PERSONAL BEST

A runner’s guide to being the best you can be

THE STRAITS TIMES Run At the Hub 2014
Panasonic

YOUR RACE GUIDE SPECIAL
IN A city partial towards abbreviation and in a sporting world brimming with acronyms, one stands quietly as possibly the most profound in sport. Before WR, before OR, before CR, before NR, first you find these two joined letters. It’s a Record not of World, of Olympic, of Championship, of Nation, but of the self. Not faster than anyone else yet faster, or further, than you’ve ever gone.

The PB.
Personal Best.

The PB, whether for professional or amateur, is a badge, it is a private quest. It doesn’t necessarily come with a medal or a certificate, which you hoard in a cupboard. It earns you something fleeting and rarely lasting, yet it is superior to any metal or paper. It is the feeling of exhausted accomplishment, the beauty of pinning down challenge, the glow of personal conquest. You stand there sweaty, too tired to smile some days, but inwardly satisfied. Doesn’t matter if you were beaten to 117th place, this moment of the PB is unbeatable.

Last year at the finish of the ST Run a man gently grumbled to me that he was one minute off target across 15km. He was only 67 years old, yet he was still pushing. Pushing past age, past doubts, past limits as he tried to win the greatest event know to humankind: the championship of the self. In this, he, this anonymous, unknown, greying runner is the athletic kin of Usain Bolt: in some stubborn corner of their minds, both men believe they could run a millisecond faster. They have not met their personal best yet.

The PB is not just for the professional, but also for you. The everyday runner who diets, plans, calculates his distances and also the weekend lonely runner like me who runs on Sundays with the footwork of a shuffling drunk and the breathing of a man rapidly approaching myocardial infarction.

I am not actively racing anyone or myself, but I’m not just inhaling the evening haze for fun either. No calorie-counting, heartrate-monitoring watch adorns my wrist because my PB isn’t measured by time. No, my PB is running to one extra bus stop or one more lamp-post. It’s running through one more guitar-jangling Meat Loaf song. If I can keep moving, I’m winning.

Personal Best doesn’t have to be reduced to kilometres and minutes or even kilograms lost. This idea of finding our Best as a running Person can’t always be distilled to numbers. Down the winding road which we run, all manner of little, private contests are rapidly occurring which require inspiration. We’re all taking

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**Rohit Brijnath**
Straits Times
Senior Sports Correspondent
inward adventures, begging the mind to find a little more courage and a little more energy. Our Best isn’t always a timing, sometimes it’s just maintaining a discipline — running after a late night or just returning to running after illness or just being regular in our running. Our Best is our own private struggle.

Walls of exhaustion spring up, nagging you, teasing you, which no one else can see. Normally you stop, but this day you don’t. Mutinies in the muscles take place which no one knows. The knees complain, the hip aches, the shin throbs, the ankle twinges, you want to slow down but you don’t. You don’t truly understand the idea of will-power till you get to this place in the run, when you harness your mind to propel the body, when you tell the voice shouting “quit” to shut up.

Everyone has a point of discomfort and to find your way through it is to appreciate the idea of the human spirit. A friend, when crippled by tiredness at the end of a run, convinces herself that she is at the Olympics and a gold medal — nothing else — is on the line if she finishes. In her head, the only voice is her own excited commentary on her own brilliant running. It is the sort of wonderful lunacy that takes a person to their best.

Professional athletes often say, “I want to be the best I can be” and therein lies the truth to our Best. It’s a journey to discovering potential. Who am I? What have I got? Where can I go? So many days we fail, but we lace up our shoes and start again, for somewhere in the distance is our invisible finishing line. As the poet and playwright Samuel Beckett wrote in Worstward Ho: “Ever tried. Ever failed. No matter. Try again. Fail again. Fail better.”

One day we will find our Best selves. Or maybe we won’t. But at least we tried.
Running different distances, from 5km to a 42.195km marathon, requires vastly different preparation.

A marathon, for instance, requires you to be on your feet for about five hours for an average beginner. Your body needs to be conditioned for strenuous work like that.

One can easily prepare for a 5km and 10km run, or even a 21km half-marathon, within eight weeks.

A full marathon warrants a minimum of 18 weeks’ preparation.

Slow down your pace if training distances get too challenging, but get your body used to clocking the high mileage.

It is recommended to get the green light from a doctor before embarking on strenuous training.

If you fail to prepare, you’re preparing to fail.

Age: 60
Title: National head coach for distance running

Since 2006, the former national athlete has been the national head coach for Singapore’s middle and distance runners.

The 1.91m senior customer service officer with national carrier Singapore Airlines, who coached female marathoner Vivian Tang at the 2003 and 2005 SEA Games, also helms a training group for running enthusiasts, holding six training sessions a week.
PREPARING for a 5km run would entail a totally different training plan than if you were attempting a marathon.

Anyone can complete a 5km route, even if by just brisk walking the entire route, and still feel very comfortable about it.

But longer distance races such as a half-marathon (21km) or a full marathon (42.195km) would be entirely different. Those are distances that have to be respected, and your body needs to be conditioned for it.

Sure, one would still be able to claw his or her own way to the finish line by sheer will even without preparing, but the resulting suffering makes it more torturous than one can expect.

Physically, it will mean sore muscles, body aches and pain for the rest of the week — if one is lucky to escape injury.

Mentally, the agony may deter you from ever wanting to attempting a long-distance run again.

Anyone would be able to go for a 5km or 10km run, and most do so before stepping up to a half-marathon. Many runners also usually chalk up one or two half marathons before going for a full marathon.

Still, there are many who train with me that target a marathon for their first long-distance race. It is doable, since you would have progressively clocked up sufficient mileage in your training.

You wouldn’t dive without a parachute, so don’t attempt a long distance run without training either.

But while preparing for a race is crucial, what is equally important is to enjoy your run, and be passionate about what you enjoy doing.
WHEN I tell the runners training under me that they should vary their training and try “different” kinds of running, quite a number of them usually come up to me and ask why.

They don’t see the need for it, thinking that running along the same route constantly is enough.

What they do not understand is that running is like, well, cooking. When you cook, you not only vary your choice of food but also spice it up at times with a little salt and pepper to make it more interesting.

Running is exactly the same. Add a bit of variety to it and you’ll find the training enjoyable and fulfilling — like a healthy meal — rather than tedious.

One of my favourite variants of training is tempo runs. These runs are faster-than-usual workouts that induces changes to metabolism, thus releasing lactate and
hydrogen ions into the muscles, which eventually wear down as the ions are acidic. These tempo runs will eventually help to increase your muscles’ resistance to these ions, eventually allowing you to run farther and faster.

Also, include uphill and downhill runs in your training. Every race is different in terrain and route but will almost certainly require you to encounter hilly portions at one time or another.

This will also build strength in your legs.

Training aside, the other important tip is to always listen to your body. Do not push yourself if you are unable to go beyond your ability and, keeping this in mind, always set goals that are achievable.

Even if you’re not thirsty, make sure you sip drinks during the race instead of waiting till you are thirsty as you lose electrolytes through perspiration. By the time your body tells you to take in fluids, it may be too late to fully reverse the loss and you may come down with muscle cramps.

Every race is different but the enjoyment and satisfaction you will get from finishing the race will always be the same so the key is to enjoy it and maintain a healthy lifestyle.

Running a marathon is not difficult. If you put in the effort and training required to run it, you’ll be able to do it and come out feeling good after knocking over this personal achievement.

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Here’s Ghana Segaran’s 8-week TRAINING PLAN

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LONG RUNS
》 Done usually on weekends which start from 10k to 32km with about four weeks to race day before tapering starts. (reducing the mileage)
》 Run at a comfortable pace that would allow you to converse with someone running with you. It would be good if you are able to cover the distance stated.
》 Setting a comfortable pace from the start is important as it will help you last the distance.
》 Walk if you have to, since it is your first marathon. Every effort counts.

CROSS TRAINING
》 Cycling and swimming help to strengthen the other muscle groups in your body while adding variety to training.

REST
》 It is important to rest, as muscles regenerate and get stronger. Rest also helps prevent injury.
》 When you feel tired, take an extra day of rest so that you do not over-exert yourself.

TRAIL RUN
》 Running on trails like the MacRitchie Reservoir or the Bukit Timah Nature Reserve can improve running technique.
### 18-week Training Plan

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**Week 10 - Week 18**

While fitness levels may vary, do note that runners should already have a base to start with.

Although this programme should give you all you need to complete a marathon, it is only a guide. Feel free to alter the training plan to suit your needs and try not to make up for the days you can't train.
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TIP 2
CHOOSING THE RIGHT SHOES
Top 3 considerations when choosing shoes

Right category
Matching the right shoe, feet and running profile

Fit
How well the shoe wraps and holds every part of your feet, giving sufficient allowance for expansion and still ensuring minimum slippage

Overall comfort
Simple as it sounds, this is crucial to a solid run

WONG KEE WEE
Age: 32
Title: Product Executive of New Balance Singapore

Wong oversees the various product lines in the Asean region and does testing on the sports apparel manufacturer’s running shoes for aspects such as the grip of the shoe, its forefoot propulsion and cushioning level.

A running enthusiast who has done multiple distance running events, Wong also enjoys working out and a sunny day out on the beach.
THE most fundamental thing to know in choosing the right pair of shoes is the pronation level of the runner.

Pronation refers to the inward roll of the arch muscles upon foot strike. It is a natural function of the human feet and helps to absorb impact.

Some running specialty stores have treadmills to help a runner determine their pronation level.

To be honest, there is no "perfect shoe" or "best shoe" in the market. Different runners have different feet anatomy and running gait.

Different shoes can have different construction, and built from different shoe "last", which is the mould that shoe measurements are based on.

It provides the basic shape for a shoe, based on its type, such as whether it is wide or broad. Shoe lasts can be wooden or plastic, depending on the manufacturer.

There is no one-size-fits-all shoe.

A pair of shoes with a much thicker midsole and outsole rubber tends to last longer.

However, in terms of performance, selecting a pair of running shoes should be more dependent on the runner rather than on distance.

As the muscles of the human body are all dependent on one another, getting the wrong shoe could cause injury in other parts of the body as well.

There is a misconception that the more cushioning the shoe has, the more protection it can give to the runner.

However, injury prevention still depends largely on the running gait and training discipline of the runner.

No matter what shoe you wear, a poor running form will still lead to injury.
Stability

» Runners who over-pronate (inward rolling of the foot), or those with low-arched or flat feet, would feel most comfortable in these.

» Usually designed to provide greater heel cushioning and forefoot responsiveness.

New Balance 1260
Minimalist

» Lightweight shoes that give the experience of “barefoot running” and have been all the rage recently.
» Difference between the height of the heel and forefoot is mostly just 0mm and 6mm.
» Allows for more natural running style.

**New Balance Road Zero**

A minimalist shoe that supports a natural foot position.
Cushioning

» For runners with neutral to high-arched feet, meaning those that underpronate or have natural pronation.

» Factors such as bodyweight, strength of leg and foot muscles should be considered to determine how much cushioning one needs.

» The heavier you are, the more cushioning needed to absorb impact.

» Muscle imbalance or weakness may warrant more cushioning.

New Balance FreshFoam 980
TIP 3
PACING
quick TIPS

» Before your race, determine what pace you want to go at. For instance, to complete each kilometre at a six-minute pace. Be patient during your race. Even if you feel strong, stick to your predetermined pace.

» Only start going faster if you feel up to it towards the end of the race.

» Train regularly – about three times a week – so you know what pace is comfortable for you.

» Depending on how accurate route markers are on a race, wearing a GPS watch may help you keep to your pace better.

Age: 26
Title: SEA Games marathon champion
Personal Best: 2hr 26min 30sec

Mok is a two-time SEA Games gold medallist — the first in triathlon at the 2007 meet in Thailand and the second in marathon at the 2013 edition in Myanmar — who also holds the national record in the men’s 5,000m after clocking 14min 51sec at the Tokai University time trials in Japan in 2011.

Although he missed out on being the first Singaporean male marathoner to compete at the 2014 Commonwealth Games in Glasgow due to injury, Mok is working towards becoming the first Singaporean man to run the marathon at the Rio Olympics in 2016.
RUNNING a race on a pace that is planned and pegged to a person’s capability is one of the best things a runner can do to get a good performance on race day.

Too often, runners either start out too quickly, or get drawn into too fast a pace by stronger runners, that they end up “hitting the wall” — overcome with fatigue and their legs depleted of energy.

Regardless of what distance you are running, it’s important to have a target time before you begin, and train towards that time while preparing for your race.

Studies have shown that running even splits or negative splits is more ideal on race day than positive splits, so even if you feel strong in the early stages of a race, resist the urge to speed up.

Keeping to a steady and suitable pace can have a lot of impact on your race. If you run too fast at the start, your body could produce a lot of unwanted substances such as lactic acid that will make you prematurely fatigued.

I’ve learnt this the hard way. I was after the national record when I ran the Gold Coast marathon in 2011, and was aiming for a timing of 2hr 24min.

Based on the theory of even splits, that would be 1:12 for each half of the race. But I was over zealous, and ended up going faster because I was feeling good and also because of the speed of my fellow runners.

I ended up clocking 1:10 for the first half, but blew it towards the end with a 1:16. Comparatively, at the SEA Games last year, I stayed consistent despite some of my fellow competitors pushing hard. That helped me push towards the end for a good finish to win the gold medal.

A good way to train yourself to keep to a pace is to run regularly at the required effort. If you train regularly with a group, try to run together during a race so that you can help control each other’s pace.

It’s probably wiser to run at an even pace because you end up losing more energy if you speed up and slow down repetitively than if you were running at an even pace. Remember, it’s not about starting fast. You can always push towards the end of race with the finish line in sight.
PACING IS A SKILL RUNNERS NEED TO LEARN AND MASTER

A runner takes the VO2 max test at the Singapore Sports Institute.

TOO fast a pace results in fatigue, but one too slow may cost more energy.

SLOW and steady wins the race? Not always. When it comes to pacing in distance running, there are no hard rules, says Mr Ray Loh, an exercise physiologist with Tan Tock Seng Hospital’s Sports Medicine and Surgery Clinic.

“It all depends on an individual’s fitness level, experience, how they train and their race strategy,” says Mr Loh.
Take Patrick Makau’s world record setting run at the 2011 Berlin Marathon, for example. The Kenyan achieved his 2hr 3min 38sec timing by starting fast, speeding up, then slowing down in the last 7km or so – though he hung on for the win and record.

In contrast, when Haile Gebrselassie won the race three years earlier (in a then world record time of 2hr 3min 59sec), the Ethiopian started to progressively get faster from the halfway mark. Known as negative splitting, this strategy is typical of most elite runners.

Whatever strategy one adopts, pacing is a skill all runners need to learn and master, says Mr Loh.

A pace that is too fast results in fatigue. Mr Loh explains this is because the body uses carbohydrates and fats as the primary fuel source during running, and the faster you run, the more carbohydrates, or glycogen, is used. When these glycogen stores deplete, runners “hit the wall” — that sudden feeling of fatigue and loss of energy in a race or training session.

But running too slow may also cost more energy. Every runner has an optimal pace at which he can cover the greatest distance with the least effort, according to a study published in the Journal of Human Evolution in 2009.

So how fast should you go?

The best way to find out, Mr Loh says, is through an endurance profiling test to measure your aerobic capacity (VO2 max), lactate threshold and running economy. Using these indicators, you can find out the safest pace you can sustain without hitting the wall.

Lactate threshold is the point where the lactic acid, a by-product of anaerobic muscle metabolism at high exercise intensities, builds in the muscles due to the body’s inability to process it. This is the “burn” you feel in your legs as you fatigue. Running economy is a measure of how efficiently a person uses oxygen while running at a given pace. But such tests can easily set one back a couple hundreds of dollars.

A more common and economical way to determine your pace is to regularly run race simulations or timed trials of a given distance. Monitor your pace every kilometre and try to keep it consistent.

During training, work on even pacing. Your training pace depends on the goal for each session, says Mr Loh. In general, goals can be
categorised into easy run (pace should be slow enough so that you can speak in complete sentences), tempo run and interval run (for these faster runs, you should be able to say a few words before needing to catch a breath).

Modern tools can provide pace feedback to help you stay consistent. The Cruise Control app, launched last year, is particularly useful. It matches your running footsteps to a musical tempo, cued to your song playlist. It automatically pulls “good running songs” from the music already on the runner’s phone into the app.

Set the preferred speed for your run before you head out. During the run, you just need to synchronise your steps with the sound, almost like you are dancing. The tempo of the sound is automatically adjusted so that you will reach your running goal.

Good pacing comes with experience. Mr Loh’s favourite programme to work on pacing is to do six to 10 repetitions of 1km interval runs on a treadmill at a goal pace, with short 30- to 60-second rests in between sets.

Do not forget to take other factors into account that may affect pace: weather, terrain, elevation, injury and participant numbers.

Once you figure out your pace, remember to stick with it on race day. Runners often get excited or change their game plan at the last minute — a tactical mistake.
TIP 4
STRETCHING
quick TIPS

» Stretching helps to improve flexibility, which can help one become a better runner
» Greater flexibility can mean avoiding injuries, better stride length and step frequency
» Stretching benefits tight muscles – typically the quadriceps, hamstrings, hip flexors, ilotibial band, piriiformis and lower back for runners.

WENDY CHO

Age: 45
Title: True Fitness master trainer

Cho has been in the fitness industry for over 18 years and is one of the pioneer trainers at True Fitness Singapore since the fitness chain was first established in August 2008.

In her capacity as master trainer, Cho — who has fitness and personal training certifications from the likes of FISAF (Federation of International Sports, Aerobics and Fitness) and the AFPA (American Fitness Professionals & Associates) — plays a pivotal role in creating and introducing new forms of training programmes for her company.
ON race day, do not start your stretching routine right away as it’s not a good idea to stretch cold muscles.

Instead, begin with five to 10 minutes of light aerobic exercise to loosen up your muscles first. If your muscles are not loosened up before you stretch, you are more likely to pull them.

To warm them up, try brisk walking, a slow jog or cycling on a stationary bike before you proceed with the following warm-up stretches.

As you move into each stretch, go slowly into it and try not to do it in a bouncing motion. Allow your body to get to a point where you’re feeling some tension but not to the point that it hurts.

Once you get there, hold the stretch for at least 45 seconds, and for up to a minute if your goal is to increase your flexibility.

Finally, don’t forget to breathe. Holding your breath can lead to your body tensing up, so make sure you relax.

After the race, post-run stretching is essential as it will help prevent muscle injuries especially those caused by the strain of running.

It will also promote blood circulation and help muscle fibres repair themselves more efficiently.

Awareness is the first step towards protecting yourself from injury.
PRE-RUN STRETCHES

Hamstring stretch

» Start in a seated position with one leg extended in front of you and the other bent and tucked in.
» Keeping your back straight, slowly bend at the hips, bringing your torso forward.
» Hold, and repeat with your other leg.
» Do not round your back or slouch, even if it allows you to get closer to your toe as it will put undue stress on your lower back while working on your hamstrings. Hold, and repeat with your other leg.
PRE-RUN STRETCHES

Achilles’ tendon stretch

» Find a stable wall or tree and press your palms against it for support. Place one foot in front of the other, bend your front leg and keep your back leg straight.

» Lean forward slightly, always keeping your spine straight, and hold for 30 seconds.

» After that, slowly bend your back knee slightly to stretch your Achilles’ tendon.
Calf stretch

Besides reducing tightness in your calves after the run, this stretch will help prevent shin splints by repairing the muscles in your calves at a faster rate, which in turn reduces the impact when landing each footstep.

» Bring one leg forward at a 90-degree angle, and the other stretched back and resting on the toes.
POST-RUN STRETCHES

Inner thigh stretch

This will stretch out the abductor muscle group, which consists of your inner thigh and groin muscles. These muscles might not feel sore after running, but stretching them will make your stride feel lighter and more controlled, which will lower the risk of sustaining injuries.

» Sit down with your legs stretched out in the shape of a ‘V’ in front of you.
» Try to touch your feet by reaching over your legs.
» The wider the angle of your V shape made by your legs, the deeper the stretch.
POST-RUN STRETCHES

Glute Stretch

Don’t neglect your glutes, or buttock muscles, in post-running stretches. Glutes are important because they are part of a process called hip extension, which enables us to be able to lift our legs off the ground for walking and running.

» Roll onto your back and bring your right knee towards your chest.
» With both hands, hold your knee and press it towards your chest.
» Hold the stretch at a point where you feel the tension in your glutes but ensure that the tension is bearable/uncomfortable.
RUNNERS often obsess about speed and mileage, but an aspect of fitness that is often overlooked is flexibility. It could be due to ignorance or even confusion from conflicting views, but flexibility is key to becoming a better runner.

“Flexibility is important for runners,” says Mr Justin Wee, senior physiotherapist at Tan Tock Seng Hospital’s Sports Medicine and Surgery Clinic. “The body usually attempts to compensate (for inflexibility) by transmitting the load to other joints, ligaments or muscles, which may lead to other injuries.”

Flexibility also correlates to stride length and step frequency, two factors in faster running.

To improve flexibility, stretching or repeated movement through a joint’s range of motion will work to increase joint range and prevent loss of motion respectively, according to Ms A. Lynn Millar, a professor of physical therapy and a fellow of the American College of Sports Medicine (ACSM), in a column on the ACSM’s website.

“Stretching increases the flexibility of muscles and tendons, facilitating resting length of muscles, which may be tight due to habitual postures we adopt or due to ageing,” says Mr Wee.

When and how to stretch, however, is still a point of contention. For a long time, experts believed that static stretching — holding a position that produces a slight pull but not to the point of pain — increased flexibility and boosted performance.

But about a decade ago, studies found that it actually caused performances to suffer. Experts started advocating dynamic stretching — which takes the joint and muscles through the full range
of motion, often repeatedly.

“Studies on static stretching right before sporting activities show that the rates of injuries are not reduced, while speed and power seem to reduce,” says Mr Wee.

“Dynamic stretching also allows muscles to warm up by increasing blood flow and temperature, hence it is preferred.”

However, he says that since long-distance running may not require a lot of power and speed, static stretches may not be detrimental to performance.

Keeping pre-exercise stretching routines to less than eight minutes may not significantly alter lower leg strength. In fact, it appears to temporarily improve joint range of motion, according to a study of moderately active individuals in the August 2008 issue of the ACSM journal Medicine & Science In Sports & Exercise.

“Our findings...suggest that for these muscles, there may be a ‘threshold’ of stretching between eight and 10 minutes that would be necessary to decrease muscle strength,” said study author Joel T. Cramer, an ACSM fellow.

Offering another perspective on the stretching debate, a study presented at the 2011 annual meeting of the American Academy of Orthopaedic Surgeons found that stretching before a run neither prevents nor causes injury. However, runners who typically stretch should continue or they risk injury, say the researchers.

More than 2,700 runners who run 16km or more per week were involved in the study. About half were randomly assigned to a group that stretched their quadriceps, hamstrings and calves for three to five minutes just before running; the other half did not stretch.

“Although all runners switching routines were more likely to experience an injury than those who did not switch, the group that stopped stretching had more reported injuries, implying that an immediate shift in a regimen may be more important than the regimen itself,” said Dr Daniel Pereles, study author and orthopaedic surgeon.

Mr Wee notes stretching is beneficial only when done to tight muscles — not every muscle would be tight. He says the muscles or areas typically tight in runners are: quadriceps, hamstrings, calves, hip flexors, iliotibial band, piriformis and lower back.

“Stretching should be stopped if symptoms of tingling or numbness are experienced. Stretching muscles that are not tight should be avoided as that may do more harm than good,” says Mr Wee.
Priscilla Lam, a Pure Yoga instructor who has run four marathons, says a combination of dynamic and static stretching is best before a run to contract, relax and elongate muscles. She has designed the following pre-run stretching circuit to work the key muscle groups for running.

**SUN SALUTATION**

**WHAT IT WORKS**

Everything, with focus on strengthening the core, glutes and hip flexors, lengthening the hamstrings and calves, and opening the chest and shoulder to facilitate breathing. It also starts the breath flowing and increases mental clarity and focus – key ingredients for a run.

1. While standing, stretch arms straight up, look towards hands.
2. Keeping spine straight, lower torso. Place fingertips on floor, just outside the feet.
3. Rise to fingertips, straighten arms, and lift torso.
4. Place palms on floor. Step feet back into a plank and lower body into push-up position.
5. Press tops of feet into floor and raise torso. Hold for five breaths.
6. Return to starting position and repeat on other side.
TRIANGLE

WHAT IT WORKS
Quadriceps, hips, ankles, heels. It wakes up the spine, chest and circulation

1. Stand with feet wide apart. Reach arms out to the sides, palms down.

2. Turn left foot slightly to the right, and right foot out 90 degrees. Bending from hip joint, rest right hand on floor. Stretch left arm towards ceiling, in line with shoulders. Keep head in neutral position. Hold pose for a few breaths.
**HIGH LUNGE**
**WHAT IT WORKS**
Abs, hip flexors, quadriceps, calves, plantar

Step right foot forward, aligning knee above ankle. Reach back through your left heel. Extend arms overhead, lift chest, and reach through your fingers. Hold for a few breaths. Repeat on other side.

**ONE-LEGGED DOWN DOG**
**WHAT IT WORKS**
Hamstrings, calves, core

1. Starting on your hand and knees, press up and straighten your legs to form an inverted V.

2. Lift left leg up in the air. Hold and breathe.

3. Lower leg, bending it and bringing knee towards right elbow, followed by left elbow. Repeat on other side.

**TWISTED CHAIR**
**WHAT IT WORKS**
Glutes, quadriceps, ankles, heels

Get into a semi-squat with palms together in front of chest. Twist torso towards left, placing right elbow on outside of left knee. Turn face and look up at ceiling, hold for three to five breaths. Repeat on other side.

PHOTOS: MATTHIAS WEIKOFF
GRAPHICS: LIM KAILI
TIP 5
INJURIES
Quick Tips

» Factors to consider: being overweight, training volume, age and old injuries
» Stretch and warm up before a workout, and cool down after
» Try strength or resistance training, which can help to strengthen muscles important for running
» Listen to your body. Do not ignore aches or pains and get them looked at before they aggravate
» Don’t push too hard. Running while exhausted could increase risk of injury

Dr Lim Kay Kiat

Age: 41
Title: Orthopaedic Surgeon, Synergy Orthopaedic Group (Mount Elizabeth Novena)

Dr Lim specialises in foot and ankle injuries, and also has a keen interest in running and cycling injuries.

In his spare time, Dr Lim likes to take part in endurance events and has run in several marathons and triathlons, including the Ironman 70.3 Triathlons in Singapore, Malaysia and Canada.
THE most common injuries a runner encounters are soft tissue injuries of the lower limb, which is related to overuse. This includes muscle strains and inflamed tendons. Such injuries occur when the runner increases mileage without progressive buildup to allow the muscles to adapt to the increased demands. Running on unaccustomed terrains or using improper footwear also increases the risks of injury.

For someone building up towards a run of a longer distance, I recommend a 10 per cent week-on-week increase in mileage. Long runs should not be done on consecutive days, as there should be adequate recovery time. Also, exercises such as core strengthening can help reduce the risk of injury.

Running longer distances certainly puts an increased strain on the body. Runners should be wary of developing injuries so as to address them before they become chronic. Adequate hydration and nutrition before and during a run is important, especially for those beyond an hour.

Appropriate clothing and footwear is also important. In Singapore’s warm and humid weather, light-coloured synthetic fabrics are preferred. They can wick away moisture from the skin, and regulate your body temperature while running.

Stretching is also important for injury prevention. It has been shown however, that aggressive stretching pre-exercise may actually impair performance.

When we walk, four to seven times the force of our body weight goes through each knee. This is even higher when running.

It is easy to see why a heavier individual is more prone to injury, given the same running mileage. Those with mechanical alignment problems in the lower limbs, such as bow legs or flat feet, are also more prone to injury due to uneven distribution of impact forces.
HOW TO PREVENT RUNNING INJURIES
Train smart and stay within your limits to lower the risk of getting hurt.

National triathlete and reigning South-east Asia Games champion Mok Ying Ren demonstrating one of the correct running technique.

DEPENDING on which expert you speak to, they will tell you that your chances of suffering a running-related injury are between 20 per cent and 90 per cent.

Studies on this topic are aplenty, but there is a large variance simply because there are so many factors and conflicting ideas involved. With long-distance running, there is also a fine line between overuse and being under-conditioned.

Greater age, for example, was found to be a significant risk factor for incurring running injuries in some studies, but found to be a
significant protective factor in others. Does increasing training distance per week cause or protect against knee injuries? The jury is still out.

The latest study to challenge conventional theory was published in June last year in the British Journal of Sports Medicine. Scientists at Aarhus University in Denmark followed more than 900 healthy novice runners for a year, all of whom received the same model of a neutral running shoe regardless of how they pronate (or how the foot rolls inward on landing). It was found that runners who over- or under-pronate do not need a shoe with special support.

Consequently, lead researcher Rasmus Ostergaard Nielsen, a physiotherapist and PhD student, suggests that runners, and in particular beginners, do not need to obsess about their foot type and shoes. To avoid injuries, they should instead consider other factors like being overweight, training volume, age and old injuries.

In fact, training errors, such as excessive distance and a sudden change in training routines, have been implicated as the main culprit for running injuries, accounting for about 60 per cent to 70 per cent of them.

In other words, most injuries are preventable — if you train smart and within your own limits. It all depends on the individual, however. That is why some can run 100km a week and barely get a black toenail, while others limp with knee pain after a 5km jog.

“We know that more experienced runners are less prone to injury, with the number of years of running being inversely related to incidence of injuries,” says Dr Ramesh Subramaniam, a consultant at Tan Tock Seng Hospital’s Sports Medicine and Surgery Clinic. “Studies have shown that running mileage and previous injury are important predictors of running injury.”

In a 2010 study, researchers from the University of Groningen in the Netherlands observed more than 600 novice and recreational runners during an eight-week training period for a 6.4km running event.

One in four runners reported having at least one running-related injury. Having no previous running experience was the most important risk factor in participants, and men were more prone to getting an injury than women.

The top three common running injuries are runner’s knee (patellofemoral pain syndrome), Achilles tendinitis and muscle strain, says Dr Ramesh.

According to him, some injuries have become more common in recent times, as more people join the running boom and seek to chalk up increasingly longer distances. These injuries include those to the
Achilles and calf, iliotibial band, hamstring and quadriceps muscles, and ligaments and menisci in the knee.

Furthermore, with the barefoot or minimalist trend that has led many runners to swap their traditional chunky trainers for super lightweight, barely-there shoes, Dr Ramesh says he is seeing more cases of knee tendinitis, Achilles tendinitis and stress fractures to the metatarsals (the five long bones in the forefoot).

“It’s imperative to learn appropriate running techniques with barefoot running. It involves forefoot or mid-foot striking, which minimises the impact of the body colliding with a surface,” he explains.

“It is also important to allow the body to have a period of adaptation to these techniques before running long distances, and also to be progressive in running training.”

Because most running injuries are soft tissue injuries of the lower limb, Dr Ramesh recommends stretching and warming up before a workout and cooling down after.

Strength or resistance training can also help, he says. In particular, strengthening the core, hip and buttock muscles are important for spine and pelvis stability during running.

If you have biomechanical abnormalities in your foot, ankle or lower limbs, customised insoles or foot orthoses could prevent injury, he says.

For those who are already injured, seeking a physical therapist for active-release or soft-tissue mobilisation can help break down scar tissue between connective tissue in the injury area and rebuild mobility and strength. Dr Ramesh says that this will reduce your chances of injuring the same spot again.

Perhaps the best way to avoid injury, however, is to listen to your body. Don’t shrug off niggling aches and pains; get them sorted out before they become a full-blown injury.

Challenge yourself, but don’t push your limits too far. When running during exhaustion, runners unknowingly change their running form and have increased motion in the hips, knees and ankles, according to a 2010 study in the Journal of Biomechanics. This could increase your injury risk.

Lead researcher Tracy Dierks of Indiana University explains that the extra motion makes it harder for the muscles, tendons and ligaments to handle the strain forces related to running, and could lead to overuse injuries.
Tip 6
Eating to run
quick TIPS

- It’s not advisable to run on a full stomach, but attempting long-distance races without sufficient fuel before can also be counterproductive.
- Energy bars may be convenient, but some are just junk food in disguise. Look careful at its nutrition label and look out for ingredients such as high-fructose corn syrup and trans fat.
- Aim to fill your daily diet with foods that are made with fresh, whole ingredients, avoiding processed foods as they are high in sodium and sugar.
- Energy gels are popular sources of energy among endurance runners. They are easier to digest, and contain electrolytes that assist in rehydration.
- But give yourself time to adapt to energy gels, and refrain from taking them for the first time during a race. Some people cannot stomach them and can develop tummy problems.
- Make sure you drink enough water to go along with the gels.

ANNE QI HUI

Age: 33
Title: Singapore’s top female marathoner
Personal Best: 2hr 50min 30sec

Arriving here from Inner Mongolia to play hockey for Singapore full-time in 1999, Qi picked up running in 2002 out of curiosity and has never looked back since.

Qi, who became a Singapore citizen in 2000, has been the fastest Singaporean female runner at the past five editions of the Standard Chartered Singapore Marathon since 2009, and had to overcome an upset stomach in her latest triumph last year as she clocked a time of 3hr 7min 30sec.
RUNNING is not just about putting one foot in front of the other and clocking mileage.

It is a lifestyle, and nutrition is a big part of this lifestyle. To me, what a runner eats and puts into his or her body is probably 80 per cent of the equation, with training making up the rest.

I eat well so that I can be healthy, and because it helps to put me in the best form possible when I run.

While I'm not a proponent of any specific form of diet, I do believe in eating wholesome foods and stay away from processed food and fast food.

Our bodies are like car engines — if you put in inferior petrol, even a good car will not run very well.

I'm not a fan of carbo-loading, because I feel it just makes me bloated. Instead, I will go for food high in good fat, such as fish oil, avocados, eggs and nuts, mixed with protein and a moderate amount of carbohydrates the day before a race.

If I am running a marathon, I will take a simple breakfast the morning of the race. It could be oatmeal porridge, or a little bit of fruit.

Power gels help sustain me throughout a race, and I take about 1 every 10km — although this depends on the weather.

Eating, however, is a very personal thing and there is no one size fits all diet that will apply across the board.

Taking caffeine before a race will help some while making other runners sick.

It's about learning from your body, listening to your body, and not introducing anything new or potentially shocking — such as seafood or shellfish, or something spicy — before a race.
Anne's pre-race meal

- Oatmeal porridge
- Fruit

Anne's typical every-day meal

- Salad
- Grilled fish seasoned with salt, vinegar and pepper
- Boiled sweet potatoes
R

Hong Kong-based Italian chef Andrea Oschetti (above) makes his own energy bars with a mixture of nuts, seeds, dried fruit and oats, all held together and naturally sweetened by pureed pumpkin.

RUNNERS these days are spoilt for choice when it comes to nutrition, what with the mind-boggling array of energy-boosting food and sports drinks available.

While the popularity of such products continues to grow, there is a concurrent trend of runners seeking more natural alternatives — such as soaked chia seeds instead of energy gels, and spirulina smoothies instead of protein shakes.

Mr Andrea Oschetti, an Italian chef and ultra-endurance athlete
based in Hong Kong, makes his own energy bars with a mixture of nuts, seeds, dried fruit and oats, all held together and naturally sweetened by pureed pumpkin. The bars are low-sugar and dairy- and gluten-free.

“Athletes like energy bars because they’re convenient,” he says, “but where healthiness is concerned, they’re far from a substitute for real food. In some cases, the harm of pre-packaged bars can outweigh the convenience they provide.”

For example, some bars are high in refined sugars, making them no better than candy. Look at the labels and avoid ingredients such as high-fructose corn syrup and trans fat, Mr Oschetti says.

This trend towards more natural sports nutrition has arguably been sparked by recent running-related books. In Eat And Run: My Unlikely Journey To Ultramarathon Greatness, author Scott Jurek tells of how a plant-based diet fuelled his success as one of the world’s most accomplished ultra-marathoners.

Jurek advocates eating whole foods that look as close to how they are grown as possible, and avoiding processed foods as they are packed with sodium, sugar and empty calories, and are a drain on the digestive system.

His training and racing menu includes lentil-mushroom burger patties, chocolate adzuki (red bean) bars, and a pre-workout “Green Power” drink based on spirulina, a high-protein green algae which he says has “shown promising results as a performance enhancer for long-distance runners”.

Jurek was one of the stars in the 2009 New York Times bestseller Born To Run by Christopher McDougall — the book that turned the running and fitness world onto chia seeds.

Chia fresca, a “home-brewed Red Bull” of chia seeds mixed in water with sugar and lime, fuels the Tarahumara, the Mexican tribe whose exceptional ability to polish off ultra-marathons day after day was documented in the book.

“In terms of nutritional content, a tablespoon of chia is like a smoothie made from salmon, spinach and human growth hormone,” writes McDougall, adding: “If you had to pick just one desert-island food, you couldn’t do much better than chia, at least if you were interested in building muscle, lowering cholesterol, and reducing your risk of heart disease; after a few months on the chia diet, you could probably swim home.”

Another famous running population, the Kenyans, have their own natural-energy source: ugali.
“Basically, maize flour and water boiled up to make a sticky, white dough,” writes Adharanand Finn in his book Running With The Kenyans.

Ugali — “with the consistency of mashed potatoes and almost no taste” — is served with githeri (a mixture of boiled corn and kidney beans), sukuma wiki (chopped boiled kale) and rice.

For a snack? Roasted corn on the cob. For post-training recovery? Tea mixed with raw cow’s milk and a bit of sugar.

Finn, who travelled to the town of Iten in 2011 on a six-month mission to uncover the secrets of Kenya’s elite runners, suggests in his book that diet plays a part in the Kenyans’ global domination of distance running.

Sports scientist Allen Lim, who has worked with numerous pro-cycling teams, is known for radically overhauling his cyclists’ diets from engineered foods to fresh, whole ingredients.

Together with chef Biju Thomas, Mr Lim developed The Feed Zone Cookbook: Fast And Flavourful Food For Athletes.

Published in 2011, the book is packed with 150 recipes such as bacon muffins and fresh rice cakes.

If Olympic and world champions can get by on natural foods, everyday athletes like us should be able to as well.

Engineered sports foods do have their advantages. They are convenient and useful when you need a burst of energy, says Ms Nancy Clark, a certified specialist in sports dietetics and author of Nancy Clark’s Sports Nutrition Guidebook. For some people, such foods are also easier to digest than whole foods.

But Ms Clark says a lot of people “needlessly waste a lot of money misusing them”.

She says: “When my clients ask for advice about how to use these products, I first assess their daily sports diet to determine if they can get or are getting what they want from standard foods.”
TIP 7
TAPERING
THE period in which training is cut down on in the build-up to the big day, is known as tapering.

The duration lasts around 10 days, during which training volumes are reduced.

It gives the body a chance to recover from the hard workouts, and be in top shape for race day.

Always taper to achieve optimal race performance.

A general guideline is to reduce weekly mileage by 20 per cent 10 days before race day for marathoners, seven days for half marathoners, and four days for 10km runners.

All jogs within this period should preferably be light and easy, with some striding done at the end of each run.

When I’m training for a half marathon, my weekly mileage will be around 100km per week. I will reduce it to 80km the week before, and then to 50km for the week of the race.

It will also be good to keep away from other vigorous activities such as a football, reserving your energy for race day. It also reduces the risk of getting injured right before the big day.

There is no need to do other forms of exercises to make up for the cut mileage. You just have to take it easy for the week before the race.

Remember to take in the required amount of carbohydrates. Food that provides longer-lasting energy and is packed with lots of other nutrients, is recommended. These include stuff like brown rice, pasta and oatmeal.

Benefits of tapering are optimal physical conditions, technique and psychology conditions, all of which are key to peak performance.

Tapering is equally, if not more important, than the hard training phase. Not getting in a proper tapering plan may lead to a sub-optimal performance, and see all your hard work going to waste.
6 NO-NOS WHEN TAPERING

**CRAMMING**
Last-minute efforts will not help. Without rest, the muscles will not be able to repair from months of hard work and optimise its glycogen (energy) stores. Have faith that you have done all the necessary work to run a good race.

**EATING TOO MUCH**
Do not overdo the carbo-loading. You are expending less calories during a taper and do not need to eat more than usual. Aim to make carbohydrates 65 to 75 per cent of your total calorie intake, and do not neglect protein, which help in musculoskeletal recovery.

**SNEAKING IN RUNS**
Stick to the taper plan even if you get mentally and physically restless, and even if you feel great — which is likely.

**LOWERING INTENSITY**
High-intensity training at race pace or slightly faster keeps your nervous system primed for hard work. A lack of it during a taper is a common cause of a “flat race” — when you “just don’t have it” even though you’re extremely fit.

**PHANTOM PAINS AND PANIC ATTACKS**
Do not get stressed by the pressure to perform or a fear of failure. Do a couple of race-pace kilometres in the middle of a run to restore confidence in your ability to hold the pace.

Muscle twinges and aches are signs of the body repairing itself. During rest, scar tissue tightens and repairs, leading to tightness, aches or even pain. Stretching and light cross-training can help.

**WORRYING ABOUT WEIGHT GAIN**
A weight gain of 1kg or 2kg can be expected, but is usually due to water accumulating in the muscles, attracted by the extra stored glycogen. This “water weight” will actually keep you better hydrated on race day.

Try some 100-metre sprints at the end of some easy runs to help dust off this feeling, without overdoing it.

The “taper” phase refers to the final two or three weeks before a race, when rest is prized over hard work. Training volume is reduced while intensity kept high in order to prime the body for the big day. Typically, the more hours you train per week and the longer the race, the longer the taper should be. For a marathon, this usually lasts 10 days to two weeks.
TIP 8
RACE-DAY ESSENTIALS
Avoid anything new. Stick to what has worked for you in past races and in training, from pre-race ritual to food and even clothing.

**Pre-race**
- Fuel adequately.
- Go to the toilet.
- Charge any electronic equipments such as GPS watches.
- Visualise the race.

**During the race**
- Do not get sucked in by other faster runners. Stick to your pace.
- Recharge along the way at all hydration and food stations.

**Post-race**
- Cool down and don’t just rush off to join in the festivities.

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**Age:** 25  
**Title:** New Balance runner, freelance writer

Tung specialises in the 3,000m steeplechase, 5,000m, 10,000m and half marathon. The 25-year-old, who counts reading, writing and watching movies as his hobbies, was the first to cross the finish line in the half marathon men’s closed category at the 2014 SAFRA Singapore Bay Run & Army Half Marathon, with a time of 1hr 17min 13sec.

Tung was also the eighth Singaporean male runner to cross the finish line at the Standard Chartered Marathon Singapore 2013 with a timing of 3:10:48.
THERE are several parts to race day — pre-race, during the race, and post-race.

For pre-race preparation, whatever you do on race day should not be something new, and should have already been tried and tested in training.

In terms of physical preparation, one important thing to do is to fuel adequately.

The timing of the meal, what your meal comprises, and the portion of your meal can all affect your performance.

If it is an afternoon race, I make sure to eat at least three hours before the race, with food that sit well in the stomach.

If the race is in the early morning and my breakfast is close to the start time, then I have a lighter meal, usually with bread and peanut butter, a banana, and coffee.

Also make that trip to the toilet before the race, to save yourself a lot of frustration during the race.

While you may be tempted to wear a new pair of shoes or a new top you bought specially for the race, refrain from doing so. Your body is not used to them, and might therefore perform differently, or even negatively.

Some problems that new gear might cause are blisters, chafing, or discomfort caused by ill-fitting equipment.

Remember to charge equipment such as GPS watches, before the race.

Plan your arrival at the venue taking into consideration your mode of transport, and the queues for bag deposit and mobile toilets. Give yourself adequate time to warm-up.

Another crucial aspect is the psychological. Incorporating some form of mental preparation such as visualising the race, can sharpen your readiness when you meet with the actual situation.
During the race, resist the temptation at the start to bolt with the throng of runners and stick to your target pace. For distances like 5km and 10km, drinking water or isotonic drinks at hydration stations should be sufficient.

For longer distances like the half marathon and especially the marathon, consume foods like energy gels and bananas. Personally, for marathons, I take in isotonic drinks at every hydration station to mitigate the loss of salts in my body which could cause cramps later in the race.

It is always better to prevent the onset of any such problems than looking for a cure.

At the end of the race, it is easy to get swept up in the post-race festivities, but remember to have a good cool-down routine to recover from the race exertion.

It should include a jog immediately, or a five- to 10-minute rest to catch your breath. One can also have a massage.

A good cool-down routine prevents aches and sores post-race.

Know that anything can happen on race day, but always stay calm amid the excitement and chaos. Remember the training you have put in and run the race with a positive mindset.
TIP 9
RECOVERING
Within the Hour

Cool down
After walking, stretch passively. Ice anything that is or was sore, pulled or twisted during the race for 10-15 minutes. Resist a massage at the finish as it could cause more soreness the next day. Wait at least two hours before getting a rub-down.

Refuel
To take advantage of the immediate post-exercise period, eat 1-1.5g of carbohydrate and 0.4g of protein per kilogram body weight and drink liberally (but avoid alcohol). This aids in replenishing muscle glycogen.

Change
Pack spare clothing and slippers, and ideally a pair of full-length compression tights which aids in “energy return” and clearance of lactate from tired muscles.

Age: 27
Title: 2013 SEA Games marathoner
PB: 2hr 35min 40sec

One of Singapore’s top marathon runners, Liew initially never saw himself taking the sport seriously — he clocked 4hr 29min in his first marathon in 2004 — until he met his coach Murugiah Rameshon, who holds the national marathon record of 2:24:22.

Under Rameshon’s tutelage, the 28-year-old — currently studying chiropractic in the United States — has gone on to represent Singapore in the marathon at the 2013 SEA Games, and was also Singapore’s top male finisher at the 2012 Standard Chartered Singapore Marathon with a time of 2:45:06.
WITHIN 24 HOURS

Avoid crowds
It is common to suffer a drop in the body’s immune function after tough bouts of exercise, which means you are more likely to fall ill. Stay away from crowded places to reduce infection risk. Take the next day off if your work involves a lot of standing or walking. If you are desk-bound, get up and stretch frequently.

Seek cold comfort
Continue to apply ice for 10-15 minutes every one or two hours if you are still sore. Consider seeking professional help or advice if the pain gets worse.

Relax
Elevate your legs to prevent by-products and fluid from pooling. Keep those compression tights on. Do some active recovery in the pool (light swimming or water running), but NO running.

Celebrate with a tipple
Light alcohol is okay, but remember to keep drinking lots of water.

Hold the junk
Keep the junk food to a minimum as your body needs high-quality proteins and carbohydrates to recover. These include food like pasta, wholemeal bread, brown rice, fresh fruits and salad, low-fat yoghurt and dairy products, lean meat and fish.

WITHIN THE WEEK

Recover actively
Do light activity to help prevent stiff muscles. Cycling on an easy gear, swimming or deep-water running for about 20-40 minutes helps to get the blood circulating.

Get a massage
But avoid having one that is too aggressive or deep. Delayed onset muscle soreness (or Doms) can occur for up to seven days. But, if any area hurts beyond a week or there is pain or swelling at or close to a joint, seek professional help immediately.

Eat normally
Return to a healthy diet, and avoid excessive or high-calorie intake, since your exercise is likely to be reduced drastically.
THIS may sound counter-intuitive, but no matter how tired you are, do not stop after you cross the finish line.

Doing so could lead to blood pooling in your legs and lactic acid build-up, inhibiting recovery.

Discipline yourself to do a thorough cool down, and resist the urge to collapse onto the ground or lie sprawled on the floor immediately after.

I would walk around for a few minutes, then do some static stretching of all the major muscle groups once my heart rate has settled down.

I’d start from the calves and slowly progress upwards towards the neck and shoulders, holding each stretch for 30 seconds.

I believe in the benefits of massages, both before and after a race. A good massage helps to relax your muscles, improve flexibility, boosts circulation and flushes lactic acid from your body.

But I am more cautious about doing a deep tissue massage right after a race, in order to give your body the time to fully heal itself.

Our bodies are equipped to self-heal, so I also do not recommend icing or anti-inflammatory pills as recovery strategies.

But what is imperative, however, is a good night’s sleep after a race. If you can throw in an afternoon nap, even better.

Sleep is the best form of recovery. While you rest, your body recovers by repairing your muscles and bones, strengthening your immunity and decreasing inflammation.

When next to pound the pavement again? There is no hard and fast rule, but you’d want to be exceptionally aware of your body.

I take a full rest in the week after a marathon, only taking walks to clear any residual lactic acid from my legs. In the second week, I do
some light non-impact exercises such as getting on the elliptical trainer, swimming or cycling.

Only in the third week do I resume running in a progressive manner, starting out easy with a 3km run.

Don’t jump straight back into hard and fast training, especially if your body has just been through a gruelling marathon or half-marathon.

A sound post-race recovery plan is paramount to building the motivation to move forward towards your next goal.

It is as mental and emotional as it is physical, just like how it is not just about the race you just ran, but also about your next exciting journey ahead.
TIP 10

GADGETS FOR TRAINING
IT might resemble a watch, but the wristband-like accessory known as a fitness tracker, that many athletes don during their runs actually does more than just tell the time.

Touted as the next big thing since the emergence of smartphones, fitness trackers have become popular with running enthusiasts because of their ability to tell users many otherwise-unknown details about their run.

Equipped with an accelerometer — a device that measures acceleration forces — these gadgets accurately track the distance of a run, calculate how many calories are burnt and, in some models, even measure the elevation of a run.

With this data, collated into interactive graphs when the devices are synched to either a smartphone or computer, users can analyse their workouts and determine whether or not they have achieved their intended targets.

Although many sporting enthusiasts swear by fitness trackers now, some members of the running community were initially sceptical about their effectiveness.

Anthony Sum, the founder of local running group Team FatBird who has completed over 20 marathons, didn’t think he would wear a fitness tracker long term when he first used it in 2005, a year after he started running.

“Back then, there wasn’t anyone who really educated us on the proper advantages of these gadgets so I wasn’t
expecting to use it for long,” said Sum.

“After using it constantly, I realised it was a very good tool as it not only tracked my training progress but also served as a form of motivation by helping me set targets to improve myself.”

Added Sumiko Tan, a Singaporean lecturer who in 2011 was the first athlete to win both the Sundown Marathon and Sundown Ultra Marathon in the same year: “Having a fitness tracker ensures you don’t train blindly and that you know what you’ve accomplished and how much more you can improve.”

An indicator of how far the fitness tracker has come since its inception is its appearance, with these bands looking more like a trendy fashion accessory than a geek toy.

Some, like the LifeTrak Zone C410 and the Garmin Vivofit, are available in teal and orange.

Last year, over US$1.9 billion (S$2.3 billion) was generated from the sales of these sports, fitness and activity monitors according to IHS, a US-based market intelligence firm.

That amount is projected to hit US$2.8 billion in the next five years.

Michael Kang, a Singaporean sports executive who has run in more than 10 marathons, believes this potential surge is due to the low prices of fitness trackers.

Most trackers retail between $100 to $200, while a heart-rate monitor – which offers detailed readings on your heart rate – costs about twice that amount.

“Many enthusiasts who are new to the sport will probably get the fitness tracker first due to its affordability,” said Kang.

“It may not cost a lot but it is still an investment too so naturally, most people will go for the cheaper option at the start.”

Added Sum: “I myself started with the most basic gadget but slowly went on to the more sophisticated items like heart-rate monitors and GPS watches as they tell me more about my runs.

“I’m sure people who start buying a fitness tracker won’t stop there because they’ll want to know more about their performances.”
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THE STRAITS TIMES

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