ABDOMINAL EXERCISES

TONING

Bench Crunch with a Twist

- Lie on the floor with the lower part of your legs propped on a step or chair. Relax your legs.
- Place one thumb behind each ear so that your fingertips touch behind your head but aren't clasped.
- Lift your head, neck and shoulders off the floor in one motion, exhaling as you lift.
- With your shoulder blades off the floor, rotate your torso to the left, leading with your right shoulder.
- Rotate back to the center, then to the right (leading with your left shoulder), then back to center and return to starting position.
- As you lift and twist, contract your abdominals.
- Strengthens rectus abdominus and obliques.

Combined Crunch

- Lie on your back with your knees tucked directly over your hips at a 90-degree angle.
- Keeping your back pressed against the floor, tilt your pelvis up toward your chest in a tiny, controlled movement.
- With the pelvis lifted, bring your knees a few inches closer to your chest.
- At the same time, raise your torso and keep your hands either lightly touching your head or palms down at your sides.
- Contract the abdominals as you would in a standard crunch.
- This is an advanced exercise. The movement is very small and control is critical.

Cradle Crunch

- Lie on your back with your knees bent, feet lifted off the floor, and ankles crossed.
- Contract the abdominal muscles, allowing the head and shoulders to raise slightly. Do not lift the head and shoulder first - concentrate on contracting the abdominal muscles and the head and shoulders will naturally follow.
- Hold the contraction while pulling the knees in toward the chest. You should feel this in the upper and lower abdominal regions.
- Release the contraction and repeat.

Crunch Sit-Up

- Lie face up on the floor with both knees bent and your feet flat on the floor. Place your hands behind your head.
- Contract your abdominals, raising your shoulders up off the floor. Keep your head in line with your spine - do not tuck your chin in to your chest. Move your shoulders and head up as one unit.
- Hold for 1-2 seconds and slowly return to the starting position.
- Your lower back should remain in contact with the ground throughout the exercise.
Knee Raise - Flat Bench

- Sit on the end of a flat bench and support your body weight on your hands resting just behind you. Lean back slightly and straighten your legs out in front of you.
- Bend your knees as you raise them towards your chest as far as possible.
- Return to the starting position.
- Perform the exercise slowly.

Knee Raise - Hanging

- Hang from a chinning bar with a palm down grip about shoulder width apart.
- Bend the right knee as you raise the knee towards your right shoulder. Continue until your thigh is parallel to the floor.
- Pause for one second and then lower your leg to the starting position.
- Repeat with the left knee towards the left shoulder.
- You can also perform this exercise by bending both knees and keeping them together as you raise them towards your chest until both thighs are parallel to the floor.

Knee Raise - Incline

- Lie with your head at the top of an inclined sit up board.
- Reach overhead with both hands and hold the board for support.
- Bend and pull your knees slowly towards your chest, keeping your knees together.
- Return to the starting position.

Knee Raise - Lying and Twisting

- Lie face up on the floor with your legs straight and your hands behind your head.
- Bend your right knee and raise your knee towards your left elbow, which you simultaneously move towards your right knee. The movement should twist the upper body to the right and the lower body to the left.
- Return to the starting position and repeat with the opposite extremities, alternating one side and then the other.

Knee Raise - Standing

- Stand with your feet slightly wider than shoulder width and with your arms resting at your side.
- Bend and raise your right knee to your right shoulder as far as possible.
- Return to starting position and repeat with opposite side.

Knee Raise - Standing and Twisting

- Stand with your feet slightly wider than shoulder width and your hands behind your head.
- Bend and raise your right knee towards your left elbow, which you simultaneously move towards your right knee. The movement should twist your upper body towards the right and your lower body towards the left.
• Return to starting position and repeat with opposite extremities, alternating one side and then the other.

**Knee-Up**

• Lie on your back with your knees bent and pointed toward the ceiling, feet raised from the floor, and thighs at a 90-degree angle to your torso.
• With your back relaxed, roll your pelvis without bringing your knees toward your head. Your knees should lift slightly, but be sure they lift up straight and not in toward the head.
• *This is a very small movement that helps to develop abdominal and lower-body awareness in beginners. Concentrate on the lower abdominal region when performing this exercise.*

**Lateral Crunch**

• Lie on your right side with both legs bent so your thighs are at a 90-degree angle to your body. Extend your right arm on the floor, straight overhead.
• Place your left hand behind your head and point your elbow toward the ceiling.
• Slowly lift your rib cage toward your hip. Do not pull your elbow down, and try not to press on the floor with the right arm. You may need to press with the right arm a bit at first, but concentrate on using the abdominals.
• Do one set of reps and repeat on the other side.

**Leg Raise - Flat Bench**

• Lie face up on a flat bench with your legs off the end of the bench.
• Place your hands under your buttocks with your palms facing down.
• Keeping your legs straight, raise your legs to a vertical position.
• Slowly lower your legs until they are slightly above the floor.

**Leg Raise - Flat Bench, Bent Knee**

• Lie face up on a flat bench with your legs off the end of the bench.
• Place your hands under your buttocks with your palms facing down.
• Keeping your knees bent, raise your legs until your thighs are in a vertical position.
• Slowly lower your legs until they are slightly above the floor.

**Leg Raise - Flat Bench, Alternating Bent Knee**

• Lie face up on a flat bench with your legs off the end of the bench.
• Place your hands under your buttocks with your palms facing down.
• Keeping one knee bent, raise one leg until your thigh is in a vertical position. Slowly lower your leg until it is slightly above the floor.
• Repeat with the opposite leg, alternating one leg and then the other.

**Leg Raise - Hanging**
Hang from a chinning bar with your arms straight. Use an overhand grip about 24 inches apart.

- Raise your legs with your knees bent until your thighs are parallel to the floor.
- Return to the starting position.
- You can also perform this exercise by twisting your knees to either side, or by keeping your legs straight until they are parallel to the floor.

**Leg Raise - Incline Board**

- Lie on an incline board face up with your head at the top.
- Reach overhead with your hands and grasp the top of the board for support.
- Keep your legs straight and raise them to a vertical position above your hips.
- Slowly return to the starting position.

**Leg Raise - Incline, Alternating Bent Knee**

- Lie on an incline board face up with your head at the top.
- Reach overhead and grasp the top of the board for support.
- Bend your knees and raise one leg to a vertical position above your hips.
- Return to the starting position and repeat with the opposite leg.

**Sit-Up - Incline Board**

- Lie face up on an incline board with your feet at the high end. Place your feet under the foot strap.
- Bend your knees to a 45 degree angle and place both hands behind your head.
- Raise your shoulders upward towards your knees as far as possible. Do not pull on the neck, use the abdominals.
- Return to the starting position.

**Sit-Up - Jack Knife**

- Lie on the floor with your arms extended fully behind your head and your legs straight.
- Bend at the waist while raising your legs and arms straight up.
- Continue until your arms and legs touch each other above your abdomen.
- Return to the starting position.
- *This is an advanced exercise.*

**Sit-Up - Knees in the Air**

- Lie on your back on the floor with your hips and knees bent and your feet up off the floor. Cross your feet at the ankles.
- Place your hands behind your head, resting your head in your hands and keeping your chin up.
- Contract the abdominal muscles and lift your torso toward your knees.
- Hold for 1-2 seconds and return to the starting position.

**Twisting Crunch - Knees in the Air**
• Lie on your back on the floor with your hips and knees bent and your thighs parallel to the floor. Cross your feet at the ankles.
• Place your hands behind your head, resting your head in your hands and keeping your chin up.
• Contract your abdominals and lift your torso as you twist your upper body toward your right knee. Do not pull with your elbow, use the abdominals.
• Hold for 1-2 seconds and return to the starting position.
• Repeat with the opposite side, twisting toward your left knee.

**TONING WITH RESISTANCE**

**Lower Ab Lifts**

• Secure ankle weights around your ankles.
• Lie on your back on the floor with your legs in the air and your ankles crossed.
• Contract your abdominals and lift your hips off the floor, raising your toes toward the ceiling.
• Slowly lower your hips to the starting position and repeat.

**FREE WEIGHTS**

*Most of the Abdominal Toning exercises can also be performed with free weights. You may hold a weight plate or dumbbell on your chest for additional resistance.*

**Plate Crunch**

• Lie on your back on the floor with your knees bent and your feet flat on the floor.
• Place a weight plate or dumbbell on your chest and hold it by crossing your arms over it.
• Contract your abdominals and lift your torso, keeping the chin up. Use the abdominals to lift the weight on your upper body.
• Curl up and down slowly, concentrating on the contraction of the abdominal muscles.

**Standing Trunk Bend**

• Stand with your feet slightly wider than shoulder width, and your palms resting at your sides.
• Grasp a dumbbell in each hand (this exercise can also be performed with no weights) keeping your arms resting straight down at your sides.
• Bend your trunk to the right as far as possible, keeping your body facing forward and both feet in contact with the floor.
• Return to the starting position and repeat with the left side.

**Following article for submission (injury prevention-improving core strength)**

What are the core muscles?

The core musculature includes the muscles of the trunk and pelvis that are responsible for maintaining the stability of the entire skeletal structure. These muscles determine your posture while running and in effect link your upper and lower body.

Why is it important to maintain strength in this muscle group?
Theoretically, core strength training will lead to greater maximal power yet more efficient use of the muscles of the shoulders, arms, and legs. The most common technical error in distance running is inefficient upper body movement. Other benefits include improved balance and a lower risk of injury. It has been well documented that insufficient core strength can lead to serious injury of the low back, hip flexors and hamstrings.

How are the core muscles best trained?

Although the core muscles can be strengthened with traditional weight-training exercises, conditioning should eventually mimic the dynamic movements associated with running. Sport specific training should emphasize the running positions that are most critical in competition; relaxed shoulders, anterior pelvic tilt, erect torso, high knees, and ankle dorsiflexion.

ABDOMINALS

Muscle group includes the rectus abdominis, internal and external obliques, transverses abdominus. Strong abdominals provide the foundation for training and strengthening every other muscle in the body. It has been shown through electromyographical study that the abdominal obliques play a major role in running. This muscle group prevents the hips and shoulders from over rotating. The obliques also act to stabilize the connection between leg and arm action. Weak abs can lead to low back pain while performing squats and other lower extremity lifts, poor running form, early fatigue during distance runs and general weakness. Abdominal exercises should be performed daily with emphasis placed on quality not quantity. Generally excepted training methods include crunches, crunches with a twist, decline sit-ups, hanging leg pulls, lateral dumbbell bends, supine straight leg raises, supine bicycling and knee to chest pulls.

LOW BACK

Muscle group includes the erector spinae, quadratus lumborum, multifidus, rotatores, iliocostalis lumborum and thoracis, paraspinals. Low back pain is generally not a common complaint of the collegiate or high school athlete based on a 2002 study by Nadler, et. al. He found that only 14 of 236 Division I athletes were treated for low back pain prior to strengthening the core muscles. This study is misleading however, because low back pain often times does not present physical pain or deformity until later in life.

Strengthening the lower back can be accomplished with a variety of training methods and techniques including lumbar extensions, prone chest raises, Russians twists and straight leg dead lifts. With all core exercises, especially the low back, it is important to note that increased repetitions with moderate weight is recommended rather than increased weight with fewer reps.

UPPER BACK

Muscle group includes the latissimus dorsi, rhomboids, serratus anterior, trapezius. For runners, the upper back plays a critical role allowing for proper arm swing in sprinters and relaxed shoulders in distance runners. A common finding in female sprinters and distance runners is an abducted arm swing (the arms are maintained in a “chicken wing” position while running). This is most likely due to weak latissimus muscles. Strengthening exercises include lat. pull downs, bent over rows, scapular retraction and shoulder shrugs.
HIP FLEXORS

Muscle group includes the iliopsoas, rectus femoris, sartorius, tensor fasciae latae. In professional sprinters the hip flexor muscle group is always very well defined. This muscle group is critical for maintaining high knees and explosive leg drive while sprinting. In distance runners, the hip flexor can easily fatigue on long runs and lead to injury or dysfunction. Strengthening exercises include lunges in multiple planes (side to side, oblique, and straight ahead), standing hip flexion, running uphill and specific drilling (A’s, B’s and C’s).

This has been a very brief introduction to core strength training. The main focus here is to enhance awareness of the importance of the core muscles and how they relate to running. It is imperative to check with your track coach, strength coach or athletic trainer before initiating any training schedule on your own. For more information on this topic including pictures of the above exercises or more in depth technique, please feel free to contact me anytime via e-mail at hurdlethief@hotmail.com

The following article for submission (Iliotibial Band Friction Syndrome and Knee Pain)

It seems that every article related to track and field specific injuries focuses on overuse or over-training syndromes. Athletes within our sport are exposed to high amounts of stress on a daily basis. The average distance runner for example, takes approximately 3,000 foot strikes per mile. That is 60,000 foot strikes every 20 miles. Running requires each leg to bear the weight of the entire body as both feet are never touching the ground at the same time. The force of landing is approximately 3 times body weight. That means a 150 pound runner is placing 450 pounds of force on each leg, every stride.

The iliotibial (IT) band is a thickened fascia or tendinous like tissue that extends from the hip to the lateral (outside) knee. As the knee is flexed or extended this band slides over a bony prominence on the outer portion of the knee called the femoral epicondyle. This friction can cause inflammation or irritation and eventually lead to lateral knee pain. The bone and IT band are protected by a fluid filled sac called a bursa. The bursa allows for a smooth transition as the IT band slides over the femoral epicondyle. However, inflammation can also occur in a condition called bursitis. Pain resulting from inflammation of the bursa or the IT band itself will manifest on the lateral aspect of the knee just above the joint line. Severity of pain will vary depending on a number of factors but is generally described as a localized and sharp.

The IT band functions to provide static stability at the lateral aspect of knee. At 30 degrees of knee flexion the distal IT band moves across the joint and assumes a position posterior to the lateral femoral epicondyle. Extending the knee back to 0 degrees places the band anteriorly. The friction created by this repetitive movement is further accentuated by the contraction of smaller muscles around the knee. These muscles tighten the joint further causing an additional compressive force to be applied over the IT band.

There are a number of running abnormalities that can be directly linked to IT band friction syndrome. It is uncommon for a runner without biomechanical dysfunction to exhibit the signs and symptoms of IT band syndrome. In runners with normal feet, the force of running is dissipated by the foot. However, if a runner exhibits high or low arches then the forces are “passed up” the kinetic chain to the knee. These abnormal forces also contribute to the syndrome. Common etiologies include high arches, footwear excessively worn on the lateral edges, a prominent lateral femoral epicondyle, tight IT band, leg length discrepancies, pronation, and genu varum (bow
legged). Very high mileage or sudden increases in mileage are also highly correlated with this syndrome.

Treatment is very straightforward in this condition but always remember to check with a certified athletic trainer, physical therapist or doctor before initiating any rehabilitation protocol. The first phase of treatment should focus on reducing any inflammation and resting the involved structures. Although many different modalities will suffice, ice is used more commonly due to its ease and low cost. I recommend icing four to six times daily for a period of 12-15 minutes. Reduction of activity is indicated and can vary depending on the severity of the symptoms. It is a general rule that one should not commence with full speed running until the process is entirely pain free. Swimming and cycling or alternate forms of cross training which can help to maintain any general aerobic conditioning as a result of decreased or absent mileage. I would begin by cutting total mileage in half for two weeks and reassess at that point. Gentle stretching exercises are also to be introduced in this initial phase of therapy. The hamstrings, quads and IT band are the focus of the stretches.

The second phase of treatment is only necessary if there is no improvement in the reduction or elimination of pain. Running is prohibited for two to four weeks at which point a reassessment will occur. Seeking the council of an orthopaedic doctor would be advised at this point as the possibility of a steroid injection increases.

Finally, the long term rehab phase of treatment would follow. This consists of slowly strengthening the muscles which insert on the IT band as well as the surrounding musculature of the knee and hip. The process of correcting any biomechanical abnormalities will begin in the first or second phase but will become more intense in this stage of treatment. Correction could include stretching, strengthening, bracing, orthotics or most likely a combination of these.

**Good advice:**
- Decrease mileage and apply ice after you run.
- If you run on a pitched surface, change your direction often. For example, change your road route, run clockwise and counterclockwise on the track. This will reduce the stress on your IT band.
- Pain is aggravated by repetitive flexion of the knee and relieved by walking stiff legged.
- Running downhill will increase the pain, especially with heel strike.
- Look for signs of increased foot pronation.
- Return to activity when knee has retained full range of motion, full strength compared to the opposite limb and the athlete has full cardiovascular endurance.

If you have any questions or would like some more information please feel free to contact me anytime via e-mail at hurdlethief@hotmail.com

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Article for submission (medial tibial stress syndrome)

**SIGNS AND SYMPTOMS**
- Dull or achy pain located on the medial (inside) border of the lower leg.
- Pain is often worse with running or other weight bearing activities.
- Pain continues to linger well after the workout is complete.
- Tight calf muscles.
DIAGNOSIS
Self-diagnosis is very common with shin splints, but at the high school or collegiate level it is important to rule out differential diagnoses. In this case, it would be wise to consult with a trainer or doctor about the possibility of a stress fracture or posterior compartment syndrome. Compartment syndrome occurs when the volume of muscles, blood vessels and nerves become too large for the space within the compartment. This can be due to swelling or bleeding within the compartment or hypertrophy (increase in size) of the muscle from exercise. In either of these cases, the treatment regimen will differ from that of shin splints.

DEFINITION
A short explanation of the anatomy of the lower leg is essential to understanding why runners are prone to developing shin splints. The tibia (shin bone) is the largest bone in the lower leg. Many muscles attach to this bone, one of which is the soleus. When the soleus (calf muscle) is swollen or tight, it pulls very hard on the medial (inside) portion of the tibia. This causes irritation in the outermost layer of bone called the periosteum. When a runner repeatedly flexes the soleus (i.e.-running), the condition is worsened.

MECHANISM OF INJURY
There are many different possibilities as to the origin of shin splints. In a distance runner, the muscles of the lower leg act as a shock absorber when pounding the pavement day after day. As the muscles fatigue, they become less capable of providing the necessary amount of absorption. Basically, the runner who is putting in 80-100 miles per week is going to be training in a fatigued state more often than the runner who is at 50-70 miles per week. Running shoes also provide support for the lower body. However, it is important to note that studies have shown after running 250-300 miles on an “average” pair of shoes, they no longer offer adequate support. This translates into more stress placed on the musculature. Bio-mechanical gait analysis has shown that the athlete who pronates while running is a prime candidate for acquiring shin splints. Pronation is defined as a turning outward of the foot at the ankle so that one has a tendency to run on the inner border of the foot. To assess this condition simply check the wear on the tread of a running shoe. Look for an excessive amount of wear on the inner portion of the shoe as compared to entire surface.

Finally, any sudden increase in mileage or the addition of hill workouts can adversely affect your body. Remember to always keep a detailed running log that you can reference when needed.

TREATMENT
Obviously, if you have the use of athletic trainers and doctors you need to consult with them prior to taking any course of action on your own. They will be able to better determine the degree of injury you have sustained. Treatment is fairly simple, but must be followed closely. The following options should be taken advantage of when recovering from shin splints:

*Rest (The amount of rest will vary depending on severity, but generally it is in the 2-6 week vicinity. This means NO running, sounds harsh, but must be done).

*Ice (The most efficient way to ice shin splints is to prepare an “ice massage.” Take a couple of dixie cups, fill them with water and freeze. When you are ready to massage, tear the bottom border of the cup off so the ice is exposed and rub gently across the entire surface of your shin. Continue to ice until the entire cup has melted completely).

*Stretch (If your calf muscle has been tight, this could be causing the problem. Perform the stretch shown below 2 to 3 times prior to and after running, hold each time for about 1-2 minutes. You should feel a nice pull in the back of your calf, but not pain).
*Strengthen  (slowly walking on your heels before or after practice will work to strengthen the tibialis anterior, or “shin muscle.” You should feel a burning sensation in the front portion of your lower leg).

*Get off the pavement  (Avoid the streets as much as possible. This can cause unwanted stress to be placed through the lower leg).

**PREVENTION**

The best way to avoid shin splints is to follow a few simple rules that will make running much more enjoyable for you. Does this mean you have to cut down your weekly miles to avoid shin splints? Of course not, but the more miles you put in, the more you are required to monitor your body and listen to it.

*Run at least half of your total weekly miles on a grass surface. This could include trails, parks, the infield of the track, or a cross country course. Hitting the pavement for a 10 miler everyday is going to place an undue amount of stress on the lower body. Sometimes this is hard to accomplish, but be creative, soft surface running is one of the most important things you can do to keep your body healthy.

*Check the treads on your shoes frequently. Old and worn out shoes are another common finding of those who develop shin splints. Remember that at around 300 miles, it’s probably time for a new pair of shoes.

*Stretching out completely before every run will significantly lessen the chances of developing any tight muscles.

*Perform the strengthening exercises listed above to ensure that an imbalance does not exist between the soleus and tibialis anterior muscles. A muscle imbalance can place you at risk for strains, tears or tight muscles. Running barefoot strides on the grass is a safe and proven way to strengthen the small muscles around your ankle. This will also improve your running proprioception.

*Get in the habit of using ice on a regular basis. Following workouts, ice will decrease muscle spasms, pain, and inflammation to bone and soft tissue. At the same time, ice enhances the flow of nutrients into the area, aids in the removal of metabolites (waste products), increases strength, and promotes healing.

If you have any questions regarding this article or any sports injury topic, please feel free to contact me anytime, hurdlethief@hotmail.com

Article for submission (Running Shoes: Is there a the Difference?)

There is a line from the movie “Tommy Boy” where Ray Zalinsky (the auto parts king) says “What the American public doesn’t know is what makes them the American public.”
A consumer's lack of knowledge can greatly impair the decision making process when it comes to buying a pair of running shoes. For the 2004 spring season, Nike will be releasing no less than 31 different training shoes and flats. Combine those 31 choices with the most recent editions from Adidas, New Balance, Reebok, Asics, Saucony and you have quite a conundrum on your hands. And at close to $100 each, it is worth your time to choose a pair of shoes that will benefit you the most.

I have read through countless articles that give awards for “most stability,” “best lightweight trainer” and my personal favorite “motion control.” What is motion control? I’m not sure what it means, but I know you probably don’t need it. Today’s article should offer up some objective criteria for the next time you venture out to purchase a pair of shoes.

**DETERMINE THE ANATOMY AND BIOMECHANICS OF YOUR FEET.**

*Do you have flat feet (pes planus) or high arches (pes cavus)?

This information is most often useful in determining the next question. Runners with high arches generally supinate and those with low arches (flat feet) are pronators.

*Do you pronate or supinate?

Pronation is defined as a turning outward of the foot at the ankle so that one has a tendency to run on the inner border of the foot. To assess this condition simply check the wear on the tread of a running shoe. Look for an excessive amount of wear on the inner portion of the shoe as compared to entire surface. Some studies indicate that up to 70 percent of all runners pronate.

Pronators should look for running shoes with a built in medial wedge. This is an increased height of the medial (or inner) portion of the heel. When looking at a running shoe focus on the hard outer heel. The “big toe” side of the shoe should be higher and thicker than the “little toe” side forcing an angle across the heel. The wedge will compensate for any dysfunctional movements during the stance and push-off phases of the gait cycle.

*Do you have a history of stress fractures, osteoporosis or knee pain?

This information can be used to determine the appropriate amount of cushioning required in your running shoes. More injuries equals more cushioning. If you are an oft injured runner then you need to step up to a very cushioned shoe and relieve some of the stress on your lower body.

**EVALUATE YOUR WORKOUT REGIMEN**

*Do you generally train on hard surfaces or soft?

Hard surfaces include concrete or asphalt, and mondo brand tracks. A soft surface would constitute grass, cross country courses, trails, etc. Most outdoor tracks are also safe running surfaces.

If you do the majority of your training on hard surfaces (> 70% of total weekly mileage), it is critical to wear a very cushioned and supportive shoe. This will reduce the strain on your lower extremities that result from pounding the pavement on a daily basis. Training in a racing flat or lightweight shoe is probably not a good idea. On the other hand, if your training finds you on the XC course everyday, you are a perfect candidate for a lightweight shoe.

*What is your weekly mileage?

As far as the durability of a shoe goes, weekly mileage can be classified into one of the following; (low) under 35 miles, (moderate) 35-60 miles, and (high) over 60 miles.

Those with low mileage have more flexibility in choosing a training shoe. A lightweight trainer will serve you best as the goal is fast, quality miles. When you start running over 50 miles per week, your body has less chance to recover from day to day. To reduce injuries a cushioned trainer with maximum stability is again required.

*How fast are your weekly miles run?
70 miles per week run at 6 minute pace is fast. There are not too many collegians putting in that combination of speed and distance. Use it as a reference to assess your current level of training.

Generally speaking, if you train fast a lightweight trainer is acceptable, but you must be careful to monitor your mileage frequently. The slower you run, the less need you have for a lightweight shoe. In fact, you will probably get more benefit from training in a heavy shoe and transferring to a lightweight shoe for competition only.

**FINDING THE CORRECT SHOE**

*Record the above information and take it with you. Any good running store should be able to help you out. At the very least, you should try shoes on in the store even if you are not going to buy them there.*

*Every shoe should have a flexible forefoot. This means that you should be able to bend the front sole of the shoe easily when in your hands.*

*The width of the shoe should be snug on your feet. Always try to find shoes with a flexible lacing to provide anatomical fit across the top of the foot.*

*If you commonly get blisters on the end of your toes, chances are your shoes aren’t big enough. Try moving up a half-size.*

*Finally, I’ll give you a quick run down of some of the more popular shoes.*

| **Nike Shox** | No serious runner would train in this shoe. There is no medial or lateral support system and the increased overall heel height can lead to ankle instability. |
| **Air Max Tailwind** | A very good training shoe with plenty of cushioning and medial heel support. |
| **Air Pegasus** | A neutral training shoe for the high school runner that doesn’t overpronate. |
| **Air Skylon** | This is a good lightweight trainer with average cushioning and support. I would recommend this shoe for the runner who trains fast both on and off the pavement. Maximum of 300 miles. |
| **Zoom Spiradon** | Another good lightweight trainer but geared more toward competition. Cushioning is comparable to the Skylon, but the support system is lacking. If you have a history of ankle sprains I would stay away from this shoe. Maximum of 250 miles. |
| **Adidas Supernova** | The flagship of Adidas running shoes, it offers great medial and lateral support, mid-weight design and plenty of cushioning. A great training shoe for runners at any level. |
| **Adidas Universal** | A pricey shoe that is more or less a knock-off of the Supernova. It is a lightweight shoe designed for the serious runner. |
| **Asics Gel Kayano** | Asics top of the line training shoe offers both cushioning and lightweight design. This is a high mileage shoe that will last 400+ miles. |
| **Asics Gel 1090** | This classic Asics design offers a high medial wedge with good support and cushioning. A quality trainer for any runner. |
| **New Balance** | New Balance shoes always offer strong support systems with very good cushioning. These trainer are generally heavier than others and will last a bit longer. |