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Fashion shouldn't be a factor when choosing the right footwear for each sport. Here's how to make the smart shoe decisions that'll see you striding ahead of the competition

Finding the right pair of athletic kicks should be fun – but do it wrong and they could trip up your performance. Unfortunately, shopping for sports shoes can leave you more confused than a chameleon in a bowl of M&Ms, since the shoe firms sometimes seem more concerned with making their products flashy rather than functional.

A good exercise shoe should reduce impact and shock, create traction for the surface you're performing on and provide support for lateral motion. Though there are now shoes for every sport, as a foot and ankle surgeon I see more and more preventable injuries related to improper shoe support, like metatarsal fractures, tibial stress fractures, ankle sprains, plantar fasciitis, shin splints and the list goes on.

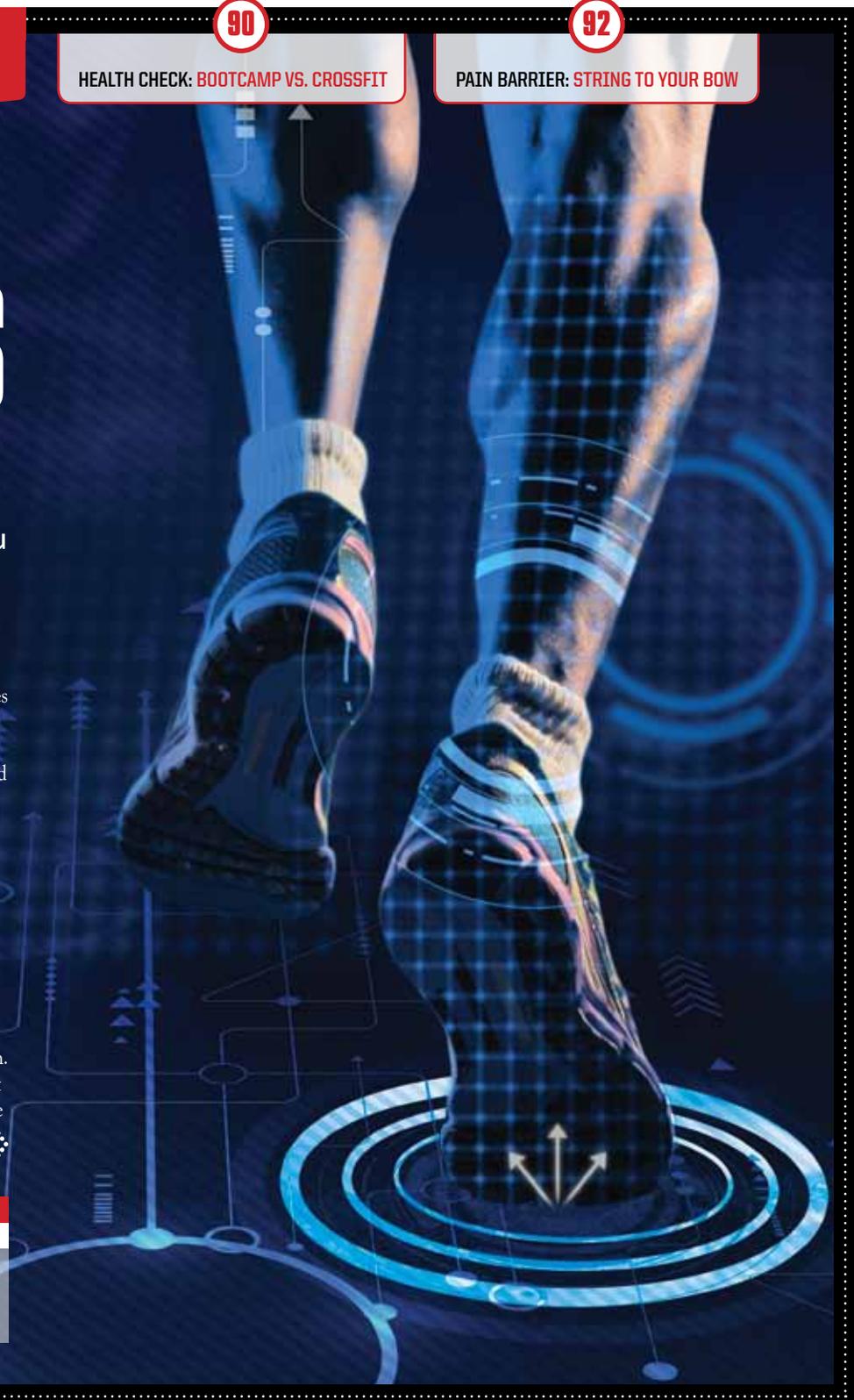
Fortunately, you can ease your hurts and put your athleticism on the front foot thanks to the right footwear knowledge contained in the following pages.



YOUR TRAINER
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WHEN SHOULD YOU BREAK OUT THE PLASTIC?

Most exercisers only need a good running shoe or cross-trainer. However, if you enjoy a specific sport more than twice a week, then you should invest in sport-specific shoes to provide maximum comfort and protection.

As a rule, athletic shoes should be replaced every 500 miles or 4-6 months. Since it is normal to swell a little at the end of the day, it is recommended you buy your shoes in the afternoon while wearing the type of socks you'll use for your sport. And always get measured on both feet, since your shoe sizes may be different.

If shoes are comfortable, buy them. If they aren't, choose something else. Shoes do not stretch or break in that much.

It's important when shopping to know what to look for and not to rely on a sales person who may not be knowledgeable about the features you require.

The following pages are full of suggestions that highlight the shoes' features – not the brand. Use the examples as a reference, then find the brand and style that works for you and your foot type.



FROM THE GROUND UP

All quality athletic shoes should have these basic properties:

STIFF HEEL COUNTER

This resists side-to-side slippage by re-enforcing the back of the shoe with cardboard that's covered with material. Newer shoes use strategically placed plastic to act as supports. A stiff heel counter-locks your heel into the back of the shoe to resist slippage and provide support on impact.

SEMI-RIGID MID-FOOT

They should resist twisting because if you can bend it like a pretzel, it's not going to offer support. A shoe that twists from side to side allows your foot to over-pronate (when the foot rolls inward), which is related to many overuse injuries. The shoe should flex in the ball of the foot region only and not in the arches. The most advanced development in athletic shoes has been the use of EVA (ethylene-vinyl acetate) and PU (polyurethane) midsoles. These products are firm to provide stability and resist twist, but are also excellent shock absorbing materials proven to reduce overuse injuries.

HOW TO PICK THE BEST SHOE FOR YOUR SPORT



RUNNING

01 Training kicks are the most versatile and still the best type of shoe to buy. They are the heaviest of the running-class shoes and provide the most shock absorption. It's important to remember that the most expensive training footwear might not be the best for you.

02 A neutral platform (Asics Gel Kinsei 6), which has higher amounts of cushioning and designed for people with a high arch.

03 Stability shoes (Asics Gel Kayano) will be more supportive in the midsole to prevent arch collapse. This is great for mild to moderate flat feet.

04 Motion control shoes (Hoka One One Conquest) offer the most mid-foot support, and are very rigid generally. They're designed for athletes with severe flat feet or over-pronators.

05 Lightweight running kicks (Nike Free) are just that, thinner and lighter shoes that should be used for racing only. They're less supportive and less resistant to impact, thereby making them faster. They should not be used for more than 20% of your weekly mileage.

06 Race spikes (Asics Sonicsprint) and minimalist shoes (Vibram Five Fingers) are the least supportive and the lightest of all running kicks. They offer no support and are designed for track competition only. They come in a spikeless form known as race flats. It's not recommended that you try this type of running shoe as it can lead to serious injury, like metatarsal fractures, tendon ruptures and knee and hip injuries. Leave them to the pros.

07 Trail running shoes (Asics GT-2000 Trail) are very similar to training shoes but usually have a more aggressive tread pattern. These shoes sometimes come in a higher 3/4 version for additional ankle support, which is great on rough terrain.



CROSS-TRAINING – WEIGHT TRAINING, CROSSFIT, AEROBIC EXERCISE

The best shoe options for this diverse group of exercises are cross-trainers (Nike Metcon), a cross between a running shoe and a court shoe.

They have the cushioning and mid-foot support of a running shoe with increased support needed for side-to-side movements, provided by the use of thermoplastics. These are a smart choice for CrossFit and aerobic workouts, since they also absorb shock and reduce impact forces.

If you're strictly into weightlifting, you want a shoe specific to that sport because lifting footwear has very little cushioning and often a raised heel that lets you squat deeper thanks to increased ankle range of motion. This helps you keep a more upright torso, putting you in a better position to push the weight up. They're also more stable around your feet than running shoes so you're less likely to rotate your ankle.

If you're doing CrossFit and there's running in your WOD, then it's best to bring two pairs of shoes so you're using the right tool for each job.



COURT SPORTS – BASKETBALL, VOLLEYBALL, RACKETBALL, TENNIS

These can be high-top (Nike Jordan CP3) or low-top (Nike KD8). Sports where athletes are more prone to twist their ankles, like basketball, do better with a high-top version. Lacing the high-top properly provides added protection against rolling the ankle over. The soles are also EVA/PU to provide shock absorption, and they're generally wide to offer stability. These shoes are also usually leather to provide support for lateral movement and sudden starts and stops.



FIELD SPORTS – SOCCER, LACROSSE, FOOTBALL, BASEBALL

Cleats are primarily for use on soft surfaces like natural grass and artificial turf. The cleat digs into the surface for increased grip at push off. The soles of these shoes are thin and offer minimal shock absorption, meaning the athlete relies on the playing surface to absorb shock. Baseball (**Nike Lunar Vapor**) and most football (**Under Armour SpeedForm**) cleats will have a front one to allow greater traction when starting from a bent-over position, like a baseball player trying to steal a base.

Some players, like a football lineman or lacrosse player, benefit from a high-top cleat (**Under Armour Highlight**) to offer more ankle support, while a wide receiver or running back would be better off with low-top cleats to allow more agility.

A soccer cleat (**Adidas Copa Mundial**) will have a softer leather upper to absorb shock when kicking the ball but still maintain a stiff heel counter for lateral support. The sole will also be thinner and more rigid than most cleats to provide grip with lateral motion.

GOLF

Golf shoes (**Nike Lunar Golf**) are much like a cross-trainer with specialized soles to provide for better traction on grass. They give lateral support needed for the pivot motion used in the golf swing. The grass surface offers shock absorption when walking, so soles are usually stiffer to allow for spikes that help you grip the ground when playing a shot.

Buy these a little snugger than your normal shoes because any kind of sliding action when swinging can cause you to miss your club's sweet spot. Comfort is paramount, since you'll be walking in them for four hours at a time, so choose the most comfortable type for your feet.



A GOOD EXERCISE SHOE SHOULD REDUCE IMPACT AND SHOCK, CREATE TRACTION FOR THE SURFACE YOU'RE PERFORMING ON AND PROVIDE SUPPORT FOR LATERAL MOTION

CYCLING

Cycling shoes (**SiDI Level**) are highly specialized. The shoe is extremely rigid for more efficient transfer of power to the pedals and are worth getting if you cycle more than three times a week.

When choosing a pair, realize that the tighter they are, the more power you'll get when in the saddle, but this costs you comfort and blood flow to your feet. If you get forefoot pain, then consider the stiffness of your shoe or modify the insole to decrease the pressure.

Selecting the right shoe can be tough because you often can't take them for a ride, so those with removable insoles are good options if comfort is on the agenda. Always keep the receipt in case they hurt more than they should.



TAKING THE NEXT STEP SO YOU'RE ALWAYS MOVING FORWARD



If you're a serious athlete and have encountered lower extremity pain or injury, go to a podiatrist or foot specialist and have your foot evaluated before you invest in new sneakers. Doctors can recommend the features you need in your new shoes or the possibility of orthotics to accommodate any weaknesses.

There has been a big push to make athletic shoes more aesthetically appealing, but this has led to a sacrifice in support. Shoes have gotten narrower and more form-fitting, which they should do, but the shoe companies have taken this to the extreme. It is harder to fit a custom orthotic into these newer styles. Therefore the biomechanical problems that were corrected with the orthotic are manifesting themselves once

again, predisposing the athlete to more injury. Professional football players have expressed their dissatisfaction with current cleats because they don't provide enough lateral support and flexibility. Because of this, I see more turf toe, shin splints and ankle sprains in football and soccer players alike.

Runners have been training in lightweight shoes with little support and experiencing more metatarsal and tibial stress fractures, shin splints, plantar fasciitis and Achilles tendonitis.

The moral of the story is the shoe should provide comfort, support and simplicity. Be an educated consumer and don't buy shoes based on looks alone. Don't let your sports hero dictate what you wear to work out in because it could see you suffering in the long run. ●