack of fruit and vegetables/poor diet	Vomiting

Some health conditions, such as kidney disease, congestive heart failure and bulimia, and some drugs, including diuretics, can cause an electrolyte imbalance. Please speak to your GP if you suffer from any of these conditions and are concerned about electrolyte imbalance.

How to replace electrolytes naturally.

There are easy ways to replace electrolyte levels naturally and keep your electrolyte levels up, including:

Sports drinks: Although sports drinks and electrolyte gels are often recommended as quick-fix for restocking electrolyte levels during & after exercise, they typically contain high refined sugars levels. Look for sugar-free options, or consider alternatives to prevent consuming empty calories post-workout.

Electrolyte tablets: Electrolyte supplements, such as electrolyte effervescent tablets, are an excellent option for topping up low levels of electrolytes after exercise. They are also particularly beneficial for older adults who are more likely to have an electrolyte imbalance. Electrolyte tablets are also almost always sugar-free.

Nuts, fruit & vegetables: Pickles, tomato juices and sauces are all great sodium sources, while lettuce and olives provide chloride. Pistachio Nuts, potatoes (with the skin left on) & bananas are some of the best potassium sources. Spinach, Brazil Nuts & halibut are excellent sources of **magnesium**. Almonds, yoghurt, skimmed milk, dark greens such as kale and sardines are terrific sources of **calcium**. Finally, to round up the above, Cashew Nuts are a good source of **Carbohydrates & Iron**.

Use Himalayan Pink Salt; it has high levels of electrolyte elements.

IMPORTANT

Couch to 5K Rules

Your Coach is responsible for your safety please obey all verbal commands as quickly as possible, particularly when crossing roads. Don't worry about being the slowest – no-one gets left behind

These commands or calls are typically:-

- **"KEEP LEFT"** – this is the normal rule when approaching oncoming walkers or cyclists. They will most likely hear the command too and keep to their left (your right).
- When running on the road where there is no footpath, always run facing oncoming traffic. On hearing to cry of **"CAR"** or **"BIKE"** – keep to the right in single file. Be prepared to cross to the other side of the road on blind bends.
- **"WAIT"** or **"STAY"** – Front runners to wait at the top of a hill, the next junction or crossing
- All runners must wear 'HiVis' vests or jackets during winter nights

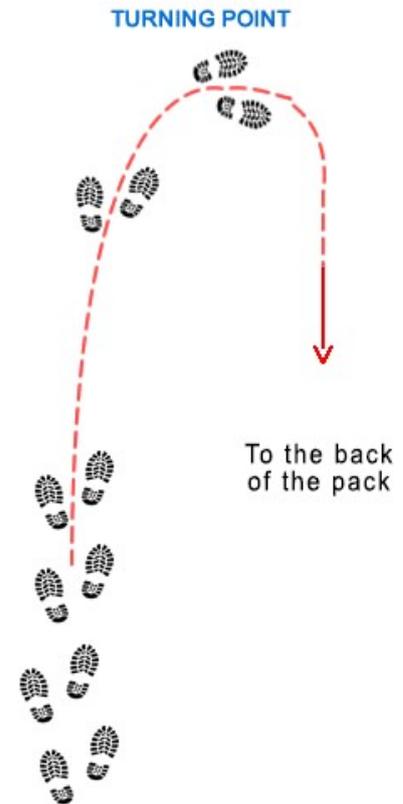


Whistle Rules For Your Safety

Your Coach has a whistle and here are the commands:-

- Long blast **"FREEZE"** stay exactly where you are – there is a safety issue.
- 1 short blast – Front runners loop to the back of the pack.
- 2 short blasts – change from walk / march to jog / run and vice versa

GROUP LOOPING PROCEDURE



Upon hearing a short blast of the leaders whistle or the command "LOOP", the front runner should turn to the RIGHT and run on the left to the back of the pack behind the slowest runners. Other able runners follow using **THE SAME TURNING POINT**. Slower runners should "keep to their left" allowing space for the returning runners.

Stay safe and enjoy your running

