Learn to Run Program: GETTING STARTED

Running is natural but we tend not to do it naturally. What do I mean? For this we have to look at "humans" as animals. Not only that but animals that have only been induced to move on solid surfaces for maybe 10,000 years or less. The rest of the time, humans have walked or run on soft surfaces like sand, dirt, forest floors.

These various issues will be discussed over the next several weeks. For now what do we as individuals who would like to be able to run need to do?

1) Find a friend and chat with each other.
2) We tend to run too fast at the beginning, so chat with your friend.
3) There are five heart rates that are referred to when discussing running. They are: HR 1, 2, 3, 4, and 5. First, what is your gender (male or female). Gender determines what your maximum heart rate might be (the numbers are better then estimates but they may be higher or lower). Maximum HR female is 226 beats per minute while for males it is 220 beats per minute. This number changes (lowers) every year, so start with the theoretical maximum minus your gender minus your age. This number is your theoretical maximum HR or the top of your HR 5. {For example, if you are female aged 40 your theoretical maximum is 226 - 40 = 186}

Zone 1 (Recovery/Easy): 55%-65% HR max	Combined, Zones 1 & 2 are referred to as
Zone 2 (Aerobic/Base): 65%-75% HR max	"conversational pace"
Zone 3 (Tempo): 75%-85% HR max	Beginners normally choose this pace
Zone 4 (Lactate Threshold): 85%-90% HR max	Often referred to as "Race Pace"
Zone 5 (Anaerobic): 90% HR max (and above)	Sprint pace

4) Concentrate on relaxing, form, body posture — not SPEED
5) Watch each other and correct posture, foot placement, arm movements
6) Walk fast BUT run slow

Learn to Run Program: POSTURE

We, as a species, learned to walk in a world before paving. We walked and ran on soft ground not stone, pavement or other artificial surfaces.

Walking has us land on our heels regardless of the surface we are walking on. Similarly, we run landing on the front of our feet. Our feet are composed of 26 bones, 33 joints and over 100 tendons, ligaments and muscles. By design, our feet are made to support the body as we walk and run. However, we land on our fore feet when we run and our heels when we walk. Why?

With all of the structure in our feet, our feet are designed to provide us with cushioning and support as we walk or run. The structure is the result of thousands of years of evolution. All of the bones provide cushioning but this doesn't apply to heels. The heel bone (Calcaneus) is the largest bone in the foot but it is solid. If we land on our heels as we run bare foot on a hard surface (pavement) the force generated is passed from the heel up through the ankle to the knee and then the hip. This can be very painful. If we land on the front of our feet, the foot structure spreads the force of contact out and cushions our landing.

Running shoes are designed to meet the demand of the greatest number of people. Most of us walk and land on our heels therefore shoes are designed to meet with heel striking in mind. As a beginning runner you need to bear in mind that we humans were designed to land on our fore feet when we run. Remember that focus on barefoot running several years ago? Made sense but the designers forgot that we don't run on dirt or bare ground much anymore but on pavement. There is not much cushioning in the front of running shoes these days. Our feet hurt.

Bear this in mind when you choose your running route — trails may have bears but they also are what we are designed to run on. Running tracks, such as we now have in Whitehorse, have a spongy rubber surface applied over a pavement or concrete base to mimic bare ground. Its quite nice to run on.

Our feet are designed to not be shod. Wearing shoes only began maybe 10,000 years ago. Modern shoes restrict our toes so that they do not spread away from each other to provide balance, stability and thrust as they were designed to.

While walking or running our bodies need to move freely. In order to move relatively pain free our bodies should be upright, our torsos should be bent slightly forward from the waist, our hips need to be moved slightly foreword, our feet should land just in front of our body (try to land under our body), our heads should be positioned in an upright position (leaning forward tends to put us out of balance), and swinging our arms back and forth as though someone is pulling on strings tied to our elbows.

We can help by encouraging each other to land on the bottom or front of our feet, stand tall with our hips forward, keeping our head up and swing in our arms back and forth.

Learn to Run Program: HILLS

Think of the world as being flat. When you walk you land on your heel. When you run you land on your forefoot. You swing your arms appropriately back and forth. Your head is up, your hips are forward, your elbows are slightly bent. All is good.

As you walk or run you come to an uphill stretch. What do you do?

Think of the surface that you are on as being in a flat plain, then tilt it up at the front. Now what do you do? The easiest way to do an uphill is to lean very slightly forward, shorten up your stride length while maintaining your cadence (rpm) and swing your arms.

Everyone slows down while going uphill. Your only concern is trying not to slow down too much (or start walking if you have been running). Swinging your arms with more force may help but it will also be tiring.

Some people enjoy running uphill but many people don't. Just do your best.

Now that you e reached the top of the hill you find that it now starts to go down. What do you'd do?

Again think of the surface as being a flat plain with the front tilting down. Now it is time to think about the physics that you have to deal with.

Things to consider: 1) angle of descent, 2) length of descent, 3) body position. Normally think of gravity as being your friend. It worked against you on the uphill section but now it can work for you. How? Going up I suggested that you try to shorten your stride length but maintain your cadence. On the downhill, try to lengthen your stride. Now consider what is going to happen: the ground will be further down from your foot so landing will hurt, maintaining your balance may become an issue, cadence may definitely become an issue as you pick up speed. What do you do?

Try to lean slightly forward but still land on your forefoot. The idea here is to try to get the downhill section to be not significantly different from a flat section. DO NOT LEAN BACKWARDS! Leaning back will lead to greater pain and potential damage to your legs (or body if you tumble). If you have practiced this maneuver you should be able to extend your stride length a bit, thus increasing your speed.

Have you ever watched a dog while it is running? Its tail is always moving keeping its body in balance. You can use your arms in the same fashion — move them to help maintain your balance.

Remember, speed is not your real goal here efficiency is. Speed comes with conditioning and practice.