General Running

Road-running: Running paths or courses on traditional gravel or concrete pavement, usually around traffic.

Trail Running: A special course for runners often over a hiking trail in hilly, mountainous terrain. Some runners prefer trail running over road running for the soft surface to lessen the effects of "pounding pavement".

Barefoot Running: Exactly like it sounds — running barefoot for the ultimate minimalist experience.

400 Meters: This is the distance of one loop around the track.

1 Mile: 1609 meters

5K / 10K / 15K: Common race distances; 3.1 miles, 6.2 miles and 9.3 miles respectively.

Marathon: 26.2 very long miles for the brave hearted.

Half-Marathon: Like a marathon, but half the fun.

Ultra-marathon: For those where 26.2 miles is just not enough any distance longer than this is considered an ultra-marathon. Commonly held ultramarathon events are 50 km, 50 miles, 100 km, and 100 miles.

Triathlon: Why stop at running? A triathlon is an athletic event where athletes challenges themselves starting with a swim, transitioning to a bike ride and concluding with a run. The distances of each can vary from race to race. The shortest competitive triathlon distance is the sprint event which consists of a .47 mile swim (750 meters) , a 12.4 mile bike (20km), and a 3.1 mile (5k) run.

Ironman: The Ironman challenge is the ultimate triathlon with a 2.4 mile swim, 112 mile bike, and a full marathon at the end.

Training Terms

Speed: Measured in meters per second or miles per hour.

Pace: Measured in minutes per mile or kilometer.

Splits: A split refers the amount of time it took you to cover a mile or kilometer segment within a longer run. i.e. mile one was 7:30, mile 2 was 7:38, mile 3 was 7:24.

Negative Split: A negative split is when you run the later half of your run at a faster pace than the first half. It's an impressive feat, as it means you're speeding up despite fighting fatigue.

Even Split: An even split is when you run the entire run at a steady pace; hence the word even.

Static Stretching: Stretch, hold, and repeat. This is the kind of stretching where you lengthen a large muscle group, like your quads or hamstrings, and hold for at least 30 seconds.

Dynamic Stretching: Dynamic stretches, on the other hand, are controlled movements held for less than 3 seconds of muscle groups to help increase flexibility and range of motion.

Easy Run: A run done at an effort where you can have a conversation without feeling winded and where you are not straining to maintain a particular pace— you should try to "let the run come to you". Often considered to be a run at or below 70 percent of your maximum heart rate.

Tempo Run: Tempo runs are also common referred to as Lactic Threshold runs or Anaerobic Threshold runs. A typical tempo run is done with the goal of trying to increase one's lactic threshold. An example of a tempo run might be a 20 minute run run at a pace you could hold for a 1 hour long race if running all out. Another parameter for determining a good Tempo run effort is doing an ~20min run at ~90 percent of your max heart rate a 20minute.

Long Run: A long run is typically considered to be any run that is 1.5 x the distance of your regular daily run or longer. The distance of your long run will depend on the distance you are planning to race.

i.e. if your goal is a 10k race you long run may be 8 miles;12-15 miles for half marathons; 16-22 miles for full marathons.

Recovery Run: A run shorter than normal duration run if your normal run is 60mins your recovery run will likely be 40mins or less done at a level of intensity where you can have a conversation without getting winded and you aren't straining to maintain a particular pace. Typically a recovery run is done at 70% of your maximum heart rate or less.

Repetition Training: Repeated bouts of high intensity runs lasting two minutes or less with 2 or more minutes of jogging or walking are taken before the next repetition is started. The goal of these workouts are to improve speed and running economy.

Interval Training: Commonly executed as bouts of hard running lasting 3-5minutes with 50% or less recovery jogging or walking bouts (i.e. if the interval run is 5mins, 2:30 or less recovery jog or walk taken before the next interval is begun). These workouts are typically run at 97%-100% maximum heart rate are targeted at increasing you body's ability to deliver oxygen to your working muscles (improve your VO2max). an example of an interval workout is 6x1200m (or 4mins) with 2mins jog between.

Hill Sprints: Find a hill and sprint up it for about 30 seconds, turn around and jog down the hill, recover (often a 2 min wait) and repeat. Depending on your training goals, you might do a 6-8 time cycle

Fartleks: This Swedish word translates to "speed play" and is a training method great for beginner runners. It's a blend of both interval and continuous training, essentially incorporating short bursts of sprints during a longer, steady run.

Strength Training: Exactly as it sounds — this type of "off-the-track" training aims to increase the strength of your muscles. This can be done through body weight exercises like push-ups, or equipment style weightlifting such as dumbbell squats.

Cross-Training: As a runner, or any athlete, it's important to take part in exercise other than your main sport to build strength and fitness. A few great cross-training sports for runners include swimming, tennis, and cycling.

Rest Day: Taking a day off from running is just as important as getting in the mileage you need for your big race. Be sure to incorporate rest days into your training to give your body the time it needs to recover and heal.

Over-training: This is one of the most common causes of injury for runners. Sometimes when you're training or just getting in the habit of frequent runs, it's easy to get carried away and hit the road a little too much.

Ice Baths: Ice baths are a great way to give your muscles the rest they deserve after a long run or tempo run. It helps to reduce inflammation of the muscles and help with recovery.

Taper: This is the period of time before your big race or event where you reduce your mileage — or taper off — to give your muscles (and the rest of your body) some time to recover from your hard training.

Endurance: Endurance is key for long-distance runners, as this is what's going to help them run for longer and faster as they build up mileage. It refers to the ability to withstand stress to the body and push through.

PR / PB: Time to celebrate! PR and PB stand for Personal Record and Personal Best. This often refers to a new fastest time or longest distance.

Biomechanics

Form: Ever watch another runner pass by and think "they look awful!". Chances are, they had bad form. Everything from correct arm swings to staying tall and upright is part of practicing good running form. The benefits is better biomechanics to help improve your performance and reduce the risk of injury.

Cadence: Measured as steps per minute, it is the term used to describe how often your foot contacts the ground during every minute.

Bounce: Bounce, or vertical oscillation of your pelvis, refers to the up and down movement of your body while you run. The larger your bounce value is, the more energy is taken away from propelling you forward, which decreased your efficient and can increase the risk of injury.

Braking: Braking is the measure of how much your speed slows down on every step. Each time your foot hits the ground, your speed temporarily drops until push off to pick speed up again. This is a good measure of running efficiency, because the greater the change in your speed before and after each step, the more energy you waste slowing down and having to speed back up.

Pelvic Rotation: Pelvic Rotation is the side to side movement of your pelvis observed from above as you run. This is a secondary measure of over-striding as you often have to reach with your pelvis to stride forward.

Pelvic Drop: Pelvic Drop is the side to side lowering of your pelvis as you run and is best observed from the front of the runner. Perhaps one of the toughest of metrics to address during your run as it involves firing strong glutes, it is directly related to common causes of injury such as lower extremity rotation, often referred to as knocked knees.

Pelvic Tilt: Pelvic Tilt is the forward and backward movement of your pelvis and is best observed from the side of the runner. Another way to think about this is your running posture. Pelvic tilt is often a function of fatigue and can lead to back pain and interfered breathing.

Stride Length: Stride Length measures the distance between the initial ground contact of one foot to the next ground contact of the same foot. Optimal stride length is different from runner to runner, as it is a result of your individual pace and cadence.

Ground Contact Time: Ground Contact Time (GCT) measures the time your foot is in contact with the ground during each step. It's important to have a small GCT because the larger your GCT, the longer your leg is loaded with the weight of your body — this increases your potential for injury, as well as slows you down.

Pronation: Foot pronation is how much your foot rolls in or out by your ankles on each step. It's most commonly addressed through footwear and orthotics to reduce over pronation, but strengthening your foot muscles is just as important.

Foot Strike: This is a hot topic in the running community, so make sure you know what kind of foot striker you are if you want to get in with the run crowd; forefoot, midfoot or heel-striker. Over the years, heel-striking has developed a bad rep and forefoot striking is apparently the new black.

Push-offs: Push off is the fancy term used to describe the flick of your foot to propel you forward on each step. It is the moment in the gait cycle when your toe leaves the ground. Think of sprinters and racers in their crouched down positions before the start of the race; one foot is usually propped up on the toes ready to push the athlete forward when the start gun sounds.

Triple Hip Extension: Triple Hip Extension is the full extension of your leg behind you at all three of the joints — hips, knees and ankles — to give you the maximal push off to propel you forward. (Think about flicking your wrist in golf!).

Arm Swings: Pretty much exactly as it sounds, arm swings is the back and forth movement of your arms while you run. For long distance runners, aiming to keep your elbows at a 90 degree angle and swinging back just far enough as if you are putting something in your back pocket is a good way to counter the movement of your legs.

Physio

Metabolic Cost: This is the amount of energy you expend for a given type of physical activity. In running, it's said that runners pick a combination of cadence (steps per minute) and stride length that reduces their metabolic cost the most.

Gluteal Muscles: Your Gluteal Muscles are located on (surprise!) your butt. This muscle group should be the largest muscle group to power your strides to give you the maximum push forward. However, it is often not strength trained or recruited properly, and many runners tend to run using their quads and hamstrings. Here are a few good exercises you can do to start taking advantage of this power source (link to exercises on different website?)

Calves: Your calves is the muscle in the back of your lower leg. Helps to point your toe and power your push off the ground. Can be overworked with forefoot running so it is a good idea to strengthen it if you are changing your foot strike or increasing your intensity or duration.

Achilles Tendon: The calf muscles attach to the heal via the Achilles Tendon. This tendon can be shorted through daily activity (wearing high heels!) and then be overstretched during running which can lead to pain in the tendon. If you msucles are being overwork

Hip Flexors: A very important group of muscles in the hips, especially to achieve the ever so elusive triple hip extension during your push offs. It's important to keep these muscles flexible and utilize full range of motion to get the most out of your running.

Tibial Muscles: There is an anterior one that helps with lowering your foot to the ground. Strengthening this muscle can help decrease braking as your reduce your foot slap upon landing. There is also a posterior one that supports your arch. Ensuring that this muscle is strong will take some of the stress of your plantar fascia.

IT Band: A piece of longitudinal fibrous reinforcement of the fascia, which can be tight on runners. If you have a lot of rotation (from weak feet or an unstable pelvis), you can stretch this fascia with every step.

Plantar Fasciitis / Jogger's Heel: This is best explained as the sharp pain and stiffness in the arches of your feet, specifically at the heel or under the ball of your foot. Specifically, the pain is caused by irritation or tearing of the plantar fascia, which is a fancy name for the fascia tissue on the underside of your foot.

Runner's Knee: More formally known as Patellofemoral Pain Syndrome, is one of the most common ailments amongst runners — after all, it was named after runners! It is accompanied by tenderness on the soft tissue behind the kneecap, as well as pain when bending the knee; sometimes even a popping or grinding sensation in the knee, too.

Shin Splints: An all-too-common affliction for runners, especially pavement runners and barefoot runners. The pain is caused by the inflammation of the muscles and tendons that run alongside the shinbone, otherwise known as the tibia. More recently, however, the term shin splints has become somewhat of a catch-all term for any pain experienced below the knee.

ITBS: IT Band Syndrome, is a quite painful and troublesome injury for many runners. The pain is felt on the outer part of the knee, and is usually a consequence of a tightness and inflexibility of the IT band: an important, thick tissue that connects the pelvis to the shin. The IT band's main purpose is to stabilize and move the knee joint, which is key for runners and cyclists.

Stress Fractures: This is a common injury that manifests as a result of overuse and overtraining. Too much running can cause the muscles to fatigue overtime to a point where it can't absorb any extra load, and the muscle begins to transfer the added stress to the surrounding bone, causing a tiny hairline fracture.

Chafing: Though this may not technically qualify as an injury, it's an extremely uncomfortable and painful experience for many runners. It's a rash like skin irritation that develops when sweat and garment rubs against your skin. They develop commonly on the inner thigh, arm pits, and for some women, under the band of sports bras. Many runners swear by Bodyglide or Vaseline to prevent chafing especially on long runs.

Race / Events

Carbo-loading: The best part about the night before a marathon? All the carbo-loading you get to do. This means you finally get the green light to load up on delicious carbs like pasta, rice and bread that you otherwise may have been avoiding. There's obviously guidelines on what and how much you should eat, but it's a glorious time where you get to stock up on the necessary carbs you'll need to prepare for the big race.

Pacer: In a race or even at some run clubs, there are a few runners who run along with the pack as a pacer. These runners have the responsibility of running at a constant pace for other runners to gauge their current pace during an event.

Chip-time: This is your official time for any races you participate in. Especially in large races, your race bib or footwear will have a small chip in or on it to accurate tag your start and finish times for official records.

DNS / DNF: You'll see this occasionally on posted marathon results. They stand for Did Not Start and Did Not Finish respectively, and signifies race day runners who either did not show up to the startline or did not finish the race.