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# Absolutes of perfect technique

# The Six Absolutes of Perfect Technique

BFS Publications  
With Kim Goss, MMA



## **TABLE OF CONTENTS**

### **INTRODUCTION**

Page 3

### **ABSOLUTE 1 ATHLETIC OR JUMP STANCE**

Page 9

### **ABSOLUTE 2 BE TALL**

Page 15

### **ABSOLUTE 3 SPREAD THE CHEST**

Page 21

### **ABSOLUTES 4 AND 5 ALIGN TOES AND KNEES**

Page 27

### **ABSOLUTE #6 EYES ON TARGET**

Page 35

### **CONCLUSION TAKE YOUR TEAM TO THE NEXT LEVEL**

Page 41



**Visit the office of any high school coach who handles the strength training program of his or her athletes and often you'll find a textbook about biomechanics – and most likely that textbook hasn't been opened since college.** The reason is not that the coach has mastered the basic concepts of biomechanics and feels no need for an occasional review, but more often it's that the material is presented in a complex manner with foot-long science terms and mathematical equations – almost as if the writers of these books are daring you to learn. Such was the inspiration behind the development of the BFS Six Absolutes.

The creation of BFS Founder/CEO Dr. Greg Shepard, the Six Absolutes are six training principles that are amazingly effective in teaching perfect technique, not only in the weightroom but also in any sport. Coaches who learn the BFS Six Absolutes can dramatically elevate their athletes' strength and their own coaching ability.

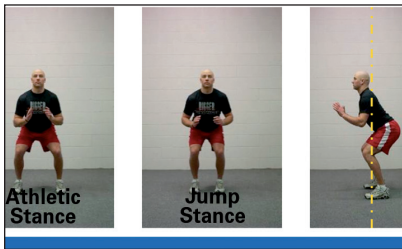
Without keeping you in suspense, here are the Six Absolutes of perfect technique:

1. Use an athletic or jump stance
2. Be tall
3. Spread the chest (lock-in the lower back)
4. Align the toes
5. Align the knees (knees over toes)
6. Eyes on target

One reason the Six Absolutes are so effective is that they encourage all coaches to use the same terminology when teaching weight training and sport skills. After all, how can an athlete be expected to follow instructions exactly when the instructions

they receive vary from coach to coach? Such confusion also goes against the concept of developing a unified program. Therefore, when teaching the squat, instead of one coach saying, “Make your chest big!” and another coach at batting practice saying, “Spread the chest!” both coaches will simply say, “Spread the chest.”

In future articles in this series we will look at each absolute in detail, providing examples of their use in weight training exercises and also sports techniques. For now, here is a quick overview of



each absolute.

## 1. USE AN ATHLETIC OR JUMP STANCE

All sports require one or both of the same two basic stances – the jump stance and the athletic stance. We use the jump stance primarily when we lift from the floor with lifts such as the power clean, the power snatch and the hex bar deadlift. We use an athletic stance with lifts such as the squat or the rack position in the power clean (when the bar is caught on the shoulders).

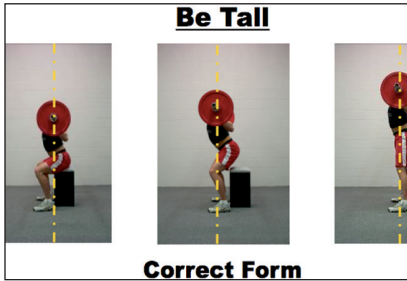
All sports use basically the same stance. It doesn't matter if it's tennis, softball or a “ready” position in football; the stance is the same. It is imperative that we always squat from an athletic stance so we can access the strength and power we build from that stance. We want these gains meaningful and functional.

## 2. BE TALL

You need to be tall all the time, whether you're sitting, walking, sprinting, lifting or even stretching. You can't slump or lean forward outside your center of gravity and expect to perform well. Being tall produces dramatic improvements in posture, improvements that will translate into better sport performance and reduced risk of injury.

If an athlete is slouching, say, “Be tall!” Immediately, good things happen. If an athlete is bending at the waist with a

rounded back, the quickest way to correct this problem is to say, “Be tall!” Fine-tuning comes with the other absolutes, especially keeping eyes on target and spreading the chest. All these terms are designed to help any athlete get into a correct and efficient alignment.

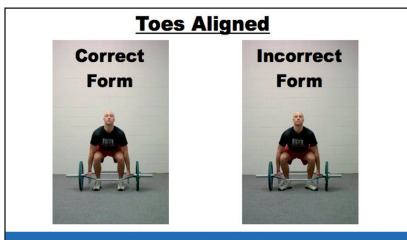


### 3. SPREAD THE CHEST

Spreading the chest and locking in the lower back work together, but you must visualize and coach both techniques. The lower back must swoop way in, into a concave position that exercise physiologists call

the neutral spine. When athletes spread their chests, the lower back will start to lock in properly in a concave position.

Remember, you can use this same BFS absolute when coaching in any activity: running, jumping, stretching or sports practice. You will be a better athlete if the lower back is correct. You will be less prone to injury if the lower back is correct. And, all you have to do is say, “Spread the chest!”



### 4. TOES ALIGNED

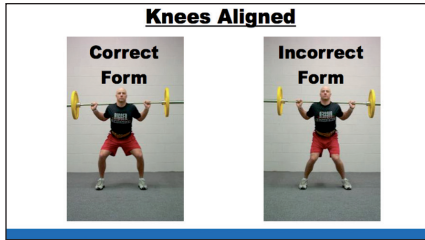
This may sound strange, but you should always strive to have the toes of an athlete aligned. What this means is that the toes should either be straight ahead (jump stance)

or slightly pointed out for balance (athletic stance). We call this absolute toes aligned.

A total strength and conditioning program involves, of course, a lot more than just lifting weights. It also involves stretching, jumping and sprinting. The toes also need to be aligned correctly in all of these phases of strength and conditioning.



It does not take very long for an athlete to experience dramatic improvements in technique using the toes aligned absolute. Insist that all athletes act as assistant coaches and always coach their teammates when spotting or performing any phase of strength and conditioning. If your goal is to win, then all athletes and coaches must be unified in helping each other become great.



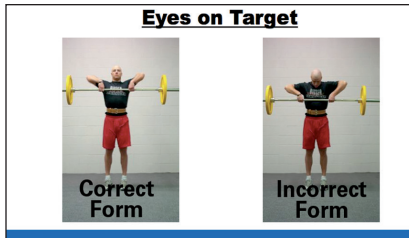
## 5. KNEES ALIGNED (KNEES OVER TOES)

The knees must be over the toes at all times in the weightroom, in every phase of strength and conditioning, in every drill and in every athletic movement.

letic movement.

Many times the knees will be way forward in front of the toes. The athlete needs to learn to balance on the entire foot; the heels cannot come up. Be tall, spread the chest, eyes on target and sit with the hips well back. This will keep the knees aligned over the toes. Knees that are in perfect alignment will be straight from every position.

## 6. EYES ON TARGET



The eyes on target absolute is a useful tool in sports such as football. For example, it is late in the game and you are behind. You're on defense and you must create a turnover.

Instead of tackling while your eyes are on the ball carrier's chest, you could try switching to targeting the ball. At BFS clinics, athletes learn this absolute so thoroughly that by the end of the day all you have to do is say, "Eyes!" and an immediate perfect correction takes place.

Eyes on target is a great tool to use in the weightroom,

especially with squats. When an athlete looks up at the ceiling while beginning the squatting movement at the top position, everything might seem comfortable and right. However, at the bottom position, things go bad. It is virtually impossible to look at the same point on the ceiling in the bottom position. Therefore, the eyes move, the head moves and the body moves out of position. Don't look down at the ground, as this can be as dangerous as tackling a ball carrier with your head down. Don't look up and don't look down, but stare intensely straight ahead and fix your eyes on a single point completely and totally throughout the entire lift.

Study these teaching points, write them down, post them on your weight room, memorize them, and see the difference the BFS Six Absolutes will make.



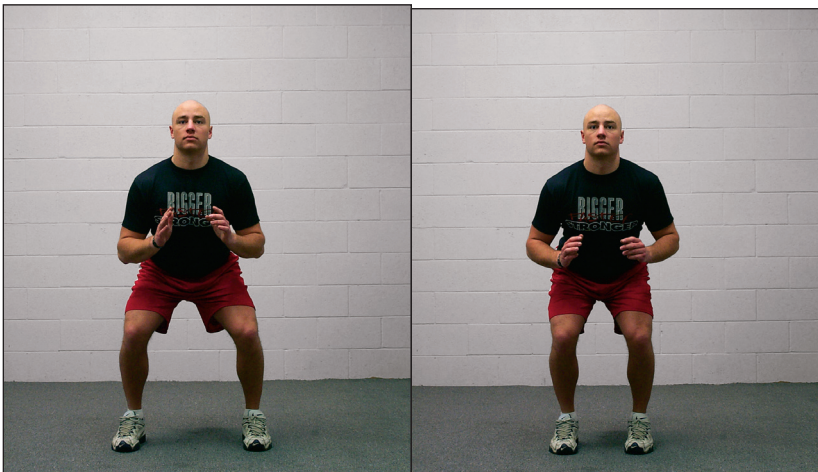
# ABSOLUTE 1: STANCE

## Selecting the best stance; an athletic stance or a jump stance

**It's the shoes!** is a popular advertising slogan that suggests there must be some special quality in a pair of athletic shoes that makes one athlete superior to another. It's an effective slogan, no doubt, as kids (or rather, their parents) are willing to spend over \$100 for a pair of sneakers that promise to give them athletic superiority along with the latest style sense. But the truth is that success in athletics doesn't depend so much on what you put on your feet as where you put them.

All sports require the use of one or both of the same two basic foot stances, a jump stance and an athletic stance. Collectively, we refer to this as the first absolute of the Six Absolutes of Perfect Technique, which is "Use an Athletic or Jump Stance."

A jump stance is the position where the feet are directly under the hips. How far the feet are apart depends upon the height of the individual, but as a general guideline say six to eight inches.



This is the best stance for generating speed and jumping power. An athlete would use this type of stance when performing a vertical jump or during the start of a power clean or a deadlift.

One reason that the jump stance is the best foot stance in these situations is that were the feet too wide apart, much of the force generated from the ground would be dispersed horizontally, reducing strength, power and speed. You can prove this by simply testing your vertical jump. If you don't have a Just Jump and Run force platform, there is a simple alternative. Put some chalk on your fingertips, stand near a wall with your feet wider than shoulder-width apart, and see how high you can jump – touching the wall at the highest point of the jump. Then use a jump stance and notice the difference.

In an athletic stance feet are approximately shoulder-width apart – again, the exact distance depends upon the individual, but as a general guideline it will be about six to 10 inches wider than the jump stance. To understand why this stance is important, you need to understand such concepts as center of gravity, stability, and base of support.

An athlete's center of gravity, or center of mass, is not necessarily the bellybutton. It's the single point on the body where the athlete's body mass is equally distributed between the head and the toes. You've probably heard of how a basketball player will bend their knees as they jump to manipulate their center of gravity, giving the illusion of a greater hang time. Well, it also works in the opposite way. By widening the distance between the feet, an athlete lowers their center of gravity, which in turn increases their stability.

What further increases the stability is that moving the feet out increases the base of support of the athlete, which is the area underneath and between the feet. The wider the base of the support, within reason, the greater the stability. As such, the narrower base of support of the jump stance makes it less stable, and it's easier for the athlete to be thrown off balance.

In sports, often the athlete alternates between a jump stance and an athletic stance. For example, in a power or squat clean, the athlete starts with a jump stance to impart the maximum force on the bar, and then moves their feet outward into an athletic stance to catch the weight, as this is a more stable position. In tennis, a player serves with a jump stance to generate maximum power on the ball, but the athlete on the other side of the net will be in an athletic stance to increase their stability and therefore their control when the ball hits their racquet. In the area of strength and conditioning, the basic concept here regarding the first absolute is to build strength with an athletic stance, and build explosiveness with a jump stance.



## Squatting and the 1st Absolute

Let's take a closer look at how this absolute works in squatting. In squatting, there are three basic squatting stances: bodybuilding, powerlifting and athletic.

Bodybuilders generally use a very narrow stance, often with the toes straight ahead – essentially a jump stance – and

sometimes with a board placed underneath the heels. This method is used to attain certain bodybuilding objectives of increasing development of the teardrop-shaped muscle of the lower thigh called the vastus medialis. In contrast, an Olympic lifter will use more of an athletic stance while squatting, assuming the same position they use when they are catching the weight in the bottom position of a snatch or clean. But what about powerlifting?

Many powerlifters will use a very wide stance with the toes flared out – it's actually not an athletic stance because it is too wide. Such a stance belongs in its own category unique to the

sport – so we’ll call it a powerlifting stance. Although this stance reduces the power from the quadriceps, it enables powerlifters to lift more weight because they reach the parallel position sooner and the lifting action relies more on the powerful glutes and hamstrings. Powerlifters will use whatever stance will allow them to squat the most weight, even though some of these techniques do not have as much carryover to sports. For example, during box squatting many powerlifting coaches recommended keeping the shins perpendicular to the floor – in what sport do the shins remain perpendicular to the floor? It’s not a natural movement.

Whenever we hear about squatting stances from strength coaches or attend a seminar on the subject, invariably the experts will say, “Take about a shoulder-width stance.” This is meant to be an athletic stance, but is there a better way to refer to the stance? Yes! This is part of your winning edge. Part of “the secret.”

Ask basketball players to get in a rebounding stance and baseball players to look like a shortstop. Tell football players to get in a linebacker stance, and volleyball and tennis players to assume their “ready” position. At clinics, BFS Founder/DEO Greg Shepard would put an athlete into a bodybuilder’s squatting stance and ask, “Does this look like a linebacker?” The kids would respond, “No. Get your feet wider!” He would then put them into a wide powerlifting stance with the toes flared way out and ask, “How about this position? Does this look like a football, basketball or baseball player?” Everyone always laughed. Then he would get them into an athletic stance, and the athletes saw that the “ready position” for all mainstream high school sports is essentially the same.

When coaching, it is much easier to provide instructions to an athlete by saying “athletic stance” rather than saying “put your feet about shoulder-width apart.” Likewise with the jump stance. Furthermore, in the weight room you should select the appropriate stance for each specific exercise. And if a school can get all

coaches using this terminology, it makes for a smoother transition from sport to sport and there is little confusion about what coaches are trying to teach. The Six Absolutes – it's biomechanics, and coaching, made simple.





## ABSOLUTE 2: BE TALL

### Why this absolute is the key to good posture and athletic performance

**Parents often tell their children that good posture involves standing or sitting up straight and pulling their shoulders back.** The medical profession has a more precise definition. In 1947, the Posture Committee of the American Academy of Orthopaedic Surgeons came up with the following definition of good posture:

“Good posture is that state of muscular and skeletal balance which protects the supporting structures of the body against injury or progressive deformity irrespective of the attitude (erect, lying, squatting, stooping) in which these structures are working or resting. Under such conditions the muscles will function most efficiently and the optimum positions are afforded for the thoracic and abdominal organs.”

In other words, good posture improves your overall health and athletic performance, and will reduce the risk of injury. An athlete can't slump or lean forward outside their center of gravity and expect to perform well.

To help ensure that athletes have good posture, BFS encourages the use of Absolute #2, which is Be Tall.

Athletes need to be tall all the time, whether they are walking, sprinting, lifting, stretching or even sitting. Being tall produces dramatic improvements in posture, improvements that will translate into better sport performance and reduced risk of injury.

Here's a simple test to determine if you're standing tall. Stand with your heels, buttocks, back, shoulders and head



against a wall. Now try to slide one hand behind your lower back, at bellybutton level or where there is the greatest arch in your back. If you are standing tall, the thickest part of the hand will just fill the gap between the wall and the back. If the hand slides right through or gets stuck, this suggests that you are not standing tall.

A coach can determine if his or her athletes are standing tall simply by observing their relaxed, standing posture. Look at each of them from the side and note the position of the shoulders and head. Does the head thrust forward? Are the knees locked and does the pelvis thrust forward? If the answer is yes to these questions, the athlete is not being tall.

Athletes who stand tall look like winners. When an athlete is tall, their waist will appear flatter and their shoulders broader. In fact, the common reaction from friends to an athlete who learns to be tall is that they've lost weight! And in sports where there is an aesthetic component, such as diving, gymnastics and figure skating, the postural improvements from being tall will be reflected in higher scores from the judges. Further, the postural improvements from being tall can help prevent lower back problems (which have become epidemic in our population) and other injuries.

If an athlete is slouching, say, "Be tall!" Immediately, good things happen. If an athlete is bending at the waist with a rounded back, the quickest way to correct this problem is to say, "Be tall!" Fine-tuning comes with the other absolutes, especially keeping eyes on target and spreading the chest. All these terms are designed to help any athlete get into a correct and efficient alignment.

The be tall absolute should be used with most lifts in the weightroom. In squatting, every athlete needs to squat with the feeling of sitting tall. You do not want to bend over with the head down and hips high, as this can injure the lower back and does not develop functional strength for athletes. When

performing the hex bar deadlift, focusing on being tall throughout the entire lift helps ensure that the spine is in proper alignment and that the legs are being properly used during the lift. Outside the weightroom, the be tall absolute should be used as often as possible. For example, after full speed is attained in sprinting, athletes should sprint tall. When throwing a discus or a ball, if an athlete ignores the absolute by bending forward, inefficiency and technique problems are the result.

At BFS clinics athletes thoroughly learn the absolute of being tall by the end of the day. Coaches in attendance who coach their own athletes use the six absolutes repeatedly. We always find it rewarding to see the rapid improvements in both coaches and athletes, especially with coaches who have no significant background in weight training. In just one day they become amazingly skilled in correcting technique flaws. Coaches should make certain their athletes are being tall in all they do.







## ABSOLUTE 3: SPREAD THE CHEST

A key teaching cue to help protect the lower back

The strength training community tends to jump on new trends, thus changing the way athletes are trained as well as how a particular coach is perceived in terms of identity and reputation. In the '70s, static stretching and energy system training were often emphasized in athletic training, and these were soon followed by plyometrics, overspeed and form running work, stability training and functional training. One extremely popular trend of recent years, “core” training, has crossed over from fitness and rehabilitation to the sports community.

Core training refers to working the muscles of the trunk, especially the abdominals and lower back. Isolation movements are often used, such as crunches and back extensions, or compound movements such as work performed on rocker boards. The proponents of core training contend that movements often begin from the trunk, and that power from the legs and arms must be transferred through the core. As such, these core muscles work not only as force producers but also as force transducers. This notion has led to an excessive amount of attention paid to training these muscles. Numerous books, videos and seminars on core training are available, and the topic is included in many personal training certification programs.

Whether or not this type of specialized training is worth the investment in time that many coaches give it, there is no question that these muscles are important for maximal performance. However, equally important as strength training for the core





muscles is proper posture of the trunk. And this key idea is the inspiration of Absolute #3: Spread the Chest.

## Controlling the Core

One of the most misunderstood concepts in athletic training is that of the pelvic tilt. There are several movements the pelvis is capable of, including the twisting and lateral shifting that occurs during walking and running. But the two types of pelvic tilt that a coach should be especially concerned about in the weightroom are anterior and posterior.

An anterior pelvic tilt involves rotating the pelvis forward. Some of the muscles that cause an anterior pelvic tilt are the erector spinae, which are two large cable-like muscles that run along both sides of the spine, and hip flexor muscles such as the psoas. A slight anterior pelvic tilt should be used when lifting weights off the floor, such as during a deadlift or a power clean. It is also the type of posture to use when stretching the hamstrings. At BFS, we refer to an anterior pelvic tilt as “locking in” the lower back.

A posterior pelvic tilt occurs when the pelvis is rotated backward. Some of the muscles that cause a posterior pelvic tilt are the glutes, hamstrings and also the lower portion of the abdominal

muscle called the rectus abdominus, which extends from the bottom of the ribs to the top of the pelvic bone. A slight posterior pelvic tilt is used when lifting weights overhead and when stretching muscles such as the psoas, which helps lift the legs.

The important concept to consider here is that it's not that one type of pelvic tilt is better than another, but that one type of pelvic tilt is better suited for a specific purpose. For example, during a clean and jerk, an anterior pelvic tilt should be used when the barbell is pulled from the floor; but when the barbell is on the shoulders prior to the jerk, more of a posterior pelvic tilt should

*One of the most serious errors in the weightroom occurs when the lower back is rounded (posterior pelvic tilt) when a barbell is lifted off the floor or when squatting.*

be used. This combination of pelvic tilts provides the highest levels of stabilization for the spine – and this transition from one pelvic tilt to another is called the lumbar pelvic rhythm.

One of the most serious errors in the weightroom occurs when the lower back is rounded (posterior pelvic tilt) when a barbell is lifted off the floor or when squatting. When the back is rounded, the erector spinae muscles are relaxed, and as such the discs of the lower back and their ligaments are exposed to high levels of dangerous forces. Using the verbal cue “Spread the chest” gives athletes a visual image of the posture they should be using.

### **Posture Makes Perfect**

Many years ago BFS founder/CEO Dr. Greg Shepard came up with the idea of using the posture cue “Spread the chest.” During a seminar he was trying to get several young men to arch their lower backs. Says Dr. Shepard, “I blurted out, ‘Spread the



chest!’ and to my amazement, their backs immediately went from poor to great.”

A small percentage of individuals will still have problems and just can’t get a kinesthetic feel for the correct position, so Dr. Shepard came up with two coaching ideas to help these athletes.


First, a coach can try telling an athlete to put their hands on their knees with some pressure, as if they were a baseball umpire. Often simply doing this simple action will give the athlete a kinesthetic feel, or body awareness, to be able to achieve this position.

Next, it’s often helpful to work on the concept of spreading the chest from a sitting position. “Sitting in the chair just makes it a whole lot easier,” says Shepard. “Our clinicians might have to make some slight adjustments by pulling back slightly on an athlete’s shoulders or being more forceful in giving the command to spread the chest.”

Another factor that can have an effect on achieving good posture is paying attention to the position of the head. Tilting the head forward and down is used in some activities, such as forward somersaults; and throwing the head backward is done in back flips – obviously, divers and gymnasts will use the head position to achieve ideal movements. However, when lifting, you should not tilt the head downward.

According to the late Dr. Mel Siff, a sport scientist with an extensive background in biomechanics, flexion of the neck causes a “reflex relaxation” of the erector muscles. In contrast, extending the head will help contract the erector muscles – however, not to the extent that it creates neck strain. As such, paying attention to head posture goes right along with Spread the Chest, Lock in the Lower Back, and another absolute that will be discussed in greater detail in a future article in this series, Absolute #6, Eyes on Target.

Beyond the weightroom, the cue “Spread the chest” can be used with just about any athletic activity, such as when sprinting or running or preparing to hit a baseball. Can you imagine trying to hit a baseball when your back is rounded? It’s just not an athletic posture.

Want to be a master at teaching core training? Start by simply telling your athletes to “Spread the chest!” 



ELEIKO

2

ELEIKO

10  
SWEDEN

2

ELEIKO

ELEIKO

20

20  
SWEDEN

ATLANTIS

## ABSOLUTE 4 & 5: KNEES AND TOES

### The importance of knee and foot alignment for optimal performance

**Coaches often comment on an athlete as having “good feet.”** They want athletes who are light on their feet, are quick on their feet, and have a fast “first step.” But having good feet is not a mysterious quality that only a few fortunate individuals are blessed with. Every athlete can improve this important athletic quality, much more than you might suspect.

Two of the most important absolutes for developing good feet are Absolute #4, align the toes; and Absolute #5, align the knees. Although these are considered separate absolutes, they work together.

Before getting into the specifics of these two absolutes, let’s explore the importance of good lower body alignment for injury prevention and athletic performance.

#### The Numbers Game

Lower extremity injuries are one of the most common injuries in athletics, and in fact for the population as a whole. According to the National Center for Health Statistics, injuries to the feet, toes and ankles accounted for 11 million visits to physicians’ offices in 2003, and 800,000 of those visits were diagnosed as ankle fractures. To make matters worse, as a study in Australia found, an athlete who injures an ankle is five times more likely to injure that ankle again. An ankle injury can cut short an athlete’s sports season and can lead to many more ankle injuries in the future.

It’s bad enough that ankle and foot injuries can stop athletes from participating in their sports, but often these injuries can lead



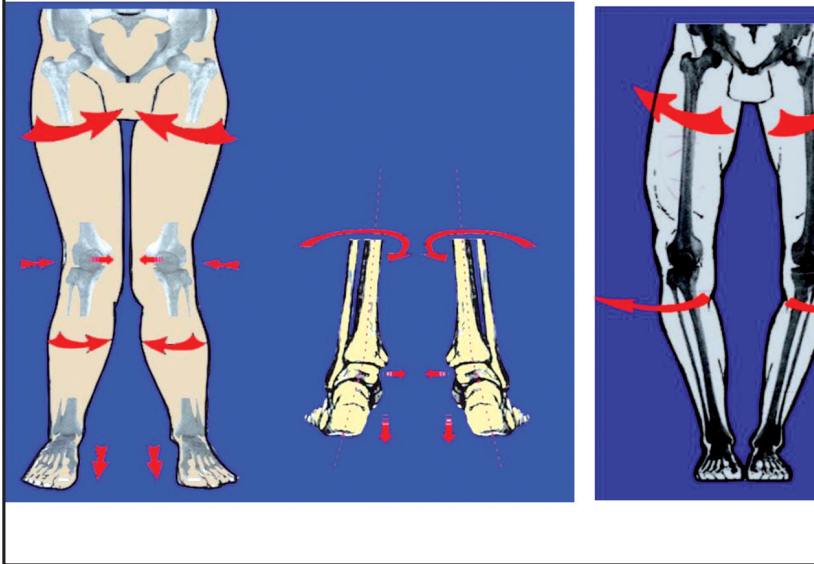
to serious injuries to the knees and spine. Case in point: the ACL.

The ACL is a knee ligament that connects the lower and upper leg bones. It prevents the shins from moving excessively forward, and prevents excessive rotation and angulation of the knee. The ACL can be injured when the knee is twisted, bent sideways or bent backward – and the risk of injury is higher if two or more of these actions occur at the same time.

Men and women are both susceptible to ACL injuries, but in sports such as volleyball, basketball and soccer, it has been estimated that women can be up to eight times as likely as men to injure the ACL. One theory explaining this difference is that a woman's wider pelvis changes the alignment of her lower extremities so that the upper thighs angle inward more than a man's and therefore make the ACL weaker. Interestingly, about 70 percent of ACL injuries are from noncontact activities, which suggests that many of these injuries could be related to poor biomechanics.

Canadian posturologist and strength coach Paul Gagné said it well: "The feet and ankles are the foundation that the body is built upon; so if that foundation is weak, then everything above it is at risk." An excellent way to strengthen that foundation is to focus on Absolutes #4 and #5.

## Valgus Feet



### Align the Toes

This may sound like simple common sense, but you should always strive to have an athlete's toes "aligned." What this means is that the toes should either be straight ahead (jump stance) or slightly pointed out for balance (athletic stance). We call this absolute toes aligned.

It's important to consider that there are few activities in which the feet would be positioned perfectly straight ahead. Because of the way the upper thigh bone (femur) inserts into the hip, usually there will be about five degrees of external rotation of the foot during many activities, such as squatting. And some individuals have what's known as "open hips," which makes it more natural for them to have the feet in a greater degree of external rotation. That's fine. The idea is to avoid exaggeration – you don't want your athletes waddling around with their feet out like Charlie Chaplin.

Two exceptions that are often brought up about alignment of the toes are powerlifting squats and the postures of ballerinas.





Strength coach Charles Poliquin assesses the knee and foot alignment of weightlifter Marilou Dozois-Prévoist at the Poliquin Strength Institute in East Greenwich, Rhode Island. Dozois-Prévoist placed 10th at the 2008 Olympic Games.

Although squatting with the feet pointed straight ahead is recommended by some powerlifting coaches, often the squats that are performed in their federations are not the deep squats that BFS recommends. These types of power squats are designed for specific powerlifting federations and for a specific purpose, which is to lift the most weight in the shortest distance. On the other extreme are ballet dancers, who are often required to perform movements with extreme “turn-out” of the feet. For people with open hips, working to achieve these positions may not be an issue, but individuals with closed hips may find themselves at a high risk of lower extremity injuries, as it will be extremely

difficult for them to achieve these postures.

A total strength and conditioning program involves, of course, a lot more than just lifting weights. It also involves stretching, jumping and sprinting. The toes also need to be aligned correctly in all of these phases of strength and conditioning.

It does not take very long for an athlete to experience dramatic improvements in technique using the toes aligned absolute. Insist that all athletes act as assistant coaches and always coach their teammates when spotting or performing any phase of strength and conditioning. If your goal is to win, then all athletes and coaches must be unified in helping each other become great.

## Align the Knees

The knees must be positioned over the toes at all times in the weightroom, in every phase of strength and conditioning, in every drill and in every athletic movement. We call this absolute knees aligned.

In sports or lifting, often the knees will be extremely forward of the toes. The athlete needs to learn to balance on the entire foot; the heels cannot come up. Be tall, spread the chest, eyes on target and sit with the hips well back. This will keep the knees aligned over the toes.

Knees that are in perfect alignment will be straight from every position. A good test is to take a ruler and place the top end at the middle of an athlete's knee and let it hang perpendicular to the ground. The bottom of the ruler should be at the middle of the athlete's toes, specifically the long toe. If the ruler is inside or outside, the position is incorrect. Sometimes the knees will be outside the toes. This is almost always due to a narrow stance. Simply widen the stance to resolve this problem.


Having improper knee alignment is a common problem in squatting. Sometimes beginning athletes squat with their knees too far forward, with the heels off the ground. This posture puts too much pressure on the patella (i.e., kneecap) area, besides being absolutely ineffective. If the knees are past the tips of the toes, they are too far forward. To help correct this, use the partner system and practice squatting with the hips back and the knees vertical, as straight as possible. Another great way to learn how to balance is to try a front squat with a very light weight. This will help an athlete practice the art of stabilizing his or her body correctly.

Squatting with the knees excessively pointed out will put undesirable pressure on the lateral collateral ligaments (located on the outside of the knee). The knees-out problem is easy to correct: simply widen the athlete's stance until the knees are aligned

directly over the toes.

The most common problem is that athletes allow their knees to come together excessively when they squat, putting pressure on the medial collateral ligament (located on the inside of the knee). Although as an individual rises from the squat, there will usually be some slight inward movement by the knees, this is natural – it's when you see an extreme buckling of the knees that it becomes a problem that must be addressed.

The knees-in problem is more difficult to correct than knees-out. The first step is to say “knees” to athletes while they are squatting or doing some other lift. This is a signal to force the knees out over the toes. This signal may or may not work the first time. If not, a second corrective technique is to lightly tap the inside of the athlete's knee. This kinesthetic approach gives the athlete an actual feel for the problem. The cure usually happens after only a few light taps. If the problem persists, then videotape the athlete so that he or she can see the problem. This combination of coaching guidelines will almost always do the trick.

Remember, you can use this same absolute when coaching any activity: running, jumping, stretching or in sports practice. Your athletes will perform better in all these areas and will be less susceptible to injuries if they keep their toes aligned and knees aligned. 





## ABSOLUTE 6: EYES ON TARGET

Why it's important to keep your eyes on the prize

**Keep your eye on the ball!**" is a popular bit of wisdom heard often in golf and baseball, but it also has expanded to many other sports. How often, for example, have you seen a football player fail to catch a kickoff because he took his eyes off the ball for a split second to determine where he was going to run? Although keeping your eye on the ball is not one of the Six Absolutes, there is one that is very similar and just as important: Eyes on Target.

Living in the Information Age, coaches are often bombarded with elaborate details about sport biomechanics. During a power clean an athlete can often keep the barbell closer to their body by turning their wrists slightly under, which positions their elbows out to the side. Such details are all valuable, and often small details can make the difference between winning and losing; however, before getting to that level of technical precision, coaches need to focus on the basics.

Eyes on Target refers to the importance of focusing your eyes on your immediate goal. Using the example of the football player receiving a kickoff return, he needs to focus on the target, in this case the football, so that he can securely make the catch. After securing the ball, the player has a new target, which is the most appropriate path to take to avoid getting tackled. Likewise, for the opposing players, the "target" is the ball carrier's lower body, not the upper body, as that's not the best way to make a tackle. But there are exceptions.

Let's say it's late in a football game and your team is behind. You're on defense and you must create a turnover to enable the offense to catch up. Instead of tackling while your eyes are focused on the ball carrier's lower body, you could try switching



to targeting the ball. Yes, making the tackle is important, but the tradeoff is that by swinging at the ball you have a better chance of causing a fumble. Let's look at a few more examples.

One of the most dangerous errors in football occurs when the head is down during a tackle. Keeping your head up, with your eyes on the target of the area of the body you want to tackle, is the best and safest way to tackle. When your head is down, the spine is straight, and its ability to absorb the shock of impact is compromised. This compression can lead to concussions and spinal cord injuries. Simply keeping the eyes on target can help avoid this dangerous posture.

In baseball it's been said that it's impossible to keep your eye on the ball throughout the entire pitch when it's thrown at high speeds. That may be true, but the principle is the same. In effect, what researchers at American University and the University of Southern California have discovered is that during a pitch a batter switches from central vision to peripheral vision. This switching explains why fastballs apparently rise and curveballs appear to break.

In the weightroom Eyes on Target is a great teaching tool for coaches. In the squat, often an athlete is taught to look up at the ceiling at the start to help keep their back tight. While this posture may seem comfortable at the start, it's at the bottom position where things go bad because it is virtually impossible to look at the same point on the ceiling when you're in the bottom position. As a result, the eyes move to a different target, the head follows and the body moves out of position. Don't look up and don't look down; instead, stare intensely straight ahead and fix your eyes on a single point throughout the entire lift.

Eyes on Target is important to proper posture, especially

Even during stretching movements, such as these three stretches included in the BFS 1-2-3-4 Flexibility Program, it's always important to keep your eyes on target.



to prevent or correct the condition known as round shoulders. Round shoulders refers to a posture characterized by an exaggerated curvature of the upper portion of the spine and excessive forward positioning of the shoulders (and often the head). Swimmers, wrestlers and gymnasts, and those who spend a lot of time on a computer often display this type of posture. Rounding of the shoulders reduces the flexibility in the shoulder joint and makes the joint more susceptible to shoulder impingement syndromes and dislocations. Keeping the eyes forward on a target in front of you, rather than down, is the first step in helping to



During the squat, it's important to focus your eyes straight ahead (not at the ceiling) to ensure proper technique.

prevent and correct round shoulders.

At BFS clinics, athletes learn this absolute so thoroughly that by the end of the day all you have to do is say, “Eyes!” and an immediate perfect correction takes place. Eyes on Target is one of the great coaching secrets that will give you a big edge over your opponents. Use it often.



# SIX ABSOLUTES

1. ATHLETIC OR JUMP STANCE
2. BE TALL
3. SPREAD THE CHEST
4. TOES ALIGNED
5. KNEES ALIGNED
6. EYES ON TARGET

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# Clear & Consistent Improvement

## Bringing all your training under one methodology with the 6 Absolutes

“The Six Absolutes of Perfect Technique,” are training principles that can be used to teach proper biomechanics in any sport, as well as in the weight room. Learn these absolutes and you can dramatically elevate your strength and sport coaching abilities.

In previous chapters in this series we’ve defined the Six Absolutes in detail. For review, here they are:

1. Use an athletic or jump stance
2. Be tall
3. Spread the chest (lock-in the lower back)
4. Align the toes
5. Align the knees (knees over toes)
6. Eyes on target

Unlike many textbooks on biomechanics that confuse readers with complex terminology and mathematical equations, the Six Absolutes are extremely easy to learn and to teach. Further, they encourage all coaches to use the same terminology when teaching – after all, how can an athlete or physical education student be expected to learn quickly when the instructions they receive vary from coach to coach or from PE instructor to PE instructor?

When teaching the deadlift, one strength coach may instruct an athlete at the start to “Keep the back tight” and another may say, “Arch your lower back!” These instructions are fine, but it is simpler to have everyone on the same page and just say, “Spread the chest!” To get you started, here are six practical steps to implement these important practice and performance principles with athletes.



### **Step 1: Have copies of the Bigger Faster Stronger book available to your staff and athletes.**

One of the chapters in the book *Bigger Faster Stronger* provides an excellent overview of the Six Absolutes. Published by Human Kinetics, this professionally produced and extensively illustrated textbook can be found in major bookstores or purchased through BFS.

### **Step 2: Subscribe to BFS magazine blog and visit the BFS website.**

*Bigger Faster Stronger* magazine has been published since 1981 and is the official publication of BFS. In each article you will find examples of coaches and physical education instructors applying the Six Absolutes in their programs. The BFS website contains a magazine archive section in which you can read all the past issues and download thousands of articles in PDF format – all for free!.

### **Step 3. Put up BFS posters in the weight room.**

BFS has developed a series of high quality, professionally produced posters that highlight each of the Six Absolutes, using examples of many common weight training exercises. Just one glance at these posters will remind everyone using the weight room that they must always be thinking “perfect technique” in all their lifts.

### **Step 4: Start with a Six Absolutes review.**

At the start of every sports season or school semester, give a review of the Six Absolutes. Many athletes are transfer students from other schools, and in high school you always have freshman athletes who may not have been taught the Six Absolutes. During the orientation, encourage each individual to act as a coach during their practice and use the Six Absolutes to help their teammates and classmates always focus on perfect technique.

### **Step 5: Implement the BFS Readiness Program**

The BFS Readiness program gives young athletes in middle school and even elementary school a head start in physical education and sports training. It's a truism in the weight room that it's best to learn perfect technique when you are weak to reduce the risk of injury. That way, when young bodies mature and are ready to lift heavier weights, they will have a head start and can progress more rapidly.

### **Step 6. Hold a BFS clinic or attend a BFS certification**

Nothing beats hands-on instruction from a BFS clinician at a BFS clinic or certification. Our clinician will work with your staff, athletes and physical education students to ensure that the Six Absolutes are being taught effectively.

The Six Absolutes are a valuable teaching tool that will help young athletes improve their athletic performance and will increase the safety of any sports or physical fitness program. Get started today!







