# Running 

## A to Z

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## Notice

The information in this book is designed to help you make decisions regarding your fitness and exercise program. It is not designed to replace medical advice and is used at the reader's discretion. As with all exercise programs, you should seek your doctor's approval before you begin.

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## Chapter Fifteen

## Tips for Breathing while Running

Allow air to enter through both your mouth and nose when you're running. Your muscles need oxygen to keep moving and your nose simply can't deliver enough.

Make sure you're breathing more from your diaphragm, or belly, not from your chest because that's too shallow. Deep belly breathing allows you to take in more air, which can also help prevent side stitches.

Exhale fully through your mouth, which will remove more carbon dioxide and also help you inhale more deeply.

Run at a pace at which you can breathe easily. Use the "talk test" to figure out if your pace is appropriate. You should be able to speak in full sentences, without gasping for air.

Slow down or walk if you're running out of breath. If you relax and slow the pace, breathing problems often take care of themselves.

Your breathing should be rhythmic and deep. When you pick up the pace, don't let your breathing get shallow.

Helpful Tip: Toward the end of the run, when you feel as though you are completely gasping for air, control your breathing and keep your concentration on your breath. Breathe in a rhythm of two short exhales ( 1 second each), followed by one extended exhale ( $2-3$ seconds). The inhale will naturally follow. This rhythmic breathing will help calm you while it provides your body more oxygen.

## Chapter Sixteen

# New Approaches to Running 

## Chi Running

Danny Dreyer is the creator of Chi Running (1999). He wanted to combine the principles of Tai Chi with his running. Tai Chi, a form of martial arts, focuses on countering a force. In the case of running, gravity is the force we must counter. His solution? Proper posture to create body alignment and reduce the risk of injury, a long spine (especially lengthening through the back of the neck) to allow the lungs to be more efficient ( 30 percent of lung capacity can be diminished by rounding the shoulders), a mid-foot strike rather than a heel strike, a quicker, steady cadence (170-180 strides/minute) at all speeds and a slight forward tilt of the upper body from the hips, so that your body maintains a perpetual sense of falling forward with each stride and your feet simply step forward to keep an upright position and avoid hitting the ground.

Dreyer also considers breathing in Chi Running to be a very important factor. He suggests you get a fuller, deeper breath by breathing into the belly. This is called belly breathing. On the inhalation, expand the belly. On the exhalation, contract the belly. When he runs, he matches up his breathing with his cadence - exhaling for three strides and inhaling for two strides. However, he suggests you do what works best for you. Remember to fully empty your lungs before inhaling again.

Dreyer claims that Chi Running will develop injury-free running for the rest of your life, improve your running efficiency and increase your running speed while reducing effort.

## Barefoot Running

Those who are avid barefoot runners, love it and claim that it has changed the way they run and attribute barefoot running to decreased injury. Barefoot running teaches you to land very lightly on the ground rather than striking the foot against the ground, as some runners have a tendency to do wearing shoes.

The human foot has 26 bones, 33 joints, 20 muscles, and hundreds of sensory receptors, tendons and ligaments. Stimulating the muscles in your feet and lower legs will not only make you stronger and healthier, it improves your balance, agility and proprioception.

Some of the major running shoe manufacturers and a growing number of younger, smaller shoe companies are joining the revolution and creating "minimalist" shoes. These shoes are all designed around the idea that running without the traditional built-in heel lift is better for your body.

Recent studies showing that over-built running shoes are a big contributor to the $65 \%$ annual injury rate. Running in flatter, more minimal shoes will allow your feet, ankle and leg muscles to strengthen, readjust, and move with better structural alignment.

Running barefoot or in minimal shoes allows your feet to accurately sense the ground and allows your body to find its own natural balance and alignment. This works wonders toward helping runners and walkers avoid many of the more common impact injuries.

The best way to consistently guarantee that you avoid running injuries is to adopt a "barefoot-like" running style. This means that, no matter what shoes you're wearing, or whether or not you're even wearing shoes, you're always running in a way that creates the least amount of impact, imbalance and extraneous effort in your body. But if you are running in a way that creates impact and injury to your feet, ankles, knees or hips you'll need to look farther than a change in footwear to get to the source of your problem. Barefoot running may not be right for you if you wear orthotics or a lift, or if you are an excessive supinator or pronator.

Racing flats are lightweight and offer a minimal sole. You may also want to check out: www.vibramfivefingers.com.

Helpful Tip: If you are interested in barefoot running, begin running only a couple hundred yards a week at first, and run most of that on grass if you can. Increase your distance conservatively over time.

# Chapter Seventeen 

## Racing Strategies

1. Get a good night's sleep two nights before your race. (Yes, that means seven to ten hours even if you think you need five or six. If you need an alarm clock or caffeine, you ARE sleep deprived.) You want to run fast? SLEEP. REST. Let your body have a chance to recharge. Also be sure to get a good night sleep the night before the race. Aim for seven to ten hours again.
2. Day Before Race - DBR -Approximately 24 hours before your race, run two miles easy and sprint six to eight repetitions of 100 meters.
3. Eat an adequate pre-race dinner. Grilled chicken breast with rice and vegetables or spaghetti and meatballs is good. This is not a meal to try new foods or a new restaurant. Be well-hydrated and avoid alcohol.
4. Eat breakfast. Have something the morning of the race, like a piece of toast with almond or peanut butter, a banana with nuts or a protein bar. Don't eat anything out of the usual. Ideally, get up three or four hours before the race to get your body awake and moving.
5. Drink water, but don't over hydrate yourself. Within the hour before the race, drink only a sip or two as you need it and then drink eight ounces immediately before the start of the race. That cup of water will be used by your body during the race so that you won't have to hunt for a spot to relieve yourself along the race course. In a 5 K race in normal weather conditions, you likely won't need to drink any water or sports drink. You may want to take a small amount of liquid in a 10 K race. Listen to your body. In a race longer than a 10 K , it is a good idea to take in liquids as you feel you need them. Mimic what you did in your training. If you typically run for an hour at high intensity without water, you most likely can race for an hour without water.
6. Warm up 20-25 minutes before you race. If you are RACING, a ten minute jog or easy run will help to loosen your muscles and get your blood flowing. If you are simply planning on finishing the run, a brisk walk is good. You should not be breathing hard after your warm-up. Five to ten minutes before your race, sprint three to four repetitions
of 100 meters to get your fast twitch muscles activated. Be sure you are fully recovered (ie. normal heart rate) before the gun goes off.

## 7. Double knot your shoe laces.

8. Stay warm. If the temperature is less than 70 degrees, keep your warm-ups on until the last minute. Do this even if you're not cold because removing an excess layer right before the start will make you (feel) lighter and less constrained. Keep a hat, mittens or long sleeve shirt on for the first several miles, if you feel too cold. Remember, the body heats up when you run and makes the outdoor temperature feel about 20 degrees warmer than it is. Typically, you will go faster if you're a little cold than too warm.
9. Sprint to a good position at the beginning. Go out hard for the first minute and then find your pace. Don't be afraid to be in the front of the line. If you aim to be in the top 20 percent, line up with the first 20 percent of the runners. Both of these strategies will help you to be pushed by a stronger pack. Falling off the back is a term used to describe runners who are at the back of the pack and not being "pushed" by anyone around them. That is a big mental disadvantage that can drastically alter your time, pace, race and place.
10. Keep your eyes up. Focus on the person in front of you and the course ahead of you. Plan your maneuvers just as you would in a ball sport. Pace off someone or pass them. Mentally prepare for upcoming uphills and physically plan for turns in the courses so that you are running the shortest distance. When there is no one ahead of you, push yourself against the clock.
11. Never look behind you to find out how far back the next racer is. Assume they are immediately behind you and they are in the same sex and age category as you are. If you slow down, assume they will catch you. This will help you keep a fast pace.
12. Positive thinking. This works for everything - on and off the race course. Make every negative a positive. Racing in a blizzard? Be glad it's not 100 degrees and humid. When it's 100 degrees and humid, be glad it's not 102 degrees. Remember that everyone else is facing the same weather conditions. Let them grumble all they want. It won't change anything. You know you'll do well in any conditions. What if you couldn't find your favorite racing socks? Good. Now's your chance for another pair to become even luckier than the old ones. Negative thoughts don't create successful runners or successful people. Squash them immediately.
13. Reflect on your training and your goals. If you want something bad enough, you'll get it. Racing and winning does take hard work and talent, and having the right mindset is
