

Soccer Coaching Manual



Life Ready Through Sport



The LA84 Foundation is the organization created to manage Southern California's share of the surplus from the 1984 Olympic Games. Located in the historic Britt House since 1985, the LA84 Foundation has committed more than \$160 million to create, support and expand existing youth sports programs, and develop the Paul Ziffren Sports Resource Center. The Sports Resource Center is a state-of-the-art learning and cultural center for sports which contains sports books, films, videos, photographs and memorabilia. To date, more than two million boys and girls and more than 1,000 youth sports organizations throughout Southern California have benefited from our endowment.

The goal of the LA84 Foundation is to be an innovator in youth sports and coaching, and to increase opportunities for achieving athletic excellence at every level. The Foundation grants financial assistance to organizations providing youth sports opportunities, initiates and operates its own youth sports programs including Run For Fun, Summer Swim, and offers free coaching education workshops through the LA84 Foundation Coaching Program. For additional information regarding the LA84 Foundation please visit our web site at www.LA84Foundation.org.

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Edited By

Stacey Chapman
Edward Derse
Jacqueline Hansen

Contributing Writers

Amy Allmann	Martin McGrogan
Orlando Brenes	Billy McNicol
Roger Bryant	Bob Myers
Stacey Chapman	Jen Netherwood
Ellen Coleman, R.D.	Sean Roche
Ed Derse	Sigi Schmid
Afshin Ghotbi	Trudi Sharpsteen
Ann Grandjean, Ed.D.	Karen Stanley
Tim Harris	Skip Stolley
Norm Jackson	Jim Zachazewski, M.S., P.T./A.T.C.
Alan King	

Design

Mary Jo Reutter

Cover Design

James Robie Design Associates

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LA84 Foundation

2141 West Adams Boulevard
Los Angeles, CA 90018
(323) 730-4600

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A Philosophy for Coaching High School Athletes

High school coaching may be the most special and important profession anyone can choose. This is not because sports are important, but, rather, because the young men and women who participate in high school sports are so valuable. As a coach, you have an opportunity to foster both their emotional and physical development. The path to coaching success begins with defining a philosophy to guide your efforts.



The High School Coach, Someone Special

ATHLETES MEET SPORTS THROUGH THE COACH

It is the *coach* who frames the sport experience for the athlete. A study of 10,000 high school athletes released in 1990 concluded that the quality of coaching has the greatest influence on whether participation in high school sports becomes a positive experience for the young athlete.

The sport of Soccer offers opportunities for athletic success to a wider variety of personalities, body types and natural athletic talent than any other sport. With its opportunities for individual skill as well as team competition, few other sports can provide so much for so many. There are opportunities to develop physically, emotionally and socially. There are opportunities to discover hidden talents, learn about oneself and develop a new sense of competence and self-worth. There are opportunities to be part of a team while competing as an individual. There are lessons about life and reality. There is the motivation to pursue goals and objectives that most teenagers dismiss as being impossible. All these possibilities are woven into the unique fabric of sport. The responsibility of making them an intimate part of every young athlete's Soccer experience rests squarely on the shoulders of the coach.

THE ROLE OF THE COACH

What exactly is the high school coach's role: recruiter, expert teacher, trainer, strategist, personnel manager, administrator, promoter, communications expert, diplomat, spokesperson, psychologist, impartial judge, disciplinarian, caring friend, counselor, parent substitute? A high school coach assumes all of these diverse roles. For the coach, the greatest reward should not be the outcome of winning, but rather the process of training and competition that positively affects the personal development of young athletes. Great coaches use sport as a vehicle to enrich the lives and futures of their athletes.

IT MATTERS WHETHER YOU WIN OR LOSE

While society often perceives winning as the most prized outcome of sport, *a single focus on winning by the coach can subordinate every other worthy outcome of an athlete's participation in sports*. There is nothing wrong with wanting to win, and given the choice, coaches would be nearly unanimous in choosing winning over the alternative. But there is a difference between being focused and being obsessed. Winning is just not the only important outcome of sport.

Factors that Determine Who Wins and Who Loses

Coaches should recognize that two factors primarily determine whether an athlete or team wins a given competition:

1. How well the athlete and/or team performs in a particular competition.

Every individual and team is capable of a certain level of performance. How well the athletes exploit that capability in competition is the chief factor in winning. Anything less than one's best can open the door to defeat.

2. Scheduling.

As obvious as it may seem, the next greatest factor in winning is the *quality of the competition*. Inferior competitors can, and sometimes do, upset superior ones, but the powerful role that scheduling plays in winning and losing cannot be disputed.

Once the schedule is set and the opponent is known, the most significant factor becomes *performance*. When athletes or teams perform to the best of their capability against weaker opponents, victory usually results. This is not certain, for winning is often elusive. It is the uncertainty and mystery of the outcome that gives sport much of its intrigue and magic. Winning is a challenge.

At best, however, only 50 percent of the participants can be winners in any sport competition. Only one team emerges victorious. So, does everyone else then become losers? Is there no opportunity for achievement, fulfillment and fun without winning? Is winning really the ultimate goal of sport, or is there a more important objective and a more attainable goal?

WINNING VERSUS SUCCESS

The opportunity for success is available to everyone if it is defined as performing to one's capability, rather than focusing solely on the out-come of a given competition.

Teaching athletes to focus on success, rather than winning, nurtures the factors that ultimately lead to winning.

Success = Ability + Preparation + Effort + Will

Ability. Everyone has ability, but it isn't distributed equally or predictably. This applies to coaches as well as athletes. Often ability is a gift of birth, but that doesn't guarantee any success. The challenge isn't to have ability, but to develop and use the ability we are given.

Preparation. We gain greater use of our abilities by investing in preparation. Only through the persistent and consistent process of preparation can raw talent be transformed into greater capability. In Soccer, we call this preparation *training*. Through proper training, athletes become faster, stronger, more skilled, knowledgeable, confident and mentally tough. But although developing greater capability is important, it is still no guarantee of competitive success.

Effort. Developed ability realizes its value when expressed through the challenge of competition. That expression is accomplished when physical and mental effort summon every ounce of one's capability. Still, athletes often find themselves nearing the finish of their race exhausted, having given all they think possible, but needing to find even more. In sport we call this...crunch time!

Will. Crunch time is real, both in sport and life. It is that moment when you think you have given all you have, only to find out even more is required. Many athletic contests are won or lost at this moment. Some athletes are able to draw on an inner strength to summon greater effort than they know themselves to have. This is the use of one's will, the power to go back to one's personal reservoir again and again as needed.

When athletes and teams train hard to develop their ability, give their best effort in competition, and show the will to push themselves beyond self-imposed limits, they are successful.

Too often, coaches and athletes miss experiencing the pride and satisfaction of success because they are too focused on winning. More often, coaches and athletes fail to win because they first fail to become successes.

BUILDING SUCCESS

Unlike winning, success can be experienced by every athlete every day. It doesn't come easily or immediately, however. Success requires athletes be coached to develop some specific, personal attitudes. Six such attitudes have been identified by Robert Goodwin, Soccer Coach at St. Lawrence University.

1. The desire to strive for excellence.
2. The realization that nothing of value can be achieved without hard work and dedication.
3. The desire to display self-confidence.

4. The desire to show one's ability in competition.
5. The desire to cooperate as part of a team.
6. The desire to have fun.

THE DESIRE TO HAVE FUN

The desire to have fun deserves special attention. Sports should be fun for both athletes and coaches. *The opportunity to have fun is consistently identified by students as the number one incentive to participate in high school sports.* But the fun we refer to is not the fool around fun we see in our locker rooms, on the bus, or at team parties. It is the pride, satisfaction and fulfillment a youngster experiences from improving his or her strength, speed and skill after hours of training and practice. It is the thrill and exhilaration of setting a new personal best in competition. This is the fun that all athletes and coaches seek. It is the fun of feeling good about oneself.

When athletes experience this kind of fun, they become consumed with the desire to feel more...preferably as soon as possible. Developing this desire to have fun may be the most important attitude coaches can teach. *When athletes are filled with the desire to have fun, they are likely to:*

- Strive with all their heart for excellence.
- Dedicate themselves to consistent hard training.
- Show the self-confidence to make the tough decisions and sacrifices it takes to train and compete at their best.
- Be anxious to show their ability in competition, free of fear or self-doubt.
- Gain personal strength from respecting, helping and caring about their teammates.

So, What About Winning?

Where, then, should winning fit into a coaching philosophy? As noted earlier, nearly every coach would prefer to win every contest. Realistically, however, it is important for coaches to admit that it does not matter much whether or not our teams win all those games. What *does* matter is that we win the battle to enhance the lives of our athletes through the experience of participating in Soccer. For coaches, this is the most important win of all. This is the true measure of coaching success.

SHAPING THE ENVIRONMENT

Most people believe sport teaches participants high ideals and admirable personal qualities such as pride, courage, confidence and respect. Unfortunately, this is not always true. None of these ideals and attributes are inherent in sport. It is the coach who frames the experience of participating in sports within the environment he or she creates for the program. For every athlete who has experienced pride through sport, others have experienced relentless criticism and ridicule from their coaches. For every athlete who has gained courage from competition, others have been gripped by the fear of intense scrutiny and high expectations from their coaches. All too often, athletes develop attitudes of disrespect, hate and vengeance for their opponents, officials, teammates and coaches.

Sport is fertile ground for learning. Coaches, both good and bad, are effective teachers. Lessons learned are learned well. Consciously or unconsciously, the coach designs and controls his or her sport environment. Every coach is encouraged to invest significant time and effort into engineering an environment that nurtures pride, confidence, courage, respect, responsibility, trust, caring, leadership and other attributes the coach believes to be important. These must be reflected and constantly reinforced in the attitude, words, actions and behavior of the coach.

SOME THOUGHTS ON BEING A GREAT COMMUNICATOR

Without question, the key to being a successful coach is the ability to communicate effectively. Communication is a two-way process between the sender and receiver. It takes on many forms, some overt and others subtle. Coaches communicate with their athletes by what they *say*, what they *write*, what they *do* and how they *behave*. To communicate effectively, coaches must also receive communication from their athletes. In a word, *listen*.

Guidelines to Improve Communication Skills

- **Understand the primary burden of responsibility for any communication belongs to the *sender*, not the receiver.**

If it is important enough for a coach to say or write something to an athlete, it must be repeated, reinforced and reviewed to be sure the message is understood. Communication must be an ongoing process, especially with high school athletes.

- **Communicate with those *under* you as you would with those *above* you.**

Some coaches are unaware that often they communicate with younger and/or lesser athletes in a condescending or demeaning fashion. Ask yourself if your choice of words, tone and style of delivery reflects the attitude and respect you would like to receive from your athletic director or principal.

- Communicate with your athletes regularly, consistently and thoroughly.

Make communication easier by having at least one team meeting a week so your athletes come to anticipate and expect certain messages. Avoid just talking *at* the athletes. Ask for their questions and input.

- Instruct Constructively.

Too often, athletes are only told what they are doing wrong. It is more important, and far more effective, to tell them how to do it right by:

- Reinforcing the positive.
- Praising what your athletes do right, preparing them to be receptive to your next instruction.
- Explaining the mistake and how to correct it. Be specific and keep it short. Athletes can only process a limited amount of information at one time. Be patient and careful not to show any frustration.
- Reinforcing the positive. Sandwich further instruction between two positive comments to take the sting out of continued correction.

UNDERSTANDING MOTIVATION

Motivation is something that arises from inside an individual. Motivation cannot be given to someone; it can be fed, nurtured and tapped. The word motivation is derived from the word *motive*, which is the desire to fulfill a need. The primary need we all have is the need to feel worthy. Our sense of self-worth is enhanced most by feelings of competence, accomplishment and acceptance. Simply put, we feel better about ourselves when we feel we are good at something. We will work hard to improve in areas where we believe we have the potential for success. The more effort we put into the process of improving, the more our feelings of increased competence enhance our feeling of self-worth. Accomplishments and recognition along the way reinforce our worthiness. We also measure our self-worth by the acceptance we get from others, especially the sense of *belonging* to a group of peers.

The need to feel worthy is the single most powerful element of motivation. It should be easy to see why sports are a perfect vehicle for boosting an individual's sense of self-esteem. However, since only a few can be champions, there is a danger of athletes equating self-worth with the ability to win in competition. The message for the coach is this: While you cannot make every athlete feel gifted, you can make them all feel more competent. While you cannot make every one of your athletes feel some sense of great accomplishment, you can see that each feels some sense of real achievement.

What you *can* guarantee is that every one of your athletes feel important and accepted. Don't make them earn your acceptance. Accept them unconditionally. Let them know it is OK to make a mistake. If you allow athletes the security of having your time, energy, interest, belief and trust, you will be amazed at the great things they will dare to do.

ADVICE TO HELP YOU SURVIVE AND PROSPER IN COACHING

- **Put your family first.** Coaching is so time-intensive that the only way you can be assured of having time with your family is to make time *for them* before you make time for anyone else.
- **Expect success.** Visualize what you want to accomplish. Winners know what will happen...losers fear what might happen.
- **Take the lead.** Showcase the Soccer program in your school and community. Fight for equitable funding. Take a cue from football and basketball and give Soccer a chance to be a spectator sport by presenting your home games as entertainment.
- **Project yourself.** Put your "stamp" on each of your athletes, assistant coaches and on every phase of your program.
- **Surround yourself with good people.** You cannot coach a large group of athletes by yourself. To succeed in Soccer, you must recruit and train assistant coaches who will adopt the your philosophy, share your commitment and join your quest for success. An assistant coach with a bad attitude can sabotage an entire program.
- **Know who your friends are.** Anyone in a leadership role is subject to the positive or negative influence of others. Identify those who can positively influence your coaching career and make them your friends.
- **Be true to your values.** It can be easy to compromise yourself in the quest to win. Say what you believe. Do what you say. Nothing is harder to earn and easier to lose

than a good reputation.

– Adapted from Dr. Rick McQuire's contribution to the AAD Track & Field Coaching Manual

High School Sports as an Extended Classroom

Our schools have interscholastic sports programs because they provide students with unique learning experiences that are not offered in other parts of the school curriculum. Through participation in interscholastic sports, athletes improve strength, speed, endurance and acquire the complex skills and poise needed to perform at their best in athletic competition.

Few educators have the opportunity to affect the lives of their students more than a coach. The best coaches use their practices and competitions as *extended classrooms* and strive to inspire athletes to reach for their best both athletically and academically. High school students are young adults who look to their coaches for leadership, knowledge, instruction and direction. Many lessons can be taught and learned through participation in competitive interscholastic sports such as how to set goals, how to compete, how to take risks, how to deal with success and failure and how to maintain emotional self-control. Important values and attitudes such as sacrifice, dedication, accountability and self-confidence can be learned along with such virtues as good sportsmanship, teamwork, camaraderie, respect for opponents, mental toughness and persistence in the face of adversity. Those experiences and character traits will lead young athletes toward successful, fulfilling lives long after their high school athletic careers are over.

The benefits that can be derived from participating in sports, however, do not result from participation alone. *Research indicates it is the quality of adult leadership that determines whether youngsters have a good or bad experience in competitive sports.*

An effective high school coach will be an inspirational leader, a knowledgeable teacher and an appropriate role model. More than just a teacher of skills and strategies, the high school coach is a significant adult force in the life of a student-athlete. You will have a great impact on the psychological growth and personal development of athletes you coach. What you say to your athletes, and how you go about saying it, will have a great impact on your athlete's experiences in sport.

Developing a Coaching Philosophy

DETERMINING COACHING OBJECTIVES

The two most important considerations in developing a personal coaching philosophy are determining **coaching objectives** and **coaching style**. Your coaching objectives could include improving your win/loss record, winning your league title, being one of the top teams in the CIF, showing significant individual and team improvement, making the program fun for your athletes, or teaching your athletes to compete well.

High school coaches often believe their first responsibility is to produce winning teams. However, winning should not be the single measure of success for your athletes. An overemphasis on winning can cause negative responses in young athletes, such as anxiety, fear of failure, reduced self-esteem and a loss of motivation. This is not to say that winning is not an important objective. Winning is important! But for the high school sports to bring out the best in young athletes, *coaches must keep winning in proper perspective.*

Your coaching success should be defined and measured in a variety of ways other than a state ranking, win/loss record, or place in your league. The number of athletes you attract to the program, your athletes' enthusiasm for Soccer, the improvement your team shows through the course of the season, and the amount of parental/community/school interest and support you generate for your program are equally important measures of success. Winning the majority of your games does not necessarily mean you are a good leader or role model for your athletes. As a coach, your actions speak louder than your words, especially during competition. You must teach respect for the rules, your opponents and the judgment and integrity of officials by example of your behavior.

DEVELOPING AN EFFECTIVE COACHING STYLE

This brings us to the second part of your coaching philosophy: coaching style. Your coaching style reflects how you choose to lead and interact with your student-athletes. It affects how you motivate and discipline, and what role, if any, you permit your athletes to have in making decisions that affect them. There are authoritarian, cooperative and passive coaching styles. Your style of coaching must fit your personality, but every coaching style is a somewhat different combination of these three approaches.

We encourage you to take some time to examine your coaching philosophy and consider the coaching style you wish to use to achieve your objectives. ***Here are some suggestions:***

- Remember that your athletes should be the center of attention. Sports were not created to glorify coaches.
- The simple objective of coaching is to help athletes shorten the trial-and-error process of learning and ease the trial-and-terror experiences of competing.
- When coaching, focus on the skills needed, a method to teach and demonstrate them, and drills to practice and master them.
- Integrity, credibility and technical knowledge are the most important qualities of a good coach — in that order.
- Every athlete deserves to be addressed by first name and treated with dignity.
- Your coaching style must not isolate you from your athletes. You must have a forum for open communication or you will never be in touch with your athletes. Be willing to listen to all the athletes, hear criticism and respond by acting rather than reacting.
- You cannot talk about winning without talking about losing. Is placing second or third, or not placing but recording a personal best, considered a failure? How do you want your athletes to behave when they are clearly going to lose? How do you want your team to behave after a tough loss? How do you expect your athletes to bounce back after performing poorly?
- Regardless of your coaching style, you need to command your athletes' attention and respect. And you need to communicate and motivate, praise and discipline effectively in your role as a high school coach.

TLC: TEACH • LEARN • COMPETE

As a high school coach, every decision you make should be in the best interest of your athlete's physical, psychological and social development. The philosophy advocated by the LA84 Foundation is **TLC**: teaching, learning and competing.

Teaching represents what a coach provides student-athletes by way of instruction. The lessons a coach must teach include technical skills, positive attitudes about competition, the process of training and effective tactics and strategies. A coach must

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also teach athletes emotional self-discipline, responsibility, self-esteem and how to maintain poise by focusing on the things they can control. No less important are social values such as appropriate behavior, fair play, good sportsmanship and the importance of working together to accomplish team goals and objectives.

Learning is the athletes' acceptance of what you teach. Learning is greatly influenced by the atmosphere a coach creates in helping athletes reach for their best. Effective learning requires communication, motivation, feedback, cooperation and purposeful training. A positive approach to practice and training that emphasizes skill development, fitness, teamwork and fun will help to ensure athletes' learning experiences are positive.

Competition is the essence of sport. Competitive skills are essential to prosper in a society where we compete for grades, spouses, jobs and promotions to achieve success, happiness and security. Soccer is a sport in which athletes demonstrate both their physical and competitive skills. Coaches should portray the adventure of athletic competition as an opportunity for success rather than failure.

Coaches must help athletes learn as much as possible from their competitive experiences, analyze what they do well and what they don't do well, and resume training with a new agenda and a renewed determination to improve. Coaches should emphasize that success in sports should be measured by each athlete's personal performance goals. Just because every soccer game has only one winner doesn't mean everyone on the other team is a loser. Competition should serve as a reference point for athletes to measure progress.

Sometimes the pressures of competition can result in athletes setting goals that are unattainable. Goals that are too high guarantee failure even when the athlete performs well. Coaches should help athletes set realistic goals.

MOTIVATING AND COMMUNICATING WITH YOUNG ATHLETES

Sport psychologists have learned that two of the most important needs of young athletes are the need to *have fun* and the need to *feel worthy*. Certainly, it is easy to see when athletes have fun. They appear to be challenged, excited, stimulated and focused. They express feelings of enjoyment, satisfaction and enthusiasm.

Athletes also have a need to feel competent, worthy and positive about themselves. Sports can be threatening to young athletes when they equate achievement with self-

worth. As youngsters, we learn quickly that others judge our worth largely by our ability to achieve. To win is to be a success and to lose is to be a failure. This attitude causes tremendous anxiety in young athletes.

Social evaluation and expectations of others are also major causes of anxiety. Athletes become anxious when they are uncertain about whether or not they can meet the expectations of their coaches, parents, peers, or even themselves. The more uncertainty athletes have, and the more important they perceive the outcome to be, the greater their feelings of anxiety.

The very nature of sports involves an extensive evaluation of the skills of the participants. Any situation involving social evaluation of abilities that a youngster considers important can be threatening if he or she anticipates failing or receiving negative evaluations. Most youngsters place great value on athletic competence and are particularly sensitive to appraisal of their abilities by others. Mistakes and errors which are a natural part of the learning process can be misinterpreted as failure or incompetence. These competitive pressures can result in youngsters setting unrealistic standards of near-perfect execution, which virtually assures they will fail.

As a coach, you must help your athletes satisfy their need for fun by structuring their sport experience so it challenges and excites without being threatening. Motivated athletes have a strong desire to master skills and demonstrate their competence. Similarly, you can help athletes meet their need to feel worthy by creating situations where everyone can experience some degree of success. The continual process of achieving incremental goals that are challenging, yet attainable, provides motivation. When athletes experience a taste of success, it reinforces their feelings of mastery, competence, pride and self-worth. This in turn stimulates their desire to pursue new levels of personal achievement.

HELPING ATHLETES REACH FOR THEIR BEST

The ability to teach, communicate and motivate athletes is the *art* of coaching. Teach your athletes to focus on things they can control: their own performance and readiness to compete. When athletes worry about their opponents instead of focusing on things they can control, they limit their ability to compete well. Athletes who tend to worry about performance must be taught to focus on *what* they want to do (skill or strategy execution), instead of *how* they are going to do. Athletes should also recognize that winning is sometimes sabotaged by external factors beyond their control, such as an oncoming cold, bad weather, or outright bad luck. Over time these things even out,

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and they will be the beneficiaries of such occurrences as often as they are the victims.

Let your athletes know it is all right to make mistakes. Many young athletes fear making mistakes because they have been ridiculed or punished for making mistakes in the past. Coaches must create a supportive atmosphere in which athletes view making and correcting mistakes as a natural part of the learning process. Some athletes become so frustrated and angry at themselves when they make a mistake during competition that they lose their composure and perform far below their abilities. Teach your athletes that one of the things that separates champions from average athletes is the ability to let go of a mistake quickly and refocus on what needs to be done next.

Communicating is the most important thing a coach does. This fact cannot be overstated. Effective communication involves the explicit expression of instructions, expectations, goals, ideas and feelings. Doing so enhances mutual understanding and is the first step in meeting the athlete's and coach's needs. Communication is a two-way street: both coach and athlete must listen and speak to make it work.

As a coach, you must be credible in the eyes of your athletes in order to communicate with them. Your credibility is the perception of the trustworthiness of what you say and do. To be credible in the eyes of an athlete, you must be knowledgeable about soccer, enthusiastic about coaching well, and consistent and positive.

A positive coaching attitude projects your desire to understand athletes, accept them for who they are, and treat them with respect and affection. It requires refined listening, clear speaking and the ability to give feedback and constructive criticism in a nonpersonal and instructive manner. A positive approach is characterized by the liberal use of praise, encouragement and positive reinforcement. Constant criticism, sarcasm, or yelling at athletes will increase their anxiety over making mistakes, decrease their sense of self-worth, and discourage them from continued participation.

Another important component of a positive approach is empathy. It is not the same as sympathy. Empathy is being aware of the feelings and emotions of your athletes. Coaches who are empathetic listen to their athletes and try to understand what is going on in their lives outside of athletics.

Praise must be sincere. When coaches are not sincere, they risk losing the respect of their athletes. It means little for athletes to hear "good job" when in fact they know

they have not done a good job. If the athletes or team have not performed well, the coach should be honest and acknowledge the fact they did not perform to their potential. However, athletes should also be complimented for things they have done well. Remember to praise deserving efforts, not just final outcomes.

Attitude is the key to success. Let your athletes know that champions expect to do well. Champions believe they will succeed and they recognize the important role that hard work and sacrifice plays in the quest for athletic excellence. Champions focus on goals and how to achieve them. They don't surrender their goals easily. They identify their areas of weakness and work hard to eliminate them.

Athletes should be taught the most important kind of success resides in their personal improvement, giving their maximum effort, being willing to take risks, and striving to do their best.

If you can impress on your athletes that they are never losers when they give their best effort, you endow them with a precious gift that will see them through many of life's most difficult endeavors.

FINAL THOUGHTS

All of the athletes you coach are unique and special. They may range from 13-year-old boys and girls to 18-year-old young men and women.

They come to your program with different abilities, skill levels and personalities. They all have different backgrounds, attitudes, expectations and needs. One of the greatest challenges in coaching a sport like Soccer, which involves working with a large number of athletes, is being sensitive to individual differences and striving to make each athlete feel valued and important.

Finally, whether you are a full-time faculty member or a non-classroom coach, try to make yourself a part of the high school community. Get to know the principal, front-office staff and fellow coaches. Attend and ask to be part of any pep rallies or assembly programs during the season. Write to your athletes' teachers and tell them about the objectives you have for your program. Invite them to attend your games and let them know you are concerned about your athletes' performance in the classroom as well as on the field. The coach who gets involved in school is sure to receive greater support for the Soccer program from his or her fellow coaches, faculty, support staff and school administration.

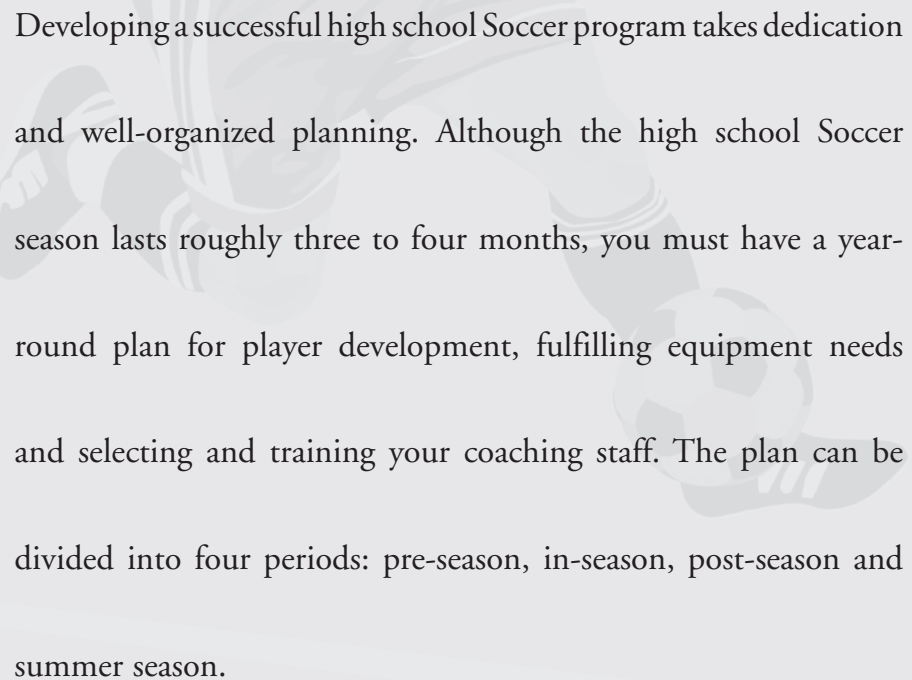
THE USOC COACHING CREED FOR YOUTH SPORTS

- 1.** Establish the well-being of your athletes as your #1 goal.
- 2.** Use your sport to teach young athletes that victory and athletic achievement are meaningful only if achieved in a fair and sportsmanlike manner.
- 3.** Teach young athletes by example to respect their opponents, the rules of the sport, and the role and judgment of officials.
- 4.** Develop the competitive spirit of your athletes by encouraging them to "play to win." But remember young athletes should derive primary satisfaction from the experience of playing, improving, and attaining personal goals, which should not be limited to winning.
- 5.** Be reasonable when scheduling practices and competitions. Young athletes need some time to be able to enjoy other worthwhile activities and interests.
- 6.** Be sure your equipment and facilities meet safety standards appropriate for the age and ability level of your athletes.
- 7.** Never yell at your athletes for losing or making a mistake. Young athletes should be able to participate in sports without fear of failure or ridicule.
- 8.** Remember that young athletes thrive on enthusiasm and encouragement. Be positive and generous with your praise.
- 9.** Avoid overplaying your most talented athletes. All your athletes need playing time, or experience in competition, to be able to develop.
- 10.** Always follow a physician's advice when deciding when injured athletes are ready to resume practice and competition.
- 11.** Get to know your athletes' parents and encourage them to become supportive volunteers for your program. Educate parents and volunteers to understand that the physical and emotional well-being of young athletes can be threatened by programs that involve a high level of psychological stress and over-zealous parental supervision to win.

COACHES' CODE OF ETHICAL CONDUCT

- A** Show respect for athletes, officials and other coaches.
- B** Respect the integrity and judgment of your officials.
- C** Establish standards , and be a model for fair play, sportsmanship and proper conduct.
- D** Establish athlete safety and welfare as your highest priority.
- E** Provide proper supervision of your athletes at all times.
- F** Use discretion when providing constructive criticism and when disciplining athletes.
- G** Be consistent in requiring athletes to adhere to the rules and standards of the sport.
- H** Always instruct your athletes in the safe use of equipment.
- I** Do not exert undue influence on your student-athletes' decisions on which college or university they should attend.
- J** Avoid influencing student-athletes to take easier course work in order to be eligible to participate in high school athletics.
- K** Do not encourage or permit your athletes to use performance enhancing drugs.
- L** Do not recruit student-athletes from other schools.
- M** Enforce the rules of behavior and procedures for crowd control established by your conference and local board of education.

Managing a Soccer Program



Developing a successful high school Soccer program takes dedication and well-organized planning. Although the high school Soccer season lasts roughly three to four months, you must have a year-round plan for player development, fulfilling equipment needs and selecting and training your coaching staff. The plan can be divided into four periods: pre-season, in-season, post-season and summer season.

Responsibilities of a Head Coach

PRE-SEASON

- Encourage your prospective team members to enroll in a sixth (last) period pre-season Soccer class. Follow school procedures for adding and dropping students from the class.
- Monitor the academic eligibility of all team members.
- Develop a fitness program that includes work with and without the ball. Make the program fun and include much variety. Remind your players to bring both Soccer and running shoes to school every day. If you include training that will take your athletes off campus, be sure to obtain permission from your school administration. Plan runs that avoid busy roads and unregulated intersections. Monitor your athletes closely.
- Meet with your coaching staff to discuss your overall coaching philosophy, season goals, coaching and administrative responsibilities, team and school policies, safety guidelines, and emergency medical procedures.
- Discuss tryout procedures with your coaching staff. Review the previous year's team roster to determine the number of players you expect to return and the positions that need to be filled. Schedule dates for tryouts. Remember to adhere to the federation rules governing the number of allowable tryout days.
- Review and confirm your game and bus schedules with your athletic director.
- Hold a pre-season meeting with your players and their parents to explain team policies, solicit volunteer help, and preview the season. Introduce your coaching staff, preview your tournament and game schedule, explain transportation policies, team rules, and state your goals for the season. Make yourself and your staff available to answer any questions.
- Select team captains and assign them specific leadership roles.

IN-SEASON

- Have a written plan and a purpose for each and every practice.
- Follow school procedures for taking attendance during sixth period P.E. Soccer class.
- Meet with your coaching staff at least once a week to handle administrative mat-

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Managing a Soccer Program

ters, go over game and bus schedules, and discuss player development.

- At home games, greet the visiting coach and team, and direct them to the locker room or restrooms closest to the Soccer field.
- Pay close attention to your players when visiting other schools. Do not allow them to wander around the campus.
- Carry player emergency information cards to all practices and games.
- Provide players with passes that excuse them from class for away games. Passes should include the date of the game and the time of departure. Take attendance before leaving for games.
- Know whom to contact if the bus for an away game does not arrive on time.
- Make checklists for home and away games. In the bustle that often presides before games, a checklist serves as a silent assistant. Checklist items should include all necessary equipment and supplies as well as tasks to be performed. Before departing on a road trip, verify that all the needed equipment is on the bus with the team.
- Establish a schedule and routine for your players to follow for all home games.
- Keep individual and team statistics and share them with your players.
- Assemble a brief scouting report for every game, especially playoff games. Review the report with your team at practice sessions before each game.
- Prepare written evaluations at mid-season for all players. Discuss your evaluations with each athlete.
- Carry the National Federation Soccer Rule Book, your league rules and regulations, as well as the CIF Soccer Preview Bulletin and/or Soccer Play-Off Bulletin with you to all games.

POST-SEASON

- Collect and inventory all equipment and uniforms.
- Hold athletes financially responsible for school equipment not returned according to athletic department policy.
- Place uniform and equipment repair and purchase orders.
- Complete the documentation required to provide school athletic letters and awards

to your players.

- Plan an end-of-the-season awards banquet or help your booster club do so.
- Encourage your players to play off-season sports.
- Follow school procedures for transferring students into other physical education classes if there is no post-season Soccer class.
- Prepare a schedule for the next season. Try to schedule some night games if possible. Night games will allow more parents and fans to attend. Base your schedule choices on league requirements and on the anticipated strength of your next year's squad. Establish or maintain traditional rivalries, and add variety by looking into new tournaments for the upcoming year.
- Hold a wrap-up meeting with your coaching staff to evaluate your season, critique your program, and implement new objectives and procedures for next season.
- Prepare a training program for your post-season Soccer class. Include a wide variety of games and cross-training activities.
- Look into summer tournaments in which your team may play. Five-a-side and seven-a-side tournaments let you field teams with the limited number of players that may be available during the summer. If your schedule or school policy doesn't allow summer play, encourage your athletes to play club Soccer.

SUMMER

- Schedule a number of training sessions during the summer. Summertime is a good time to work on ball skills and strength training.
- Participate in leagues and tournaments.
- Take advantage of international tours and schedule games with visiting teams.
- Coordinate your training sessions with your players' club Soccer and other summer activities.

The High School Coach's Legal Liability

The litigiousness of our society and the risks inherent in sports participation leave you, the coach, with more liability exposure than any other individual in your school.

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Today's coaching liability lawsuits focus on these eight areas:

1. Failure to provide **adequate advance warning** of the risk of injury involved in participating in school sports activities.
2. Failure to have or to enforce **rules and procedures for safe participation**.
3. Failure to provide **proper supervision** of an activity.
4. Failure to provide and maintain a **safe playing area**.
5. Failure to use proper **coaching methods** and provide **adequate physical conditioning**.
6. Failure to provide **safe transport** to and from sites of competition.
7. Failure to provide **proper instruction** for the use of athletic equipment.
8. Failure to provide **proper medical care** to injured athletes.

To protect the safety of your athletes and minimize your legal liability we recommend the following steps:

- Advise all team members and their parents, in writing, of the potential risk of injury inherent in sports participation and have both the athlete and parent sign a consent and waiver/release form.
- Establish written training safety rules and procedures with your coaching staff. Distribute them in writing to all team members.
- Enforce your safety rules and procedures.
- Develop a medical emergency plan for all training sessions and games. Always provide close supervision for any potentially dangerous training activities such as weight training or off-campus runs.
- Instruct your athletes in the proper use of all equipment. Specifically, never allow your athletes to hang or swing on the goal posts.
- Be aware of the special medical history and special health problems of every athlete you coach (diabetes, asthma, allergy to bee stings, etc.).
- Immediately inform administrators in writing when you feel your equipment and facilities are unsafe or inadequate.
- Purchase National High School Federation Liability Insurance.

Sexual Abuse in Youth Sports

The problem of sexual abuse of young athletes by adult coaches has gained increased attention in recent years. Many youth sports organizations have taken steps to combat the problem. The LA84 Foundation encourages all coaches to be aware of the issue and learn what steps to take if you suspect a problem in your youth sports organization. The Foundation also requires that all of its grantees have a written policy addressing their commitment to keeping their athletes safe from sexual abuse. For assistance in developing a policy, or to become more knowledgeable about protecting the safety of young athletes please see the Foundation's Resource Guide On Preventing Child Sexual Abuse in Youth Sports (http://la84foundation.org/1gm/ResourceGuide_frmst.htm).

Developing a Pre-Season Plan

Effective pre-season planning lays the groundwork for a successful season. Administratively, you will need to ensure that all your equipment needs have been addressed, verify your schedule of games and tournaments, finalize transportation arrangements, and obtain athlete information and class schedules. On the field, focus on player development, fitness training, and team tryouts. Develop a training plan that best suits your coaching philosophy, incorporates your goals for the season, and falls within the federation (CIF), district and school guidelines.

A detailed pre-season plan is a hallmark of a coach who approaches his or her sport with a professional attitude. Set a good example for your players by being well-organized and prompt. Your pre-season plan, though detailed, should remain flexible. Pay close attention to the physical and emotional well-being of your players. Alter your plan according to the needs of your players. You may need to increase or decrease the intensity of fitness training or allow them to scrimmage on a scheduled fitness day.

Training should be purposeful and fun.

Pre-season training is made much easier if you have a scheduled class period in which to work with your players. In Southern California, most schools have a sixth period class that permits athletes and coaches to conduct pre-season training, although no practice is allowed after school. If your school does not have a Soccer class, we suggest that you ask the administration to add one. This class period will allow you to work with your players and evaluate their progress before the actual practice season begins.

Organizing Tryouts

Unfortunately, Soccer's popularity, the constraints of the game and school budgets often force coaches to limit the size of their teams. Cutting a number of players from those who show up to play is a necessity in many programs. Almost any fellow coach will tell you that making cuts is the most difficult part of coaching.

An extended organized tryout is the best and fairest way to evaluate players. The CIF-Southern Section and LA City Section allow a 10-day tryout period, over which time you may hold practice sessions, before or after school, to evaluate athletes who wish to participate in your Soccer program. Only first-year players are permitted to participate in tryout sessions. Returning players are not permitted by the CIF to participate in pre-season tryouts. Tryouts for returning players must be held once official after-school practice begins.

Before scheduling pre-season tryouts, determine how many players you plan to have on each team. Identify prospective newcomers before tryouts begin. Many athletes will be competing in other fall sports and will not be able to attend tryout practices. You will need to give them an opportunity to try out for the team once their seasons end. Do your best to determine how many athletes from other sports you expect to join the team.

Establish written guidelines for evaluating players and discuss these guidelines with your coaching staff. Create an evaluation sheet for each player. Athletes deserve to have their efforts evaluated formally. If you are forced to cut an athlete from the squad, these evaluations will help you explain your decision to the athlete and his or her parents.

If you need to make cuts, you owe each athlete the service of an individual meeting to explain your decision. Review each athlete's player-evaluation form for your own reference. Remember to be sensitive and encouraging; remember that you are dealing with kids. Be understanding and prepared to answer their questions in a concise and tactful manner. Encourage cut athletes to continue playing Soccer and remain interested in the team. Let them know of other opportunities to play Soccer in club, AYSO, or recreational league teams.

TEAM SIZE

As a general rule, carry more players on your Junior Varsity and Freshman teams than your Varsity. Although some of them will get very little playing time in games, you

will be able to train a larger number of players. No coach can predict exactly how younger players will develop. A large player pool lets you hold on to the proverbial “late bloomer.”

The number of players you carry on the varsity team can vary widely. Most varsity teams carry 16 to 18 players. Although most young athletes want to be part of the varsity team, in most cases you will serve your athletes and program better by letting borderline players get experience and playing time on the junior varsity.

Organizing Your Coaching Staff

Your coaching staff is a vital part of your Soccer program. Select assistant and lower level coaches who share your coaching philosophy. Although individual coaching styles will differ somewhat, your assistant coaches need to coach according to your philosophy. Fundamental differences between coaches often create serious problems for teams.

Discuss your coaching objectives and philosophy with all prospective coaches. Enthusiasm, commitment and effective communication skills are as important as Soccer knowledge. Former players can be a good source for assistant coaches. Keep in mind that young coaches may need special attention and guidance regarding professional coaching behavior.

Once you have selected a coaching staff, be sure to follow the hiring policies of your school and district. All coaches, whether paid or volunteer, must register with your school’s personnel office (fingerprints, TB test, etc.).

Organizing Daily Practice

Just as your coaching style reflects your overall coaching philosophy, the nature of your practice sessions will also reflect it. Some coaches emphasize individual skill development while others prefer to concentrate on team play. Some coaches prefer short, intense practices with little rest time while others prefer longer practices with time to reflect and discuss. Some coaches prefer well-planned and regimented practices, while others prefer general guidelines that can be altered if needed.

PRACTICE CONSIDERATIONS

The following points will to help you formulate a philosophy for practice sessions:

- Gauge practices according to players' abilities and needs.
- While players and teams have similarities, they also are unique combinations of Soccer skills, experience, physical qualities and personalities. When you design practices, exercises and drills, consider the strengths and weaknesses of each player and your team as a whole. Choose activities that allow your players to improve their weaknesses and exploit their strengths in competition. Overemphasizing weaknesses can weaken confidence and motivation, while overemphasizing strengths leaves your team unprepared for the multiple challenges of competition.
- Practice sessions can be quite stressful if you are not well-organized. No matter how well-prepared you are, you cannot pay individual attention to each player at any one time. Part of coaching well is teaching in such a way that your players learn to help coach each other. Instruct them to watch for correct and incorrect techniques, movements and decisions when in pairs or groups. The feedback your players give each other is invaluable in developing team unity and helps players develop a greater understanding of the game of Soccer.

MAKE PRACTICES FUN

Practice sessions become fun when they capture and hold players' attention in an enjoyable manner. Sometimes fun is spontaneous and frivolous, while other times fun results from challenges being met. Hard work can be fun. Find exercises and drills that your players enjoy. Use these exercises to lighten the load of hard work or to establish positive team attitude. When drilling, do enough to improve technique, but don't drill to the point of boredom. When you drill players to exhaustion, they stop concentrating on the technical goal and simply try to endure. Technique development is extremely important, but drills will fail to accomplish that goal if players are bored by them.

KEEP YOUR TALKING TO A MINIMUM

Practice is a time for athletes to be active rather than passive. Once players lace up their shoes, they want to go! Have your chaltalk before going to the field or at the conclusion of practice. Short, concise instructions are better than long explanations and rehashed information.

Sometimes you will encounter moments in practice when a situation requires or deserves specific instructions and elaboration. These moments often are quite valuable. Because players are actually experiencing or directly observing the event, you can use these moments to reinforce earlier instructions.

SIMULATE GAME CONDITIONS

The game of Soccer requires accurate and quick decision making. The ability to recognize situations, understand the field of play, and make appropriate decisions separates very good players from average players. Recognition skills are best learned in game settings. Create practice situations that emphasize skill and tactics likely to be encountered during a game. Practicing in a game-like setting will help your players learn to recognize when certain skills or tactics are appropriate. For example, playing 4-versus-4 on a small field with regular goals is a great way to emphasize player movement and shooting, rather than simply shooting at the goal without opposition or movement.

Practicing in game settings teaches athletes how to adjust to changing areas of play and use the appropriate skills. Teaching athletes when to dribble, pass, attack and retreat is best done in a game-simulated setting. These settings can involve a small number of players, but need to closely approximate the demands of competition.

Be sure to vary exercises using different size areas of play, and change the number of touches you allow players to use. Doing this will more closely reflect real game situations. For example, players can use more space and multiple touches when settling or controlling an open field pass without opposition. However, controlling or passing the ball using one touch is a real part of attacking. Less experienced and talented players will need more room and touches than more experienced players.

BE CREATIVE

Remember, your job is to develop players and prepare them for competition. Be willing to create or adapt drills to meet unique needs of your team. Skilled players will master drills fairly quickly, so add some new twists to challenge these players.

REVIEW SKILLS AND TECHNIQUES

As you introduce new skills and techniques, you also need to review fundamental ones. Drills are a good vehicle for addressing your players' technical flaws. Encourage your players to help coach each other.

Don't let players depend solely on you to improve their technical skills. If your players feel your only job at practice is to improve their individual Soccer skills, you will have little time to work on team play. Review techniques and show players how to improve, but make them responsible for their own skill development.

COMPONENTS OF A PRACTICE SESSION

Practice sessions generally include the following components:

- Warm-up
- Review and practice previously taught skills
- Introduction and practice of new skills
- Simulation of game situations
- Fitness training
- Cool-down

Each practice should begin with a warm-up routine and should end with a cool-down. A thorough warm-up gradually prepares the body for vigorous, intense activity. For example, have players dribble, pass, throw, jog and stretch for 10–15 minutes prior to practice, gradually increasing their exercise intensity. Cooling down is a warm-up in reverse. Because players have worked hard during practice, they need to bring their activity gradually to recovery level. Cooling down also helps prevent muscle soreness by flushing waste products out of the muscles.

As a general rule, introduce new skills early in a practice session, when your players are fresh and attentive. Trying to teach a new skill when players are winded or fatigued often is a waste of time. Practice new skills for several days before incorporating them into more complex drills and game scenarios.

PREPARING FOR A PRACTICE

Practices are the ideal place to teach, make mistakes, gain fitness, practice game strategy and tactics, and prepare for the next contest.

Have a Plan

A successful practice plan creates an environment that helps you accomplish your goals. First and foremost, you must know what you want to accomplish. With your goals

in mind, design your practices specifically to fulfill those goals. Be sure to determine the time you need for each phase of practice, but be willing to make time adjustments depending on specific circumstances. Some days your athletes will respond quickly to your instruction, some days not. That's part of coaching. Nonetheless, always keep your practice session objectives in mind.

Just as individual practice sessions should be planned, so, too, should your season. Take time to review weekly, tournament and league play goals and objectives for your team. Remember, you should write out these goals before the start of the season. Each practice session is one block of a performance pyramid. The better each block fits with the others, the stronger and higher the pyramid will be.

Setting Up Equipment

Before each day's practice begins, determine the sequence of drills and where you will set up equipment. If possible, set up your practice field and equipment before the start of practice. Setting up and moving equipment can waste valuable practice time. Set up equipment early and assign different groups of players the tasks of bringing out balls, cones, nets, goals and other equipment. You may want to designate exercise captains to help organize players for drills.

Specific equipment needs include balls, **scrimmage vests** (also called **bibs** or **pinnies**), flags and cones. It is very important that you provide each player with a ball. The more time each player has to touch a ball, the more time each player has to improve! Use scrimmage vests to divide players into teams for scrimmages and drills. Flags and cones are used to divide your practice field into areas called coaching grids.

Coaching Grids

Grids are a great way to organize players and make maximal use of your practice field. They let you organize the field into distinct areas the size of which can be adapted to fit the skill level and number of the players involved. You can create grids by using cones, flags or other markers, on an open field, or on a regulation marked field as shown in Figure 2-1.

Why Grids Are Important

The game of Soccer is about time and space. The best players can control the ball in little time and within a small space. Less skilled players need more time and greater

space in which to perform. Coaching grids let you adjust the field of play according to the technical abilities of your athletes. Novice players generally require a larger space in which to work. As players improve, you can have them work in increasingly smaller spaces.

Constructing Grids

Soccer fields can be divided into a number of grids. The purpose of a given drill and the number of players involved should determine the size of the grid. For example, if you are conducting a drill to develop dribbling skills, you will want to keep the space grid fairly small, forcing the athletes to work within a tight space and keep the ball at their feet. Conversely, if you are working on long passes, you will probably want to expand the size of the grid.

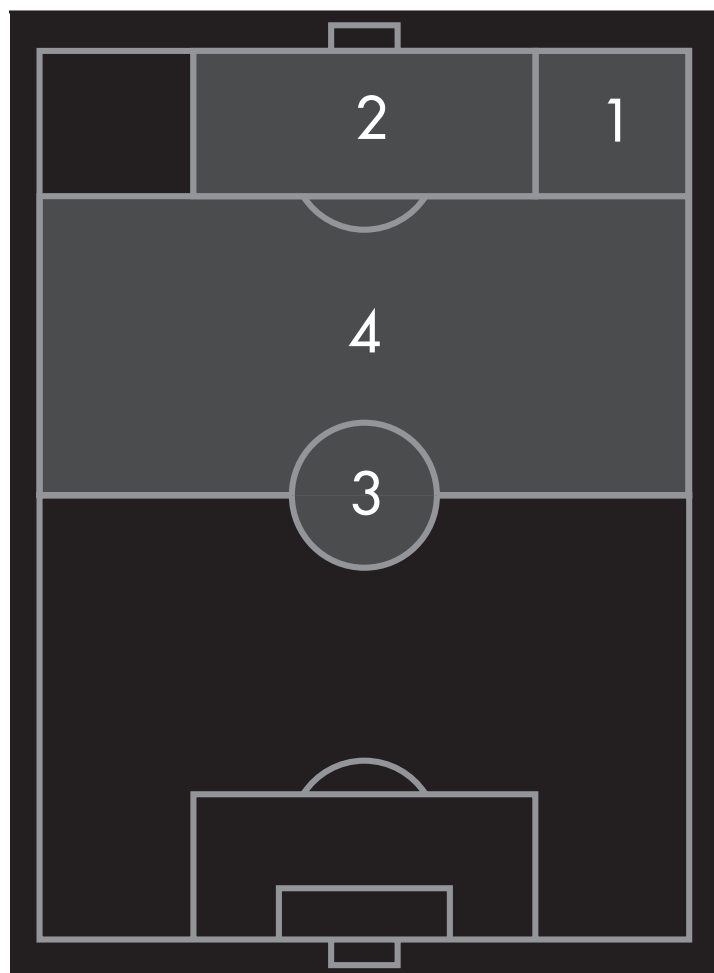


Fig. 2-1. Coaching Grids.

Special Game Considerations

Competing successfully is often as much a matter of organization as it is brilliant play or game strategy and tactics. Preparing athletes to compete at their best is your responsibility. Poor organization on your part can leave you and your athletes physically and mentally unprepared to compete. One late school bus can ruin days, weeks, or months of hard training. *Here are some things you should do by game day:*

- Make sure to reaffirm departure times and directions for away games. Always allow for heavy traffic or mechanical difficulties. You and your team should be ready to board the bus and leave promptly at the scheduled time. Meet with your team before boarding the bus so you can give last minute reminders, check equipment, and make sure everyone is present. Know whom to contact in case the bus doesn't arrive at your school on time! In the age of technology, it is a good idea to carry a cellular telephone on the road. It makes communicating much easier in case of problems. Ideally, you should arrive at your opponents' home field roughly 60 minutes before kickoff.
- Have an away-game checklist detailing all items (balls, ice, first aid kits, etc.) and tasks to accomplish on the day of the game.
- On long trips, include a mid-trip lunch stop. Plan to arrive early so players can stretch and relax.
- Have a policy regarding radios and portable stereos.
- Once you arrive, don't let the bus leave until you are certain that you are in the right spot.
- Carry the National Federation Rule Book, and the CIF Sections Soccer Preview Bulletin and Soccer Play-Off Bulletin.
- Try to assemble a brief scouting report for every game.
- Prepare a schedule for arrival at games and pre-game warm-ups.
- Keep statistics and share them with your players.
- Have special game awards and honors.

Planning for a home game

- The field should be lined with corner flags and goal nets in place at least one hour prior to kickoff. Speak with your athletic director to find out if the school's

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Managing a Soccer Program

maintenance department can assist you.

- Be sure that there are benches on the field for both the visiting and home teams.
- Pick up the paychecks for the officials from the appropriate person on campus prior to the game.
- Establish a time and place for your players to meet prior to warm-up.
- Make arrangements for players to have ankles taped or other injuries tended prior to the team meeting.
- Check the game balls to be sure that they are filled to proper pressure.
- Have an emergency plan in case of injury. Be sure that you or an administrator at the game has a key to the gate that would allow EMS vehicles on the field. Be sure that you have access to a phone.
- Ice and a first aid kit should be placed next to the home team's bench. As a courtesy to the visiting team, you may want to place a container of ice next to their bench as well.
- Make arrangements to have an athletic trainer or physician at the game.
- Greet the opposing team and coach upon their arrival. Inform them where the locker rooms and field are located.
- Make arrangements for the equipment, the goal nets, and corner flags to be put away after the game.

Preparing a Team Handbook

One time-honored device for organizing your Soccer program is a team handbook. A handbook conveys the personality of your program and most of the important administrative information your athletes need to know. It also is a resource for your athletes full of information, motivating images and quotes, team history, and pages on which they should record practice notes and thoughts about their play. The team handbook becomes the written document of your program.

Basic Contents of a Team Handbook

- A brief summary of your school's Soccer history

- A short statement of your coaching philosophy, along with your goals for the season and your pre-season assessment of the team
- School-mandated participation requirements, such as parental permission, physical examinations, insurance coverage and academic eligibility
- Team rules
- A detailed list that details the equipment to be issued by the school and what your athletes must provide themselves
- Criteria for team awards and a varsity letter
- Team competition schedule
- Office and home phone numbers of you and your assistants

Additional Handbook Information

- Varsity, Junior Varsity and Frosh-Soph school records
- Action photos from the previous season
- A pre-season overview of league competitors
- Directions to away games for parents and fans

Recruiting a Soccer Team

Before the beginning of each school year, make a final effort to publicize your program and recruit new members to the team. A crop of new athletes injects new blood into your program. Occasionally, a new player will contribute immediately to your team's competitive success.

Advertise your Soccer program by placing attractive posters around the campus. Place notices in school and local newspapers. Have an invitation to new athletes prominently displayed on a Soccer team bulletin board, along with photographs and information about your team. Your athletes will enjoy and appreciate the recognition, and other students will be drawn to your program. The promise of public recognition is a strong motivator.

Design a sales pitch intriguing enough to entice new players to the Soccer team. You might discuss the rewards and satisfaction of competing and training, being a part of

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a team, getting in shape for another sport, the fun of socializing, acquiring long-lasting friendships, or the outstanding health benefits of training. Don't underestimate the powerful attraction of being part of a team. Many high schoolers are quietly seeking a group to which they can belong. Soccer can provide them with that opportunity.

Your returning team members are the best recruiters for your team. They can give prospective athletes a good sense of what it is like to play Soccer at your school and be a member of the team. Also, ask your athletes to recommend talented athletes from club Soccer, AYSO, elementary school or junior high school.

If you are not a physical education teacher, ask the P.E. staff at your school to help you recruit Soccer players.

Building a Soccer Tradition at Your School

Successful sports programs have strong traditions. Usually, we think of a "winning tradition," but winning is only part of the formula. In fact, winning is most often the result of strong tradition. Many Soccer programs have traditions that span years and decades regardless of win-loss records.

COACH

As coach, you are the keeper and transmitter of tradition. Your commitment creates the environment from which tradition emerges.

The simplest tradition focuses on winning. Of course, not every school has the ability to build powerhouse winning teams. Nonetheless, every program can have traditions that sustain an atmosphere of success. Encourage your athletes to create a team and/or school identity. Nurture the unique personality of each year's group of athletes.

There are innumerable ways in which coaches build team identity. Feedback, recognition, reputation, reward, distinction, commitment, consistency, fairness, equality and common sacrifice are among the most important concepts that govern any cohesive group. The responsibility and art of coaching is to interpret these qualities into distinct actions and policies for your team.

TEAM

The foundation of tradition is the athletes' sense of belonging to a team. Dedication to common effort and goals is the basis of team cohesion and identification.

Building team feeling starts with the coach. Communicating your commitment to the success of every athlete is the first, and most important, step in forming team identity.

Treating your athletes equally is another requirement of team building. While that doesn't mean that every athlete must be treated identically, it does mean that every athlete must be valued equally regardless of talent. Head coaches who devote almost all their energy and attention to the top athletes communicate a subtle message of value to the rest of the squad. That message will be reflected in a weak sense of team unity.

You can help create strong team identity by encouraging, and sometimes demanding that every athlete have stock in the performance of teammates. Don't let your varsity players ignore the efforts of the Junior Varsity and Freshmen teams. Your athletes should spend some time together during daily training and competition. Teammates need to know each other to have any sense of common identity.

Team identity and tradition also are reinforced by weekly team meetings. Acknowledging effort and achievement before the team promotes common support and cohesion. Approval from peers bonds team members together. Nicknames, T-shirts, pins, buttons, patches, candy, etc., are all small tokens that recognize effort and accomplishment on behalf of the team.

Encouraging off-campus interaction is another way to promote team spirit among your athletes. Provide social opportunities that bring teammates together. Often, athletes of vastly different abilities may find a bond of different origin that only serves to cement their relationship as teammates.

COMPETITION

Competition defines tradition. The strengths and weaknesses of your program are revealed most clearly in competition. It's relatively easy to build tradition if you win a lot of games. To that extent, your recruiting and technical coaching ability contribute to your program's tradition. But programs with strong tradition and identity thrive in competition regardless of whether they win or lose.

HISTORY

Part of tradition is history. Although the historical memory of most high schoolers is about 15 minutes, you need to impart a sense of continuity within your program. If

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you are fortunate to have a rich history of Soccer success, use it to motivate your athletes. Past examples and exploits provide real stories to inspire your athletes.

If you have a program without much history, challenge your athletes with the task of establishing a legacy for future teams. Team history can be made of more than competitive victories. Stories of individuals, remarkable efforts, adventures, and mishaps are fodder for future team tales and tradition.

RECOGNITION

Tradition is also about the recognition of past achievements, current efforts and future goals. A program with strong tradition recognizes great past performances, recognizes today's athletes, and looks forward to future achievements.

Prominently display your team records, league and CIF performances, photos, and any articles about current or former athletes on a team bulletin board. When your team plays well, make sure that everyone in your school community knows about it. Use a team bulletin board, team newsletters, school bulletins, the student newspaper, local newspapers and school public address announcements to acknowledge your team's efforts. Make sure that any trophies or awards are publically displayed.

Get to know the newspaper reporters that cover the local high school sports beat. If you live in a small television market, you may even be able to garner some television exposure for your team.

Keeping a Winning Tradition

Competitive success over a long period of time depends on many factors, many of which a coach cannot control. You shouldn't spend too much time worrying about changing school population, demographics and mere luck. Just keep doing all the things that will build your program.

While you should have a basic philosophy of training, you must adapt it to each new group of players. Make each team unique and set goals appropriate to the talents of the athletes. Not every group can match the accomplishments of past teams. Realistic goals and a winning tradition will lead you to success.

Beware of becoming an elitist coach, one who only tends to the attention-grabbing

Varsity. The best coaches stay on top by continually building from the bottom. Make room on your team for novice players who want to try the sport. On a highly competitive team, these athletes are often overlooked or cut.

Here are some things to help your program maintain its winning ways:

- With a successful and visible program, convince the counselors to promote your sport when they are scheduling people into classes.
- Rely on the leadership of the upperclassmen as models of discipline and commitment for the rest of the team.
- Have a single consistent set of rules for the entire squad.
- Telephone prospective players and recruit from P.E. classes.
- Put pictures of the varsity groups on a publically visible team bulletin board.
- Plan special trips to compete outside your area. Overnight trips are fun for your athletes and motivate them to work hard in order to make the traveling squad.
- Develop contacts with local newspapers in order to get publicity for your team.

Fund-Raising and Financial Management

FUND-RAISING

Today's high school coach must be able to raise funds and manage expenses in order to build and maintain a successful Soccer program. In an era of declining state, district, and school support for high school athletic programs, it often falls upon your shoulders to raise money for new uniforms, equipment and entry fees.

Financial management begins with planning, and the first step in that process is identifying your program's needs and determining what meeting those needs will cost.

Make a list of needs and wishes for your program regardless of cost. Divide those needs into three categories: immediate, short-range and long-range. Then, estimate the cost of each need.

Next, discuss the needs of your Soccer program with your athletic director. Ideally, your program will receive some funding from the school's athletic budget. If school funding is not available, the responsibility for funding falls upon your shoulders.

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In any case, ask your A.D. for your school's fund-raising guidelines. Each school, district and state has rules and regulations that govern school trust accounts and booster clubs. You can avoid potential problems by being aware of these regulations, most of which concern proper authorization and paperwork.

Don't use your own money to pay for the needs of your Soccer program expecting to be reimbursed later with income from fund-raising. Many fund-raisers are unsuccessful and often raise far less money than anticipated.

Ideas for Fund-Raising Activities

Activities:

- Pizza night (Restaurant gives you a % of what they sell.)
- Block party
- School dance
- Donation jars at local businesses
- Summer Soccer night series at your school
- Bingo night
- Pancake breakfast
- Matching-fund drives with local service clubs
- "Las Vegas Night" with your boosters club
- Auctions
- Food concessions at school football games
- Attend a game show taping (They will pay a fee for groups.)

Product Sales:

- Candy
- Supermarket scrip
- Pizza certificates
- Craft items

- T-shirts
- Advertising on your team T-shirts
- Baked goods
- School calendars listing sport schedules
- Mistletoe/Christmas decorations
- Forest Service firewood
- Coupon books
- Entertainment passes
- School spirit items

Fund-Raising Activities Prohibited in California Schools

- Raffles (misdemeanor)
- Games of chance
- Amusement rides including animal rides (safety issue)
- Games using darts or arrows (safety issue)
- Objects thrown at a live target (safety issue)
- Use of water tanks into which a person is “dunked” (safety issue)
- Destruction of old cars or objects with sledgehammers, etc. (safety issue)
- Sale of used jewelry (health issue)
- Rummage sales (health issue)
- Activities using trampolines or mini-trampolines (safety issue)

Note: The California Association of School Business Officials (CASBO) produces a manual with information regarding the use of money in California school systems. It lists disallowed fund-raising activities.

Here are some considerations when selecting fund-raising activities to help you to pay for your immediate and short-term needs:

- Is it legal? Does it fit within your school’s fund-raising guidelines?

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- What kind of fund-raiser will be most attractive to your student body and community?
- Will your team support the fund-raising activity enthusiastically?
- Will it be supported by your parents and/or boosters club?
- Is it likely to provide you with the required funds? Is there likely to be any money remaining to pay for your long-range needs?
- If your team is going to sell a product, what is the profit margin? Are there hidden costs, such as promotion, shipping, art, printing, etc.? Do you have to pay for the product in advance? Can you pay only for what you sell? Can you be billed after the fund-raiser is over?
- How much time will the fund-raiser require? Can it be done in one day, or will it require several weeks? Is the effort worth the amount you might raise? Could you raise the same or a larger amount of money with another endeavor requiring less time?
- Are other groups or athletic teams conducting the same type of fund-raiser? Are you offering something interesting to the campus and community?
- When is the best time for the fund-raiser — pre-season, in-season, or during summer? When will your athletes and their parents be most helpful?
- Can you solicit incentives for your top sellers or workers from local businesses, such as free pizzas or movie passes?

The final thing you must consider is keeping records of costs and income. Whenever possible, have someone other than you, such as the school finance secretary or booster club president, handle income and record keeping. Determining how money will be received and deposited, and how bills will be paid, is one of the most important parts of planning your fund-raising.

When starting your fund-raiser, you must be the best salesperson on your team! You must convince your team to support the activity and work hard to ensure its success. Let the team help select and plan the activity. Discuss and organize the fund-raiser with your team in a classroom or at your home, rather than outside at practice. Create many small jobs and assign them to your athletes as a team project. Motivate by offering incentives, posting records, and making daily announcements acknowledging your top workers and most successful sellers.

Remember that the success of a fund-raiser always depends on your planning, your enthusiasm and your motivation.

Managing Your Budget

Stretching your Soccer budget and minimizing the amount of fund-raising you have to do are the hallmarks of good financial management.

A Soccer program has three primary expenses:

1. Equipment
2. Transportation
3. Entry fees

How you budget and pay for these items depends on your individual school. Most schools place transportation and entry fees in budget categories separate from equipment.

Equipment

Equipment for Soccer usually consists of uniforms — jerseys, shorts, warm-up suits, shoes — as well as balls, cones, goals and nets.

For openers, consider whether the uniforms you intend to purchase will be available for future reordering. Select a uniform manufacturer that has a consistent design and color selection if you want to be able to replace and add to your basic uniform inventory over several years.

Buying from the same manufacturer will let you start a replace-and-repair program for team uniforms, rather than having to purchase new designs or slightly different colors every year. It will also save art design and screen charges, which can range from \$30 to \$150 with every order. Be sure to find out the Pantone Matching System numbers for your school colors. Some athletic directors will not pay for school uniforms that are not produced in your exact school colors.

Numbered uniforms allow you to keep an accurate record of the equipment you issue to each athlete. Numbers also make it easy for your players to identify their uniforms, especially warm-ups, from a pile of team uniforms.

Inspect uniforms at the end of each season to see what needs replacing or repairing. Keep a uniform inventory list so you always know the number of uniforms in each

size and style. Many schools have a uniform repair budget that can save the expense of replacing a damaged piece of apparel. When issuing uniforms at the start of the season, let your athletes know that they will have to pay for each piece of lost or damaged school-issued equipment.

Soccer balls are your other perishable equipment items. Your program should have a ball for every player. Multiply the cost for one good ball by the number of players on your team and you have a hefty sum. Take good care of your Soccer balls. Keep them clean and dry to help them last longer. Make sure to mark the balls with some identifying mark or initials. Having to replace a dozen lost or stolen balls in mid-season can ruin your budget. You may want to assign responsibility for keeping track of the ball bag(s) to one or more players.

Transportation

If the responsibility of ordering transportation to away games falls on your shoulders, there are several ways to stretch the budget. First, scheduling games close to home minimizes transportation costs while making it easier for fans, friends and parents to come. If you have access to school or district vans, use them if you can't fill an entire bus. Overnight trips are usually only scheduled for Varsity squads, which can use school or district vans rather than more expensive commercial buses.

Entry Fees

Every Soccer coach must plan for tournament entry fees. Most tournament organizers levy severe fee penalties for entry fees received past the deadline. If your school business office cannot cut a check in time to meet an entry deadline, send your own check, and get reimbursed, rather than pay a late fee. (Not paying your entry fee on time is also the best way not to be invited back to a tournament the next year.)

Organizing Parents for Support

Every high school sports program needs support that goes beyond the team budget. Fortunately, coaches are blessed with a built-in support group: the parents of athletes. Involve parents in your Soccer program. Both you and the sport need them. You can organize a parents' group either formally, as a team booster club, or informally, as a loosely constructed group of interested parents. However, before you try to organize parents, you need to figure how they can help you best.

Here are several activities that need parent volunteers:

- Fund-raising
- Helping at home games
- Organizing the team awards banquet
- Providing transportation to games, training and activities
- Hosting team meals before important games
- Recruiting volunteer help for games
- Hosting tournaments

Once you have defined your program's needs, organizing parent help will be much simpler. Look for outgoing people who are eager to help. Parental loyalty will usually bring committed volunteers your way if you open the door first.

If you decide to organize a formal booster club, check first with your athletic director to see if there are any restrictions and guidelines. Then, form an organizing committee to develop formal by-laws of the group. After by-laws have been established, elect officers. Remember, however, that as the head coach, you need to be aware of all activities and remain in control of your team at all times.

A word about fund-raising. If your team's parents do most of the planning, preparation and work, you should expect that they will want some control of how the money is spent.

Regardless of whether you organize parent support formally or informally, there are a number of things that you can do to encourage parents' involvement with your team. One easy way to garner support is through a newsletter for parents. This gives you direct communication with parents without having the message filtered or forgotten by your athletes. A newsletter can relay information about games, trips, college visits and recruiting, team gatherings, and other school activities. It can also help organize a booster club.

Early in the season, ask for a volunteer to host a team parents' meeting. If no one's home is available, hold the meeting at school. This is a good time to introduce yourself to parents, explain your program and coaching philosophy, define seasonal goals for the team, set out team rules and expectations, and discuss fund-raising. More importantly, though, a parents' meeting is an opportunity for you to learn more about the

athletes you coach while gathering support for the team. Encourage parents to ask questions.

One good way to build parent support is to have interested parents form a caravan to games. Parents can arrange to leave school together at a predetermined time, perhaps meeting for breakfast or coffee beforehand. Of course, fans arriving en masse wearing school colors, hats, shirts, or jackets always inspires the team.

Team meals are opportunities to involve parents. Instead of heading off to the nearest pizza parlor, see if you can enlist a group of several families to host a pasta dinner. A combined team-parent gathering lets parents and athletes get to know one another.

Last, enlist parents to help you put on the team awards night. Even if your school has a spring sports banquet, you might put together a team-only gathering, at which you can acknowledge the contributions of each athlete individually.

Some coaches avoid soliciting help because they fear parents will disrupt their programs. Many coaches have horror stories to that effect. If organized properly with a clear set of expectations and rules, however, parents can be a tremendous asset to your program. It is your responsibility as coach to provide the guidance and leadership that best elicits the strong support most parents are willing to offer.

Planning and Organizing a Team Trip

Taking an athletic team on an overnight trip can be one of the most enjoyable events of the season or it can become a frustrating nightmare. As with most things, planning and organization determine the quality of the experience.

Team trips are most enjoyable when you prepare in advance for both expected and unexpected situations. It is always a good idea to have a written set of procedures for any contingency. Checklists of “What to Do” or “What to Bring” help prevent you from overlooking details that might be forgotten in a busy moment or emergency.

When considering an overnight trip, ask yourself the following questions. What is the purpose of the trip? Does it help fulfill my coaching objectives for the season? How does the trip help meet the team and individual goals? Does this trip serve the overall purpose of the program?

Some athletes become quite distressed if their daily routines are disrupted before a competition. If a team's first overnight trip precedes a major championship game, the combination of competition stress and the disruptions of traveling might be very unsettling to some athletes.

For that reason, you may want to organize a team trip in early or mid-season to ac-custom your athletes to overnight travel before competition. That way, your athletes can establish schedules and habits that help them get the rest and relaxation they need to compete well. Hotel beds, roommates, all night cable television, and the absence of parents may be completely new experiences for some of your athletes. The novelty of team travel often distracts athletes from the primary purpose of competition. A team trip helps athletes see travel as part of being a competitive athlete.

Overnight trips and camps also allow you to see your athletes outside of training and competition. How does each individual socialize with the group? How do different groups and ages interact? A team trip can tell you much about the personality of your team, knowledge that provides you with an excellent opportunity to unite your team.

BEFORE TRAVELING

Questions to Ask

Ask yourself the following questions to develop a planning checklist for an over-night trip or team camp:

- What are the dates of travel?
- What times are we leaving and returning?
- From where are we leaving and returning?
- What kind of transportation will we use? If taking a bus, have we accounted for a bus driver and his or her accommodations?
- Do drivers/parents/spectators have maps to the game?
- Have we distributed to parents printed information containing important telephone numbers?
- Do we have a medical release form for each athlete?
- Do we know the location of emergency medical facilities in the area to which we

are traveling?

- Do we have team rosters, checks, reservations, room assignments, time schedules, meal money and credit cards?
- Have we packed an extra uniform?
- Have we developed a complete itinerary for the trip? (Always allow 30 minutes extra travel time.)
- Is there adequate supervision for the number of athletes?
- Are there restaurants that can accommodate a group the size of our team? Have we made reservations?
- Where will we hold team meetings?
- What special responsibilities will be delegated to assistants?

A Guide to College Recruiting

Many high school athletes continue their athletic careers into college. Some will be recruited aggressively by many schools while others will have to initiate all contact with coaches at the schools of their choice. In either case, athletes, parents and coaches should be aware of the rules that govern contact between high school athletes and college sports programs and coaches. This includes National Collegiate Athletic Association (NCAA) member schools, National Association of Intercollegiate Athletics (NAIA) member schools, and junior colleges.

BASIC NCAA RECRUITING RULES

The NCAA has an elaborate set of rules that govern the recruiting of prospective student-athletes. These rules are sometimes complicated and confusing. Although college coaches are tested on the rules each year, there is no formal instruction for college-bound student-athletes and their parents. Prospective athletes, parents and coaches, however, should familiarize themselves with these rules. Infringing on the NCAA rules, whether intentional or accidental, can jeopardize the future eligibility of prospective student-athletes. The following is an outline of the basic rules governing contact between NCAA member schools and prospective student-athletes.

Important Note: The word "player" applies to both athletes and their parents or legal guardians. As far as NCAA rules are concerned, athletes and parents are one and the same.

Freshman Year (9th grade)

A **prospective student-athlete (PSA)** becomes subject to NCAA rules beginning the first day of classes in the freshman year of high school.

What a PSA may do:

- Write at any time to colleges and coaches in which they may be interested.
- Telephone colleges and coaches in which they are interested. However, colleges and coaches may not return telephone calls. This is considered an improper recruiting contact.
- Visit a college campus and speak with coaches at their own initiation and expense. Prospective student-athletes may not receive any compensation for the visit or expenses.
- Attend a college match anytime and talk with the coach of the home team. Prospective student-athletes may not speak with the coach of the visiting team.

What College Coaches may do:

- Watch a PSA compete a maximum of four times during the freshman academic year. A two-day tournament with several games, or one game on one day, both count as one evaluation.

What College Coaches may not do:

- Write to freshmen (even if the athletes have written them first).
- Telephone freshmen or return a call.
- Meet with freshmen unless the PSAs attend a home game or visit the campus at their own initiation.

Sophomore Year

What Prospective Student-Athletes may do:

- Write at any time to colleges and coaches in which they may be interested.
- Telephone colleges and coaches in which they are interested. However, colleges and coaches may not return these telephone calls. This is considered an improper recruiting contact.

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- Visit a college campus and speak with coaches at their own initiation and expense. The prospective student-athletes may not receive any compensation for the visit or expenses.
- Attend a college match anytime and talk with the coach of the home team. PSAs may not speak with the coach of the visiting team.

What College Coaches may do:

- Evaluate a PSA a maximum of four times during the sophomore academic year.

What College Coaches may not do:

- Write to sophomore athletes. A coach is allowed to send one letter introducing the school and sending a questionnaire. The letter may not include information about the athletic program and be considered recruiting. This letter may be sent out to freshmen also.
- Call sophomore athletes.
- Meet with sophomore athletes at anytime, unless the PSAs attend a home game or visit the campus at their own initiation.

Junior Year

What Prospective Student-Athletes may do:

- Write at any time to colleges and coaches in which they may be interested. Prospective student-athletes may now receive return correspondence from college coaches.
- Telephone colleges and coaches in which they are interested. However, colleges and coaches may not return telephone calls. This is considered an improper recruiting contact.
- Visit a college campus and speak with coaches at their own initiation and expense. PSAs may not receive any compensation for the visit or expenses.
- Attend a college match at anytime and talk with the coach of the home team. PSAs may not speak with the coach of the visiting team.

What College Coaches may do:

- Evaluate a prospective student-athlete no more than four times during the junior year.
- Correspond unlimited times after September 1st of the prospective student-athlete's

junior year.

What College Coaches may not do:

- Telephone a junior athlete.
- Meet with juniors at anytime, unless the PSAs attend a home game or visit the campus at their own initiation.

Senior Year

What Prospective Student-Athletes may do:

- Write colleges and coaches and receive return correspondence.
- Telephone colleges and coaches in which they are interested.
- Visit a college campus at any time. PSAs are allowed an unlimited number of unofficial visits. Athletes are allowed a total of five official visits, but only one official visit per school. On an official visit the prospective student-athlete may be compensated for travel and meal expenses; the visit may last no longer than 48 hours. All official visits must be approved in advance by the NCAA Clearinghouse.
- Attend college games and talk to the coach of the home team.
- Offer a verbal commitment to a college. A student-athlete can offer a verbal commitment sooner. The coach can make the offer in a letter in their junior year and they can commit although the letter of intent cannot be signed until the official date in their senior year. Many students commit early if they get the school of their dreams.
- Sign a National Letter of Intent (NLOI) and accept an athletic scholarship from a college.

What College Coaches may do:

- Evaluate a prospective student-athlete four times during the senior academic year.
- Correspond with Senior PSAs as often as desired.
- After July 1st, following the student-athlete's junior year, a coach may call the PSA no more than one time per week.
- Have a maximum of three in-person, off-campus meetings with a senior PSA and/or parents.

- Invite a PSA for an official campus visit.
- Offer an athletic scholarship and have a PSA sign an NLOI.

HELPING ATHLETES THROUGH THE RECRUITING PROCESS

- Have a meeting with your players and their parents to explain the recruiting process and NCAA rules. Invite a college coach to speak if you do not feel knowledgeable of the rules.
- Be an advocate for your athletes by providing college coaches with recommendations, game videos and fair assessments of your athletes. Alert college coaches to your promising underclassmen.
- Prepare a view book with player profiles of your team for college coaches. Include their academic information and year of graduation along with the relevant athletic information.
- Make sure your college-bound athletes register with the NCAA Clearinghouse.

The NCAA Clearinghouse

The NCAA Clearinghouse assesses the academic standing of all college-bound high school student-athletes who wish to compete in NCAA athletics. The Clearinghouse ascertains and authenticates the academic status of prospective student-athletes. Most high school athletic departments should have the registration information. If yours does not, contact the NCAA to obtain the necessary information. Registration of prospective student-athletes is very important. No athlete is allowed to compete in college unless he or she has been approved by the NCAA Clearinghouse.

NCAA Academic Requirements

The NCAA has criteria that prospective student-athletes must meet to be eligible for competition. For a prospective student-athlete entering college on or after August 1996, the requirements for Division I, for example, are:

- 2.5 GPA, and 820 SAT or 68 ACT score...

...plus 13 CORE courses (English, Science, Math, Social Science, Language)

There is a Qualifier Index scale for required scores, and different requirements for Divisions II and III.

FINANCIAL AID

Financing a college education is a considerable undertaking, and often determines a student-athlete's choice of colleges. Few athletes receive full athletic scholarships, and many colleges offer no athletic scholarships. Financial aid usually is available to student-athletes who demonstrate financial need. Make sure that your athletes obtain the appropriate financial aid applications, and meet the application deadlines. Encourage them to investigate other scholarships based on academic, ethnic, or cultural criteria.

COLLEGE SOCCER FOR THE NONSCHOLARSHIP ATHLETE

The percentage of college athletes, at all levels, that receive athletic scholarships is quite small. And most of those athletes who do receive scholarships receive only partial funding. At NCAA Division III level, which accounts for the largest number of colleges, there are no athletic scholarships awarded at all. The fact is that most college Soccer players do not receive athletic scholarships.

High school coaches should make their athletes aware of this fact. Many young players are ignorant of the realities of collegiate athletics, mistakenly believing that a full college athletic scholarship awaits them. Only the very best players nationally and state-wide can hope to receive such scholarships. For those who are recruited and offered athletic scholarships, the great majority will receive only partial funding. Last, those who receive athletic scholarships often mistakenly believe that their scholarships are guaranteed for their entire college career. You have the responsibility of helping your athletes think realistically about the facts of college athletics.

Because so few high school players are offered college scholarships, many high school players believe they are not good enough to play college Soccer if they have not been recruited. This is just not true. Although the very best college Soccer programs do heavily recruit almost all of their players, there are plentiful opportunities for athletes to play college Soccer even if they have not been heavily recruited. Most good high school players can find a college program suited to their abilities. If you have a player who really wants to continue playing Soccer, you should help identify college programs suited to him or her.

An expressed interest in playing college Soccer also can help your student-athletes gain admission to academically competitive schools. Extra-curricular participation is usually an important consideration at these schools. Moreover, college coaches often have some influence in the admission process. Although athletes may not be in the run-

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ning for an athletic scholarship, interest in playing college Soccer may help them gain admission to the school of their choice.

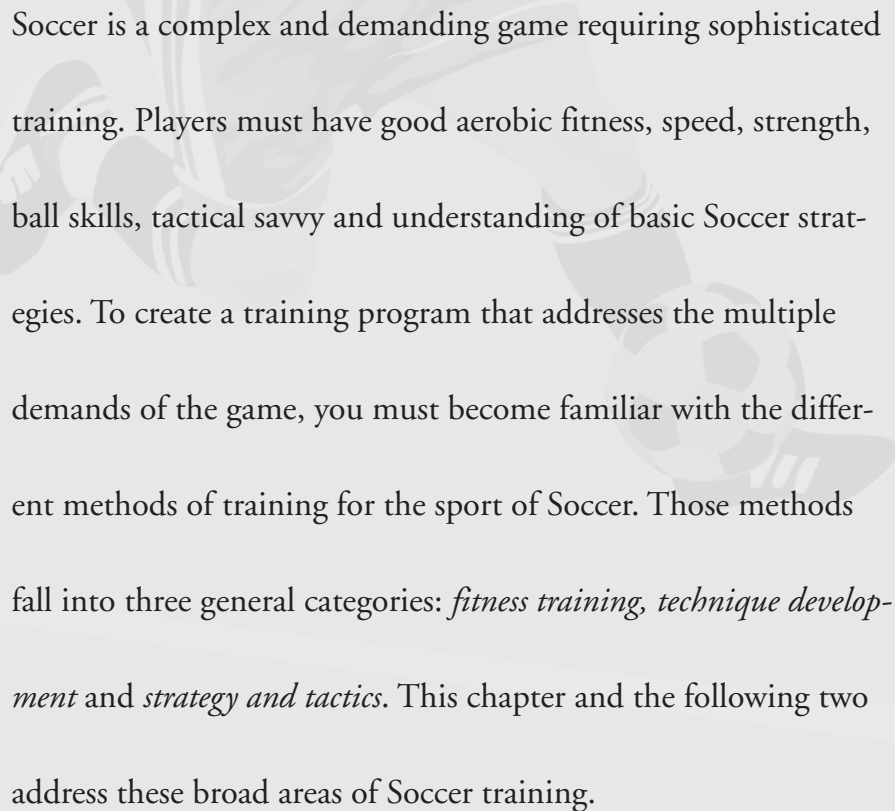
Note: Every year the NCAA rules change, so your athletes should obtain an NCAA college-bound student-athlete handbook from the high school or the NCAA. Information is located on the Web site, www.ncaa.org.

EVALUATING YOUR PROGRAM

As a guide for evaluating your program throughout the season, consider the following 15 questions:

1. What are our goals?
2. Are we improving and making progress?
3. Are we organized? Are our training sessions well-planned?
4. Is our training what we need?
5. Is our program fun?
6. Do we look and act like a team?
7. Are we always appropriate role models as coaches?
8. Are we in touch with our athletes? Do we listen?
9. Do we treat all our athletes respectfully, calling them by their first names?
10. Are we fair, firm and consistent in dealing with our athletes?
11. Are we teaching our athletes to be self-disciplined and responsible?
12. Are we protecting the safety and well-being of our athletes?
 - Good equipment & facilities
 - Safe training practices
 - Proper supervision
 - Prepared for emergencies
13. Are we promoting Soccer at our school?
14. Do our home games make Soccer a spectator sport?
 - Efficiently managed
 - Well-officiated
 - Quick-paced
 - Informative P.A. announcing
15. Do we work as hard as other coaches in our school?

Methods of Soccer Training



Soccer is a complex and demanding game requiring sophisticated training. Players must have good aerobic fitness, speed, strength, ball skills, tactical savvy and understanding of basic Soccer strategies. To create a training program that addresses the multiple demands of the game, you must become familiar with the different methods of training for the sport of Soccer. Those methods fall into three general categories: *fitness training*, *technique development* and *strategy and tactics*. This chapter and the following two address these broad areas of Soccer training.

Understanding Methods of Soccer Training

The amount of time you are able to spend coaching your athletes is valuable. Your training program must include physical conditioning, skill development and tactical instruction for players at all positions. In order to get the most out of the time you spend on the field with your athletes, you need to combine the different methods of training. In Soccer parlance this approach is known as **economical training**.

Note: Many Soccer coaches refer to the term *methods of training as methods of coaching*. While the latter term is certainly acceptable, we find *methods of training* to be a more accurate description. **Methods of training** describes those activities athletes and coaches use to train for Soccer. Strictly speaking, methods of coaching refers to ways in which coaches communicate and teach the game of Soccer to their charges.

FITNESS TRAINING

Fitness training can be divided into four categories: **general conditioning** (aerobic conditioning), **specific conditioning** (anaerobic conditioning), **speed training**, and **strength and power training**. Any good Soccer training program will incorporate these four types of training.

General Endurance

General endurance is established through aerobic exercise. Aerobic conditioning is low intensity activity that raises the heart rate while still allowing the body to meet its oxygen needs.

Specific Conditioning

Specific fitness is developed through training that imitates the combined aerobic and anaerobic physical demands of competition. During anaerobic exercise, the body is unable to take in enough oxygen to meet its energy requirements. Specific conditioning trains the athlete to perform in competition.

Speed

Speed can be defined several different ways. Several types of speed are demonstrated in the game of Soccer. There are three different types of Soccer speed: **sprint speed**, **quickness** and **technical speed**.

- *Sprint speed* (pure speed) is the ability to run fast over relatively short distances. To a large extent sprint speed is genetically determined, but sprint training often results in great improvements in speed.
- *Quickness* is the ability to take a fast first step, change directions, or be explosive on or off the ball.
- *Technical speed* is the combination of physical speed with Soccer skills. It is the speed with which a player is able to control the ball, make decisions and create offensive opportunities. Players with good technical speed are able to collect balls delivered at varying heights, angles and velocity.

Strength and Power

Strength and power often make the difference when it comes to winning tackles, balls in the air, or scoring goals. More importantly, balanced muscular strength optimizes performance and prevents injury. Strength and power can be developed through weight training, calisthenics, plyometric exercises and running.

TECHNIQUE TRAINING

The development of Soccer technique requires a tremendous amount of practice. Players must learn to dribble at speed, pass with accuracy, shoot with power and precision, head the ball effectively. When developing technique, it is important that players encounter the variety of conditions, and the limitations of time and space seen in Soccer. Drills that emphasize technique can be broken down into three categories: **fundamental drills**, **match-related drills** and **match-condition drills**.

Fundamental Drills

Fundamental drills are the most basic skills. They are done with limited movement and no pressure from a defender.

Fundamental drills are most often used to teach new technique. Teach by the whole-part-whole method. When teaching new technique skills, first demonstrate the entire skill. This lets athletes create an accurate visual picture of what they are trying to accomplish. Then, break the skill into component parts. Use drills to teach the components of a skill. When your athletes have mastered the drills sufficiently, have them integrate the various drill components into a complete performance of the technique.

Match-Related Drills

Introduce match-related drills after players have developed a *feel* for the skill. Confine players to a limited area and place them under passive defensive opposition. Teach players to use runs to create good angles from which to pass and receive passes.

Match Condition

Match condition drills allow players to practice a skill or technique under full pressure from an opponent. Simulate game conditions by assigning players a goal to attack and a goal to defend.

STRATEGY AND TACTICS

Strategy is a plan for accomplishing goals. Most often, strategy refers to a plan devised for a game. In other words, how do you plan to win? Tactics, on the other hand, are the tools by which a strategy is executed. Game strategy and tactics are affected by your team's strengths and weaknesses, your opponent's strengths and weaknesses, weather conditions, and field conditions.

There are three levels at which tactics are applied: **Individual, Group and Team.**

Individual Tactics: 1-versus-1

The teaching of individual tactics is intended to develop a player's ability to attack or defend when faced with a one versus one situation.

Group Tactics: 2-versus-1 through 5-versus-5

The fundamental principles of play, the basis of strategy, apply when working on group tactics. Group tactics scenarios teach players what to do when they are playing in groups around the ball. Players must learn to switch quickly from attack to defense, and from defense to attack, while simultaneously providing good offensive and defensive team support.

Team Tactics: 6-versus-4 through 11-versus-11

When teaching team tactics, focus on both individual performances and combination play. Players must be taught the responsibilities of the positions they play, and how their roles change when the ball is in each third of the field. Coach players to be always aware of the movement of the ball, and the whereabouts of teammates and opponents.

Restricting player range during team tactical drills will help isolate specific areas that need improvement.

Warm-Up, Mobility and Flexibility

Many Soccer coaches and players pay insufficient attention to processes of warming up, cooling down and training to increase flexibility. Players and coaches alike often do not approach these elements of training and competition seriously or systematically. Ignoring these elements predisposes your athletes to injury and reduces their effectiveness in training and competition.

The warm-up process includes *general* and *specific* portions. The general warm-up usually consists of jogging or easy running (with or without a ball), and stretching. Begin with easy activity, and gradually increase intensity. The second part of the warm-up should be Soccer-specific. Mix individual dribbling, turning, feints, changes of direction, juggling, with intermittent light stretching and mobility exercises. Progress to partner activities such as passing, takeovers, heading, shielding the ball, light one-on-one drills. Players should be getting a feel for the ball. Once your players have broken a sweat and are loose, begin group drills such as 5-versus-2 keep-away. The last part of the warm-up should involve the entire team in game-simulated drills such as 5-versus-5 with goalkeepers.

Pay attention to weather when warming up for practice or a match. In cool weather, or at night games, players should wear warm-ups or sweat shirts and pants. The extra clothing helps players warm up faster and keeps them warm while not playing. Keep in mind that body temperature returns to normal about 15 minutes after activity is stopped. Make sure to include at least five minutes of warm-up during half-time of games. A short warm-up will let your players start the second half ready to play and also will lessen the risk of injury.

The warm-up should prepare athletes to play *psychologically* as well as physically. A warm-up routine that is familiar, structured, and fun helps athletes focus on the task at hand. A thorough warm-up complete with team drills lets athletes know they are ready to play and gives them confidence and concentration. The team component of the warm-up should not be ignored. Soccer is a team game. A warm-up that incorporates team drills helps create the technical and psychological synergy that leads to good team play.

The team warm-up should end with a few minutes for athletes to rest, reset focus and work individually with the ball. After a couple minutes, your athletes should be ready to train and play hard.

ORGANIZING A TEAM WARM-UP

A complete workout includes warm-up running, stretching, drills, the primary training unit, and a cool-down. The secondary training units optimize performance and reduce the risk of injury.

High school athletes often are not disciplined about the secondary elements of training. You cannot expect them to warm up properly, stretch thoroughly, and especially, cool down without supervision. You or your assistants or team captains must be responsible for the overseeing of all training. With limited training time, you cannot afford to spend more than 30 minutes preparing for the main workout. Only direct supervision will assure that warm-up and stretching will be a well-executed, quick-paced prelude to the focus of the training session.

THE RUNNING WARM-UP

The purpose of the warm-up is to prepare athletes physically and mentally for training and competition. There are two main components to the warm-up: easy running (or some gentle aerobic activity) and mobility exercises (loosening and stretching).

A **running warm-up** should begin with 10–15 minutes of easy jogging with increasing tempo that includes surges of slightly faster running. Athletes quickly become bored doing the same workout every day, so vary the warm-up for each training session.

The objective of the run is to awaken the aerobic energy system, raise core body temperatures, and loosen the muscles in preparation for stretching. The warm-up run should be sufficiently vigorous that your athletes perspire freely when finished. A warm-up or sweat suit will accelerate the process of warming up and prevent your athletes from cooling too much while stretching.

Running Warm-Up Examples

- 1½ miles, surging during the last 75 yards of each 440 yards.
- 8–12 minutes of easy jogging with 30-second surges every 3 minutes.

MOBILITY EXERCISES

Mobility exercises prepare athletes for hard training by limbering the muscles throughout the entire range of motion. Usually, mobility training uses both static and mobile stretching. **Mobile stretching** develops range of motion by combining stretching with movement: leg swings, knee circles and arm circles (butterfly arms). Keep in mind, however, that *mobile stretching should not use forceful movement to stretch the muscles*. Rather, movement should be slow and gentle, not ballistic.

FLEXIBILITY TRAINING

Flexibility training is designed to maximize range of motion, increase muscle elasticity, achieve functional muscle balance, speed recovery, and, most important, prevent injury. Flexibility training is not simply a prelude to a hard workout; it is an important component of an athlete's physiological development. Many great athletes have lost seasons and careers by neglecting flexibility.

As a rule, train for mobility before the main workout and for flexibility after. However, hard speed training often demands that you complete a thorough stretching regimen first. Athletes should begin stretching only after they are warmed up. Include exercises that enhance balance, flexibility and mobility. **Balance** is the equal function of opposing muscle groups (e.g., the quadriceps and hamstring muscles of the thigh). **Flexibility** refers to muscle elasticity. **Mobility** refers to range of motion.

Convince your players that stretching will make them better athletes. Explain that stretching helps the muscle lengthen fully and contract more efficiently, thus making it stronger. A loose muscle relaxes more between contractions than a tight one, allowing faster and more powerful contractions. Long muscles enable the body's levers to move through a wide range of motion.

To develop muscle balance, include exercises that stretch major opposing muscle groups of the limbs and torso. Flexibility is developed best through slow, controlled stretching, often called **static stretching**.

A muscle should be stretched to slight tension, held for a predetermined count, and then released slowly. Sustain each stretch for 10–30 seconds, letting the muscle relax under the applied tension. Each repeat of the stretch should allow a slightly greater range of movement than the previous one. Athletes should breathe deeply throughout each exercise, trying to exhale slowly while stretching the muscle.

CHAPTER 3

Methods of Soccer Training

Large muscle groups should be stretched before smaller muscles. Always stretch opposing muscle groups to ensure balanced flexibility. Take special care when stretching injured muscles. Newly formed scar tissue does not stretch like muscle and may be torn if overstretched. Stretch slowly and gently. Chronic strains result from poor elasticity in the injured tissue.

Ideally, *flexibility training should follow the cool-down from the main workout*. Elevated muscle temperature permits the muscles to be stretched beyond the normal range of motion without straining the tissue. Permanent gains in flexibility will result from consistent post-run stretching.

COOL-DOWN

Every training session should be ended with a 5–10 minute cool-down of slow jogging and walking. The purpose of the cool-down is gradually to return heart rate, respiration rate and temperature to normal. A thorough cool-down also disperses most of the lactic acid that accumulates in the muscles during a hard workout. Not cooling down properly after intense exercise leads to stiff and painfully sore muscles the next day. Rapid body temperature cooling and pooled muscle lactate will only make the following day's workout more difficult and less productive.

The following warm-up script and stretches have been taken from the *LA84 Foundation Track & Field Manual*.

WARM-UP SCRIPT

1 RUNNING WARM-UP

2 FLEXIBILITY STRETCHES

Sitting on the ground, legs extended with shoes off:

- Toe Pointers (Fig. 3-1)
- Butterfly Arms-to-Toes (Fig. 3-2)
- Reach Over-Toes/Insteps/Outsides of Feet (Fig. 3-3)
- Pull Forehead-to-Knees (Fig. 3-4)
- Yoga Sit (Fig. 3-5)
- V-Stretch (Fig. 3-6)
- Hurdler's Stretch/Lay Back (Fig. 3-7)
- Sit-on-Heels/Hip Bridge/Lay Back (Fig. 3-8)
- Figure "4" (Fig. 3-9)
- Sciatic Stretch (Fig. 3-10)
- Abdominal Stretch (Fig. 3-11)
- Hip Flexor (Fig. 3-12)

3 MOBILITY STRETCHES

Standing, holding onto a stationary object, and swinging the outside leg up toward hip level:

- Forward-&-Back Swings (Fig. 3-13)
- Side Swings (Fig. 3-14)
- "C" Swings (Fig. 3-15)

4 RHYTHM DRILLS

- Easy Skipping
- High Knees (Fig. 3-16)
- High Skipping (Fig. 3-17)
- Jogging Butt Kicks
- Skipping Kicks (Fig. 3-18)

FLEXIBILITY STRETCHES

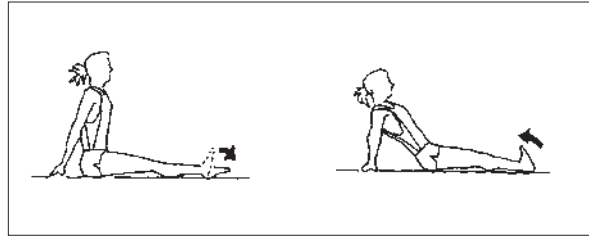


Fig. 3-1. Toe Pointers.

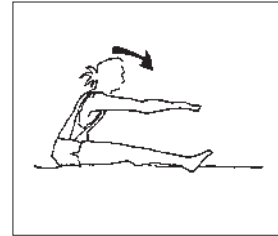


Fig. 3-2. Butterfly Arms-to-Toes.

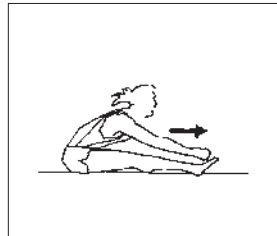


Fig. 3-3. Reach Over.

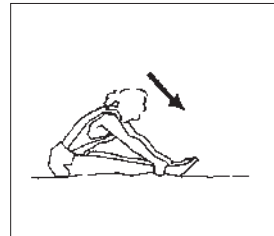


Fig. 3-4. Pull Forehead-to-Knees.

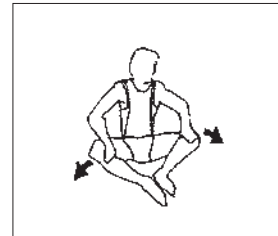


Fig. 3-5. Yoga Sit.

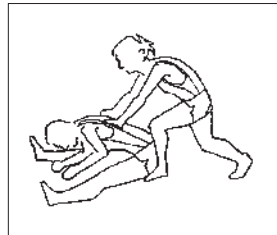


Fig. 3-6. V-Stretch.

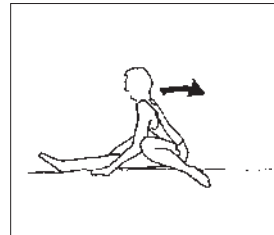


Fig. 3-7. Hurdler's Stretch/Lay Back.

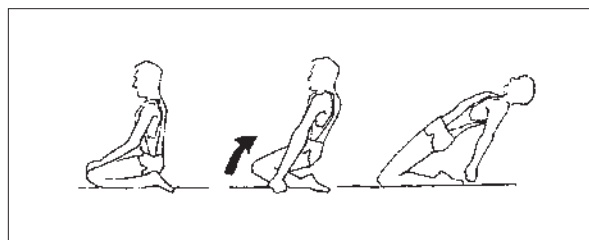


Fig. 3-8. Sit-on-Heels/Hip Bridge/Lay Back.

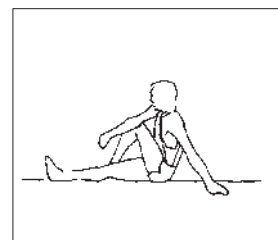


Fig. 3-9. Figure "4".

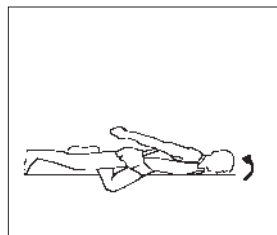


Fig. 3-10. Sciatic Stretch.

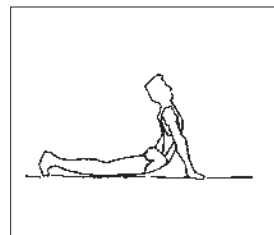


Fig. 3-11. Abdominal Stretch.

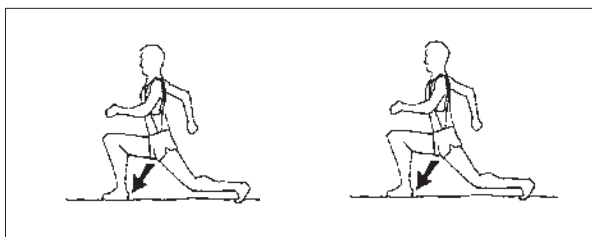


Fig. 3-12. Hip Flexor.

MOBILITY STRETCHES

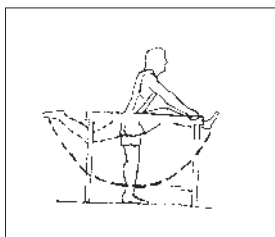


Fig. 3-13. Forward-and-Back Swings.

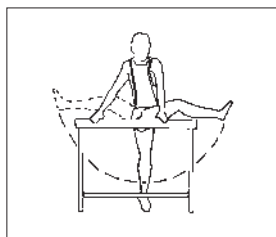


Fig. 3-14. Side Swings.

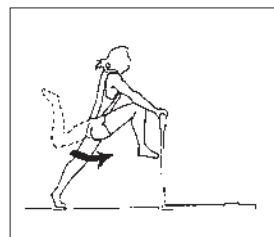


Fig. 3-15. "C" Swings.

SIMPLE RHYTHM DRILLS

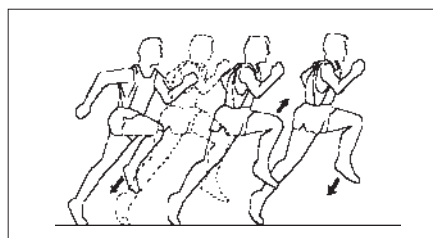


Fig. 3-16. High Knees.

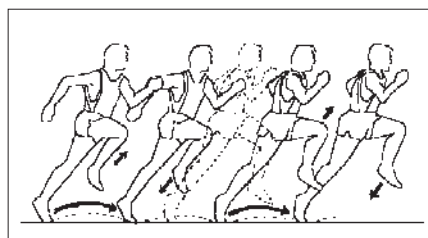


Fig. 3-17. High Skipping.

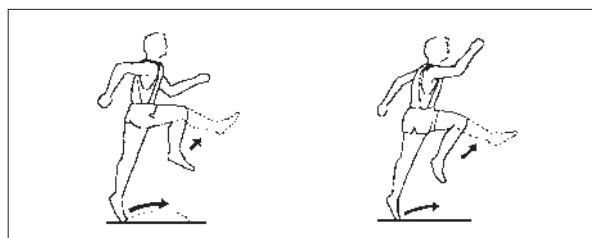


Fig. 3-18. Skipping Kicks.

Running Fitness

Good physical fitness is an absolute requirement for good play. Soccer is a physically demanding game, lasting from 60–90 minutes, requiring bursts of strenuous activity such as sprinting, dribbling, shooting, tackling and jumping for high balls. Players often run anywhere from 3–6 miles over the course of a game. Adding to the fitness demands of Soccer, are its substantial technical demands. Without good physical fitness, players are rarely able to play the game with good technique. When fatigue sets in, technique deteriorates.

For Soccer players, basic fitness training includes *aerobic conditioning, speed training and strength/power training*.

Soccer players need to be able to run, but their running requirements differ from those of distance runners or sprinters. ***They need the ability to:***

- Run fast for short distances
- Sprint repeatedly
- Run throughout the course of a game

You need to train your athletes to handle all three types of running.

The type of running done in Soccer is known as **varied** or **broken-pace running**. Although Soccer players cover a lot of distance during a game, the type of running they do is very different from that done by distance runners. Actually, much of Soccer running is short-distance sprinting. Soccer players, however, sprint many times throughout a game. This creates a unique and seemingly contradictory demand for both endurance and speed.

The challenge for Soccer coaches is that endurance and speed are developed by different means of training. This is because different systems of human energy production are used to fuel different types of exercise. To understand why Soccer requires a mix of running training, you need to understand a bit about the nature of energy production in response to exercise.

ENERGY PRODUCTION AND AEROBIC RUNNING

To live, the human body needs energy. The more active a person is, the more energy required. Energy fuels the body and allows you to perform the wide range of your daily activities.

All human energy is produced through the breakdown of a chemical compound called **ATP**, *adenosine triphosphate*. Like gasoline, it's broken apart, or burned, to produce energy. At any given time, you have about 3 ounces of ATP spread throughout your body. That amount lets you engage in vigorous activity for only a very short time. For example, existing ATP is exhausted after roughly 6 seconds of an all-out sprint.

Physical activity that lasts longer than 6 seconds requires the body to produce additional energy by converting the raw fuel of carbohydrates, proteins and fats from food into ATP. This energy production is characterized by whether or not oxygen is used to make ATP. Energy can be produced through **aerobic** processes, that is, with oxygen. Or, it can be produced through **anaerobic** processes, meaning without oxygen.

Whether energy is produced aerobically or anaerobically depends mostly on the nature of the physical activity involved. As already mentioned, intense energy needed for a very short period of time is supplied from the breakdown of stored ATP. It is an immediate energy source.

Once ATP stores are exhausted, though, energy must come from another source. If the activity is intense and of short duration, energy is produced anaerobically. But while anaerobic processes supply energy quickly, they can only do so for a short while. You see, anaerobic processes create **lactate**, or **lactic acid**, that causes muscles to burn, cramp, or seize if the activity is carried on long enough. It's the body's way of signaling that it cannot create energy at the rate at which it's being used. The muscle burn at the end of a 400-meter sprint is an example. When lactate starts to accumulate, your muscles soon stop working.

To sustain activity over a long period of time, your body must be able produce ATP through aerobic means. A balance between the demands of the activity and aerobic energy production is called a steady state. In this steady state, lactic acid does not accumulate in the muscles, and you are able to continue activity for a long time. Since Soccer requires running for extended periods of time, you must be able to produce energy aerobically.

Aerobic fitness is important for three reasons. First, aerobic fitness creates generally good cardio-vascular capacity and strengthens muscles and tendons. Second, good aerobic fitness allows your players to run at a steady state without incurring oxygen debt and exhausting important ATP stores. Third, good aerobic fitness allows your athletes to recover quickly from short ATP-depleting sprints, making them able to be more effective throughout the game.

AEROBIC FITNESS FOR SOCCER PLAYERS

Although Soccer players do need to be aerobically fit, they do not need to be distance runners. You should, however, establish standards of fitness for your athletes. Many Soccer coaches have used the Cooper 12-minute run as a standard measure of aerobic fitness. In this test, players cover as much distance as possible in 12 minutes. Although a hard 12-minute run also relies on anaerobic energy, the test is generally considered a good measure of fitness for Soccer. Athletes who can run a mile and a half in 12 minutes probably have sufficient fitness for competitive Soccer, though you need to determine how fit your team should be.

Aerobic fitness should be developed during pre-season training. Of course, you should encourage your athletes to begin fitness training before the practice season begins. Many high school Soccer players in California run Cross-Country in the fall. If you have the benefit of a pre-season sixth period Soccer P.E. class, devote at least one-half hour, three days per week to running fitness training. These running sessions should be relatively easy steady-state runs. For variety, you can intersperse steady-state running with ball-skills drills or fitness circuits. The goal of the training, however, is to raise the aerobic fitness of the athletes. You don't need to run athletes into the ground to make them fit. Harder mixed-pace anaerobic running should start once the athletes have developed basic aerobic fitness.

Steady-Pace Training (Continuous Slow Distance)

Steady-pace training is relatively slow, continuous long-distance running, where the aerobic system remains in a steady state with energy demands. Long steady runs should be done at a pace that can be maintained comfortably for 40–60 minutes.

Exercise scientists estimate that the ideal intensity of a steady-pace run is 5–10 percent below the anaerobic threshold. A very good approximation of this intensity is the talk test. Athletes should run at a pace that lets them hold a conversation. Unstable breath-

ing (ventilation) indicates that the pace is too fast, approaching the anaerobic threshold.

Steady-pace training develops aerobic and cardiovascular capacity (VO₂ max), improves muscle capillarity, and enhances the efficiency of energy production. Coaches often refer to long steady runs as the base or foundation training that precedes more intense threshold training.

ANAEROBIC FITNESS

The unique nature of the game of Soccer, however, demands both aerobic *and* anaerobic energy production. Within a relatively steady state of activity, an athlete must be able to sprint hard, recover quickly, and then sprint again. As a consequence, you must train your athletes to meet both aerobic and anaerobic requirements.

The varied-pace running that characterizes Soccer demands anaerobic fitness. Short bursts of speed within a general steady state create energy demands that cannot be met solely by ATP supply and aerobic metabolism. Soccer players need to develop a special kind of stamina that lets them engage in repeat bouts of anaerobic sprinting followed by periods of slow running or walking. This stamina is a unique form of what is called **speed endurance**. Normally *speed endurance* refers to the ability to perform anaerobically over time. In Soccer, however, the length of anaerobic activity is relatively short. What becomes important is the ability of the athlete to recover quickly from multiple speed bursts. This type of endurance can be referred to as **anaerobic recovery capacity**.

Anaerobic recovery capacity is developed by increasing aerobic fitness, by raising the lactate threshold, and by developing lactate tolerance. Since we have already discussed the basic principles of aerobic fitness training, we'll address what is called **threshold** and **high lactate training**.

Lactate Threshold Training

The primary form of running designed to raise the lactate threshold is called **tempo-pace** running. Basically, tempo runs should be 8–15 minutes long at a pace that puts the athlete slightly out of breath. In other words, the athlete should have a difficult time having a conversation while running.

Threshold training also can be divided into segments, or tempo reps. Tempo reps are shorter runs lasting from 90 seconds to 4 minutes with short rest intervals of 1 minute

or less. The entire workout should last 15–20 minutes.

Repetition Training

Repetition training helps athletes use oxygen more efficiently. In repetition training, athletes train above the threshold level for longer periods than can be sustained during a game.

Repetitions should be from 30 seconds to 3 minutes long or distances of 220–880 yards. Pace will vary according to distance. The rest period should provide slightly less than complete recovery. A 1:2 run-to-recovery ratio is a common rest parameter. The workout should total 20–25 minutes of running, sans recovery.

Intervals (High Lactate Training)

Interval training is a frequently misunderstood concept. Most coaches use the terms interval and repetition interchangeably, but, in fact, they are very different types of training. A repetition is a single unit of running. An interval is the recovery period that follows individual bouts of running. In repetition training, the objective is to run specific distances with a relatively complete recovery. With interval training, the goal is to run specific distances with incomplete recovery so that the athlete trains with elevated blood lactate.

Interval training enhances a player's ability to tolerate and produce lactic acid. While interval training does help raise the lactate threshold somewhat, it is primarily anaerobic. Soccer games require a lot of anaerobic energy, so interval training develops specific fitness.

The duration of each run in an interval session is typically 10–90 seconds or 110–440 yards. The run-to-recovery ratio should be between 1:1 and 2:1, run to recovery. Interval training should be done at a pace fast enough to create oxygen deficit. The intention of these workouts is to produce lactic acid by forcing your athletes to run the last portion of each repetition anaerobically.

Interval training is intense, demanding and painful. Do not schedule more than one such session during any single week of training. Some athletes might require 2–3 days of easy workouts to recover fully from a hard interval session.

Shuttle Runs

Shuttle runs have been a staple of Soccer training for a long time. Essentially, shuttle runs are repetition or interval runs that involve numerous changes of direction. Here is an example of a typical shuttle run workout:

Player runs 5 yards and back, 10 yards and back, 15 yards and back, 20 yards and back, 25 yards and back. The player is allowed to rest a specified time. Repeat three or four times.

Speed Play (Fartlek Training)

Speed play is the literal translation of the Swedish word *fartlek*. It is varied pace running that combines fast and slow running within a continuous run. Bouts of fast running are followed by easy recovery running. Ideally, speed play is done over varied terrain, including hills. The length of speed bursts and recovery is unstructured so that the athlete gains a genuine feeling of playing with speed.

Since the aim of fartlek training is to develop speed in the context of continuous running, the overall pace should be relatively easy. Only the speed bursts should be done with any intensity. However, speed play is not easy training. Speed bouts should be 40–220 yards long (or 5–40 seconds). The number of speed bouts depends on their length and the total length of the run. Remember, athletes should always recover between sprints; it's not intended to be high-lactate training.

High school athletes tend to need some structure to reap the benefits of fartlek and surging workouts. You might use predetermined markers or time intervals to indicate speed units.

Speed play is especially effective training for Soccer because it closely resembles the type of segmented and varied-pace running that occurs in a game. Speed play also is easy to do on or around the field. The following is an example of a varied-pace workout:

Players jog one side of the field, sprint one side, jog two sides, sprint two sides, jog three sides, sprint three sides, jog the field, then sprint the field, then jog three sides, sprint three sides, jog two sides, sprint two sides, jog one side, sprint one side and then jog slowly. The total distance covered is approximately two miles.

SPEED TRAINING FOR SOCCER

All other things being equal, the team with the best speed has the advantage. In Soccer, there are three types of speed: **sprint speed**, **quickness** and **technical speed**. A good training program will include training that develops all three types of speed.

Sprint Speed

Sprint speed is the ability to run fast. Your players need sprint speed when making runs, dribbling on a breakaway, or getting back on defense. Usually, your forward are your fastest players. Their speed often creates scoring opportunities. Nonetheless, all your players should do speed training. A fast defense can play more aggressively without worrying that it will be beaten easily.

Sprint training should be done with and without the ball. Most of your sprint training will consist of sprint repeats covering distances of 30–75 yards. Pure speed is best developed without the ball. Specific Soccer speed should be developed using the ball.

Sprint drills:

- **Sprint Repeats 30–75 yards.** Focus on speed not endurance. Athletes should perform 5–10 repetitions, depending on length. Allow full recovery.
- **From Midfield, Feed the Ball Into the Attacking Third.** Two players, starting starting on either side of the kickoff circle, race to the ball. The player who reaches the ball first should continue the attack, while the other player becomes a defender. (Fig. 3-19)
- **Two–Two–Two Drill.** Players go hard two on two for two minutes in the attacking third field. Players try to score as many goals as possible. (Fig. 3-20)
- **Star Runs.** Set up a star pattern with cones. Put equal-numbered groups at each cone. On your command, players race from middle cone to each outside cone. Once a player finishes running the star, the next player in the relay starts. This drill is somewhat more specific to Soccer because it incorporates turning and lateral movement. (Fig. 3-21)

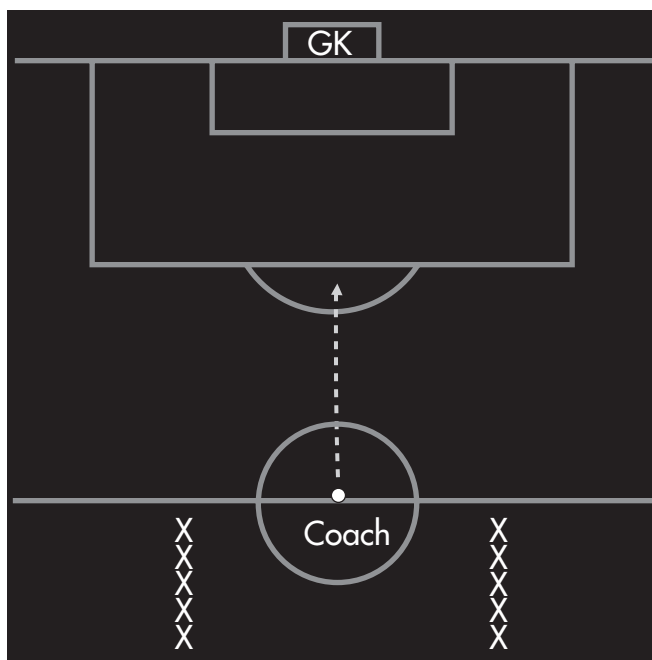


Fig. 3-19. From Midfield, Feed the Ball into the Attacking Third

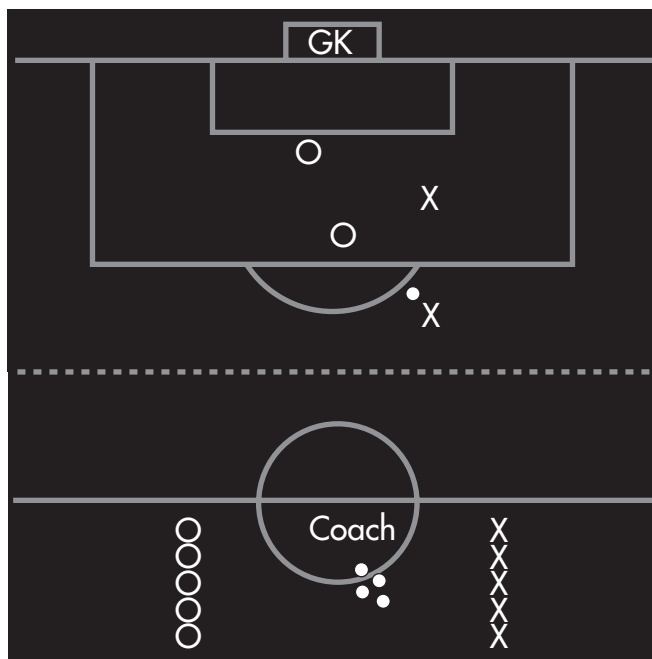


Fig. 3-20. Two-Two-Two Drill.

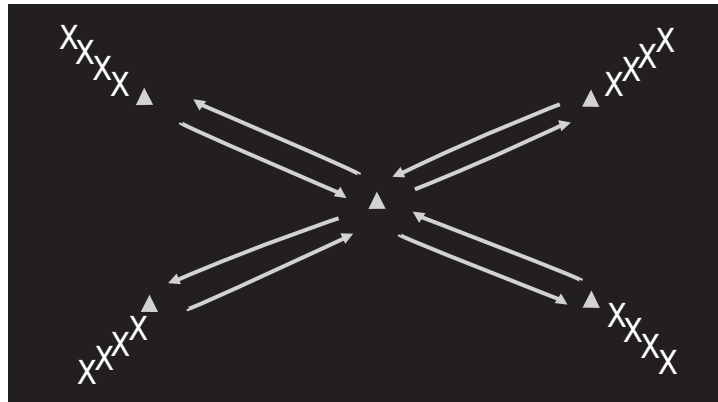


Fig. 3-21. Star Runs.

Quickness

Quickness is the ability to react and move explosively. We usually define quickness as fast first steps or the ability to change direction with speed. It is a great quality to possess as a Soccer player. Many great players are not exceptional sprinters, but are extremely quick. Quickness often gives shorter or less skilled players an advantage over faster or more skilled players.

Training players for quickness takes several forms. Plyometric training helps develop the explosive skills that make for quickness. Reaction drills help train the neuromuscular system to react with greater speed. Speed skill drills help train the ability to move quickly with the ball. For example, you might conduct a whistle drill where players dribble a ball and make turns on the sound of your whistle. For defenders, games of keepaway help develop the ability to move to the ball quickly.

Technical Speed

Technical speed is the ability to execute fundamental Soccer skills quickly. It is the most specific form of Soccer speed. The world's best players are exceptional because they have great technical speed. They are able to control the ball and execute with speed. Technical speed, however, usually takes years to develop. Being able to collect a 50-yard pass with one touch and accelerate immediately is quite difficult.

For high school players, technical speed is developed by gradually adding defensive pressure and/or limiting time and space during technique drills. Remember, however, that good technique should not be sacrificed. Collecting and passing the ball quickly is worth little if the pass is poor and off target. As players refine technique, you can add speed to drills.

A NOTE ON RUNNING TRAINING

Although running is an integral element of Soccer, you still need to remember that your players are Soccer players, not runners. Simply, don't place fitness ahead of the ultimate goal of playing good team Soccer. A fit, skilled team is much more potent than a fit unskilled one.

Do not overtrain young players. Careful monitoring of individuals and each athlete's ability to respond to the training is important. If players are continually fatigued or injured outside of games, it might be a good idea to cut back on the intensity of training until basic fitness improves.

Remember also that at no time is there a greater disparity of physical maturity than among high school athletes, sometimes literally the difference between adult and child. Your youngest players can rarely handle the workload of the older and mature players.

After every coaching session or game, it is important to end with a cool-down. Five to ten minutes of easy jogging and stretching is recommended to flush metabolic waste products from the muscles.

Strength Training

WHY STRENGTH TRAIN?

Many coaches do not think that strength training is important for Soccer players. After all, they reason, the muscle gains and power produced by weight training are not specific to the game of Soccer.

But strength and weight training are important for Soccer players. The basic elements of speed, mobility and endurance are all functions of muscular strength. According to the President's Council on Physical Fitness and Sports, improvements in absolute muscular endurance, motor ability elements and athletic abilities are associated with the individual's muscular strength. Thus, strength development may be considered not only a physical fitness need but fundamental to the total physical being.

Strength training for Soccer typically has two purposes: one, improving the overall strength of the athlete and two, developing muscle balance and preventing injury. Although most coaches understand the value of such conditioning, many still do not

fully understand the process by which strength and weight training contribute specifically to Soccer performance.

WEIGHT TRAINING AND MUSCLE DEVELOPMENT

At first glance, weight training seems to contradict the requirements of aerobic sports. Weight training enlarges muscle cells, increasing size and strength. However, the number of mitochondria does not increase. Mitochondria are the tiny structures inside cells that are responsible for aerobic metabolism, the process by which oxygen and food fuels are converted into energy (ATP). Since Soccer relies on aerobic energy and the maximization of mitochondrial density, weight training would seem to conflict with the principles of aerobic conditioning.

However, the process by which weight training contributes to Soccer performance is more complex than its effect on mitochondria. Let's look at how weight training actually affects the muscles and other soft tissues.

- First, weight training strengthens the connective tissues of the muscles, fascia, tendons and ligaments. Weight training spurs the production of collagen, a substance that makes up much of connective tissue. Increased muscle collagen lessens the risk of muscle, tendon and ligament strains.
- Second, athletic performance is often limited by muscle weakness and imbalance. Repetitive movements tend to create unbalanced strength. When opposing muscles have large strength inequities, the weaker muscle is prone to injury. Such muscle imbalance is a common cause of injuries. For example, players commonly have much greater quadriceps than hamstring strength. Not surprisingly, hamstring strains and knee problems are among the most frequent running injuries. Weight training is an excellent method of addressing muscle imbalances. Neglected muscles can be targeted directly. The isolation of specific muscles strengthens weak areas and decreases the risk of injury.
- Third, Soccer running requires a significant degree of anaerobic energy.
 - Anaerobic energy is directly related to muscle strength. When a muscle is forced to work harder than its anaerobic threshold, lactic acid accumulates and performance suffers. Obviously, a muscle with greater strength can respond better to race challenges without creating excess lactic acid.
 - Strength training improves the athlete's ability to produce anaerobic energy and run fast. Soccer players need to be able to run fast.

MYTHS ABOUT WEIGHT TRAINING FOR ENDURANCE ATHLETES

The powerlifting and bodybuilding-oriented weight training that characterizes most high school strength programs leaves many Soccer coaches thinking that strength equals size. After all, football players are strong and big. And since extra weight doesn't help Soccer performance, weight training doesn't help Soccer players. Right? Wrong.

With Soccer players, the aim of weightlifting is not to develop large muscle mass and great amounts of absolute strength. Rather, the goal is to maximize strength in proportion to body weight. Gymnasts and wrestlers, for example, have great strength-to-body weight ratios. That's the type of strength that Soccer players need. Most good players are, in fact, quite strong and muscular. They aren't bulky, but they're strong.

Muscular strength is a function of two things: size and neuromuscular efficiency (the ability of the muscle to contract forcefully). Weight training will increase muscular size and reduce mitochondrial density, but only to a point. Properly designed weight programs will limit muscle mass growth (hypertrophy) while improving neuromuscular function. Olympic weightlifters and wrestlers, who must compete in body weight categories, have known this for years.

Moreover, other factors will limit the amount of muscle mass your athletes will add. First, the intense aerobic activity of Soccer will counter the hypertrophic effect of weightlifting. Aerobic exercise shrinks the size of muscle fibers (myofibrils) and makes some fast twitch fibers (type 2A) take on the characteristics of slow twitch fibers (type 1). As a result, it is very difficult to build tremendous muscle mass while you are consistently engaged in intense aerobic activity. That is why bodybuilders who are trying to reduce weight do very low intensity aerobic work.

Another common misperception is that Soccer players should continue to train for endurance in the weight room, thinking that such training will develop muscular endurance and strength together. This approach is simply wrong. The only goal of weight training should be greater strength. It is nearly impossible to develop endurance by weight training.

Think about it. The specific muscular endurance of Soccer running is developed through the thousands of footstrikes in any single workout. Developing real strength and endurance in the weight room would require hundreds, if not thousands, of repetitions. Weight training increases muscular strength and size, specifically fast twitch

muscle fiber. Muscular endurance comes as the result of the specific aerobic training of that newly developed muscle fiber.

PRINCIPLES OF WEIGHT TRAINING FOR SOCCER

The universal principles of training must guide every strength training program. Progressive overload, or resistance, is the cornerstone of weight training. Gradual increases in the amount of weight stress the body to adapt with greater strength. In general, progressive increases are the measure of increased strength.

Weight training must be specific to the demands of Soccer. It should aim to increase the overall strength of your athletes.

Remember that all gains are made during periods of recovery. Without adequate rest between workouts, the strength of your athletes will actually decrease. The process of super-compensation that produces increased strength occurs while the athlete is recovering, not while the athlete is training.

The neuromuscular system makes its greatest changes in response to an unaccustomed stimulus, or shock. This requires weight training to incorporate a relatively large amount of variability. Research has shown that planned variations in the volume, intensity and mode of weight training produce the greatest gains in strength.

At no time is there a greater range in the individual physical characteristics of similarly aged individuals than during high school. Strength training programs must adapt to the different capacities of individual athletes. Sometimes the difference between your most and least mature athletes will literally be the difference between adult and child. Failing to construct your strength training program accordingly will lead to the frustration and/or injury of your athletes. Don't make the mistake of assuming that your best players are the strongest. Often, they are quite weak even though talented.

In addition to the general principles of training that govern strength training, there are principles specific to weight training:

- Muscular endurance should be developed primarily by running. The weight room is for strength and power training.
- Proper posture, biomechanics and technique enhance weightlifting performance and prevent injury.

- When you introduce weight training, emphasizing repetition of movement creates rhythm and develops better technique. After technique and rhythm are mastered, varying exercises keeps your athletes psychologically fresh.
- An athlete has a finite amount of energy each day. The key to successful strength training for Soccer players is carefully integrating it into the overall training program. Strength and power training are important because they increase the basic physical capacity of the athlete. However, Soccer players are not weightlifters. Keep in mind that weight training, plyometrics, running, studying and work cannot all be done intensely every day. Be very aware of your athletes' total workload.

SAFETY IN THE WEIGHT ROOM

If not properly supervised, the weight room can become a very dangerous place for young athletes.

As a coach, you have four primary responsibilities:

- The first is to ascertain the adequate physical condition of the athlete.
- The second is to maintain good condition of the equipment.
- The third is to ensure proper lifting and exercise technique.
- The fourth is to guarantee that the lifter gets proper assistance or spotting.

Physical Condition of the Athlete

Before starting a student on weight training, evaluate his or her physical condition. High school athletes present extreme differences in physical development, including gender differences. Evaluative physical tests and a careful developmental strength program are prerequisites for a safe and effective weight training program. Such testing should be done prior to beginning weight training and also periodically throughout the training cycle. Weight training does incur some degree of physical risk.

Condition of the Equipment

Ill-maintained or damaged equipment poses a risk of severe injury. Check cables on machines for wear. Check the condition of seat backs; stability of benches; condition of power racks, bars and dumbbells; positions of free weight storage racks, and the fit of the bar collars. Provide a clean, stable lifting surface. Serious injury can occur when an athlete slips on the lifting surface. Make sure that proper shoes and lifting belts are used.

Proper Weightlifting Technique

Proper technique produces the best results and reduces the risk of injury.

Even with weight machines, athletes risk injury if improper technique is used. When handling free weights, consistent use of sound technique is essential.

Proper Assistance or Spotting

Spotting is usually used in free weight exercises such as squatting and bench pressing. You must have spotters for any exercises where athletes can be injured because they lose control of the weight.

In the **bench press**, at least one person stands behind the athlete to make sure that the lift is completed safely. If the attempted repetition fails, the spotter should help guide the bar back to the bench using a solid grip. Don't allow the lifter to struggle if the bar starts tilting to one side; this can cause rotator cuff or pectoral tears. Don't allow the lifter to arch his or her back; this can cause lower back injury. For heavy lifts, a double spot with spotters at each end of the bar is recommended.

Squats are done safest inside a squat rack having pins that catch the bar in case of a failed lift. When lifting outside the rack, athletes must use spotters.

On light to medium lifts, one spotter is needed. The spotter stands directly behind the lifter, ready to help in case of trouble. The spotter stands with knees slightly flexed and arms near the lifter's torso. If the lifter fails to rise, the spotter steps in, hooks both arms around the torso, and pulls up. This stabilizes and help complete the lift. One style of spotting involves reaching around the torso and placing the palms on the lifter's pectorals. Another is to place both hands around the side of the torso, just above the weight belt, and lift upward. We recommend the first method, which is the strongest and most efficient, although the second should be used with female athletes.

Use bar collars to keep weights from sliding off the bar. They should fit snugly when tightened. Also, always check the weight on the bar. It is easy to forget to put on or remove a weight from one side of the bar. The resulting imbalance can cause serious injury.

Medical Clearance: All your athletes should be examined and cleared by a doctor before undertaking a weight training program. Those with high blood pressure, congeni-

tal back problems (bulged discs, loose ligaments), knee problems, etc., should not be allowed to lift until those problems have been remedied.

The Strength and Weight Training Program

The following section offers a strength training program designed for high school Soccer athletes. The program has two levels, each intended for athletes of various maturity levels and strength training backgrounds.

Your program also will be defined by the limitations of your school facilities and team characteristics:

- Equipment
- Weight training knowledge
- Available time
- Number of athletes
- Staff available for supervision
- Maturity of athletes

CONSTRUCTING A STRENGTH TRAINING PROGRAM

There are a number of ways to integrate strength training into your Soccer program. Most coaches develop a short weight training circuit that their athletes follow throughout the season. Such a regimen is easy to teach, takes little time, and can be done by a large number of athletes. To be optimally effective, however, weightlifting must be periodized over the course of the season.

There are two points to keep in mind when creating weight training for Soccer players. First, while strength training is quite important to the long-term development of your athletes, it is less important than Soccer skills and tactics training. Your team definitely needs strength training to remedy weaknesses and prevent injury. But, fundamentally, your athletes are Soccer players, not bodybuilders.

Second, strength training for Soccer players is often remedial. The wide range of physical maturity among high school athletes, gender differences and the range of body types among Soccer players make a uniform strength program nearly impossible. As a coach, your first task is to develop the basic physical strength of your athletes. Some

athletes need an introductory strength routine using weightless exercises. Once basic strength develops, strength training can be geared toward optimizing performance.

PERIODIZED STRENGTH TRAINING

As mentioned above, most coaches create a simple weight circuit that varies little, if at all, during the season. While this is certainly much better than no strength training, the principles of progressive overload and variability dictate that training should change every 4–6 weeks.

The program is designed to be done two or three times per week. Pre-season training should include three sessions weekly. During the competitive season, athletes should cut back to one or two sessions.

The Soccer strength program described here has two levels: one for physically weak or young athletes with no strength training experience and a second for stronger athletes. Ideally, you will combine exercises from both levels with plyometric exercises for a complete strength and power program.

LEVEL I

The Level I routine is a basic strength training circuit intended for athletes without weight training experience and those who are physically weak or immature. This routine is also recommended as a transition from off-season to pre-season training for advanced athletes.

Begin the Level I routine with 4–5 minutes of easy continuous running followed by 10 minutes of stretching. The circuit should take 20–40 minutes. Be aware that the numbers of sets and repetitions vary substantially. The key point to remember is that the amount of work and its intensity must increase gradually.

The Level I Circuit

Push-Ups (Up to 5 sets of 2–12 reps with 30–60 seconds' rest.)

Pull-Ups (Up to 5 sets of 2–10 reps with 60–90 seconds' rest. Weaker athletes may be assisted by partners until they gain sufficient strength.)

Lunges, side and forward. (Up to 4 sets of 20, alternating legs.)

Box Step-Ups, holding dumbbells in each hand (Up to 5 sets of 10–12 reps. Boxes or benches should be between 6–18 inches high; the weight should range from 5–20 pounds depending on the athlete's strength.)

Abdominal Crunches (Up to 100 in sets of 10–20.) When conditioning the stomach muscles, an athlete does not need to rise more than 30 degrees from the ground. Beyond that point, the psoas muscles do the majority of the work, placing substantial stress on the lower spine and risking injury.

Standing Long Jumps onto sand, grass, or wrestling mats (Up to 5 sets of 3 jumps with both feet together.)

Medicine Ball Tosses. If you don't have medicine balls, use homemade weighted balls of 3–8 pounds. Old volleyballs filled with sand work quite well. Choose 2–3 of the following exercises:

- **Overhead Toss** (2–4 sets of 10)
- **Forward Toss** (2–4 sets of 10)
- **Side Toss** (2–4 sets of 10, each side)
- **Triceps Toss** (2–4 sets of 5)
- **Two-Handed Basketball Pass** (2–4 sets of 10)
- **Straight-Armed Forward Toss**, kneeling position to partner (2–4 sets of 10)

You might finish the program with 5 minutes of easy jump rope work. Jumping rope is an excellent way of developing rhythm and movement skills and ankle strength. The emphasis should be on coordination.

Sample Level I Workout (2–3 sessions per week)

Day 1 — Jog 4 mins. Stretch 10 mins. Push-Ups, Lunges, Medicine Ball, Curls, Sit-Up Crunches, Jump Rope

Day 2 — Jog 4 mins. Stretch 10 mins. Pull-Ups, Step-Ups, Machine Bench Press or Medicine Ball, Sit-Up Crunches, Jump Rope

Day 3 — Alternate between Day 1 and Day 2 routines.

This program can be done during a P.E. class or as part of Soccer practice. If done dur-

ing practice, the strength training circuit should follow the main body of the workout.

LEVEL II

Weight training should start during the pre-season. Just as you establish aerobic fitness over the summer, it is also time to build a strength base. Two to three sessions per week are recommended. If your athletes weight train twice per week, have them do a weightless strength circuit that includes calisthenics and plyometric exercise on a third day.

Schedule three strength sessions per week during the preparation period and the pre-competition period. After a 2–3 week introduction to weightlifting technique, the focus will shift to strength building. In the beginning, your athletes will have sore muscles. Don't worry, it's all right for Soccer players to feel sore from weightlifting. While you must take care to avoid injury, soreness is part of training.

During the introductory phase, have athletes do 2–3 sets of 10–15 repetitions using light weights for each exercise. High repetitions and light weight let athletes learn proper technique without struggling against the load.

For the remainder of the preparation period, focus on building muscle and strength. Divide the time into two 4–6 week phases. In a 6-week phase, for example, schedule four weeks at 6–8 repetitions of 60–80 percent of max for all core lifts. For the next two weeks, have athletes do 4–6 repetitions of 75–85 percent. After completing a lifting cycle, test for new 1-repetition maximums.

Once competition begins, reduce weight training to twice per week. During this phase, focus on strength maintenance rather than strength gains as training becomes more intense.

As the season moves into its peak, reduce strength training to once per week. Research shows that one good session per week is adequate to maintain strength for a long period of time. Emphasize rest and recovery. Stop all weightlifting 10–14 days before the target competition.

Sets and Repetitions

Despite what some coaches believe, doing 10–15 repetitions of an exercise with light weight does not build endurance. Some coaches like to create a fast moving circuit that

keeps athletes working aerobically. This shortchanges both elements of the workout. You compromise strength gains by using insufficient weight and improper rest. And you really don't get a good endurance workout. Athletes really can't train for strength and aerobic endurance simultaneously. The weight room is for the building of basic strength and power. Athletes are much better off training for aerobic endurance by running or other cross-training.

Muscle mass is developed best by 6–8 repetitions of 60–80 percent of the 1-repetition maximum. Maximum strength is developed best by 4–6 repetitions of 75–85 percent of the max.

LEVEL II SOCCER ROUTINE

The Level II weightlifting routine is appropriate for Soccer players with good basic strength or weight training experience. The program consists of 6 exercises making up a basic whole-body routine that can be done in less than 30 minutes using free weights.

- Back Squat
- Overhead Press
- Power Clean
- Bench Press
- Sit-Up Crunches
- Hamstring Curls

You can teach the above lifts to your athletes as described in the following section.

Primary Lifts

Back Squats. Assume a high bar posture with the bar resting on the trapezius muscles about 2 inches below the base of neck and your hands spaced evenly on the bar several inches outside your shoulders. Lift the bar off the supporting pins of the squat rack and step into starting position.

Foot placement can be adjusted according to your flexibility. A base of 4–6 inches wider than the shoulders usually yields the best results. Place your feet with the toes pointing out 20–45 degrees. Make sure that your heels stay in contact with the ground at all times.

The key to the squat is keeping your torso tight with a straight back and lowering the bar under control. Pushing your chest and stomach out compresses the lower back and is referred to as keeping the torso tight. Doing so helps protect you from lower back injury. You should focus on using your gluteal and hamstring muscles to control the pace of descent. A complete squat is attained when the upper thigh, the line from knee to hip, is parallel to the ground. Don't force a full squat if you have poor flexibility or poor balance. By the same token, don't lift more weight until you learn proper technique.

A properly performed squat feels almost as if you are about to sit in a chair: Your knees don't move forward beyond your toes, and your heels never leave the ground. *If your heels come off the ground, you are doing the squat incorrectly and endangering your knees.*

Your eyes should look straight ahead during the entire lift. (Many athletes tend to look at the floor, which causes them to lean too far forward.) Also, make sure that both feet are spaced evenly and in line with your body. Some beginners tend to place one foot forward.

When returning the bar to the rack, don't rush back or catch your hands on the supports. Fatigue can make this a dangerous moment.

Note: Some athletes may need to do squats without weight until they develop the flexibility and balance to handle an extra load. They may only be able to do a ½ or ¾ squat in the beginning. However, don't increase the load at the expense of good technique. It will only lead to muscle imbalances and injury.

Overhead Press. This lift, also called the military press, develops the arms, shoulders and upper chest muscles. Use a weight machine or free weight squat rack. Lift the weight so that it rests on your upper chest, with your hands placed slightly outside the shoulders. Once the bar is balanced, press the bar directly overhead until your arms are fully extended. Lower the bar back to the chest and repeat. Make sure that you stand erect and don't arch your back during the press. Your eyes should look forward.

Power Clean. The power clean is an explosive total-body exercise. It requires coordination and good technique, and is an excellent strength building exercise.

The power clean is divided into three active phases and two recovery phases.

Phase I is the starting position. First, stand with your feet flat, slightly less than

shoulder width apart, and the bar over your shoes. Grip the bar with your hands evenly spaced at 1–2 inches outside your legs. Rotate your wrists inward and lock both elbows, pointing to the sides. Your back should be straight, with your torso arched slightly and the shoulders back.

Pushing your chest and stomach out compresses your lower back. Keeping the torso tight helps protect the lower back from injury. Your chest should be a few inches in front of the bar so that your back is at about a 45-degree angle to the floor. At this point, your hips should be a little bit higher than the knees, with your eyes focused straight ahead, not up.

Phase II is the pull to the knees. This is where most athletes make technique mistakes. The weight should be moved by using the large muscle groups of the legs, not the arms. The bar is lifted by straightening the legs and lifting the hips. Make sure you keep the chest over the bar. The initial drive to clear the knees will create a shift of the center of gravity from above the front of the foot to the center of the foot. Curling the wrists inward keeps the bar as close as possible to your shins and lower thighs. At no point during this phase should the elbows bend. The arms hang straight, with the torso as tight and straight as possible.

Phase III is the acceleration. Now, drive your hips forward forcefully, and raise your torso up and back. This movement allows the large muscle groups to act powerfully upon the bar, creating great acceleration. As the hips drive forward, the weight shifts to the balls of the feet and you should try to get as tall as possible. Note: A quick way to spot a major error is to see if the athlete stays flat-footed. The athlete should actually rise onto the balls of the feet.) If the lift is properly executed, the bar will make contact with your midthigh. As the bar travels upward, the trapezius muscles contract in a shrugging motion. Raising the elbows as close to shoulder level as possible creates the final pull on the bar. It is important to keep the elbows pointed away from the body and not pull backward.

Phase IV is the recovery. When the bar reaches its highest point, a slight flexing of the hips and knees will act as a shock absorber. Trap your elbows by moving them from the side to the front of your body. The upper arms must be held parallel to the ground. Most beginners catch the bar with the elbows close to the torso. The final resting place for the bar is along the clavicles, with pressure from the high elbow position keeping it in place.

It is a very dangerous mistake to bend backward to catch the bar. The bar should be caught with the torso erect, not leaning. Another error is jumping or throwing your body unevenly in order to complete the lift. The feet may move a few inches to either side but not forward or backward. It's best if your feet stay in place.

During *Phase V*, the weight returns to the starting position. Here, powercleans become a problem in weight rooms without bumper plates or padded surfaces. The bar can be lowered safely to the floor if done in stages. First, drop the bar from the rack position on the chest to the hips. Then slowly lower the bar past the thighs until it reaches the floor. Your back must remain straight, with legs flexed, to decrease pressure on the lower back.

The rhythm of the lift is very important. Movement is slow to fast. If you rip the weight off the floor as fast as possible, lower back problems usually result from the premature use of the arms and shoulders. There should never be a struggle for control at the end of the lift. Reduce the amount of weight if this happens.

Flexibility of the ankles, hips, shoulders and wrists is a major factor affecting technical proficiency. If you are not flexible, a remedial stretching routine must be undertaken. Until you improve flexibility, only light weights should be lifted.

Back Press. Also referred to as Good Mornings, this lift strengthens the thighs, buttocks, hamstrings, stomach and lower back. Place a bar on the shoulders as in the squat, spreading the feet slightly more than a shoulder width apart. Keep the back straight and the head up while bending forward at the waist. To minimize the shearing forces on the lumbar spine, maintain a moderate bend in your knees. Lower until the back is parallel to the floor, hold for a count of two, and then slowly raise back to the starting point. It may take a while to get the bar in a comfortably balanced position.

When doing this lift, it is essential that the athlete keep the back straight and the knees bent. Otherwise, very serious back injury can result.

Sit-Up Crunches. Abdominal conditioning is a very important element of strength training and also one of the most neglected. We recommend sit-up crunches. When doing a crunch, only raise the shoulders about 30 degrees off the floor. Beyond that point, most of the work is done by the psoas muscles, putting unhealthy stress on your lower back.

Hamstring Curls. Players need to maintain a balance between quadriceps and hamstring strength, since running tends to overdevelop quad strength. Most weight rooms have machines that isolate the hamstrings. If not, you can use elastic tubing.

Supplemental Lifts

During the pre-season, or if weight training replaces running on any given day, the following exercises can be added for a more comprehensive workout. Secondary or supplemental lifts should be done after the core lifts. These exercises enhance general strength, develop muscle balance and strengthen weak areas. As a general rule, you do slightly more repetitions in a single set; 10–15 repetitions are recommended.

Bent Over Rows. Bend over and grab the bar with a grip slightly wider than your shoulders. Keep the back parallel to the floor, head up and legs straight. Pull the bar up to the bottom of the chest. Bent rows strengthen the back and shoulder muscles.

Curls. Using an underhand grip (palms up), stand with the hands at arm's length against the thighs. Slowly curl the bar up to the chest while keeping the back straight. Lower the weight until the arms are fully extended again. If necessary, standing against a wall helps eliminate the tendency to throw the hips forward and arch the back while lifting the weight.

Triceps Press. Stand, holding the bar with the hands about 8 inches apart, palms facing the thighs. Press the weight overhead until the arms are fully extended with the elbows near the ears. Holding the upper arms still, lower the weight as far as possible behind the head. Press the weight to the overhead position, keeping the back straight, head up and upper arms motionless.

Lateral Raises. Hold a dumbbell in each hand at the sides of the body, palms facing slightly forward. Keeping a slight bend in your elbows, raise your arms away from your sides until they're just below shoulder level.

Bench Press. To perform the lift, lie on your back with your feet spaced about one foot out on each side of the bench. Keep the feet on the ground, with the heels touching. Your head should rest on the bench, with the nose/eyes directly below the bar. Grip the bar slightly wider than the shoulders. Most bars will have knurled markings to ensure a symmetrical grip on the bar.

After taking a couple of deep breaths, inhale and take the bar from the bench supports. (Sometimes a spotter helps to pick up the bar, depending on the weight and bench construction.) Stabilize the extended weight before attempting the lift.

When you are ready, begin the eccentric, or descending, phase of the lift. Lower the weight slowly until it touches the bottom of your pectoral muscles. The motion should be controlled, and the weight should not bounce off your chest.

The next step is the push from the chest (concentric, or ascending, phase). Drive the bar up in a slight arch toward the upper chest. This keeps the elbows in line with the direction of force on the bar. When the repetition is complete (arms extended and the bar stabilized), attempt the next repetition. During the drive off the chest, your buttocks should stay on the bench. If you need to raise them to finish the lift, lower the weight and emphasize proper technique.

Sample Level II Weight Program

- Program Squats — 3 sets x 8 reps
- Leg Curls — 3 sets x 12 reps
- Overhead Press — 3 sets x 8 reps
- Power Cleans — 3 sets x 6 reps
- Back Press — 2 sets x 10 reps (light weight)
- Sit-Up Crunches — 2 sets x 30 reps
- Pull-Ups — 2 sets of max reps
- Medicine Ball Tosses — 2 sets

Plyometric Training

Plyometric training is a form of exercise that utilizes the body's stretch reflex and eccentric muscle contractions to enhance speed and power. Though explosive power contributes relatively little to aerobic performance, plyometric training helps develop general athletic ability, ballistic skills, kinesthetic awareness, rhythm and coordination. High school Soccer players, especially, can benefit from the development of the power

and overall athleticism provided by plyometric exercise. Soccer players need to have the ability to respond quickly and powerfully on both offense and defense.

Plyometrics for Soccer, though, differ markedly from the speed and power orientation of most plyometric work. Rather, Soccer players should focus almost exclusively on exercises emphasizing rhythm and coordination. For young and physically immature athletes, rhythm plyos serves as a form of physical education, developing movement skills and running mechanics.

THE PHYSIOLOGY OF PLYOMETRIC TRAINING

The effectiveness of plyometric exercise derives from conditioning the neurological mechanisms and elastic properties of the muscle. Deep within all muscle tissue is a structure called the **muscle spindle**, which contains special fibers called **intrafusal fibers**. These intrafusal fibers are wrapped with nerve cells that tell the central nervous system when a muscle is being stretched rapidly. In response, the nervous system triggers a muscle reflex to protect the muscle from injury. This reflex is called the **myo-tatic, or stretch, reflex**.

Plyometric training uses the stretch reflex to improve strength, power and rhythm. By pre-stretching a muscle quickly, one can generate greater power than without the pre-stretch. Plyometric training uses gravity and body weight to load elastic tension within the muscles. This generates powerful eccentric contractions that allow an athlete to use more of his or her total muscle capacity. Plyometric training is quite specific to the explosive running required by Soccer. Plyometric training specifically trains the muscle to generate strength as quickly and as efficiently as possible.

GUIDELINES FOR PLYOMETRIC TRAINING

- Keep in mind that plyometric training is less specific to the demands of Soccer than skills development and should be used as a supplement to the main body of training.
- The overload presented by the combination of gravity and body weight requires good basic strength to prevent injury. Two rules of thumb apply. First, your athletes should **always start with the easiest and least complicated plyometric exercises**. Low intensity and limited repetitions are suggested for beginners and young athletes. You must also take into account an athlete's body weight. The same exercise will create more physical stress on a heavier athlete. During adolescence,

strength in relation to body weight is often poorest among heavier individuals. Second, if an athlete is able to perform the exercise with correct technique, he or she probably has adequate strength. If the athlete is unable to execute the task properly, or if execution breaks down after a few repetitions, have the athlete build basic strength before doing plyometric drills.

- **The ballistic nature of plyometric exercise poses a risk of injury.** Plyometrics can be tremendously beneficial, but must be used cautiously. A conservative approach to plyometric training minimizes the risk of injury for high school athletes. Adolescents are usually still growing, have softer bone structure, and have not developed the absolute strength needed for advanced plyometric work. The age, strength, body weight and maturity of each athlete should be taken into consideration when constructing plyometric training.
- **Proper technique is crucial** to maximize benefit and reduce injury risk. Good technique indicates a proper degree of stress. Reduced height or distance, poor range of movement, poor body posture and loss of coordination are signs that the exercise should be stopped.
- **Always conduct plyometric drills on a soft level surface, such as grass or padded mats.** Concrete, asphalt, or the running track are poor surfaces for training.
- **Plyometric drills should be done in shoes with good support and cushioning.** Gravity and speed provide the needed resistance.
- **Never add extra weight,** such as weight vests or ankle weights.

TYPES OF PLYOMETRIC EXERCISES

Plyometric exercises can be classified into three categories: rhythm, power and speed. The classification depends on the objective of the exercise and the nature of the overload. Rhythm plyometrics develop coordinated movement skills and basic ballistic strength. Power plyos combine maximum strength and speed into explosive action. Speed plyometrics shorten the time in which an action must be performed.

Rhythm Plyometric Exercises

- Rhythm Skipping
- High Knee Running

- Swing Skipping
- Butt Kicks
- Ankle Bounces
- Cariocas
- Rhythm Bounds
- Foot Stomps (Roach Stompers)
- Skipping Kicks

Skipping. Skipping helps develop good running mechanics. Skips are a total-body exercise that build both lower and upper body strength. They are the basic plyometric exercise. Do 2–3 sets of 30–50 yards.

Swing Skipping. Swing skipping is a variation of rhythm skipping. Instead of running posture, the arms swing loosely with each skip. The exercise combines relaxation with rhythm. Do 2–3 sets of 30–50 yards.

High Knee Running. This drill develops good running form and hip flexor strength by stressing high knee lift. Good running posture and mechanics are essential when doing the drill. Forward speed should be slow and controlled. Do 2 sets of 20 yards.

Butt Kicks. This exercise strengthens hamstring muscles and develops quickness and coordination of the stride recovery. Maintain tall running posture, and attempt to kick the heels to the buttocks while running slowly forward. Good arm action and controlled speed are important. Do 2–3 sets of 20 yards.

Ankle Bounces. This drill strengthens the muscles, tendons and ligaments of the ankles, which must cope with the various terrain challenges of Soccer fields. The exercise can be done in place or moving forward slowly. Jumping rope is an alternative exercise. Do 2–3 sets of 20–30 reps.

Skipping Kicks. Skipping kicks require the coordination of multiple quick movements. While skipping on one foot, pull the other toward the buttocks and then kick it forward as the knee drives to waist level. The extended foot then pulls back to the ground, initiating a new skip. Do 2–3 sets of 20 yards.

Cariocas. This exercise requires relaxed coordination and rhythm in a complex movement. The athlete runs sideways with the trailing leg alternately stepping in front of and behind the leading leg. Do 2 sets of 30–50 yards in each direction.

Rhythm Bounds. These bounds develop leg power at low intensity. They are a good introduction to power plyos. Bounds are an exaggerated running motion where the athlete tries to hang in the air during each stride. Do 2–5 sets of 30–50 yards.

Foot Stomps. This exercise builds dynamic strength in the calves and ankles and creates awareness of the push-off phase of the running stride. The athlete executes a short skip focusing on vigorously driving the heel to the ground. Do 2–3 sets of 20 yards.

Power Plyometric Exercises

Before starting power plyos, first make sure your athletes can do each exercise as a rhythm drill. Emphasize good technique. Improper technique is a sign that the athlete is not ready for that power plyometric exercise.

- Power Skipping
- Power Bounds
- Double Leg Hops
- Single Leg Hops

Power Skipping. This type of skipping emphasizes vigorous arm action and drive from the ground. The athlete should try to attain the greatest height possible. Do 2–4 sets of 10–15 skips, or 20–50 yards.

Power Bounds. The basic motion is similar to rhythm bounds except that the lead knee drives vigorously to waist level. The athlete tries to achieve both height and distance. Do 2 sets of 8–12 bounds, or 30–50 yards.

Double Leg Hops. Double leg hops develop lower body power. Consecutive hops should be done without pausing. Novices and weaker athletes should use a small hop between each full hop. The athlete should aim for maximum distance and height with each jump while moving continuously. Do 2–3 sets of 6–8 repetitions.

Single Leg Hops. Single leg hops involve the same muscle groups of the lower legs as double hops, but focus on balance and power. This is a demanding drill that should be

done cautiously. As with double leg hops, a small intermediate hop between full hops is a good way to introduce the exercise. Do 2–3 sets of 6–8 reps for each leg.

Speed Plyometric Exercises

Speed plyos use velocity to force the neuromuscular system to develop speed and quickness. For Soccer, include them as drills preceding running training.

- Speed Skips
- Fast High Knees
- Butt Kicks
- Fast Hands/Quick Feet
- Speed Hops

Speed Skips. These skips stress fast execution, not distance. The athlete should appear to be doing a quick shuffling step. Do 2–3 sets of 10–15 yards.

Fast High Knees. As with normal high knee drills, the arms and knees drive vigorously, but emphasize fast leg turnover. The range of motion will be $\frac{1}{3}$ – $\frac{1}{2}$ of normal. Do 2–3 sets of 10–15 yards.

Butt Kicks. The athlete tries to kick the butt as fast as possible while running slowly forward. As with high knees, the range of motion shortens. Do 2–3 sets of 10–15 yards.

Fast Hands/Quick Feet. The aim is to move both the hands and feet as quickly as possible within a short range of motion. Do 2–3 sets of 5–10 seconds, or 10–15 yards.

Speed Hops. The athlete performs a double leg hop in place, driving the arms and knees up very fast. Upon landing, the next hop should be done as quickly as possible. Do 2 sets of 10–12 repetitions.

SOCCER-SPECIFIC PLYOMETRIC EXERCISES

In addition to the general plyometric drills discussed above, you might want to include a number of exercises that specifically develop the type of power skills used in Soccer. Plyometric training is especially effective in developing explosive acceleration and jumping ability. In Soccer, that translates into being able to accelerate away from a defender, making explosive and quick changes of direction, greater vertical jump when

leaping to head a ball, and improved running speed. The following drills will add greater specificity to your Soccer plyometric sessions.

Cone Jumps

Soccer requires a tremendous amount of explosive lateral movement, such as a feint followed by a slashing run around a defender. Plyometric drills that incorporate lateral jumping movements help develop the strength and power such movements demand. Cone jumps are a way of incorporating explosive jumping with lateral movement. Plastic traffic cones of various sizes are perfect for these drills. Plastic cones provide a safe obstacle over which your athletes can jump.

Double Leg Side Jumps. The athletes simply performs side to side jumps over a plastic traffic cone. The cone forces the athlete to jump up while moving laterally. Use cones of different heights. If you want to emphasize speed, use smaller cones. For power, use taller cones. In any case the athlete should be able to clear the height of the cone.

Single Leg Side Jumps. These jumps are similar to double leg jumps, except that the athlete jumps from one foot to the other. When teaching this drill, make sure that a player drives the knee of the free leg up while jumping. This keeps the athlete from merely falling from one foot to another.

Turning Cone Hops. Have the athlete jump from side to side while making half turns (180 degrees). This helps develop the ability to make explosive reversals of direction. **Diagonal Cone Hops.** Set up a line of several cones. Now have your athlete jump from side to side over the cones while moving forward. The drill can be done as a double leg or single leg drill. Notice how similar the single leg version is to a player trying to dribble past several opponents.

Multiple Jumps With a Sprint. Set up several cones in a line. Have the athlete jump diagonally over the cones. Once past the last cone, the athlete should immediately sprint for 20–30 yards.

Of course, all of the above drills can be done without using cones. Some coaches simply use the chalk lines on the field. You also can create your own drills. For example, construct a pentagon and have your athletes jump from point to point.

Medicine Ball Throws

Throw-ins are an important part of the game. Explosive upper body strength helps athletes throw the ball with distance and pace. Just as important, medicine ball throws help develop abdominal trunk power used in heading the ball and kicking. Using lightly weighted medicine balls, or old Soccer balls or volleyballs filled with sand, have your athletes perform two-handed overhead throws from standing and kneeling positions.

For all exercises, emphasize quick and rhythmic execution. Each set should involve 6–12 contacts. Remember, you are developing explosiveness and power, not endurance.

USING PLYOMETRICS IN SOCCER TRAINING

You don't need to schedule specific workouts emphasizing plyometric training. For Soccer players, plyometric drills can be incorporated after the warm-up and preceding the main body of training. These drills should emphasize a full and smooth range of motion more than eccentric overload and use the pre-stretch of the muscle to facilitate rapid movement, mechanical efficiency and coordination.

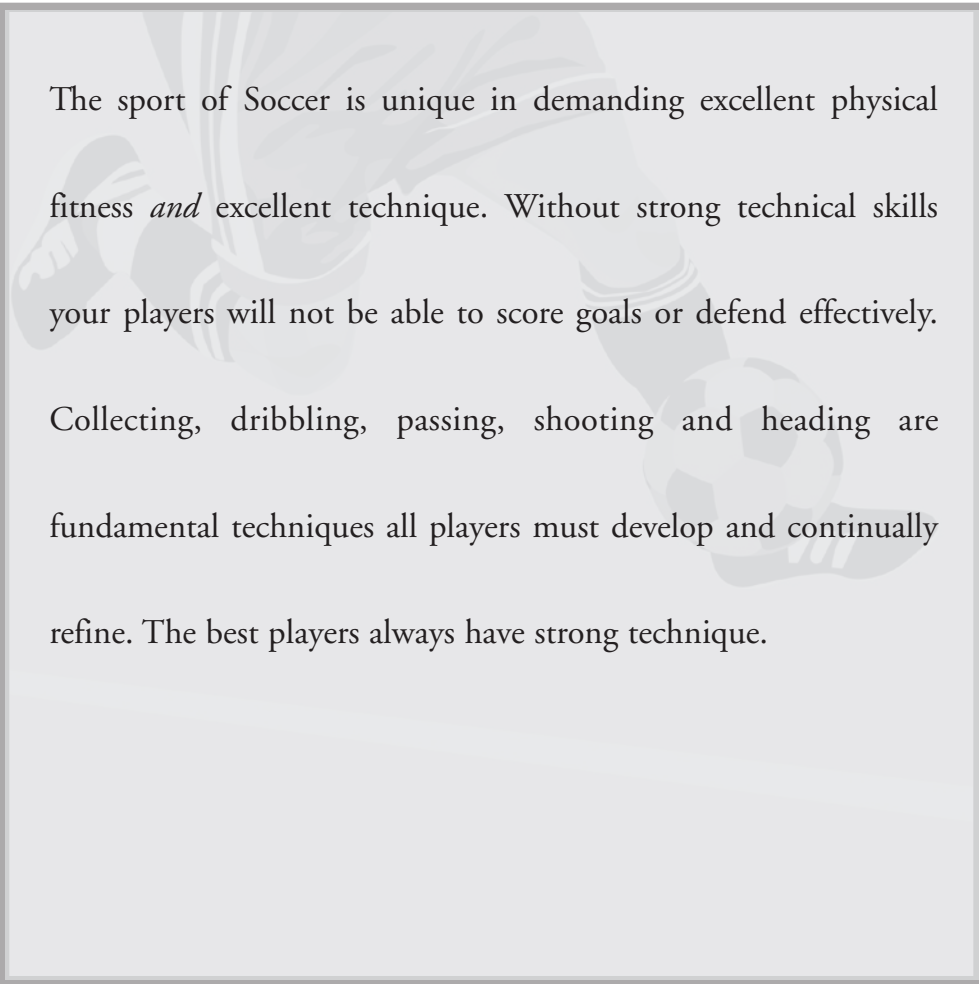
As with other types of training, plyometric exercise should be periodized over the course of the season. Volume and intensity will vary over the course of the season. In general, the volume of plyometric exercises for Soccer players will be low to moderate. The intensity also will be low to moderate.

Begin each season with a gentle introduction to plyometric training using simple rhythm drills. As your athletes become accustomed to the exercises and their fitness grows, gradually increase volume and intensity.

Once athletes have learned basic rhythm skills, slowly introduce power exercises. Soccer players will employ a small volume of power drills combined with rhythm exercises.

As the competition phase of the season begins, plyometric work stresses rhythm and speed development. Once the peak competition phase starts, reduce plyometric training to one light session per week, though your athletes can continue to include plyometric drills in the warm-up. Stop any strenuous plyometric training 7–10 days before playoffs begin.

Teaching Soccer Technique



The sport of Soccer is unique in demanding excellent physical fitness *and* excellent technique. Without strong technical skills your players will not be able to score goals or defend effectively.

Collecting, dribbling, passing, shooting and heading are fundamental techniques all players must develop and continually refine. The best players always have strong technique.

Receiving and Control

Receiving, or **collecting**, the ball is the act of bringing the ball under complete control. During every game, a player will receive balls at different heights, speed and angles. A player must be able to bring the ball under control quickly in order to pass, shoot, or dribble. Good receiving skills allow a team to control the ball. A team's ability to collect a ball under pressure is the difference between a turnover and maintaining ball possession. Your players should practice receiving, using different parts of their bodies, until they can control and play the ball with minimum effort and maximum speed.

TEACHING COLLECTING TECHNIQUES

Field players can use any part of the body to collect the ball except their hands and arms. Players usually use the feet, thighs, chest and head.

A player should move to meet the ball by putting the body in line with the flight of the ball. The player should decide prior to the ball's arrival which body surface to use and present the appropriate body surface to the ball. The player should be relaxed and balanced, ready to adapt to the flight of the ball. As the ball contacts the body, the player should withdraw the selected surface slightly to cushion the impact of the ball. A hard surface will cause the ball to rebound, usually causing a turnover. As the ball is controlled, the player should prepare for the next move.

Receiving With the Feet and Legs

Thigh. While balanced, the player stays in line with the flight of the ball and raises the thigh to form a 90-degree angle with the body. As the ball makes contact with the thigh, the knee drops toward the ground to create a cushioning effect. The ball should drop to the feet. (Fig. 4-1)

Instep. The player should have good balance and align with the flight of the ball. The toe points down to receive the ball on the shoelaces. On contact, the player withdraws the foot to cushion the ball and prepare for the next move. (Fig. 4-2)

Sole of the Foot. The player should have good balance and align with the flight of the ball. The sole of the foot should be facing the ball, with the toe pointed up and the heel slightly raised off the ground. The player wedges the ball between the sole of the foot and the ground. (Fig. 4-3)



Fig. 4-1. Thigh.



Fig. 4-2. Instep.



Fig. 4-3. Foot Trap - Sole of the Foot.



Fig. 4-4. Foot Trap - Inside of the Foot.

Inside of the Foot. With the body balanced and in line with the flight of the ball, the player turns the toe of the selected foot outward so the inside of the foot is facing the ball. The foot should be raised slightly off the ground with the toe pointed up. The athlete receives the ball by wedging it between the ground and the inside of the foot between heel and toe. The player should collect the ball in a way that prepares it for the next move. (Fig. 4-4)



Fig. 4-5. Foot Trap -
Outside of the Foot.



Fig. 4-6. Chest Control.



Fig. 4-7. Head Control.

Outside of the Foot. The body should be balanced and in line with the flight of the ball. The athlete brings the selected foot across the plant leg so the outside of the foot faces the ball. The ankle should be locked with the foot pointed slightly toward the ground. As the ball arrives, it is wedged between the ground and the outside of the foot. The player should receive the ball in a way that prepares for the next move. (Fig. 4-5)

Controlling the Ball Above the Waist

Chest. The chest and body should be in line with the flight of the ball. Using the arms for balance, the player bends back to get the chest underneath the ball. As the ball contacts the breastplate, the knees bend slightly to absorb the momentum of the ball. This allows the player to cushion the ball down to the feet. (Fig. 4-6)

Head. The head stays in line with the flight of the ball, and the arms are used for balance. The body should be relaxed, with the eyes looking at the ball. The player should receive the ball with the forehead near the hairline. On contact, the knees bend slightly, allowing the neck and shoulders to cushion the ball and bring it to down to the feet. (Fig. 4-7)

RECEIVING DRILLS

Exercise 1. X1 serves the ball by hand to O, who controls the ball and turns to pass to X2. X2 serves to O, who controls and passes to X1. Repeat and change after 10–20 serves. Vary the serve so all legal parts of the body are used to control the ball. (Fig. 4-8)

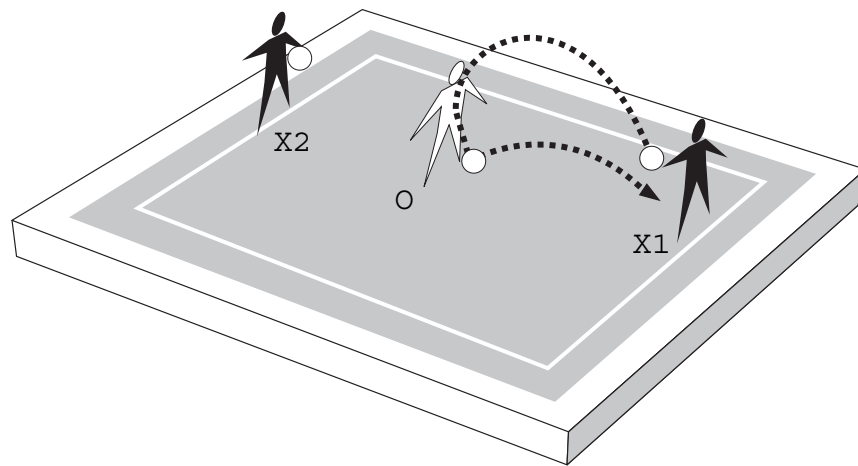


Fig. 4-8.

Exercise 2. Form a circle with one player in the middle and the others around the circumference. The center player receives balls served at different heights, then controls and passes to any other player. Repeat for approximately 2 minutes, using all legal body surfaces to control, change, receive and repeat. (Fig. 4-9)

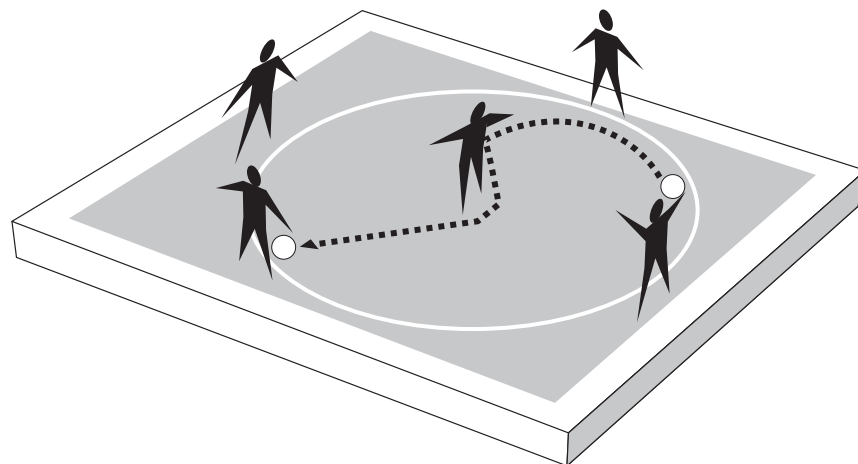


Fig. 4-9.

Exercise 3. X2 serves to X1. When the serve is made, X3 is released and will try to win the ball from X1. X1 will try to control the ball quickly before the challenge from X3, and play 2v1 with X2 against X3. Rotate the players, and repeat. Ball control must be practiced under the pressure of opponents. (Fig. 4-10)

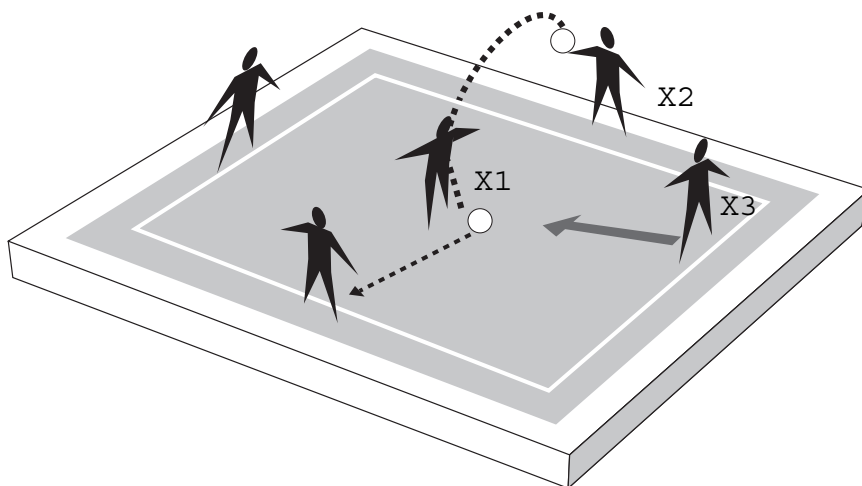


Fig. 4-10.

Exercise 4. Soccer tennis, with players allowed to have one bounce. Like volleyball, the ball can be touched 3 times on one side before crossing the net (or cones or stakes used as an imaginary net). (Fig. 4-11)

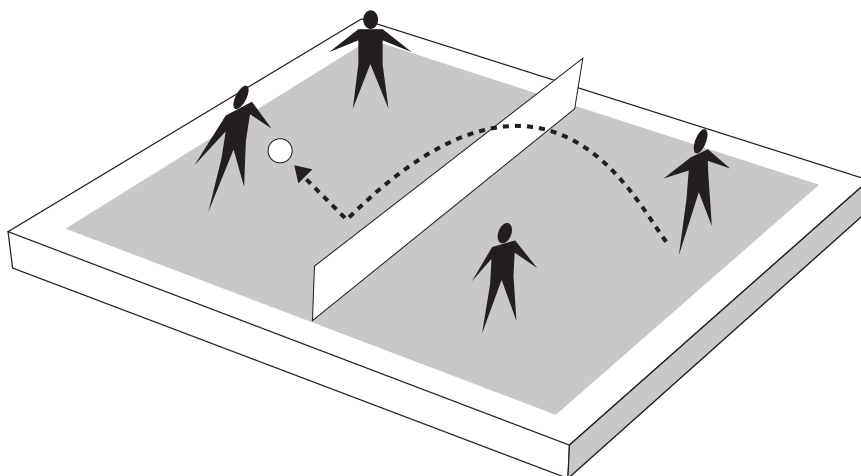


Fig. 4-11.

Ball juggling will help in developing good ball control using all parts of the body that are legal. Juggle with the feet and kick the ball high in the air, and control with thigh, head, or chest. Control it and then get it down to the feet, and repeat.

Dribbling

Many times a player has possession of the ball but does not have the immediate option of a shot on goal or a pass to a teammate. In order to maintain possession of the ball, a player must be able to move with the ball until a shooting or passing opportunity appears. This is called dribbling.

DRIBBLING FOR POSSESSION

Possession dribbling is a difficult technique to master because a player with the ball usually faces intense defensive pressure, limiting the amount of space he or she has in which to work. To keep possession of the ball a player may have to dribble laterally, called a **square dribble**, or dribble away from the defender(s).

Teach your players to dribble with short, even strides while keeping the ball close to their feet. While dribbling, a player should keep a low center of gravity and use the arms for balance. This position allows a player to be strong on the ball.

A player can use all surfaces of the foot for possession dribbling. The sides of the feet are best for cutting the ball, while the sole and heel are best for changing direction. Finally, a player should dribble with the head up in order to see the defense. Peripheral vision will allow the player to see both the ball and the surrounding field of play. A player who focuses only on the ball will not be able to see open teammates or approaching defenders.

Another technique of possession dribbling is **shielding**. When confronted by a defender, a player must shield the ball until help arrives. An attacking player must put his or her body between the defender and the ball. Teach a player to take a sideways stance between the defender and the ball. The player should lean slightly toward the defender and use the arm to help fend off the opponent. This allows the player with the ball to feel for the defender and still see the field. Finally, players should receive and control the ball with the foot farthest from the defender to prevent the ball from being poked away.

Players often turn their backs to the defenders and keep the ball directly in front of their bodies. This leaves the ball exposed between the attacking player's legs, allowing a defender an opportunity to poke the ball away. Players who shield this way are often called for obstruction because they tend to bend over the ball and back into the defender.

Turning away from an opponent will help a player get away from direct pressure and maintain possession of the ball. Players should learn to become adept with their feet to make different turns with the ball. The attacking player must have the ability to change pace and accelerate quickly after the turn. A player must explode into the open space after the turn to elude the defender and create space to pass or shoot.

DRIBBLING FOR PENETRATION

Dribbling for penetration simply means to attack the defender using the dribble as a way of advancing toward your opponent's goal. Players should attack the open space behind the defender in a manner that takes them directly toward the opponent's goal by being creative and using different dribbling feints to beat the defender. Emphasize the importance of exploding, or accelerating, into the open space that was created by the feint. This change of pace allows the player with the ball to leave the defender behind and penetrate toward the goal.

The best dribblers in the world are creative. Encourage your players to try new moves at practice. Teach them to use the body as a way of deceiving the defender by dropping a shoulder, lunging at the opponent, and using their eyes and voice. When teaching your players different feints and fakes, remember to begin with simple moves. Once players are comfortable, move on to more difficult feints. Players tend to use moves they feel they can execute well in games, so make sure to practice feints regularly.

Teach your players to dribble straight at a defender so they will be able to make a penetrating move on either side of the opponent. The attacking player must time the move correctly. Committing too early allows the defender time to respond and cut off the open space. A move made too late usually results in a strong tackle and a turnover. A well-timed move creates space for the attacker to penetrate. It is essential that the player with the ball use feints and fakes to entice the defender into committing first. Once the defender commits to one side, either by leaning or moving into the space, the attacker must accelerate past the defender into the unoccupied space.

The following are some simple feints you can teach your players:

- Stepping over the ball as if to take it in one direction and then cutting the ball in the opposite direction and accelerating into the open space.
- Winding up as if to strike the ball, then using the sole of the foot to pull the ball back and accelerating in the opposite direction
- Stepping in one direction and then taking the ball in the opposite direction, accelerating into the open space. To “sell” this move, a player must drop one shoulder and lunge in the direction of the feint.

Remember, Soccer requires a tremendous amount of decision making by individual players. They must decide when to dribble and also which type of dribbling to use. This decision will depend on the location of the ball on the field, the location of teammates and opponents, and where the open space is.

DRIBBLING DRILLS

Technique drills should always use a progressive approach, moving from simple, low pressure drills to drills that simulate game conditions.

Suggested progression:

1. Fundamental skills without defensive pressure.
2. Match-Related drills with gradual increase of defensive opposition. Limit space and time.
3. Match-Condition drills that closely simulate game conditions.

Fundamental Dribbling

Two players/ One ball.... One player jogs a yard or two ahead of the other player who dribbles the ball as he follows the trail of the leader. The lead player varies the speed at which he runs and turns to the right and left to give a challenge to his partner to follow .

Players change roles after one minute. (Player following will naturally use the different parts of his foot to guide the ball in the path of the first player and will need to keep his head up and his eyes on the leader so as to follow him.)

One ball per player... Each player dribbles the ball inside the grid, changing directions and avoiding running into other players. (Fig. 4-12)

One ball per player... Each player dribbles inside the grid. On the coach's command/signal, the players (at full speed) avoid running into each other. Coach signals to return to jogging pace after 2-3 seconds. Coach makes sure players continue to avoid each other at jogging pace while regaining their breath/composure before signaling another full speed action. Repeat. (Fig. 4-13)

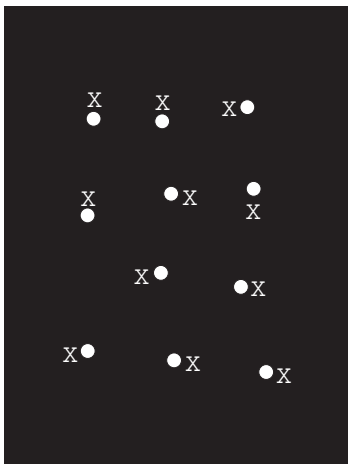


Fig. 4-12.

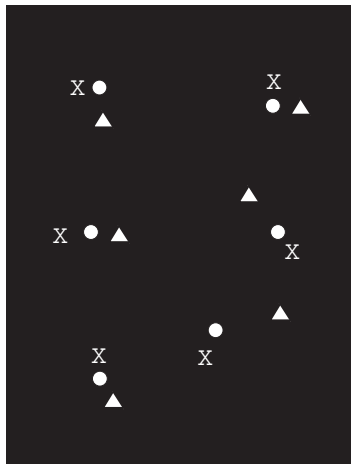


Fig. 4-13.

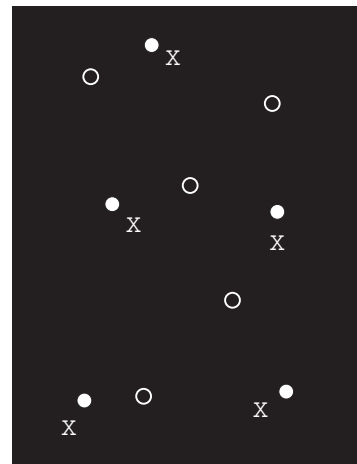


Fig. 4-14.

Match-Related Dribbling

Create a 15x20-yard grid or use the center circle or penalty box. Divide the number of players in half. Give balls to one-half the players. They should dribble, turn, cut and shield the ball while the other players try to steal balls or kick them out of the grid. If a player loses the ball from the grid, that player must juggle the ball a specified number of times before reentering the grid. You can time the exercise or run it until all balls have been knocked out of the grid. (Fig. 4-14)

The grid is laid out with two small goals in the the corners. Players are divided across from each other. First player from line 1 passes the ball to first player in line 2 who controls it and dribbles towards one of the small goals and tries to score a goal. The first player from line 1 tries to prevent a goal being scored. A goal can be scored by dribbling the ball through either corner goal. (Fig. 4-15)

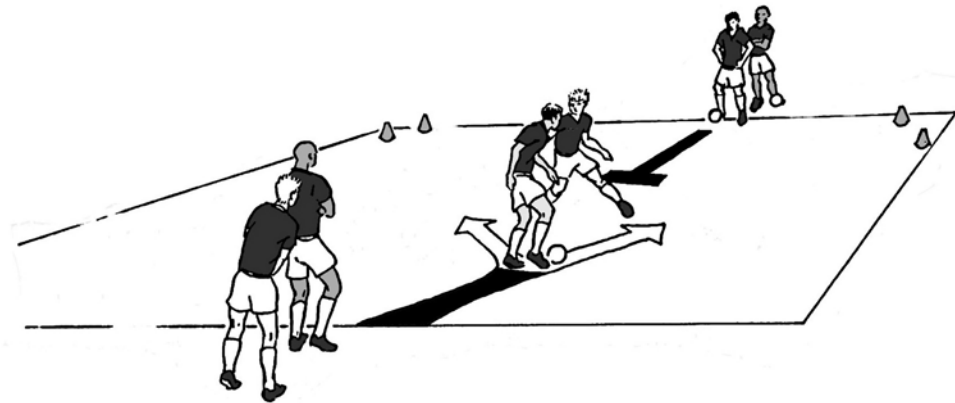


Fig. 4-15.

Match Condition Dribbling

Scrimmage with several players matched in equal numbers (e.g., 8 versus 8) within a grid of your choosing. One ball, two goals. 1) Players are encouraged to dribble when appropriate. 2) Players score a point by dribbling over the end line within 6 yards of the goal posts. 3) Players must dribble past at least one player before shooting. (Fig. 4-16)

Scrimmage as above, but use the entire field. (Fig. 4-17)

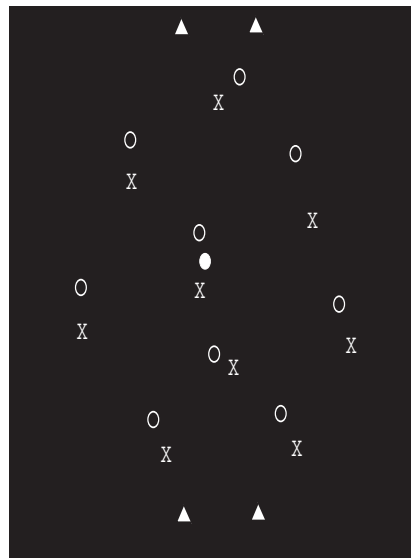


Fig. 4-16.

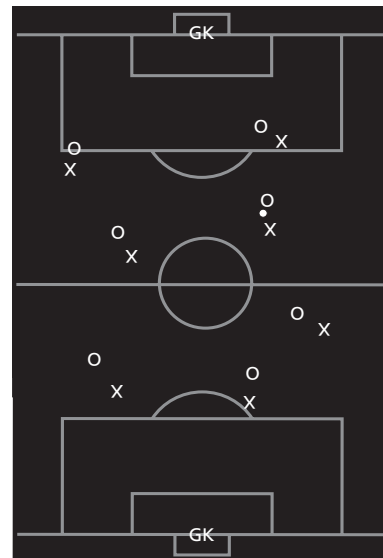


Fig. 4-17.

Passing

Good passing is absolutely essential to playing good Soccer. Approximately 80% of the game involves the giving and receiving of passes. No matter how talented the dribbler, it is nearly impossible to penetrate an offense without good passing. Good passing builds team confidence and momentum. Bad passing destroys a team. Good passing is largely a matter of teamwork. Good communication and mobility help simplify passing. The art of passing is largely the art of doing simple things quickly and well.

PASSING FUNDAMENTALS

Most high school Soccer teams play short rather than long passes. Most passes cover less than 30 yards and are played along the ground. To coach and learn the art of passing, some simple rules need to be followed.

- If a player cannot pass the ball accurately without opposition, do not introduce defensive opposition.
- If a player cannot pass the ball accurately over a short distance, then it is unlikely that the player will pass accurately over a long distance.
- If a player cannot pass a ball accurately along the ground, it is unlikely that the player will be able to play accurate passes through the air.
- The art of effective passing in soccer is the art of doing things simply, quickly and well. Professional players in most cases do this; it is amateur players who gamble and try difficult passes.
- The safest and easiest passes are simple ones.
- Where possible, the player receiving the pass should always run to meet the ball. Players who simply wait for the ball often will see the pass intercepted. This is especially true in the defensive and middle thirds of the field.
- Receiving players should present an easy target to the passer by moving into position between defenders so the passer can pass on a straight line.
- A player should pass forward if able. There must be, however, room to pass and a teammate to receive the pass.

Good passing is mostly a matter of good judgment. Although a player cannot be a good passer without good technique, technique is useless unless the player sees the field of play and makes the correct choice of pass. Players who dribble with their heads down will fail to see openings. Players who are not relaxed and prepared when they

receive a ball will tend to lose valuable passing space. Players must be taught to see the field of play. Players must lift their heads and observe the play around them. Being able to see the field of play allows players to act confidently and not make risky passes.

Passing to a Running Player

The player in possession of the ball determines when to play a pass to a teammate running into open space. The run of the teammate, however, determines where that pass must be played. Ideally, the run will take the receiving player away from defenders. The player making the run must continue to run in advance of the ball. The player making the pass should have several passing options and offensive support.

When to Pass Backward

If a player cannot pass the ball forward, and dribbling is not an option, the pass must be made back toward a team's own goal. High school players, all too often, try a dangerous pass across the width of the field. Passes made in the middle and defensive thirds of the field must be accurate and simple. Passes should be made to the feet of a teammate, not into open space. This reduces the chance that the pass will be intercepted. A player should pick the simplest pass possible.

Quick Passes

At times, changing the point of attack through quick passing is the means to getting good penetration. Quick passes require the ability to pass the ball with one touch. One-touch passing requires players to see the field and decide on the direction of the pass before the ball arrives. Playing two-touch passing allows the receiving player to look up and assess the situation before passing.

Risk Passes

When an offense moves into the "attacking" third of the field, it sometimes becomes advisable to try a difficult pass in an attempt to penetrate the compact concentration of defenders. Attacking players need to calculate the likelihood of completing the pass and the risk involved if the pass fails.

The Don'ts of Passing

- Players should not run alongside the ball. They should move to the ball and collect the pass.

- Your team should not play long inaccurate passes in the hope that something good just might happen.
- Players should not pass into situations where the defense has a numerical advantage.

PASSING TECHNIQUES

Passing skills are vital to good play. The range of play is limited if a player is not able to hit a teammate in open space, bend a ball around opponents, or chip a ball over a wall of defenders. Moving the ball through the middle third of the field is extremely difficult without good passing skills. Your team should spend much time developing passing technique.

Inside of the Foot

The **inside of the foot pass**, or **push pass**, is the most accurate pass to play over a short distance. Teach your players to make eye contact with the target. The plant leg should be slightly bent with the foot placed next to the ball and pointing toward the target. The toe of the kicking foot should be pointed up, with the ankle locked and rigid. The eyes should focus on the ball. The kicking leg pulls back with the inside of the foot facing the ball. In order to keep the ball on the ground, the athlete should lean slightly forward to bring the chest and shoulders over the ball. The ball should be kicked with the area of the foot between the heel and the big toe, ankle locked. Strike through the mid to upper half of the ball and follow through toward the target.

Outside of the Foot

An **outside of the foot pass** is generally used to cover short distances. It is a particularly deceptive pass because the plant foot and hips do not face toward the target. It is most commonly used in a 1–2 combination pass. The plant leg should be placed slightly ahead and away from the ball. This allows room to swing the kicking leg. The toes of the kicking foot should be pointed down and slightly in with the ankle locked and rigid and the player should focus his or her eyes on the ball. Strike through the center of the ball with the outside of the foot. Follow through toward the target with the kicking leg.

Instep Drive

The **instep drive** is used to cover long distances. The plant leg should be slightly bent with the foot placed next to the ball and pointed toward the target. The toe of

the kicking foot should be pointed down with the ankle locked and rigid. The player should strike the center of the ball with top of the instep. On contact, the eyes should be focused on the ball.

Chip Pass

The **chip**, or **lofted pass**, is played into the air. It can be used to cover short or long distances. Short-distance chip passes (less than 20 yards) are used when a player needs to pass over defenders. The plant foot should be set close to the ball. The backswing of the pass is a bending of the leg where the heel is pulled up to the buttocks. The chip is made by straightening the kicking leg. Contact should be made beneath the ball with the top of the instep. The leg swing is very short without follow-through. There should be underspin on the ball.

A slightly different technique is used to chip the ball for 20 yards or more. The plant foot is slightly behind and away from the ball, but pointed toward the target. The ankle of the kicking foot should be rigid and sideways to the ball. The kicking foot should be pointed down and slightly out. The kicker strikes the lower half of the ball with the inside of the instep. On contact, the player leans back slightly to put backspin on the ball. The kick should have good follow-through.

Bending Pass

A bending pass is used to swerve the ball around a defender. The ball can be struck with either the inside or the outside of the instep. The toe should be pointed down and the ankle locked on contact. To spin the ball clockwise, or bend it to the right, the ball is hit a little inside of center. The ball will spin counter-clockwise, or bend to the left, if it is struck a little to the outside of center.

PASSING COMBINATIONS FOR TWO PLAYERS

The 1-2 Movement (Give and Go, wall pass)

Player with ball:

1. Dribbles close to the defender.
2. Plays a firm first pass to teammate.
3. Sprints to space past the defender as the pass is made.

Player without ball:

1. Gets open to receive a pass.
2. Stays approximately even with the defender.
3. Angles body to face the pass.
4. Passes back into open space as teammate clears the defender.

Practicing the 1-2 Pass

1-2 played behind the defender:

X1 dribbles at O, passes to X2 then accelerates to accept return pass from X2. (Fig. 4-18)

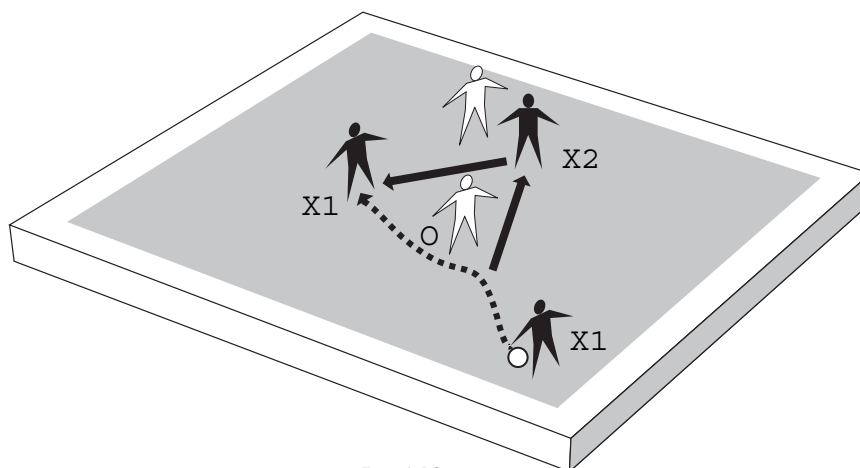
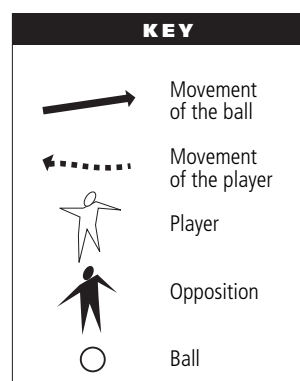


Fig. 4-18.



1–2 played across the face of the defender:

Exercise 1. Instead of breaking behind the defender, X1 runs in front of the defender to receive the return pass. This is a very effective tactic for outside players to move into the center. (Fig. 4-19)

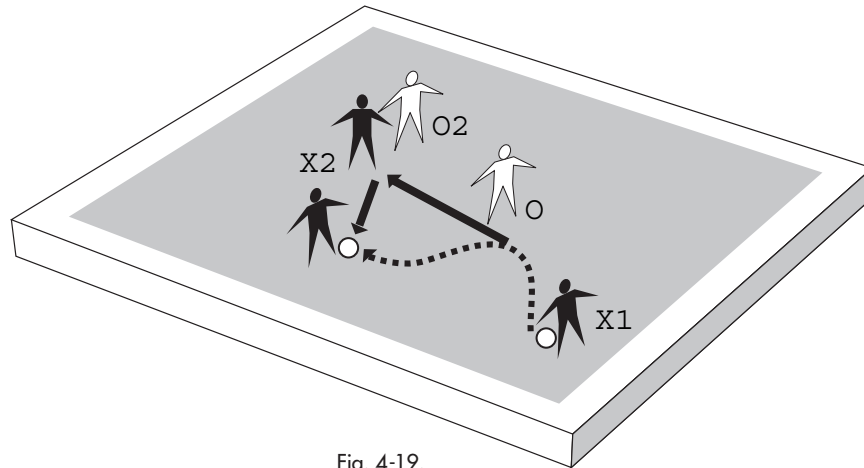


Fig. 4-19.

Exercise 2. Pass is made to target player, who then turns and plays the ball behind both defenders. (Fig. 4-20)

Note: The type and length of each pass will vary according to the distance between offensive players.

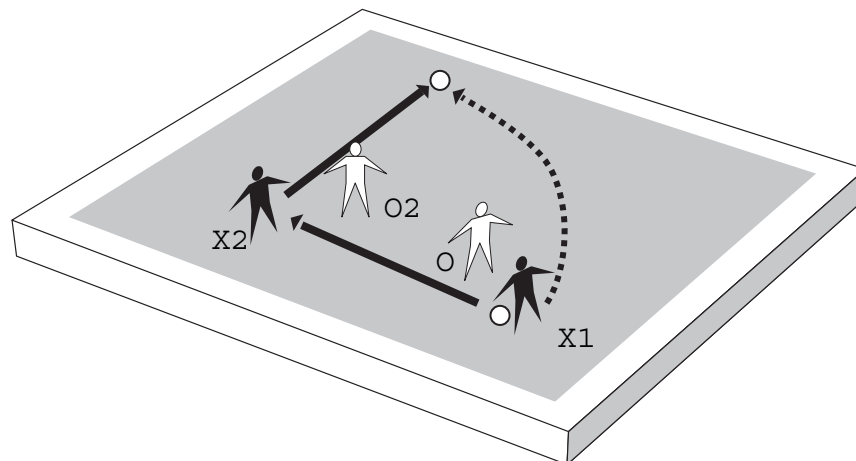


Fig. 4-20.

TEAM PASSING DRILLS.

Basic passing drills are the bread and butter of Soccer training programs worldwide. The discipline to “pass and move” is rehearsed repeatedly, often in a fundamental (i.e. without pressure from an opponent) manner.

Pass and Follow Drills

Players station themselves evenly around the center circle. One player passes the ball to any one of the other players in the circle and runs towards that player, exchanging positions with the receiver. The player who receives the pass now passes the ball to a different player and runs towards that player repeating a positional interchange.

(Fig. 4-21)

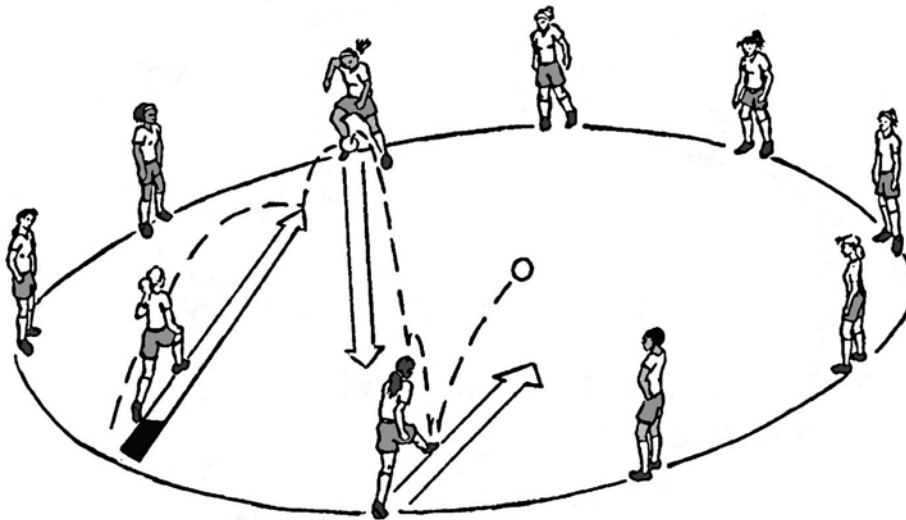


Fig. 4-21.

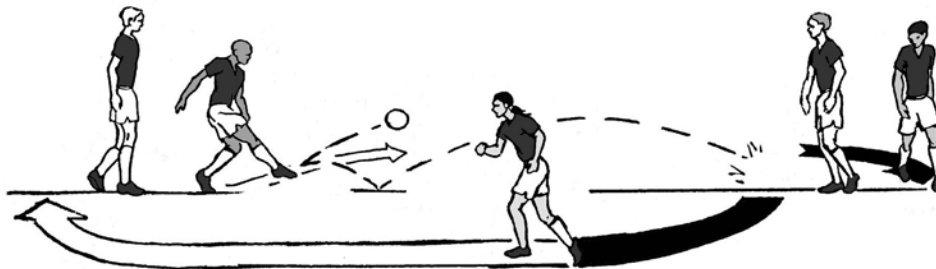


Fig. 4-22.

A second ball can be introduced to the drill. The coach can set the requirement prior to the pass (i.e. must dribble 5 yards before passing, can only pass with outside of foot etc.).

Although we generally do not promote players standing in lines while training, LINE DRILLS (Fig. 4-22) can be a simple and effective way to allow players the opportunity to repeat a skill. (Just make sure the number of players in each line is fairly small which will ensure that each player stays mentally and physically involved.) The coach can set the distance between each line and the type of pass to be performed.

TEAM PASSING EXERCISES

Possession Exercises — Match-Related Keepaway Games

5-versus-2 possession, 15x15 yard grid (size varies upon age and skill), seven players, one ball. The five offensive players keep possession, looking to pass between defenders when possible. Vary the conditions of play (e.g., one-touch, mandatory two-touch for skilled players). (Fig. 4-23)

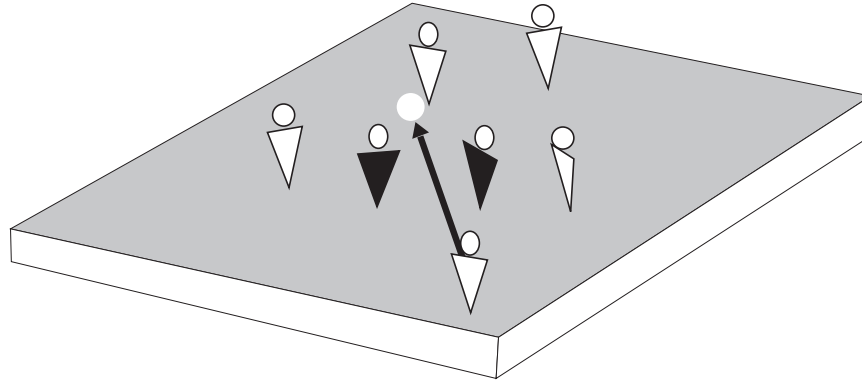


Fig. 4-23.

5-versus-3 possession, 30x30 yard grid (size varies), eight players, one ball. Increase the emphasis on depth and support. Touch restrictions can be used. (Fig. 4-24)

8-versus-4 possession, 40x50-yard grid (size varies), 12 players, one ball. Emphasize depth and support in addition to changing the point of attack. Once the offense turns the ball over four times, change the players of defense. Restrict the number of touches used by the offense. (Fig. 4-25)

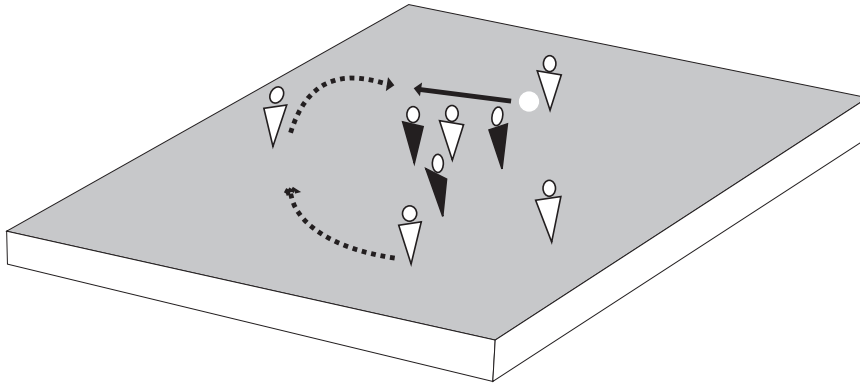


Fig. 4-24.

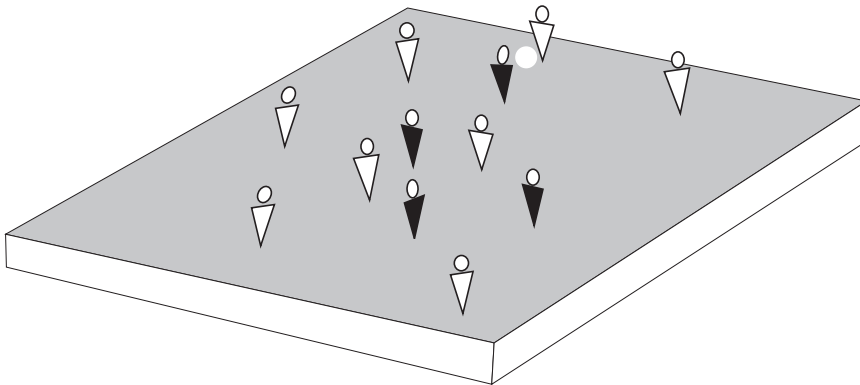


Fig. 4-25.

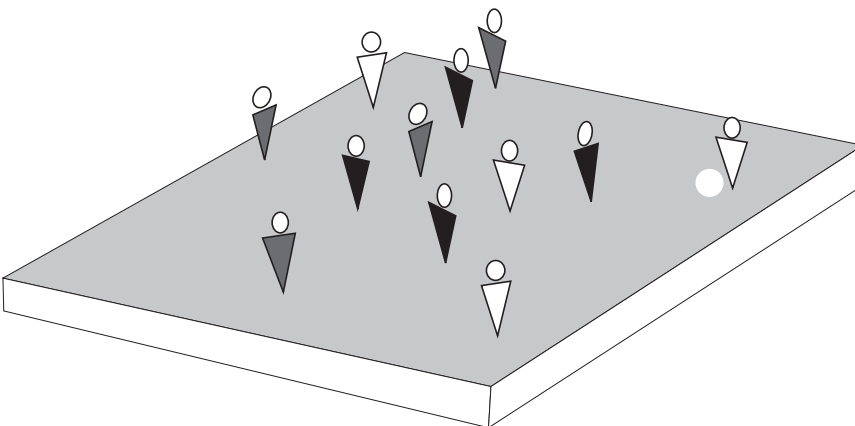


Fig. 4-26.

Three-color possession, 40x50-yard grid (size varies), 12 players, one ball, colored bibs. Use 8-versus-4 players with the addition of quick decision-making due to changing inside players. 3 teams of 4: four Grays, four Blacks, four Whites. To begin, the Blacks and Whites keep the ball away from the Grays. Once a turnover occurs, the team committing the error moves to defense. Touch restrictions can be used. (Fig. 4-26)

MATCH-RELATED EXERCISES WITH OUTSIDE SUPPORTING PLAYERS

30x30-yard grid (size varies), 8–16 players, one ball 4-versus-4 in the grid. Other players stand along each sideline. Rotate outside and inside players every 2–3 minutes.

Option 1: Play keepaway. Players can pass to any outside player. The outside player must pass it back to a player on the team that passed the ball. Outside players have a one- or two-touch restriction.

Option 2: Same as Option 1, except now a player can only pass the ball to a player on the outside of the grid, wearing the same color shirt.

Option 3: Same as Option 1, except the outside player must return a pass to a specified supporting player. (Fig. 4-27)

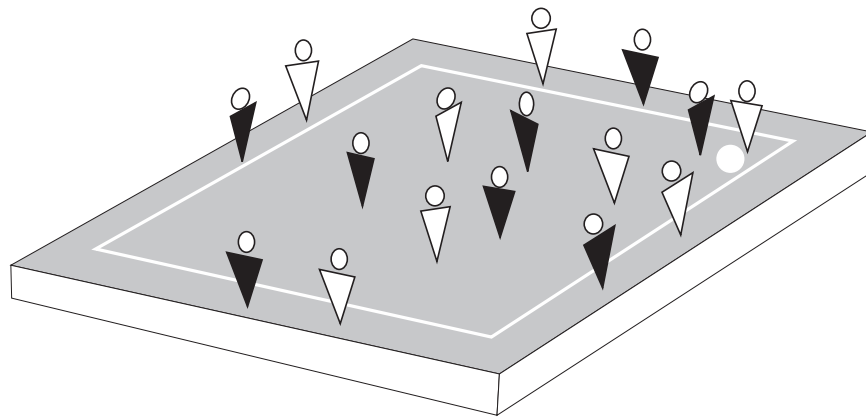


Fig. 4-27.

Option 4: X1 passes to X2. X2, allowed no more than two touches, plays a long ball to O1, who one-touches a pass to X3, the supporting player. Drill emphasizes long passing, support runs and target play. A 40x50-yard grid is recommended. (Fig. 4-28)

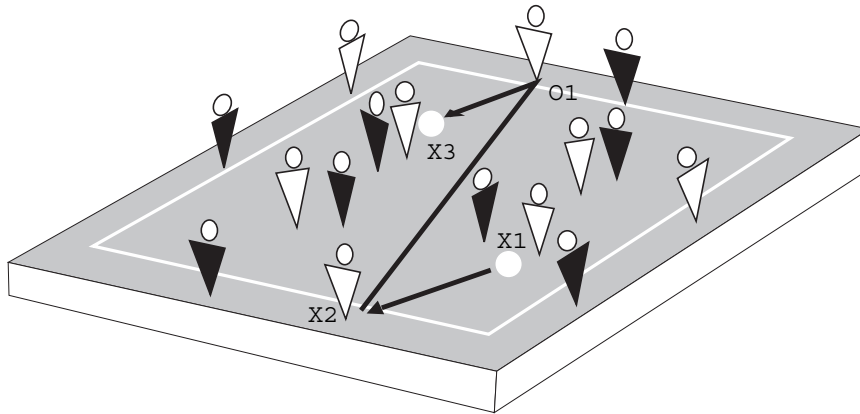


Fig. 4-28.

FREE LIBERO

40x40-yard grid, 10 players, two goals, one ball. 5-versus-5. The field is divided in half. Each team has a libero, a freeplayer who cannot be challenged by an opponent in the defending half. If the libero enters the attacking half, he or she becomes a regular player. The libero has a one- or two- touch limitation when in the defensive half. Emphasize passing and movement of the ball. Change the libero every five minutes. (Fig. 4-29)

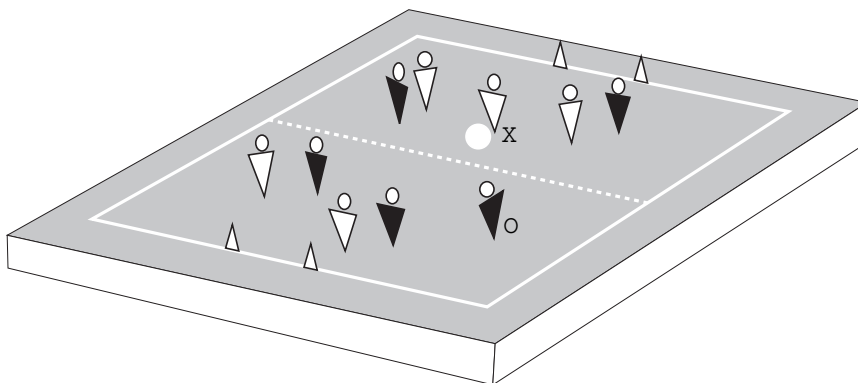


Fig. 4-29.

Shooting

There are few chances to score during a Soccer game. Good teams exploit those chances. **Shooting** should be part of every practice session. Emphasize the development of proper shooting technique: proper body mechanics, accuracy, power and timing. There is also an important mental aspect to shooting. A player who shoots with confidence is more likely to be successful. Players need to relax and focus when shooting. Help your players get a feel for shooting the ball properly so they can begin to correct their own mistakes.

The first step in teaching shooting is developing good technique. Begin with fundamental drills and progress to those that incorporate pressure from an opponent. Your players should learn to be equally effective with both feet. Teach them that in order to strike the ball properly they must place the plant-foot 6 to 8 inches to the side of the ball and pointed toward the target. The plant-leg should be slightly bent, with the head, chest and shoulders over the ball to keep the shot low. The ankle of the kicking leg should be locked while striking the ball. The shooter should push off the plant-foot and strike through the center of the ball, landing on the kicking foot.

Accuracy is the difference between simply shooting and scoring goals. The golden rule is, *accuracy before power*. Any ball that slips past the goalkeeper scores, not just eye-catching powerful blasts. Players should think about how to beat the goalkeeper. Players should look before shooting and make an early decision where to shoot. Remind them to look down at the ball, not the goal, when striking the ball. Low shots that move away from the goalkeeper are the most difficult to save. Encourage your players to shoot the ball before the goalkeeper is set. A quick shot leaves the goalkeeper less time to react. Most important, make the goalkeeper save the ball. Shots on goal require the goalkeeper and defenders to react. Forcing them to save opens the door to scoring through their mistakes; it gives your shooters an extra chance. Deflected shots may fall at the heads or feet of your forwards for an easy put-back goal. A shot that goes high or wide leaves no chance for a goal.

Shooting for *power* requires players to stay compact over the ball. A helpful teaching hint is telling your players to imagine that each has a giant eyeball on the center of his or her chest. When making contact with the ball, they want that eyeball staring straight down on the ball. This will ensure that the head, chest and shoulders stay over the ball. The ankle locks firm for a solid, powerful contact. The plant foot should be near and even with, or slightly in front of, the ball. Encourage your players to strike

through the center of the ball and land on the shooting foot. Shooters should remain compact over the ball throughout the shot. This helps keep the shot low and powerful.

Shooting is an *attitude* as well as a technique. Players must adopt a positive shooting mentality. Encourage your players to shoot to score. Confidence is a key ingredient for any goal scorer. Players should take risks and shoot as much as possible. Remember it often takes 10 shots to produce one goal. Players must look for every opportunity to create a shot on goal. Encourage them to be aggressive and anticipate potential shots in and around the penalty area. A player who consistently and aggressively shoots the ball on target, will strike fear into opponents, as well as create rebound-scoring opportunities for teammates.

SHOOTING TECHNIQUE

Just as there are different ways to dribble and pass the ball, there are different ways to shoot the ball. The correct type of shot largely depends on the location of the shooter, the location of the defenders and goalkeeper, and the type of pass the shooter receives. All surfaces of the foot can be used to shoot.

Instep Drive. The most powerful shot is the instep drive. It is most commonly used for long-range shooting. The objective is to strike the ball with the full instep (i.e., shoelaces). The shooter should take a long stride to the ball in preparation for the shot. The toe of the kicking foot should be pointed down with the ankle locked. This will ensure a solid surface with which to strike the ball. Teach your players to stay compact and strike through the center of the ball. To increase the power of the shot, teach them to lift the heel of the plant-foot when they make contact with the ball. This allows them to get their weight behind the ball. The follow-through should be a long stride with the shooter landing on the shooting foot.

Volleys. Full, half, Side foot and Sideways: These shots are, perhaps, the most difficult shots to learn. A **full volley** is striking the ball directly out of the air. A ball struck after it bounces is a **half volley**. Many players have the tendency to strike the ball when it is too high, leaving the shot without power. Teach them to wait for the ball to fall to a point where they can strike it properly.

Players should face the ball when striking a **side foot volley**. The plant-foot should be pointed toward the ball. The toe of the kicking foot should be pointed up with the ankle locked and rigid. The shooter must stay compact and strike the center of the ball

with the inside of the foot. The knee of the kicking leg should be higher than the ball on contact. Have the shooter keep his or her chest over the ball and strike through the center of the ball.

Half-volleys usually result from passes or turnovers that come straight at a player rather than from cross-balls. Half-volleys can be very difficult to judge. It is important to strike the ball immediately after it bounces. The technique is the same as for the full-volley whether using the inside of the foot or the instep. Teach players to strike the ball shortly after it bounces off the ground. Players have a tendency to lean back when striking the ball. Teach them to be aggressive and keep head, chest and shoulders over the ball when making contact.

Sideways Volley. Sideways volleys usually are played off of a cross-ball or deflection. Teach your players to face the ball as they approach it. Have them point the toe of the kicking foot toward the ground with the ankle locked and rigid. The instep strikes the ball. The kicking leg should be parallel to the ground. On contact, the shoulders and plant-foot should point toward the target. The body should stay compact and lean into the shot. The strike moves through the center of the ball. The hips should rotate toward the target. The shot's power comes from snapping the hip and kicking leg to strike the ball. (Fig. 4-30)



Fig. 4-30. Sideways Instep Volley.

Bending Ball. A bending or swerved shot is most commonly used to shoot around defenders. This shot is common on restarts such as corner kicks and free kicks. Have players strike the ball with either the inside or outside of the instep. The toe should be pointed down and the ankle locked at contact. For right-footed kickers, striking the ball inside of center causes it to spin clockwise, or to the right. Kicking the ball outside of center causes it to bend counterclockwise or to the left. (Fig. 4-31)

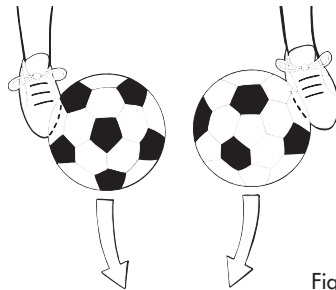


Fig. 4-31.
Bending Balls.

SHOOTING DRILLS

Fundamental

Shooting Without Opposition. Set up three adjacent grids with a goal in the center. There are two players, one server and one attacker, in each of the outside grids. A goalkeeper covers the goal in the middle grid. Play begins in the outside grid with the X1 passing the ball to O1, who is allowed only one touch to shoot the ball. X2 and O2 retrieve the shot. The goalkeeper turns to face them. X2 then passes to O2, who has only one touch to shoot the ball. The players continue the rotation. The attackers should shoot low, accurate shots. Stress the importance of proper shooting technique and a confident attitude. (Fig. 4-32)

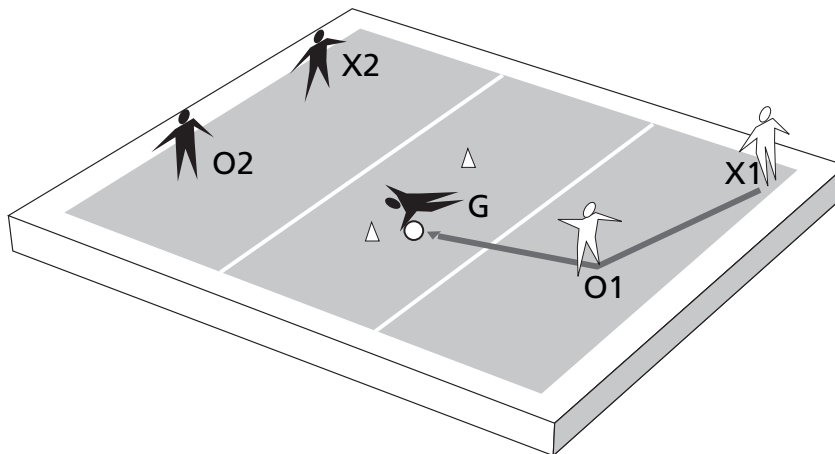


Fig. 4-32.

Match-Related

Shooting With Opposition. This drill is set up the same as the previous drill. There are now three players per outside grid: One server, one attacker and one defender. The server passes the ball to attacker from outside the grid. Once the attacker receives the ball, he or she must shield, turn and shoot before the defender wins the ball. Players repeat the same rotation as above. Continue to stress the importance of quick, well-placed shots. (Fig. 4-33)

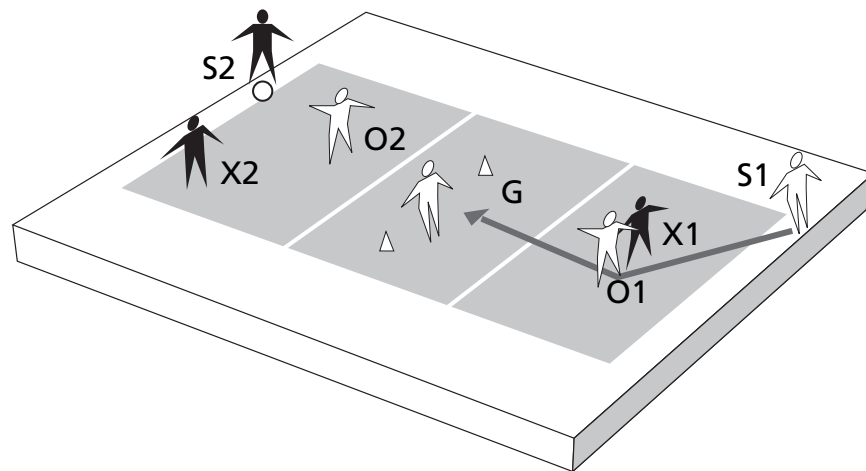


Fig. 4-33.

4-Versus-4 Direct Shooting

Play 4-against-4 inside the penalty box with two goals and goalkeepers. Each team is allowed no more than three passes before it must shoot. The goalkeeper who makes the save then rolls the ball to a teammate to restart the game. Encourage your players to shoot the ball frequently using proper mechanics. (Fig. 4-34)

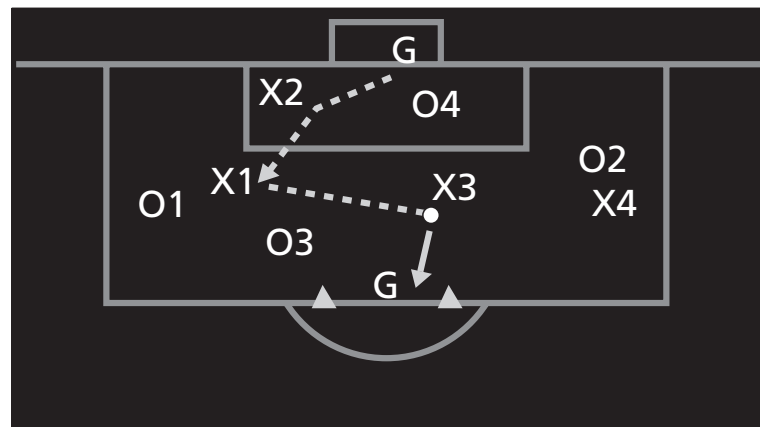


Fig. 4-34.

Drills for Finishing Close Range Cross-Balls

Fundamental. There are two lines of servers, located where the penalty box meets the endline. There are two lines of attackers, each line is located 5–10 yards outside the penalty box and opposite a serving line. One server at a time plays the ball to an attacker located diagonally from him or her. S1 serves to A2. A2 uses one-touch to shoot the ball. The server may pass the ball on the ground, lofted in the air or driven to the attacker. The players should rotate lines clockwise after each turn. Stress the importance of placement and selection of the surface of the foot that is to be used. (Fig. 4-35)

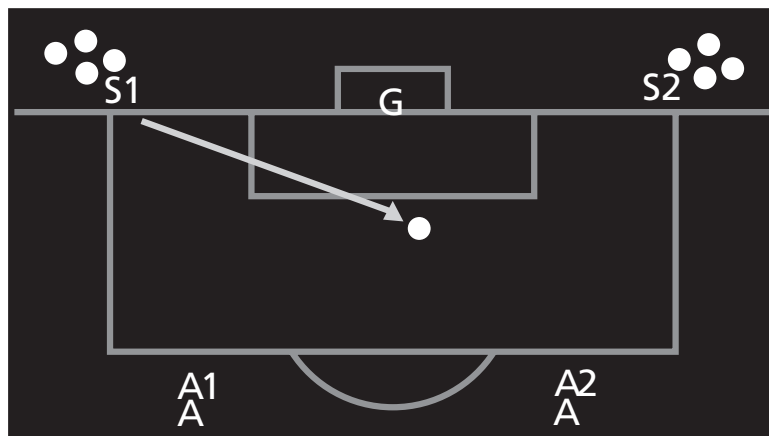


Fig. 4-35.

Match-Related. There are two sets of servers (S1 and S2). There is a goalkeeper and one defender located in the box. There are three lines of attackers located 5–7 yards outside the penalty box. Two lines are located on the outside portions of the penalty box. One line is located in the middle, opposite the goal. An attacker from each line goes at the same time. The attacker in the line nearest the ball being served (A1) makes a bending run toward the middle of the penalty box. The attacker in the middle line (A2) makes a bending run toward the far post, and the attacker in the line farthest from the ball (A3) runs to the near post.

The balls are served either one at a time, on the ground or in the air to the oncoming attackers who attempt to score. Alternate the side of the field from where the ball is served. Stress the importance of choosing the correct foot-surface and the placement of the shot. (Fig. 4-36)

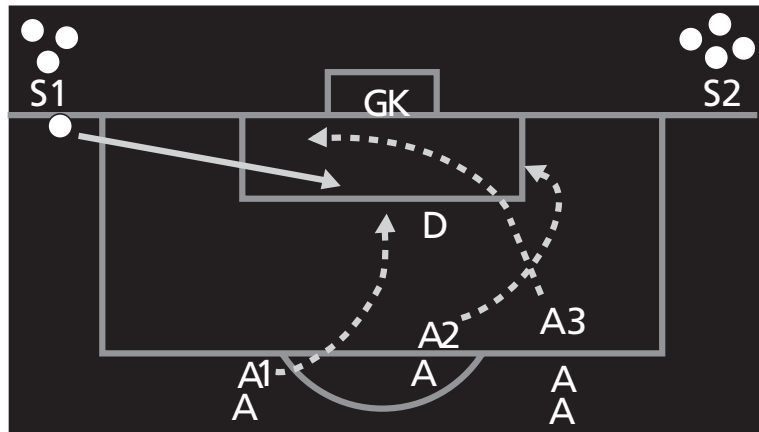


Fig. 4-36.

Match Condition. 6 against 6 (X versus Y) on half-field. Make two 10-yard-wide channels down each side of the field. There is one player from each team in each channel. The other players play 4-versus-4 in the middle-section of the field. The object is to pass the ball to the teammate in the channel. The channel player is responsible for crossing the ball to teammates for a shot on goal. Goals can only be scored from a cross-ball. Begin the drill with the channel players playing passive defense and then increase to the point of full defensive pressure as the drill wears on. Stress technique and accuracy. (Fig. 4-37)

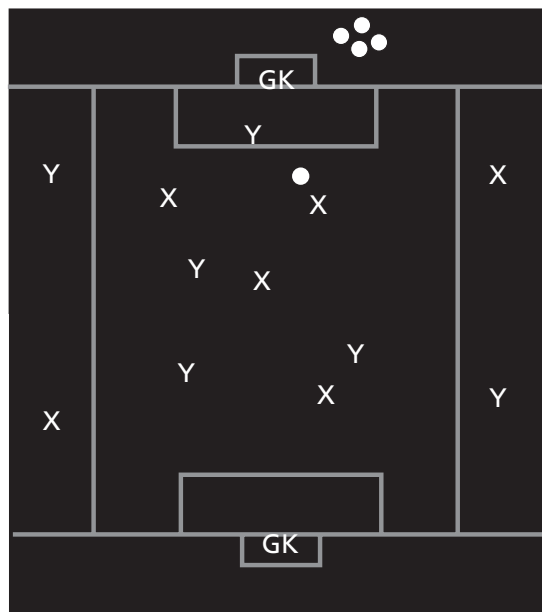


Fig. 4-37.

Heading

Heading is propelling the ball by striking it with the forehead. Players can use their heads to pass, shoot, collect, or clear the ball. Heading is an important skill to master because, on the average, 30-percent of the game is played with the ball in the air. Proper technique and timing are crucial to successful heading.

There are some guidelines to follow when teaching proper heading technique. First, start at a fundamental level to give your players confidence. As they begin to master heading technique, progress to more difficult drills that incorporate game-like situations and pressure from the opponent. Players will be more likely to head the ball during the game if they can do it in practice.

BODY POSITION

Explain to your players that power in heading comes from the trunk, legs and arms. A player often will try to throw the head at the ball by snapping the neck rather than keeping the neck firm and using the body to generate power. Whether the player is on the ground or in the air, the trunk should arch backward prior to contacting the ball. The arms should be slightly bent in front of the body as if beginning to row a boat. The shoulders and chest should be square to the flight of the ball.

With the chin tucked toward the chest, teach the player to strike the ball with the upper part of the forehead near the hairline. The eyes should be open and the mouth closed. On contact with the ball, the player should pull the arms toward the body as if rowing. At the same time, the trunk pulls forward through the ball. The neck remains firm. Players should be taught to strike through the ball for power and accuracy, and follow through toward the target.

Many players have a tendency to strike the ball with the top of the head. This can be very painful. It often happens when a player closes the eyes and drops the head. Encourage your players to keep the eyes open and focused on the ball throughout the entire heading motion. This will help keep the forehead facing the ball.

A ball can be headed while standing or jumping. When heading with the feet on the ground, the player should keep a wide base and staggered stance. This will help develop control and power. The body motion is the same as previously described. When jumping to head the ball, timing is the most important factor. Teach your

players to jump early so as to strike the ball at the peak of the jump. They want to try to meet the ball at the height of the jump. Whenever possible, encourage players to use a single leg take-off because it allows them to get the most height. Teach your players to drive the nonjumping leg up toward the ball when jumping. The arms also should be driven up toward the ball. The arm drive gives more height to the jump.

TEACHING PROGRESSION FOR HEADING

When teaching heading, create situations where players can focus on different parts of the overall technique. It is easiest to start from the shoulders up and then introduce the trunk and leg motion.

It is best to teach heading using the following progression: sitting, kneeling, standing and jumping. This progression allows your players to slowly combine all of the different technical aspects of heading. Once you begin heading drills, encourage your players to give each other good service. Bad service will cause players to use incorrect heading technique and possibly suffer a minor injury.

Sitting is the first stage of the teaching progression. Heading from a sitting position allows a player to concentrate on keeping the eyes open, striking the ball with a correct part of the forehead, and keeping the neck firm. It also introduces the whipping motion of the trunk.

Heading the ball while *kneeling* continues to develop the coordination of the eyes, forehead and neck. The arms and trunk now contribute to the motion. While kneeling, a player can arch back and use the arms in a rowing motion to make solid contact with the ball. Have the player head the ball and continue the motion forward, landing in a push-up position on the ground. This teaches the player to head *through* the ball by using the trunk.

Next, have the player head from a *standing* position. One foot should be placed in front of the other. The full heading motion can be used. Take the time to stop and correct bad technique. If the player is unsuccessful, do not hesitate to return to the kneeling position. Teach using the legs, arms and trunk to head the ball with power.

Once comfortable standing and heading, have the athlete head the ball while jumping. The heading technique is the same whether using a single or a double-leg take-off. Begin with double leg take-offs and then progress to jumping off a single leg. The knee

of the free leg should drive up toward the ball. The ball should be headed at the peak of the jump.

DRILLS FOR TEACHING HEADING

Heading With Feet on the Ground

- One player sits on the ground with the legs outstretched. The other player stands 5-yards in front of his or her partner and tosses the ball to be headed back.
- Partners stand facing each other 5–7 yards apart. The server jogs backward across the field while serving the ball to the other player, who runs forward and heads the ball back. Players switch positions after crossing the field.
- Two players face each other 5-yards apart. One partner tosses the ball straight up in the air and tries to head the ball to his or her partner, who is moving to either right or left. The player heading the ball should remain on the ground.
- Three players stand in single file about 5-yards apart. The player at the front of the line faces the other two players. The first player tosses the ball to the second player, who heads it back to the first player, who, in turn, heads the ball long to the third player. The third player catches the ball and begins the sequence again.
- Three players stand in a single file about 5-yards apart. The two outside players each have a ball and face the player in the middle. One server tosses a ball to the player in the middle, who heads it back and then turns quickly to face the other server, who tosses a ball for the middle player to head back. Repeat without stopping.

Drills Using a Double-Leg Jump

- One player holds the ball tightly with the hands in front of the body and the arms stretched high. The other player uses both legs to jump and head the stationary ball.
- Two players face each other 10-yards apart. One player tosses the ball high in the air. The other player jumps off both feet and heads the ball back. Teach your players to head the ball at the peak of the jump.
- Three players stand in single file. There is one server, one passive defender and one header. The server faces the defender and header standing 7-yards away. The defender stands in front of the header, facing the server. The server tosses the ball over the defender to the header, who must use both legs to jump and head the ball without making contact with the defender.

Drills Using a Single-Leg Jump

- One player serves the ball high and in front of the other player in order to force the player to run and jump off one leg to head the ball back.
- Three players stand in single file with one ball. There is one server, one passive defender and one header. The server faces the defender and header, standing 7-yards away. The defender faces the server. The header faces the server standing 3–5 yards behind the defender. The server tosses the ball high over the defender to the header, who must run and jump off of one leg to head the ball back to the server.
- There is one group of headers and one group of servers. The servers form a line at the point where the penalty area connects with the goal line. The headers form a line opposite the far post and even with the penalty spot. The server uses a throw-in to serve the ball to the header, who must run and use a single-leg takeoff to head the ball. Encourage your players to head the ball down toward the goal line.

Heading to Score

- Two teams, one attacking and one defending, with two players on each team in a 10x10-yard grid. There is one 10-yard wide goal at each end of the grid. The centerline is 5-yards from each goal. One attacker serves the ball from the centerline to the other attacker, who must head the ball past the defenders to score a goal. The defenders cannot cross the centerline. Each team gets 10 serves. Encourage your attackers to head the ball down toward the ground. (Fig. 4-38)

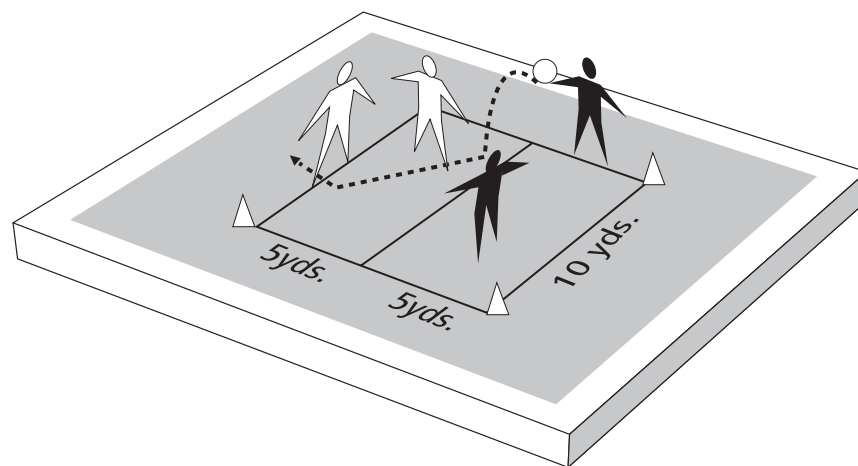


Fig. 4-38.

- Two teams of two players each in a 10x12-yard grid. The goals are the full width of the 10-yard end line at each end of the field. The game begins with one player tossing the ball to his or her teammate, who either heads to score or heads back to the server, who must then head the ball. The two players from the opposing team act as goalkeepers and may use their hands to make saves. Once the ball is in the air, the players must use only their heads to pass or shoot. If one team misplays the ball, the opposing team takes possession at the point where the ball lands. Encourage your players to react quickly when the ball is turned over to keep the game moving fast. Continue to emphasize that your players should keep their necks firm and chins tucked in. The ball should be headed down toward the goal line.

Heading for Clearance

- In the penalty box with one server, one attacker and one defender: The server stands with the ball outside the penalty box, even with the 6-yard line. The defender stands in the corner of the goal box. The attacker stands opposite the defender approximately 10–12 yards away. The server tosses the ball to the defender, who must head the ball high to a target area located far outside the corner of the penalty box. If the ball is cleared into the target area, the defender gets a point. If the defender misplays the ball or is unable to clear it out of the box, the attacker attempts to gain possession of the ball and score. As the drill progresses, vary the height and distance of the service and bring the attacker closer to the defender to increase the pressure on the defender. Teach your defenders to head the ball high to the target area. (Fig. 4-39)

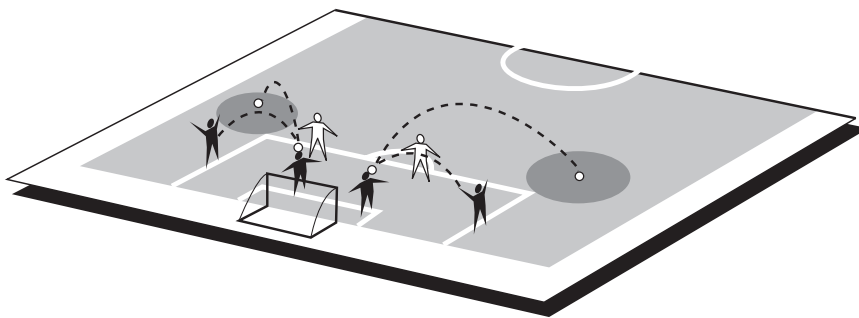


Fig. 4-39.

Goalkeeping

The goalkeeper is a specialist who plays the ball with both hands and feet. Because your team relies heavily on your goalkeeper to make saves during the game, it is important to provide your keeper with daily specialized training. Goalkeepers need at least 45-minutes of personal training at every practice. Many coaches have the tendency to put goalkeepers in the goal during shooting drills and feel that is sufficient training. Shooting drills are not the best time to build a goalkeeper's confidence or perfect goalkeeping techniques. Instead, take the time to work one-on-one with your goalkeeper. The training should be highly intense for short periods. Goalkeepers should maintain a relaxed but focused manner. Good service to your goalkeeper during drills is very important. Bad service will only work to destroy your keeper's confidence. Remember, when working on technique, keep drills simple. Give your keeper a chance to gain confidence and get a feel for proper technique.

THE STANCE

The goalkeeper's stance should be comfortable. Teach your goalkeeper to place the feet shoulder-width apart with the heels slightly off the ground. Your keeper should lean forward slightly, with knees bent so the weight is on the balls of the feet. The arms and hands, with the palms facing toward the field, should be raised into a comfortable position above the hips. Have your keeper stand comfortably but at the same time appear as large as possible to present a powerful image to the opponent. (Fig. 4-40)



Fig. 4-40. Stance.

POSITIONING

There are many factors for a goalkeeper to consider before choosing a position on the field. The goalkeeper must consider the speed, direction, distance and location of the player with the ball. The goalkeeper also must take into consideration the location of all other players. Many factors determine whether the goalkeeper should stay on the goal line or come out of the goal to minimize the shooting angle of the player with the ball.

Positioning to Minimize Shooting Angles

Controlling angles is a vital part of a goalkeeper's success. Proper positioning will make the goalkeeper's job much easier by presenting the smallest possible angle from which the offensive player can shoot. Teach your goalkeeper to take a position that bisects the angle formed by the ball and the two goalposts. The goalkeeper must adjust position every time the ball moves.

The goalkeeper should always start from near the goal line. As the attacker with the ball begins to enter the penalty box, teach your goalkeeper to advance a few steps toward the ball. If your keeper (G1) stays on the goal line, there will be too much space on either side for the attacker to score. If your goalkeeper (G2) comes out too far, more space than necessary will be covered, which leaves open the valuable space behind the goalkeeper. This open space allows an attacker to loft a shot over the goalkeeper's head or creates space for the attacker to dribble around the goalkeeper to get a good angle from which to shoot the ball. Your goalkeeper (G3) must take a position that allows him or her to cover the most space without allowing balls to be played overhead. (Figs. 4-41, 4-42)

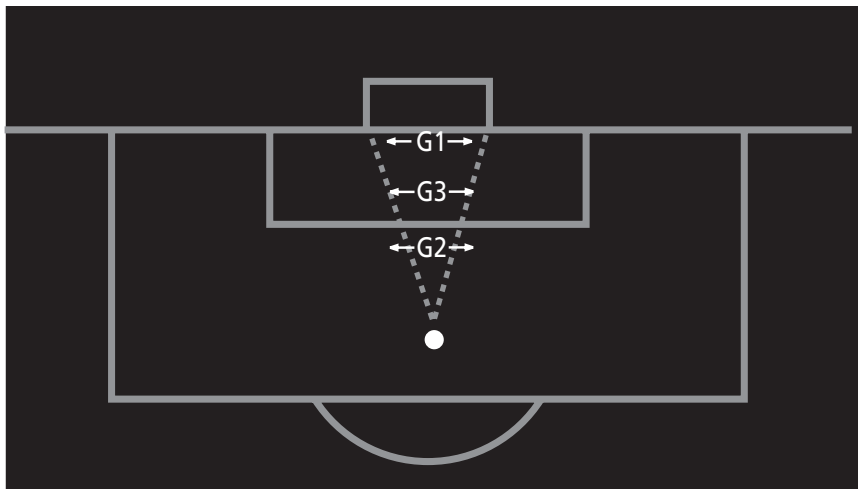


Fig. 4-41.

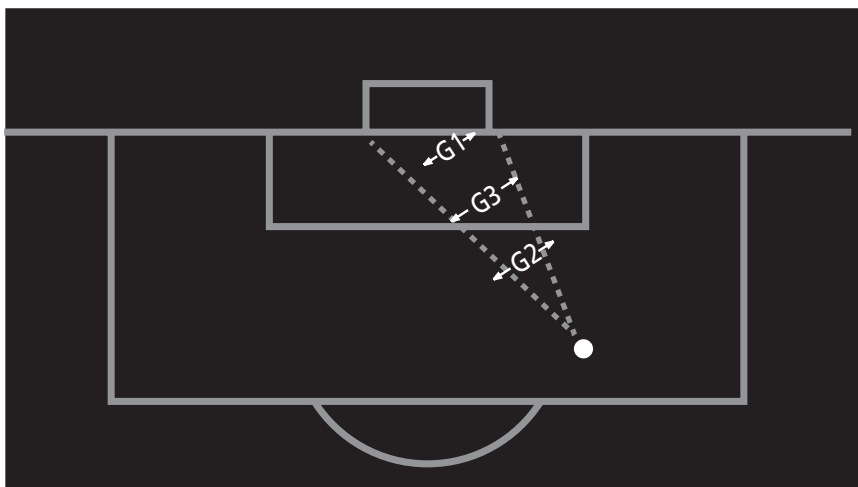


Fig. 4-42.

Angle Play Drill

The goalkeeper plays in the goal with several balls placed in and around the penalty area. One server jogs and pretends to kick one of the balls. As the server moves to a different ball, the goalkeeper must move to cut down the angle of the shot. Occasionally, the server sprints to a ball as if to shoot but freezes just prior to contact. At that point, check to see if your goalkeeper is in the correct position to cut down the angle. Every third or fourth fake, the server should actually shoot the ball for the goalkeeper to save. The objective is to keep the goalkeeper moving and constantly adjusting to the movement of the server.

GOALKEEPER TRAINING

Warm-Up

Before beginning specialized training, your goalkeeper should complete a vigorous warm-up. The emphasis should be on stretching and exercises, known as **ball gymnastics**, that improve agility, quickness and hand-eye coordination. Many stretches can be done while holding the ball.

Ball Gymnastics

As discussed above, ball gymnastics should be incorporated into every goalkeeper's warm-up. Your goalkeeper should be relaxed but focused during ball gymnastics. As with any exercise, ball gymnastics take practice before a goalkeeper feels comfortable serving and catching balls. Emphasize proper technique.



Fig. 4-43. Catching Technique.

Exercise 1. The goalkeeper stands with a ball, feet placed shoulder-width apart and the knees slightly bent. With both hands in front of the body, the goalkeeper bounces the ball through the legs and twists around to catch the ball as it bounces behind. The goalkeeper then bounces the ball back through the legs and catches it in front of the body. Teach your goalkeeper to twist in both directions. Insist that your goalkeeper always catches with thumbs and index fingers forming a “W,” with thumbs almost touching. (Fig. 4-43)

Exercise 2. The goalkeeper stands with a ball in a comfortable, ready stance. The goalkeeper punches the ball to the ground with a fist. After the ball bounces, the goalkeeper catches the ball before it rises above the knees. To vary the service, the goalkeeper should alternate fists. Your goalkeeper must be quick in order to catch the ball before it rises above the knees. Encourage bending the knees and catching with the “W.”

Exercise 3. Two goalkeepers stand with a ball 5–7 yards apart. One goalkeeper rolls the ball to the other. The second goalkeeper tosses the ball to the roller's chest. The goalkeepers serve each other simultaneously, so while one is saving balls on the ground, the other is saving balls above the waist. The goalkeepers must communicate when to switch services so that they make the switch without stopping the exercise.

Exercise 4. Two goalkeepers face each other about 5-yards apart. One goalkeeper takes two big sidesteps to the right to form a diagonal with the other. Simultaneously, each goalkeeper tosses the ball straight to the open space in front. The goalkeepers must quickly shuffle to the side in order to catch the ball that has been tossed into the adjacent space. The goalkeepers continue to toss and side-shuffle to make saves. Service, communication and rhythm are crucial to the success of the exercise (Fig. 4-44).

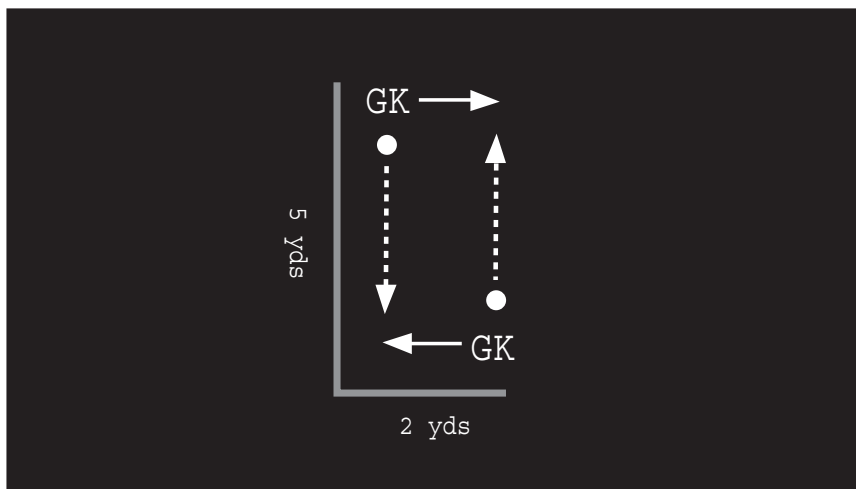


Fig. 4-44.

Elementary Catching

Saving Low Balls. A shot that is on the ground is considered a **low ball**. Teach your goalkeeper to get the body behind the ball and approach with the palms facing the ball, fingertips pointed toward the ground. The ball should be scooped with the hands into the chest. Your goalkeeper's eyes should focus on the ball. The chest and shoulders should lean over the ball to protect against a bad hop. If the ball is to goal right, teach your goalkeeper to shuffle and place the right-leg before the ball with the toe pointed slightly out. The left-knee drops toward the heel of the right-foot to create a barrier.



Fig. 4-45. Low Balls.

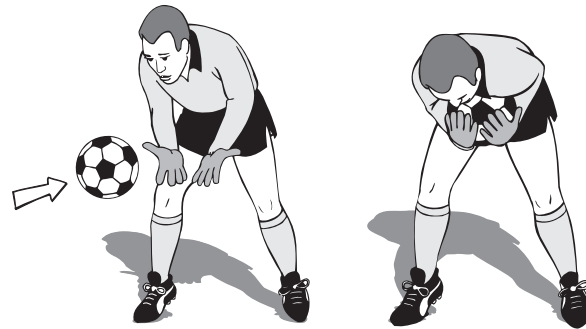


Fig. 4-46. Below Chest, Above Waist.

This will prevent a ball from going through the goalkeeper's legs. The palms and chest still face forward. If the ball is to the left, the right-knee drops toward the heel of the left-foot. (Fig. 4-45)

Saving Balls Shot Below the Chest and Above the Waist. Teach your goalkeeper to position his or her body in front of the ball. The arms should be somewhat in front of the body with the elbows slightly bent. The palms should face the ball. Teach your goalkeeper to lean slightly forward to bring the chest down toward the ball. The ball should be caught by scooping it into the chest. You should be able to hear two sounds, the ball hitting the palms and then the ball hitting the chest. Teach your goalkeeper to focus on the ball throughout the entire save. (Fig. 4-46)

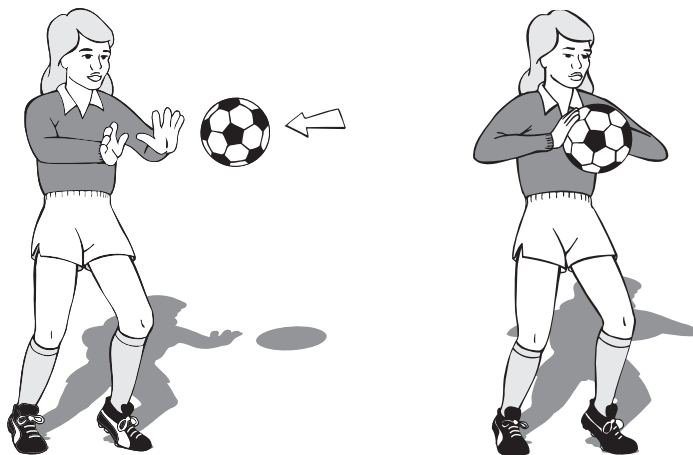


Fig. 4-47. High Balls.

Saving High Balls. Teach your goalkeeper to catch the ball by forming a “W” with the thumbs and index fingers, with the thumbs almost touching. To catch, position the body in front of the ball and extend the arms away from the body with the elbows slightly bent. As the ball touches the hands, the goalkeeper absorbs the shot by bringing the ball toward the chest. Teach your goalkeeper to catch the top half of the ball. That way, any dropped shots will fall to your goalkeeper’s feet. Again, encourage your goalkeeper to focus on the ball throughout the entire save. Many young goalkeepers tend to lose eye contact, causing the ball to drop out of their hands. (Fig. 4-47)

Catching Drills

Ball gymnastic exercises can be used to develop catching technique. Volleying the ball at varying heights or playing the ball on the ground also are good catching exercises.

One server stands approximately 5-yards from the goalkeeper. The server tosses the ball underhand a yard to the right or left of the goalkeeper’s head or chest. Your goalkeeper should push off of the leg farthest from the ball to get the body in front the ball and make the save. If the ball is to the right, the keeper will push off of the left leg. If the ball is to the left, the keeper will push off of the right leg. The server should back up an additional 6–7-yards and throw the ball overhand or volley to challenge the goalkeeper further, using the same technique.

DIVING

Most goalkeeping photographs in magazines and newspapers depict goalkeepers flying through the air in the midst of an advanced dive known as a power-dive. The majority of diving saves made by goalkeepers, however, are much less dramatic. The three basic dives that will be performed by your goalkeeper are the **low-dive**, the **collapse-dive** and the **power-dive**. The low-dive and collapse-dive will be used more often than the power dive.

Teaching Diving

The teaching progression for diving begins with the goalkeeper sitting on the ground with the legs slightly bent in front of the body. Next, the goalkeeper kneels on the ground, then squats, and finally stands. When teaching your goalkeeper to dive, it is important to keep the pace of the drill at a speed that encourages the perfection of each technique. Always remember that when correcting a bad habit or teaching a new skill, it is best to keep the drills simple. Correct one mistake at a time, and progress

from the easiest position to the more difficult.



Fig. 4-43. Catching Technique.

Saving Low Balls. If the ball is on the ground, your goalkeeper can use a low dive to save the shot. As the ball approaches, the goalkeeper takes an attacking step toward the ball by stepping diagonally toward it with the leg closest to the ball. The goalkeeper should lower the knee, while pushing off toward the ball and at the same time lowering the hands. The thumbs should be approximately 3-inches apart. Your goalkeeper should lower the hands outside of the bent knee and toward the ground. As the momentum carries the goalkeeper toward the ground and ball, the arms and hands should extend toward the ball to make the catch in front of the body. Teach your goalkeeper to keep the hands next to each other and shoot them quickly at the ball. The ball should be caught using the “W,” placing one hand on top of the ball and one hand in front of the ball. The lower hand is placed in front of the ball to act as a barrier while the upper hand holds the top of the ball down against the ground. (Fig. 4-43)

Teach your goalkeeper to land on the side, not the stomach. Shooting the hands toward the ball will create a sliding effect that brings the back of the arm and shoulder to the ground first. Landing on the side allows the body to act as a barrier and frees both hands to make the save. The upper leg is slightly raised with the knee bent toward the chest, and the lower leg is forward and slightly bent.

If the goalkeeper decides not to catch the ball, the lower hand should quickly and aggressively deflect, or parry, the ball away for a **corner kick**.

Saving Medium to High Balls. If the ball is in the air your goalkeeper will use either a collapse dive or power dive depending on the height of the ball. For a collapse dive, teach your goalkeeper to take an attacking step toward the ball. Your goalkeeper should then fully extend the arms and hands toward the ball, catching it with the W. The catching technique is the same as saving high balls that are shot directly at the goalkeeper.

On the landing, the goalkeeper’s momentum should carry him or her through the ball. Teach your goalkeeper to continue to carry the ball forward, bringing it down to the ground, to absorb the impact of landing. As the ball hits the ground, one hand should be on top and one hand behind it. Teach your goalkeeper to land on the back of the arm and shoulder, not the stomach. The goalkeeper must keep the chest facing both the field and the ball. This ensures that your goalkeeper will keep good form on the dive. (Fig. 4-48)

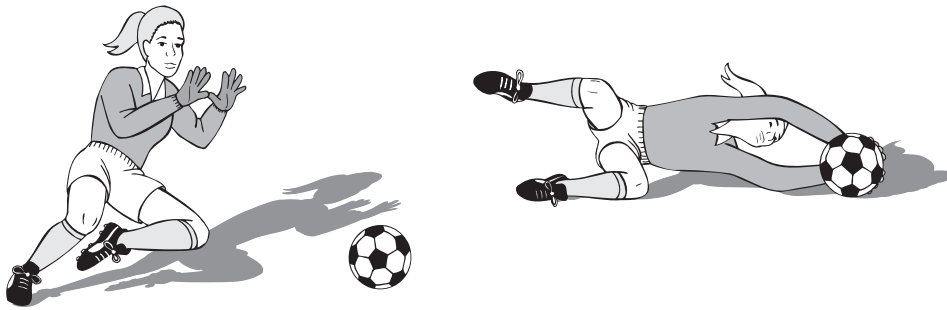


Fig. 4-48. Diving.

If a shot is too high to be reached with a collapse dive, your goalkeeper should make a *power dive* to make the save. The footwork is the same as the collapse dive. Teach your goalkeeper to take an attacking step toward the ball, explode off the ground and drive the knee of the top leg toward the ball. The arms should be extended with a slight bend at the elbows. The hands reach to catch the ball in front of the body with the “W.” The goalkeeper should land by bringing the ball to the ground first to absorb the impact, followed by the back of the arm, shoulder, and finally, the hip. The hands should be placed so that one hand is on top of the ball and one hand is behind the ball as it touches the ground. Teach your goalkeeper to extend the arms so as not to land on the elbow. Upon landing, the body’s momentum will bring the legs toward the chest. The goalkeeper should keep the chest facing both the field and the ball. This ensures that your goalkeeper will maintain good form on the dive.

If the decision is made not to catch a medium to high ball, the goalkeeper should lightly and quickly tip the ball away for a corner kick.

Diving Drills

Between the Legs. There are two players and one ball, with one keeper acting as the server. The goalkeeper stands, legs apart, facing the server. The server plays the ball lightly on the ground between the goalkeeper’s legs. The goalkeeper must turn quickly and dive to save the ball before it rolls too far away. The server must play the ball with enough pace to cause the goalkeeper to dive, but not so much as to make the keeper chase the ball. The goalkeepers should switch roles after 10 services.

Consistent Diving. Inside the penalty area, there is one server with several balls approximately 12-yards from the goal. The goalkeeper takes a stance in the middle of

the goal. The server points in the direction in which the ball is about to be served, then plays the ball. The ball should be served in a way that requires the goalkeeper to dive to save. After the save, the goalkeeper rolls the ball back to the server and returns to the middle of the goal.

Goalkeeper Competition. Use cones to make two, 6-yard-wide goals and place them 12-yards apart. Place one goalkeeper in each goal. The drill begins with one goalkeeper attempting to score on the other by kicking the ball on the ground. The other goalkeeper must save the ball cleanly, without bobbling it. If a clean save is made, the goalkeeper who made the save can attempt to score by volleying, throwing, or kicking the ball on the ground. If the ball is not saved cleanly, the offending goalkeeper must place the ball on the goal-line and attempt to score by kicking it on the ground. Regardless of the type of ball played, the service must be below the goalkeeper's knees. The first player to score 10 goals wins. (Fig. 4-49)

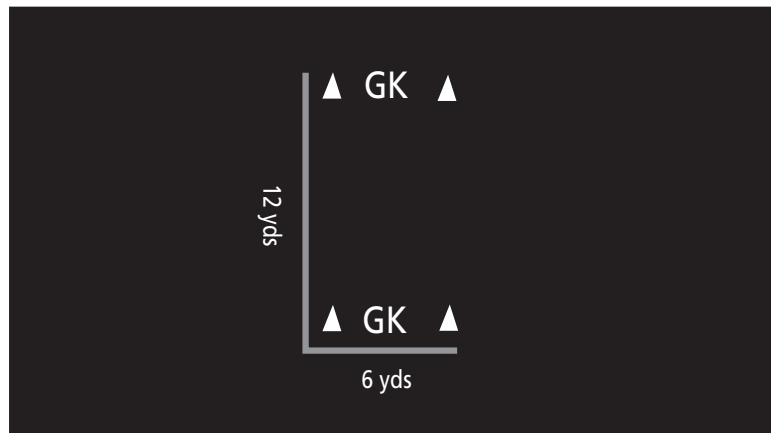


Fig. 4-49.

CROSS BALLS

Many situations such as corner kicks, free kicks, throw-ins, as well as the normal course of play, involve a ball being lofted or driven across the field into the penalty area. The ability of the goalkeeper to collect cross-balls will lessen the pressure on defenders and, ultimately, prevent goals. The keys to saving a cross-ball are timing, footwork and communication.

Teach your goalkeeper to take a position that enables movement toward the ball and gives him or her a view of the entire field. The goalkeeper should be far enough off the

goal-line to cover a large area, but not so far as to be vulnerable to a shot chipped overhead. Teach your goalkeeper to attack the ball. The goalkeeper should catch the ball at the peak of the jump. The goalkeeper should jump using a single-leg takeoff, and thrust the non-jumping knee up toward the ball. The drive of the knee will propel the goalkeeper upward. Teach your goalkeeper to thrust the knee that is closest to an opponent when jumping. This will help protect your goalkeeper in a crowded penalty area.

The decision to come off the goal-line to save must be made as early as possible to give defenders time to react. Therefore, your goalkeeper must yell *keeper* loudly once the decision has been made to come out and save a cross-ball. This lets defenders know that the goalkeeper is coming and that they should cover the space behind the keeper. If the decision is made not to come out, the goalkeeper should shout *away* or *clear* to inform defenders to clear the ball out of the penalty area.

Cross-Ball Drills

With the goalkeeper in the goal, the server/coach is on the side of the 6-yard box with a ball. The ball is tossed high in the air or thrown on a line to either the near post or far post. The goalkeeper must read the situation and react accordingly. This drill allows the goalkeeper to become comfortable with correct footwork. Teach your goalkeeper that the first step should be in the direction in which the catch will be made. For example, if the goalkeeper's first step is toward a high-lofted ball, the ball will go over his or her head. Instead, the goalkeeper should step back into the space where the ball can be caught.

A server placed wide on the flank lofts the ball into the penalty area. The goalkeeper must jump and catch the ball at the highest point. Add one attacking player to apply pressure

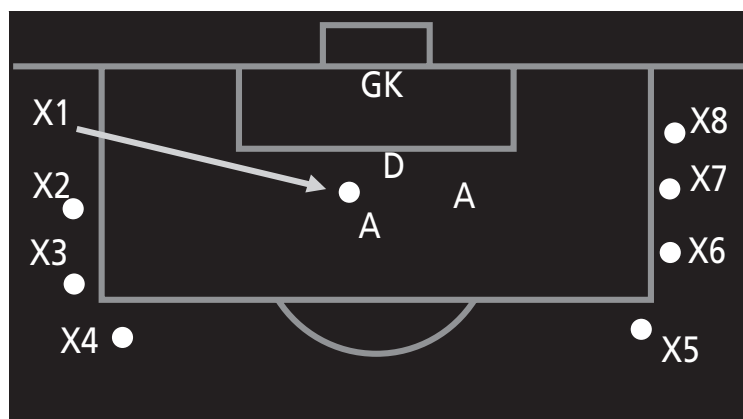


Fig. 4-50.

to the goalkeeper inside the penalty area. The goalkeeper must make the save and immediately distribute to a target outside the penalty area. To create a game-like situation, add a defender in the box and have the goalkeeper communicate with the defense (Fig. 4-50).

Place eight servers, each with a ball, around the penalty area. There are two attackers and one defender inside the box, with a goalkeeper in the goal. A ball is crossed into the penalty area, where it is played until a save is made; the ball is cleared safely out of the area, or a goal is scored. Make the drill a competition, attackers versus defenders. After the cross has been caught, have the goalkeeper distribute the ball to the opposite side of the field.

BOXING

When it is impossible to catch a cross-ball, or if conditions dictate that is unsafe to attempt a catch, the goalkeeper should box the ball, or punch it with clenched fists. Whenever possible, the goalkeeper should use both hands to box the ball.

Teach your goalkeeper to clench both fists and place them together, fingers touching, so the flat part of the fists face outward. To contact the ball, the goalkeeper should strike the bottom-half of the ball and fully extend the arms to propel the ball. The ball should be boxed in the direction in which the goalkeeper is running. The ideally boxed ball is one that achieves both height and distance. Teach your goalkeeper to use two hands to change the direction of the ball or to box it back from where it came and one hand to maintain the flight of the ball. Your goalkeeper should not try to box the ball too hard. It is more important to make strong, solid contact. (Fig. 4-51)



Fig. 4-51. Boxing the Ball.

Boxing Drills

Two goalkeepers, one standing in front of the other. The goalkeeper in front acts as an attacker. A server tosses the ball over the attacker's head so the goalkeeper must jump and box the ball away. Each goalkeeper receives 10 balls and scores a point for each boxed ball that goes over the server's head.

You can also use any of the cross-ball drills to work on your goalkeeper's ability to box the ball.

BREAKAWAYS

A breakaway is a one-on-one situation in which the goalkeeper is the last player between the attacker and the goal. At this point the goalkeeper must use the entire body in order to make a save.

There are several factors your goalkeeper must consider before making the decision to commit to leaving the goalkeeper stance to make the save. First, your goalkeeper should determine the distance the attacker is from the goal. The farther the distance, the less the goalkeeper should commit. As the distance decreases, the goalkeeper must commit further. Second, your goalkeeper must be aware of the distance of the defenders trailing behind the attacker. The closer the defenders are, the less the goalkeeper should commit. Finally, the goalkeeper must consider the angle at which the attacker is approaching the goal. The more acute the angle, the less likely the goalkeeper will be to commit.

Teach your goalkeeper to approach the oncoming attacker in a swift and controlled manner. Some goalkeepers have a tendency to race wildly toward the attacker, thus allowing the attacker to dribble past. The time to commit completely is when the attacker has pushed the ball away from the body to either shoot or dribble and your goalkeeper is 100-percent sure that enough space can be covered to make it a 50/50 ball. In other words, your goalkeeper should arrive at the ball at the same time or sooner than the attacker. A goalkeeper *should not* commit unless the shot can be smothered. Instead, teach your goalkeeper to cut off the angle and stay in the goalkeeper stance.

Teach your goalkeeper to make the save by extending the hands to the ball first; the rest of the body will follow. Teach your goalkeeper to get down to the ball early and create a large barrier by sliding through the ball with the arms and body. Using the

body as a barrier, the keeper shoots the arms and hands directly at the ball. Whenever possible, your goalkeeper should extend the hands to the same side as the near post. And finally, teach your goalkeeper to attack the ball. Making saves on breakaways requires quick decision making and controlled but aggressive play.

Breakaway Drill

With a goalkeeper in the goal, set two lines of field players, one attackers and the other defenders, located 25-yards away from the goal. The line of attackers faces the goal, and the line of defenders faces the center of the field. The coach acts as the server and rolls the ball into the penalty area toward the goalkeeper. After the coach releases the ball, one attacker and one defender play until there is a goal, a save, or the ball goes out of play. The coach should vary the service to allow the goalkeeper to save immediately before a shot, as a shot is being taken, and immediately after a shot. Serve from different angles. (Fig. 4-52)

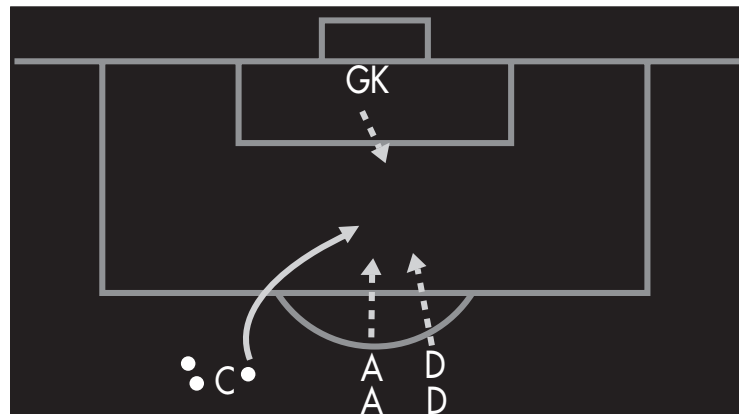


Fig. 4-52.

DISTRIBUTION

The goalkeeper is the first line of attack after a save has been made. To begin the attack, the goalkeeper can either kick or throw the ball. When distributing the ball, your goalkeeper must be accurate, delivering the ball in a way that easily allows teammates to collect it while facing the field of play. The ball can be played to a standing teammate's feet or in the space directly in front of a running teammate. Remember, the goalkeeper has only six seconds to make a decision, but is allowed to move to the most advantageous position to do so. The technique used to distribute the

ball will depend on your team's style of play, if receiving a back pass from a teammate, technical ability, as well as your goalkeeper's ability to make good decisions and play the ball accurately.

Bowling

Bowling should be used for short distances only. Teach your goalkeeper to roll the ball to a teammate with a motion similar to bowling. Your goalkeeper should step forward toward the target and bend the knee to lower the body. The ball should be released close to the ground. This creates a smooth roll. Your goalkeeper should follow through toward the target. Teach your goalkeeper to support the pass by jogging, in a supporting position, toward the teammate who is about to receive the ball.

Throwing

Your goalkeeper can use an overhand throw to distribute to teammates who are somewhat far away. This type of throw is also known as the catapult. The ball is held by placing it in the palm and cradling it against the wrist. If your goalkeeper is right handed, teach him or her to step back with the right leg, face the target, and bring the ball down to the hip. At this point, all of the goalkeeper's weight should be on the back leg. The goalkeeper should then rock forward and step with the left leg forward toward the target. Teach your goalkeeper to swing the arm from the hip over the head. The ball should be released just as the arm begins to swing downward. As the shoulder rotates, the arm should brush by the ear and over the goalkeeper's head. This prevents a side-arm throw. After the ball is released, the goalkeeper's arm should follow through toward the target. The throw should be a line drive that bounces two or three times so that it is rolling on the ground when it reaches the intended teammate. Teach your goalkeeper to keep the arm straight when throwing. If the arm is bent at any time during the throw, the ball will not travel as far.

Punting

The goalkeeper can hold the top or bottom of the ball with either one or two hands, whichever is most comfortable. Teach your goalkeeper to extend the arm(s) in front of the body and step toward the target and drop the ball to the kicking foot. The ball should be struck on the instep (shoelaces), with the toe pointed down and the ankle locked. The keeper should make contact with the ball when it is close to the ground. If the ball is struck too high in the air, it will travel up instead of far. The kicking leg should follow through toward the target.

Distribution Drills

Distribution for bowling and throwing can be incorporated into most drills by designating a target player to whom the goalkeeper must distribute. The technique of punting can be practiced by kicking the ball into the back of the goal net.

Foot Skills

Because of the evolution of the laws of the game, the goalkeeper's foot skills have become a more important part of goalkeeping. Teach your goalkeeper to deal with various types of balls played back. Goalkeepers should practice receiving, passing and clearing with either foot.

One way to increase goalkeeper's foot skills is to include your goalkeeper in exercises where he/she can play as a field player (especially as a sweeper.) Possession games are especially helpful for goalkeepers to practice receiving and passing balls under pressure.

- Place five cones at various angles and distances. Two goalkeepers compete against each other. The goalkeeper must throw or bowl the ball, depending on the distance, to hit the designated cone.
- Place balls around the outside of the penalty area. Use cones to create two 5-yard-wide goals placed near the touchlines, one goal at the 25-yard line and the other on the 12-yard line. The ball is shot at the goalkeeper who makes the save and then distributes by bowling or throwing to either of the goals. The sequence should be shot, save, distribution. Your goalkeeper should relax and concentrate on distributing the ball accurately. You also can use players as the targets. Have them stand with their backs to the touchline and teach your goalkeeper to play the ball to a player's outside foot. (Fig. 4-53)

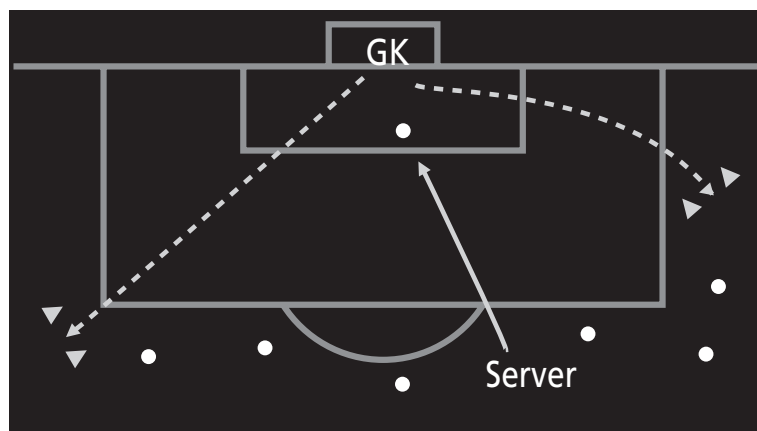


Fig. 4-53.

Functional Training

Functional training addresses the specific skills that a player needs to play a given position on the field. It teaches players how and when to use basic skills and tactics unique to his or her role on the team. For example, a central defender must be able to head the ball for clearance, while a central forward heads to score. Although heading is a fundamental skill, the defender must head high and far to an open player, while the attacker must strike the ball downward when attempting to score goals. A functional training session places players on the field in the locations they will occupy during a game. Specificity and game simulation are achieved by arranging defenders and supporting players accordingly.

FUNCTIONAL PLAY FOR WINGERS

Set up the field with a 10-yard-wide zone on each side. The two wingers play without opposition inside the strips. The ball is passed to one of the wingers, who plays a crossing pass to an “A” player for shots on goal. Each winger must stay inside the 10-yard zone. If a winger leaves the zone, the defense may pressure the ball. (Fig. 4-54)

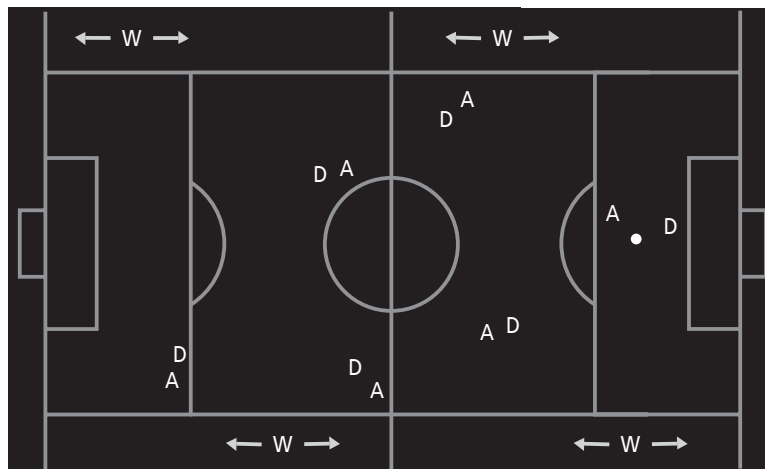


Fig. 4-54.

Winger A1 dribbles the ball to the goal line and passes back toward the top of the penalty box. A2 and A3 make runs forward for a shot on goal. They should time their runs so that they do not arrive at the spot before the ball. Defenders play passive defense. The drill's primary purpose is to develop the winger's ability to make precise offensive passes. (Fig. 4-55)

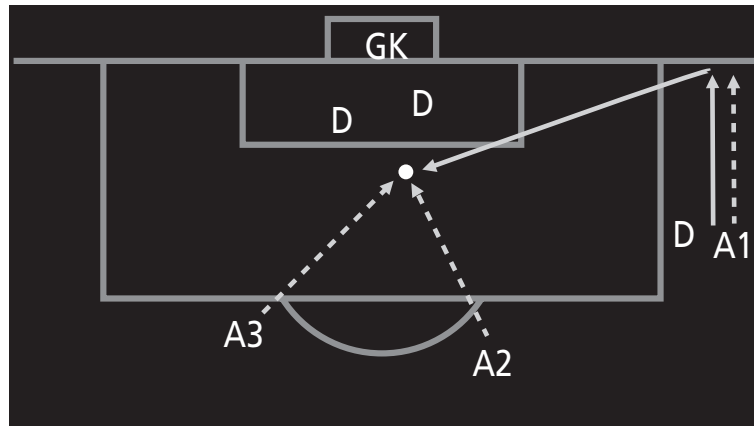


Fig. 4-55.

FUNCTIONAL PLAY FOR STRIKERS

Mark 20x40 yard grid. Play 4-versus-4. Serve balls for attackers to get shots at goal. Good strikers will get in position to receive the ball and shoot before defenders can close them down. The field size will limit the amount of running. Strikers must make quick, decisive runs. The purpose of the drill is to create realistic shooting scenarios for your strikers. Control the degree of defensive pressure. (Fig. 4-56)

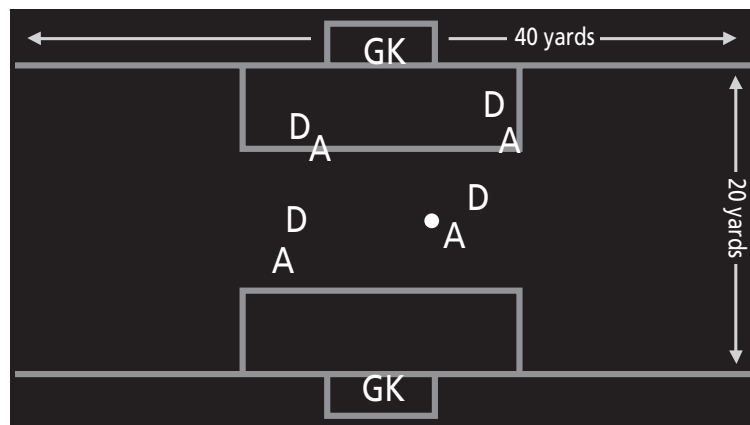


Fig. 4-56.

Balls are played into a striker, who is playing with his or her back to the goal. The striker controls the ball, plays the ball wide to a winger, and then turns and runs toward the goal. The winger plays a crossing pass to the goal, and the striker tries to score. Practice without opposition until the striker is receiving good balls from the winger. Then, add defense. (Fig. 4-57)

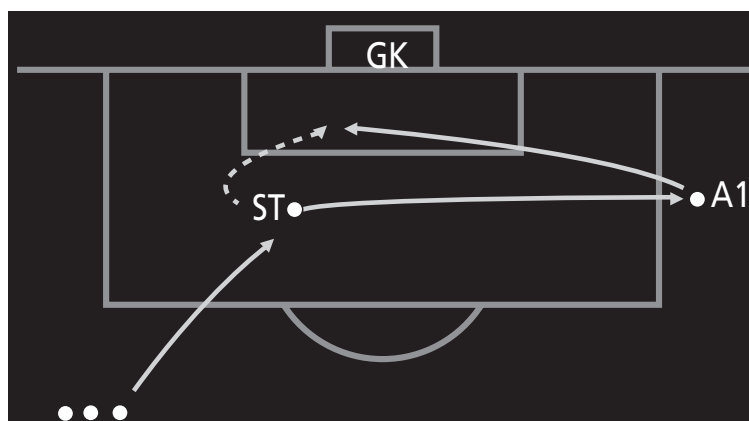


Fig. 4-57.

FUNCTIONAL PLAY FOR FULLBACKS

A server plays a ball to a fullback inside the penalty area. The fullback must control the ball while facing high pressure from a striker. The fullback must control the ball until able to make a clear, accurate pass back to a target player outside the penalty area. The drill teaches fullbacks the importance of control and good decision making in the defensive third of the field. (Fig. 4-58)

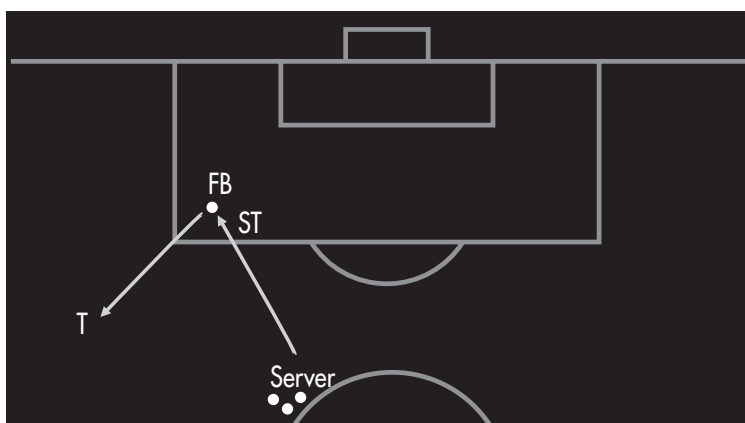


Fig. 4-58.

The midfielder (MF) plays the ball to the goalkeeper. The fullback runs wide, taking position *facing* the GK as the MF passes to the GK. The GK then passes the ball to the fullback, who must control the ball and pass forward to the winger. Practice first without defensive opposition. As the level of play improves, add defenders and pressure. (Fig. 4-59)

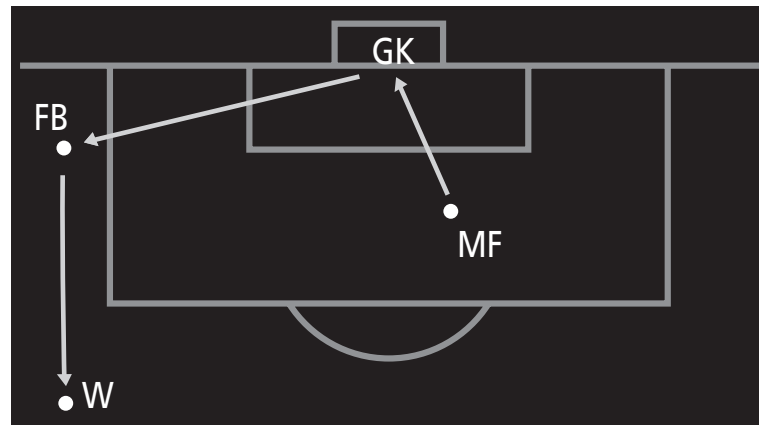


Fig. 4-59.

FUNCTIONAL PLAY FOR MIDFIELDERS

Create a 2-versus-2 matchup to goal. MF1 dribbles forward. As FB approaches, MF1 passes the ball to MF2, who shoots on goal. If the ball is saved, the goalkeeper passes the ball to A1. A1 dribbles the ball upfield. MF1 must switch immediately to defense once the goalkeeper has the ball, and chase back and challenge A1. (Fig. 4-60)

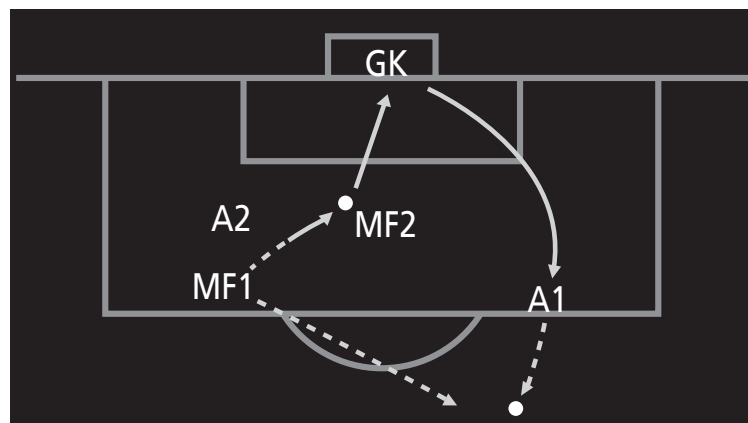


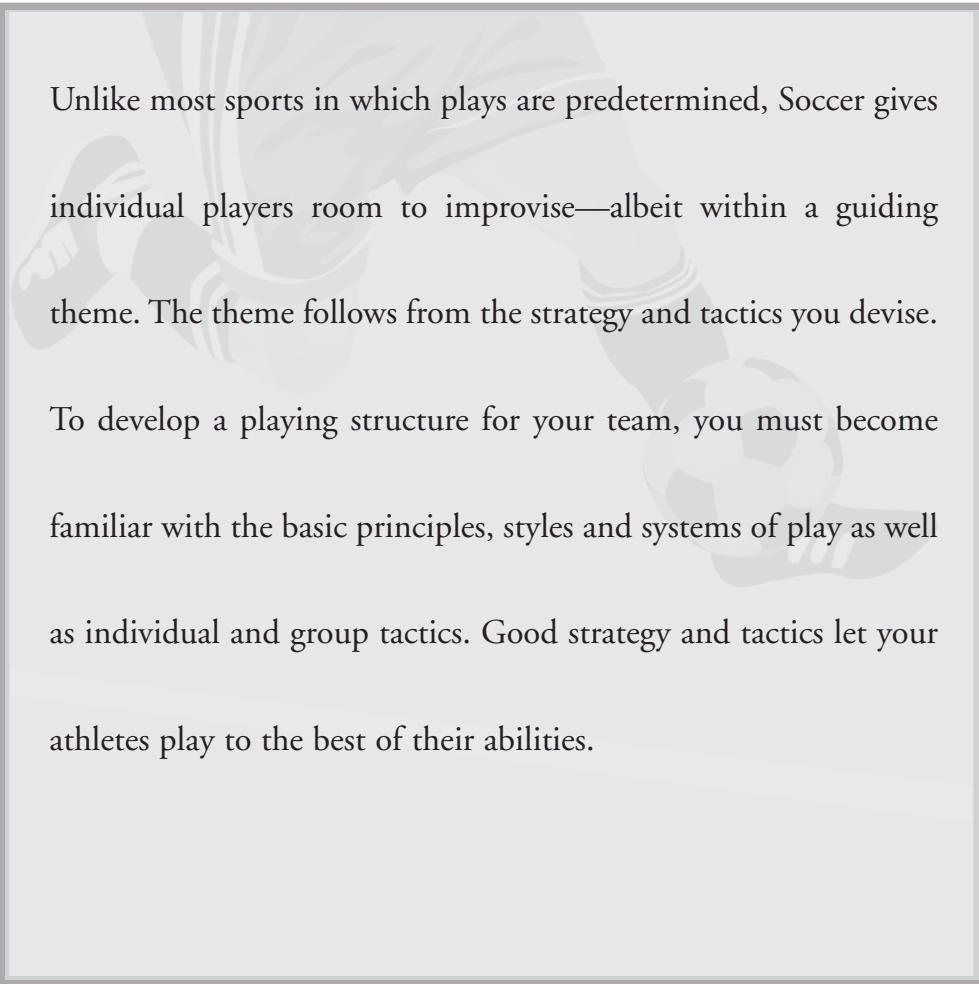
Fig. 4-60.

The three MF players play for both teams. When one of the three defenders wins the ball, the ball is passed to a midfielder. The midfielder must control the ball and pass to the forwards at the other end. Stress accurate passing, a leading into open space. MFs stay in the midfield and pass from there. When the ball is lost, midfielders play in reverse. As play improves, increase defensive pressure on the midfield players. (Fig. 4-61)



Fig. 4-61.

Teaching Soccer Strategy and Tactics



Unlike most sports in which plays are predetermined, Soccer gives individual players room to improvise—albeit within a guiding theme. The theme follows from the strategy and tactics you devise.

To develop a playing structure for your team, you must become familiar with the basic principles, styles and systems of play as well as individual and group tactics. Good strategy and tactics let your athletes play to the best of their abilities.

Introducing the Game of Soccer

In the game of soccer, teams manipulate space and time in order to score and prevent goals. Understanding how these two concepts govern play is essential to a proper understanding of the game. The intent of offensive strategy is to create space and time in which to open scoring opportunities. Defensive strategy aims to constrict space and limit time in the hope of denying the offense.

The concept of creating space often is difficult for young players to grasp. Intelligent movement off the ball creates both time and space. Players need to learn that making runs without the ball opens space for teammates and creates opportunities to score. Take the time to explain to your players the relationship between these concepts and the principles of offensive play. Create practice situations that force players to develop their skills in the context of manipulating time and space. The best players are those who can combine refined technical skills with the ability to use time and space to their advantage.

Principles of Play

The game of Soccer is not a random combination of individual skills. It is a game of strategy and tactics based upon principles of space and movement. In Soccer language, these are known as the **principles of play**.

OFFENSIVE PRINCIPLES

You will need to understand and teach the following principles of offensive play:

- Mobility
- Width and Depth
- Improvisation
- Penetration
- Finishing

Mobility

There are two types of mobility: **individual mobility** and **team mobility**. Individual mobility does not refer to pure speed, but to the ability to cover the right distance at the right time. A mobile player makes runs in order to create space, not simply to receive the ball.

CHAPTER 5

Teaching Soccer Strategy and Tactics

Forwards must be mobile and able to get behind the defense. Mobility makes a forward unpredictable and hard to mark. It also confuses defensive players. Forwards who stay in one position can be marked, and good defenders will key on their routes and favorite moves. Forwards tend to want to play in slots (i.e., left, right, or center) up and down the field. You must constantly urge forwards to make diagonal runs. Your offense becomes too predictable if players stay in slots up and down the field. By changing moves and routes, forwards can keep defenders guessing and confused, improving their ability to penetrate the defense.

A forward also may make a run into the midfield or stay in an area with other forwards after a diagonal run to continue an attack. This is called **flooding a zone**. It is a tactic that can confuse the defense. Flooding zones concentrates players in the area around the ball, hopefully resulting in a two-on-one run to the goal. At the same time, it creates space on the weak side (the side without the ball), into which a midfielder may make a run. (Fig. 5-1)

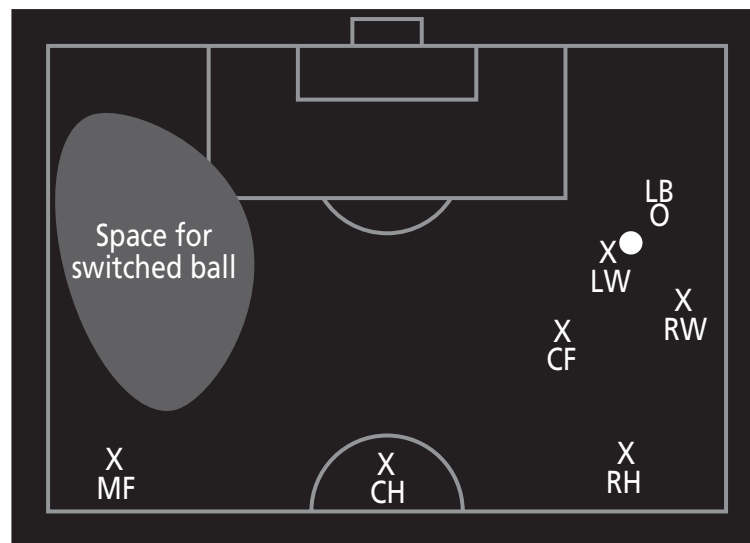


Fig. 5-1.

Forwards also must provide offensive support by making checking runs toward midfielders who are under defensive pressure. Because they usually have good speed, forwards have a tendency to run away from teammates who are dribbling toward them. This often leaves teammates without passing options, forcing them to play through-balls. It is difficult to hit a good through-ball while under defensive pressure.

One or two forwards must *check* to the ball handler to provide an option. Other attackers then can run into open space. At the same time, the midfielders or fullbacks with the ball must have confidence to pass to forwards while under defensive pressure.

Here is an example of good mobility. In Figure 5-2, attacker A2 has the ball. Attacker A1, the right winger, makes a checking run and moves back toward the ball, pulling along defender D1, the left back. This creates space in the right corner of the field. Attacker A3 moves into this space and D3 follows. This leaves space in front of the goal. Attacker A4 running from midfield receives the ball from A2 with the opportunity to shoot on goal. A1 and A3 made runs to open up space for A4.

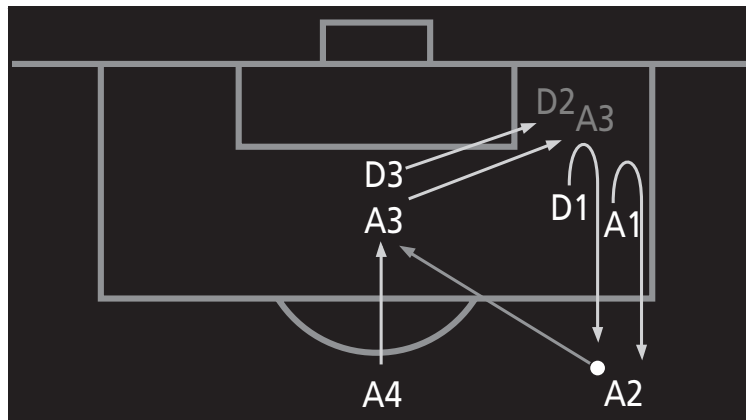


Fig. 5-2.

Width and Depth

The guiding principle of offensive movement is expansion. When a team gains possession of the ball, every player must work to expand the area of play to give the offense width and depth. Expanding the area of play forces the defense to spread and gives the offense space in which to work. (Fig. 5-3)

Width. A wide attack stretches defenders and creates space for attack. (Forwards or midfielders are primarily responsible for establishing the width of offense.) Another advantage of a wide offense is that it provides attackers with a full vision of the field. If an offense stays narrow, attackers play relatively close together and defenders can mark attackers more easily and deny offensive penetration.

Depth. Attacking with depth means to have multiple waves of attackers as opposed to attacking with a straight line or square arrangement of players. By arranging players

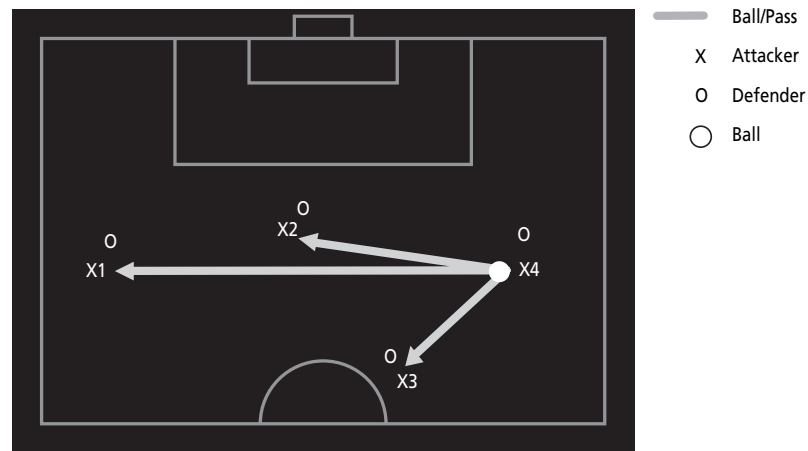


Fig. 5-3.

behind each other, you create passing lanes and triangles that are more likely to penetrate the defense.

A deep attack creates triangles of offensive players over the field. These triangles allow an offense to beat defenders by passing. With passing triangles, offensive players are never completely marked out of a play. Passing triangles open lanes between players and increase the chances for successful penetrating passes.

Improvisation

Despite the need for a sound offensive plan, good offense also relies on the ability of players to improvise. The movement of players and the ball on the field is never constant, so players must be able to create opportunities through unpredictable applications of skill and tactics.

Midfielders are responsible for moving the ball through the heart of the defense. They need to be tough, smart playmakers. Forwards need to improvise because a predictable forward is far less likely to create scoring opportunities. A forward who makes the same run and uses the same favorite move to beat defenders, is usually easy to mark and defend. Forwards must be creative. Teach players to vary their runs and moves: a one-touch pass and move, hold the ball and wait for support, turn and take on defender, take an early shot, etc.

Improvisation is mostly a matter of creativity and confidence. It comes from within the athletic intelligence of the player. Let your players study instructional videos and

game films that show players using a variety of different moves and feints. These videos provide a visual library from which players can learn to improvise on the field.

Penetration

Players must be able to penetrate defenses in order to score. Every time a team gains possession of the ball, the forwards should try to penetrate the defense. In other words, they want to move forward toward the opponents' goal as far as possible without being offside. This creates offensive depth and gives the offense space in which to work.

A team may also use penetrating passes and runs. Players should always look to make a penetrating pass when possible. This is the fastest way to move the ball toward the goal. In penetrating runs attackers break behind defensive alignments, attempting to create an offensive opening.

Figure 5-4 shows an example of a good penetrating run. Attacker A1 has the ball, and A2 is marked by defender D2. A2 makes a checking run back toward A1, creating space to the left of the goalkeeper. Left side Attacker A4, makes a diagonal run toward the left sideline. This will draw defender D3 toward A4, opening up the middle for a penetrating run by A5.

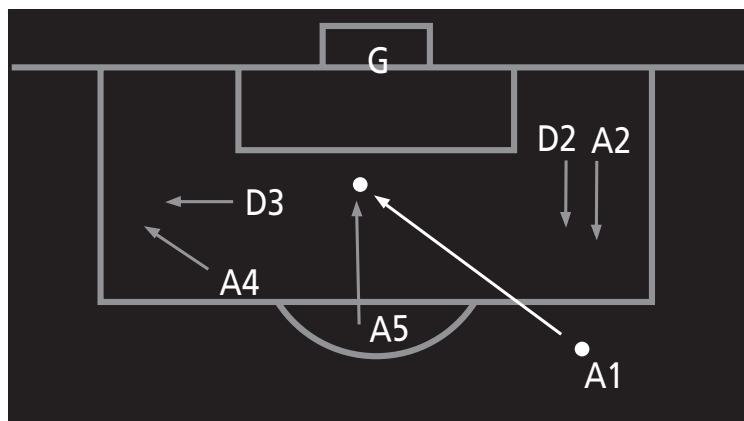


Fig. 5-4.

Finishing (Scoring)

A player's ability to finish is the ability to score once the defense has been penetrated. Goal scoring requires good technical skills and confidence. Beyond good ball control, shooting ability, balance and the ability to change direction quickly, a good finisher must be able to **pull the trigger** at the right time.

The only way to win games is to score goals. The ability to finish the play is extremely important. Scoring opportunities are rare in soccer, and good teams are able to exploit their chances to score. Shooting exercises should be part of every practice session. Every player should practice shooting, not just forwards. At the high school level, especially, your midfield players should regularly practice shooting. When developing finishing skills, stress the importance of placing shots accurately. Don't let your players just strike the ball as hard as possible. Any ball that crosses the line is a goal, regardless of its velocity. A rocket shot and a well-placed soft shot are both worth the same point. Teach players to aim for the far post. Trying to shoot between the goalkeeper and the near post requires an extremely good shot. Shooting to the far post offers several advantages. A shot to the far post requires a bit less precision; there is more goal space left open. Second, if the shot goes wide, teammates have a chance to run in from the far side and touch or head balls into goal. Such second-touch shots are very hard for the goalkeeper to save. Insist that your players shoot consistently to the far post.

Much of goal scoring is mental. Scoring requires technical skill but also the ability to choose the right moment and the right spot. Teach your athletes to shoot calmly and quickly once they see a good opening to score.

DEFENSIVE PRINCIPLES

Defensive strategy is one component of your strategic game plan. To build a sound defensive strategy, you need to understand the principles of defense and how they apply to man-to-man marking and combination defense.

The principles of defense are:

- Immediate Chase and Delay
- Depth
- Balance
- Concentration
- Control and Restraint

Immediate Chase and Delay

The principle of immediate chase and delay dictates that when possession of the ball changes, the defending player nearest to the ball must quickly chase down the opposing player with the ball to prevent a quick counter-attack. The defender must

delay the attacking player to allow the entire defense to assume positions between the ball and the goal.

Defenders must avoid diving-in for a tackle. The aim of this tactic is to delay or slow the offense. Over-committing on defense can lead to quick and easy penetration by the attacking team.

Depth

Like offenses, defenses should have depth. Defensive players should organize so that they arrange themselves in supporting positions behind the first defender. This creates multiple lines of defense rather than a single-line defense. With a single, or flat line, defense, it takes one pass or through-ball to beat all defenders. Depth allows defenders to sweep, or cover, for one another.

Balance

Besides depth, good defenses are balanced. Balance is the proper organization or arrangement of defenders in relation to the ball. Having too many of your defenders around the player with the ball gives other attacking players too much space and time to open scoring opportunities. Your defense must keep a number of players off the ball to provide support and deny offensive options. A balanced defense prevents the offense from penetrating by playing long diagonal or *switch* passes.

Concentration

When in its own half of the field, the defense should assume a funnel shape extending from the goal outward to midfield. This so-called **funneling** best limits the space and time in which the offense may work by increasing the concentration of defenders in front of the goal. Such concentration of defenders helps prevent balls from being played through and over the defense. It also greatly reduces the space in front of the goal.

Control and Restraint

Defenders must be patient and not allow attackers to lure them out of position. The rule of thumb is that defenders should not commit themselves to a tackle unless they are almost certain that they will win the ball. Instead, defenders should contain attackers until support arrives and it is tactically safe to challenge for the ball. Defenders must be careful when challenging for the ball in front of their own goal. Letting an attacker slip past can easily result in a goal.

Styles of Play

A **style of play** is the manner in which a team plays together. It's the personality that a team exhibits on the field. Generally stated, a team's style of play is how the players defend and attack as a unit.

Styles of play differ from team to team, and sometimes from game to game. Your team's style of play will be dictated by the ability and fitness of your players; your opponents' skill, fitness level and style of play; field size and condition; and weather. For example, the style of play for a relatively fit team on a cool, rainy day will most likely be one in which long balls are played on the attack and the defense applies low pressure. Remember, there are many factors to consider when choosing your team's style of play. Do not force a style on a team that is incapable of meeting the technical or tactical demands of that particular style.

ATTACKING STYLES OF PLAY

The two basic attacking styles are **direct** and **indirect** attack.

Direct Attack

With a direct style of play the attacking team attempts to beat the defense by playing long, penetrating passes toward the opponent's goal. The intent is to take the most direct route to the goal by playing as few passes as possible. A direct style attempts to push the ball forward without having many players touch the ball. Teams that play a direct style are constantly on the lookout for an opportunity to counterattack. Their aim is to challenge the opposing team's goal as quickly as possible rather than move the ball forward through a slow buildup requiring many short passes and combination play.

Immediately upon winning possession of the ball, a team employing a direct style of play will look to play a long ball to a forward target player. The target player must be as far forward as possible to stretch the field of play. This allows the attacking team more space in which to play a long ball and beat several defenders with one pass. Upon receiving the ball, the target player can attempt to move directly toward the goal or maintain possession until support arrives. It is important that your target player is mobile, strong in the air and can shield the ball from defenders.

Support for the target player can come from other forwards, midfielders and even fullbacks. The support players should look for opportunities to make fast overlapping

runs into the opponent's half of the field.

A direct style of play also requires long, accurate passes from the defensive third of the field. Teach your players to look up once they win a ball and look for the target player. Players must be careful, however, when playing balls from the defensive third of the field. A misplayed ball out of the back can be disastrous for an attacking team because most of its players are pushing forward into the other team's half of the field. Such a turnover can lead to a counterattack in your unprotected defensive half of the field.

When teaching your players the direct style of play, use drills that develop shielding, checking runs, overlapping runs and long passing accuracy. Fitness also is a consideration. A direct style of play requires players to be both fast and fit. Players, particularly outside midfielders, will be making many 30–50 yard runs. They will not be effective unless they are fit. Finally, practice playing 8 versus 8 up to 11 versus 11 on a full field. Have one team attack using a direct style of play.

Indirect Attack

An indirect style of play requires a great deal of patience and technical ability. It is the opposite of the direct style of play. Rather than attacking in a direct, rapid manner, a team playing an indirect style builds its attack slowly. The objective is to get to goal by maintaining ball possession through each third of the field. Combination play and short passes characterize this style. Rather than making long passes, the attacking team uses the dribble or plays many short passes to advance the ball toward the goal.

To play an indirect style successfully, you need creative players with good technical skills. If your players are not comfortable and adept with the ball at their feet, this style may not be suited to them. Ball possession is of utmost importance. Teach your players to be patient and to play simple passes that allow the team to keep possession. Let them know that it may take as many as 10–15 passes before they are able to get to goal.

Teach your players to utilize the entire field by running a wide offense and providing support from behind the ball. This width and depth creates valuable space for the attacking team. Large offensive space forces the defense to spread out and become vulnerable. Playing in a large space lets the attacking team keep possession more easily and create chances on goal.

Maintaining ball possession also is a matter of vision and communication. An indirect

style of play tends to bring small groups of players around the ball. An attacker must be aware of surrounding players and see where to play the ball. Teammates away from the ball must communicate with the player with the ball to provide effective support.

When teaching the indirect style of play, organize your practice session around drills that emphasizes ball possession and movement to create width and depth. Use small group or combination play that encourages short passes and creative dribbling drills. Build to game simulations of 8-versus-8 up to 11-versus-11. Assign one group to attack using an indirect style of play. Encourage patience and ball possession.

Combining Attacking Styles of Play

It may be difficult to use just one offensive style. Since many factors change from game to game, you may want to consider using a combination of the direct and indirect styles rather than employing just one style of attack. For example, you may want to play direct in the defensive third and indirect in the midfield third. This combination ensures that your team will not play short passes in front of its own goal and that the midfielders become the playmakers.

DEFENSIVE STYLES OF PLAY

Low Pressure Defending

There are two basic defensive styles of play: low-pressure and high-pressure. In **low-pressure defense**, the defending team slows the pace of the attack to allow as many defenders as possible to get between the goal and the ball. This type of defense focuses on covering zones on the field rather than individual attackers. Once the other team gains possession of the ball, the defense withdraws toward its own half, or defensive third, of the field. The defense must keep a compact shape as it withdraws so as not to allow the attacking team space in which to play the ball. The defensive team begins to pressure the ball as soon as it crosses midfield or when proper support is established.

When teaching your players low-pressure defense, emphasize the importance of patience and delay. As soon as the ball is turned over to the opponent, your nearest player must immediately chase down the opponent with the ball. Your defender must be patient and delay the attacker rather than attempting to win the ball. This allows time for the rest of your team to withdraw and establish defensive position and shape.

As the defense withdraws into its own half of the field, it must keep a compact shape

between its goal and the ball. This shape is known as the **zone of concentration**. It resembles a funnel that begins at the defensive team's goal and extends out to the halfway line. This funnel, or zone, allows the defensive team to concentrate its players in an area of the field and deny the attacking team valuable space. (Fig. 5-5)

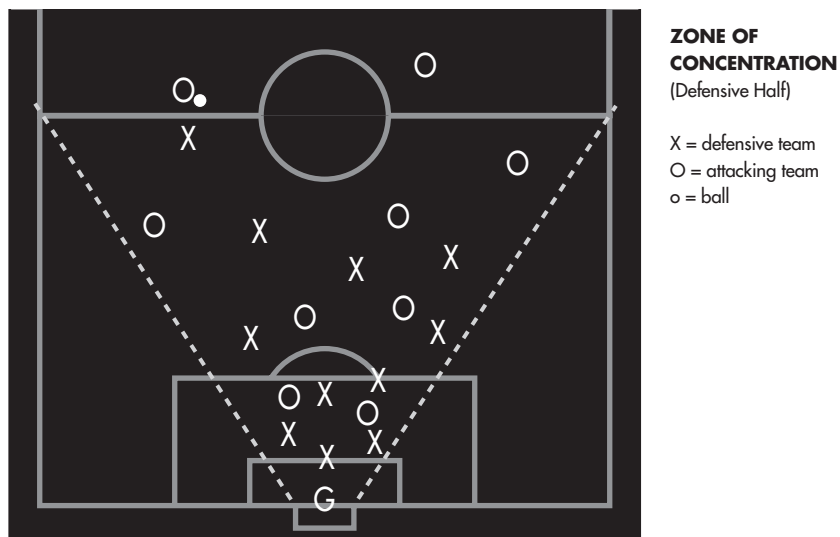


Fig. 5-5.

Once the defense assumes proper position, players should pressure the attacking team and attempt to win the ball. The defensive arrangement should continue to remain compact. The objective of the defense is to cut off all passing lanes, occupy all attacking space, and apply tight pressure to the player with the ball.

Successful low-pressure defense requires both patience and discipline. The entire team must operate on the same mental page. If one player tries to win the ball without proper support, the shape of the entire defense collapses. This collapse can lead to a goal. Teach your players to communicate and play patiently. Patient defense is especially important if your team loses the ball in your own defensive half. The entire team must make an immediate transition to defense and get behind the ball as quickly as possible.

High-Pressure Defending

While low pressure defense emphasizes delay and withdrawal, **high-pressure defense** requires immediate and intense pressure. The defensive team confronts the offense immediately after it has lost possession, and it tries to win the ball back as quickly as possible.

High-pressure defense requires tight man-to-man marking as opposed to zone defense. Once your team loses the ball, your entire team must shift quickly into defense. Your team should push forward as a unit and mark man-to-man all over the field. The player with the ball must be immediately and tightly marked to prevent a long-ball being played up and over the oncoming defense. Your defense should try to force the offense into playing faster than its ability allows. In order to keep the attacking team as far as possible from your goal, your defense should pressure the ball in the attacking team's defensive third of the field. The intent of constant pressure is to disrupt the rhythm and tempo of the attack and to force a turnover.

Your players must be extremely fit to play a high-pressure style of defense. It is very difficult to mark man-to-man over the whole field for an entire game. Good fitness is essential. Your players must learn to push forward as a unit and apply intense pressure on the attacking team with the aim of winning the ball back quickly. Tight man-to-man marking is crucial to the success of high-pressure defense. Any lapse in concentration or a failure to mark can lead to a pass that penetrates the defense and results in a goal against your team.

Combining Defensive Styles of Play

Low-pressure and high-pressure defending are diametrically opposed styles of play. The preferred style differs from team to team, and even from game to game. A combination of the two styles is possible. For example, in the defensive and middle thirds of the field a team may play high-pressure and in the final third (nearest the opponent's goal) they might play low-pressure. Keep in mind that the abilities of your players must be taken into consideration when you decide on a particular style of defense. It is best to teach your team both high- and low-pressure defending so that you can employ either style during a game.

When teaching high- and low-pressure defense use the full field and play from 8-versus-8 up to 10-versus-10. Assign one group to play low-pressure and the other to play high-pressure. Stop play occasionally to show players correct defensive arrangements and to assess the concentration of players.

CHOOSING STYLES OF PLAY

The following are guidelines you can use in determining which style of play to use. You must consider all of the following factors: your team's technical ability and level of

fitness, your opponent's ability and level of fitness, field conditions and weather.

Attacking Styles

- If you are playing a team that shifts slowly into defense, play a direct style regardless of the technical ability of your players. Your team will be able to penetrate the defense quickly with a long balls.
- If you are playing a team that shifts quickly to defense, play an indirect style of play if your team has good technical ability. If your team is weak technically, you may want to play direct out of the back and attempt to play indirect in the midfield and attacking thirds.

Defensive Styles

- If you are playing against a team that attacks *directly*, play a low-pressure defense regardless of the technical ability of your players.
- If you are playing against a team that attacks *indirectly* and is *technically adept*, play low-pressure until they penetrate into your half of the field.
- If you are playing against a team that attacks indirectly and is *not* technically adept, play a high-pressure style all over the field.

Weather Conditions

- If the weather is sunny and hot, you may want to play an indirect attacking style and low-pressure defense in order to conserve energy.
- If the weather is rainy and cold, you may want to consider attacking directly and employing the defensive style that best addresses your opponent's style of attack.
- If it is a windy day, you will probably want to play directly when you are going with the wind and indirectly as you go against it. Implement a defensive style that best addresses your opponent's attacking style.

Fitness

- If your team is very fit, you may want to consider playing a direct attacking style and high-pressure defense.
- If your team is not very fit, you may want to play indirectly and use low-pressure defense.

Field Conditions

- A smooth, grassy field is best suited for an indirect style of play; however, you can also use a direct style if it suits your team better. Your defensive style can be either high- or low-pressure depending on the other factors.
- A bumpy field is best suited for a direct style of play. If the opposing team attempts to play indirectly, apply high defensive pressure.

Whichever style you choose, keep in mind that the fitness, speed, technical skills and tactics of both teams, weather conditions, field size and condition, and the opposing offensive and defensive styles will affect your choice. Do not force a particular style on your team. The objective of both styles is to score goals. Implement a style that best suits your team.

Systems of Play

A system of play is the arrangement and organization of your 10 field-players, each with a particular assignment and responsibility. A system is always numbered from the backfield forward. For example, a 4–2–4 system denotes four back players, two midfielders and four forwards. There are three commonly used systems of play: 4–2–4, 4–4–2, 4–3–3.

The guiding rule for developing any system of play is that it must allow you to exploit your players' strengths. In any system, midfield players are the key to the team's success. They must be fit and skilled.

When deciding what system to play, you should consider the following factors:

- The technical skills and tactical knowledge of your players.
- Each player's understanding of the game and his or her individual position.
- Each player's speed, quickness, endurance and strength.
- The opponent's system of play.

SHIFTING OFFENSIVE SYSTEMS

Systems of play can be fluid, changing alignments from offense to defense. The movement of players during a game can convert one system to another. A 4–4–2 system can be easily changed to a 4–2–4 formation if two midfield players move up

into wing positions to create a wide attack. Once possession changes, these forwards drop back into midfield defensive positions.

A 4-4-2 system also converts easily into a 4-3-3 formation if a midfield player pushes forward on offense, and then withdraws into midfield defensive position when possession changes. With shifting systems, players must be fit enough to move constantly from defense to attack and back.

With only three forwards, a 4-3-3 system creates more forward space to exploit. This alignment allows runs from the back into attacking positions. A 4-2-4 system does not allow the same space. With 4 forwards, your team's forward attack must be more deliberate in order to avoid congestion and choking the offense with defenders.

DEFENSIVE SYSTEMS

Defensive alignments vary. A four back system can be arranged as two outside backs and two central defenders. When one central defender pressures the ball, the other central defender provides covering support. These two players should continually rotate roles throughout the game. This ensures that the ball-marking defender is fresh.

A four-defender alignment with a sweeper, 1-3-3-3, has one sweeper, three backs, three midfielders and three forwards. The midfielders and forwards can play different combinations. The sweeper plays behind the defenders in a supporting role. This key player must have good vision to read the game and very good all-round defensive and attacking ability. The central back defender in this formation marks man-to-man and the two outside backs move forward into attacking roles on offense.

Injury to a key player can alter a system and force you to make changes. Ideally, you should have the ability to replace a player without affecting the rhythm and flow of the game.

As previously stated, you must consider the system of play used by the opposing team when selecting the formation you are going to use. However, you cannot set it in stone. You must be able to revise your system if it is not working and be alert to subtle changes made by your opponents. For example, when your team is playing three midfield players and your opponent pushes a fourth player into the midfield, you must recognize this and pull a forward back for balance.

Game Strategy and Tactics

A strategy is a plan to accomplish your seasonal or individual game goals. In Soccer, you might devise a strategy that calls for a direct style of offense and high-pressure defense. Such a strategy might be used by a fast, extremely fit team against a much less mobile team. Tactics are the specific means you use to accomplish your strategy. For example, to achieve your strategy of advancing the ball quickly, you employ the tactics of using a long passing style or a short, fast combination passing attack.

The strategies and tactics you use should be determined by the strengths of your team and opponents. You cannot expect weak technical players to carry out every possible strategy. Train your players to develop the skills they need to implement the strategy you choose. Additional considerations include the size and condition of the field and weather conditions.

TEACHING GAME TACTICS

Good Soccer players have both technical skill and tactical knowledge. Good technical players are not worth much if they do not make good decisions as to where to run or play the ball. Teach tactics in game-like conditions, where you can show your players how to implement the principles of play.

Like teaching technique, teaching tactics should be progressive. Begin teaching individual tactics. Then teach small group tactics and finally, team tactics. This progression allows you to teach your players what to do in a 1-versus-1 situation, how to play in a small group around the ball, and how to understand the responsibilities of their positions. Because Soccer is usually played in small groups around the ball, it is important to pay close attention to teaching group tactics. Coaching grids are also especially helpful in teaching tactics because they provide a restricted space, which allows for more contact with the ball.

Focus on either offense or defense when teaching tactics. It is difficult to teach both at the same time. For example, if you are playing 4-versus-2, you will want to explain the importance of two defenders providing depth for one another, but focus on the four attackers who are working on maintaining ball possession, movement off the ball, and playing penetrating passes, between the two defenders. Do not worry too much about the defenders mistakes. Simply make a mental note and work on those problems later.

You may also notice that certain drills are unsuccessful because your players lack sufficient skill. Do not hesitate to enlarge the grid to allow players more time to control the ball and make decisions. As they become more skilled, you can decrease the size of the grid to limit time and space and force quicker decisions.

Finally, interrupt drills to teach when it is appropriate. Your players will learn much quicker if they have a visual picture of what they are trying to accomplish. Be sure to make a point of complimenting players on good decisions and provide constructive feedback when there are tactical errors. Remember, the game is the best teacher. Allow your players to play, and pick your interruptions carefully so as not to disrupt the flow of the drill.

INDIVIDUAL TACTICS (1-versus-1)

Attacking Players

A player in possession of the ball is an attacker. *An attacker needs the following skills:*

- **The ability to maintain possession of the ball.** Attacking players must learn to shield the ball by keeping opponents away from the ball using their bodies.
- **The ability to dribble and advance the ball.** Attackers need to have good dribbling skills. They must have quick feet and the skill to counter a defender's tackle. Feints allow attackers to evade defenders and keep them off balance.
- **The ability to change speed.** Attackers need to have the ability to change speed and accelerate past a defender. Changing speed while controlling the ball helps create space and penetration.
- **The ability to create space.** Attackers must be able to create space by spreading out the defense. Mobility, passing skills and vision are essential.

Defending Players

Defenders must have the following skills:

- **The ability to channel the offense.** Every player becomes a defender when his or her team is not in possession of the ball. A defender needs to channel the opponent and the ball away from the goal. Defensive shape and position near the goal is very important.
- **The ability to maneuver the attacker and limit offensive space.** Defenders should attempt to maneuver, or jockey, attackers into limited space. Marking the

opponents tightly and using the sideline to advantage helps to limit the opponent's offensive space.

- **Restraint.** A defender must not commit to a tackle until an attacker makes a mistake or defensive support arrives. Good dribblers have a difficult time with patient defenders.
- **Defensive mobility.** Defenders must stay on their feet and control the situation. Slide tackles often are desperation moves and stopgap measures. Staying on their feet keeps defenders in the play and allows them to pressure the defense.
- **The ability to tackle.** When defenders decide to win the ball, they must tackle effectively without hesitation.

GROUP TACTICS (2-versus-2 through 5-versus-5)

Attackers Without the Ball

The movement of attacking players without the ball is vital to offensive success. They create the space and provide the options that allow an attack to flow. Intelligent runs are an integral part of offensive strategy. Players without the ball constantly should be looking for takeovers, wall passes, overlaps and quick combination tactics. Combination play is an essential part of good group tactics.

Forwards should play in opposition to each other. This means as one moves toward the ball, the other moves away from the ball. Playing in opposition to each other creates depth and width. One player's run should determine the next player's run. An intelligent offense is a web or chain reaction of runs made with and without the ball.

Midfielders must offer close offensive support to the player with the ball, but should move away from the ball when sufficient support exists or when the forwards have created open space. Midfielders widen the offense to create space.

Fullbacks give the offense support from behind the ball. Overlapping runs into offensive positions are their weapons. Overlapping runs usually originate from behind the ball and move into positions left vacant by forwards or midfielders.

Attackers With the Ball

Players without the ball provide passing options, but the player with the ball makes the

decision whether or not to pass. Passing judgment, knowing when to hold the ball and when to pass, determines the offense's attacking rhythm.

The player with the ball must know the location of teammates and opponents on the field. Good ball-handling technique allows attackers to see the field while dribbling. Good field-vision results in good space utilization.

Penetrating runs with the ball often are made possible by teammates who make good runs without the ball. Players with the ball should dribble into open spaces in the hopes of opening scoring opportunities.

Group Defending

Defending as a group requires good verbal communication. Effective communication allows players to work together and defend collectively. Delaying the attack by pursuing and pressuring the ball gives players who were on the attack time to recover and assume a defensive position. Adequate recovery time allows defenders to limit space, support and concentrate behind and around the ball. Your team does not want to be left with open space behind its defensive arrangement.

Players must be patient and defend as a group. Forcing a bad pass is just as effective as winning a tackle. If one defender abandons the concept of restraint at the wrong time, the entire group of defenders is left vulnerable. Defenders must wait until there is proper support before trying to win the ball.

TEAM TACTICS (6-versus-4 through 11-versus-11)

Team Attacking

Teams must learn to attack as a unit. Remember all 11 players are part of your offense. Attacking as a unit still requires that some players provide balance, depth and support, but they should do so as part of the attack strategy.

Good attacking teams excel at keeping the ball in their possession. The offense should spread the defense to build width and depth. This will create space and passing lanes. Teammates should provide the player who has the ball with long, medium and short passing options.

One effective team tactic is to interchange players at different positions while still

maintaining a balanced attack. Intelligent running and interchange will isolate and confuse defenders.

Players should look to pass balls behind the defense or use combination passing to get behind the defense. Penetrating the defense in this manner often results in scoring chances. *Seize the opportunity and finish your chances.*

Team Defending

Teams also must learn to defend as a unit. All 11 players must play and think defense. Defending as a unit, requires some players to remain as support outlets once the defending team regains possession.

Upon losing possession of the ball, your team must get behind the ball as quickly as possible! Getting defenders between the ball and your goal stymies the opponent's attack. Limit the offense's time and space by pressuring the ball, taking away depth and restricting passing angles. Give the attacking team as few options as possible.

Good defense determines game tempo. Once your defense wins the ball, the transition to offense should be quick and efficient. An effective transition, coming from a solid defensive base, may result in a chance to score.

Set Plays

Approximately 40-percent of all goals are scored from set plays. Not surprisingly, it makes good sense to spend time practicing attacking and defending free kicks, corner kicks, throw-ins and kickoffs in practice. The golden rule of building a set play is *simplicity*. The fewer players involved, the less likely the chance of a mistake. Have at least two players who can serve the ball on restarts. Accuracy and confidence are important to the success of any set play.

THE KICKOFF

Offensive Kickoff Tactics

There are two basic offensive tactics for the kickoff: One, the possession kickoff can be used to establish ball control, letting players gain confidence early in the game. Two, an attacking kickoff seeks quick penetration and to put pressure behind the defense. (Figs. 5-6, 5-7)

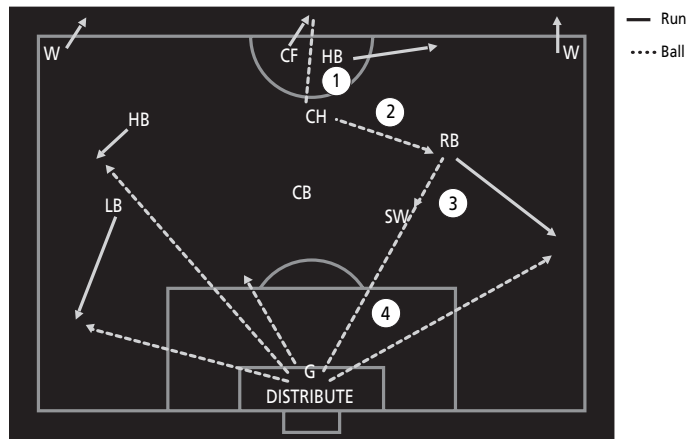


Fig. 5-6.

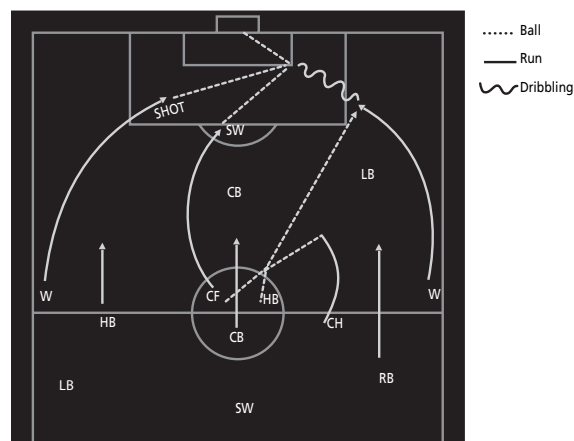


Fig. 5-7.

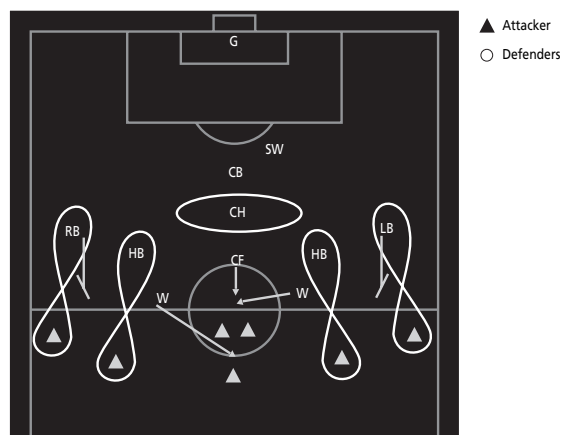


Fig. 5-8.

Defending the Kickoff

The purpose of tight marking on the kickoff is to take away quick penetration by the attackers. Man-to-man marking will help a defensive team win early possession.

(Fig. 5-8)

CORNER KICKS

Attacking with the Corner Kick

The corner kick offers a strong chance for the attacking team to score by using your team's strengths in a relatively controlled setting. The corner kick also lets you plan to attack the defense at its weakest point. The defense pays a severe price for mistakes made when defending corner kicks. To exploit the potential of the corner kick, however, you must address several tactical challenges.

- Do you have a strong heading attack?
- Do you have players who can place the ball accurately into the goal area?
- How much time can you afford to practicing corner kicks?
- How simple or complex do you want your corner kick plays to be?

The vast majority of corner kicks are played to one of three areas: the short side of the field with penetration toward the penalty box, the near post and the far post.

- Use a short pass with quick penetration into the penalty box to force the defense to pressure the short side and leave the back side open. (Fig. 5-9)

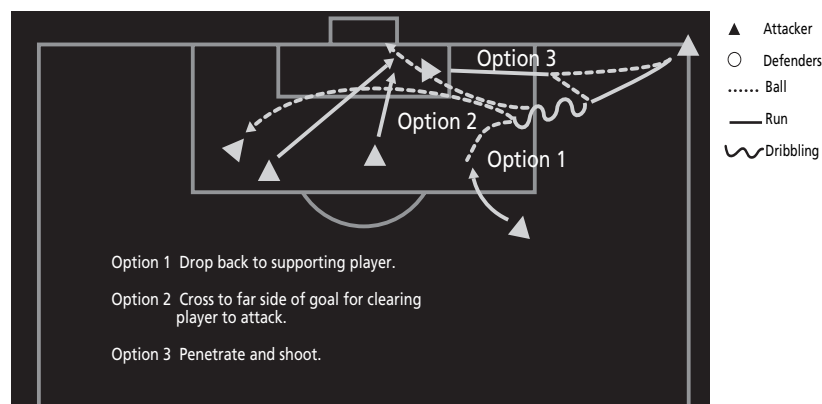


Fig. 5-9.

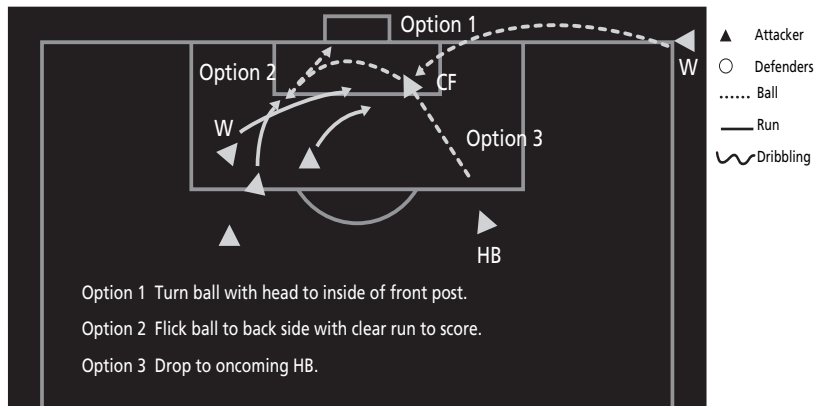


Fig. 5-10.

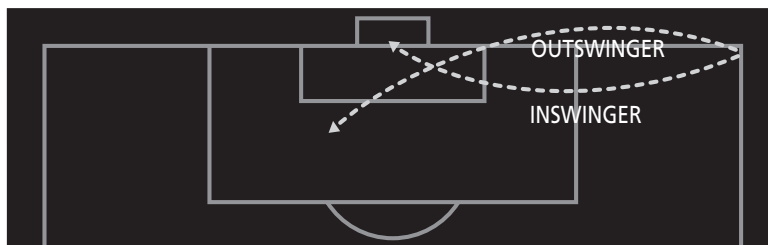


Fig. 5-11.

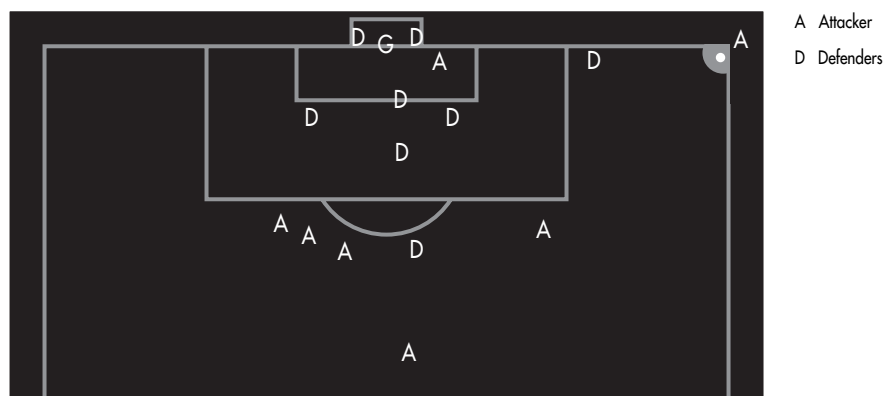


Fig. 5-12.

- A corner kick to the near post provides the offense with several options. A strong heading player at the near post forces the defense to defend against a header. This same player can be used for a decoy or to deflect the ball toward a teammate at the back post. These options prevent the goalkeeper from focusing on only one possible play. (Fig. 5-10)
- A shot to the far post provides the options of a long cross kick to clear defensive players from the space in the back side of the goal or an inswinging shot that may score or be headed into goal. Strong shooters or headers should be used to work the back side play to the far post. (Fig. 5-11)

Defending a Corner Kick

Zone defense is the best method of defending corner kicks. Defenders should focus on the area directly in front of the goal around the 6-yard line and penalty spot. Most corner-kicks will be served to this area. Place one defender on the near post to prevent a goal from being scored by an inswinger. Depending on the ability of your goalkeeper, you may want to place another defender at the far post. Your best “in air” players should take position in front of the goal just outside the 6-yard box and around the penalty shot spot. To prevent a ball being driven low to the near post, put a player on the endline, 10-yards from the ball. You may want to consider placing a player above the top of the “D” to defend a pass played outside the penalty box. The same player also can serve as a target outlet for the defenders inside the box.

Teach your players to clear the ball high out of the box so it won’t be intercepted by the other team. Your players must be aggressive and go after head balls. The goalkeeper must communicate with the defenders to control the penalty box. (Fig. 5-12)

FREE KICKS

Free kicks give the attacking team time to execute simultaneous runs to gain the advantage or create space near the goal. Take the time to use a rehearsed play to give your team the best possible chance to score. (Fig. 5-13)

General hints for free kicks:

- Have your players work on still ball shooting.
- Make sure each player executes a specific role in the set play.
- Have several players attack the goal on each free kick.

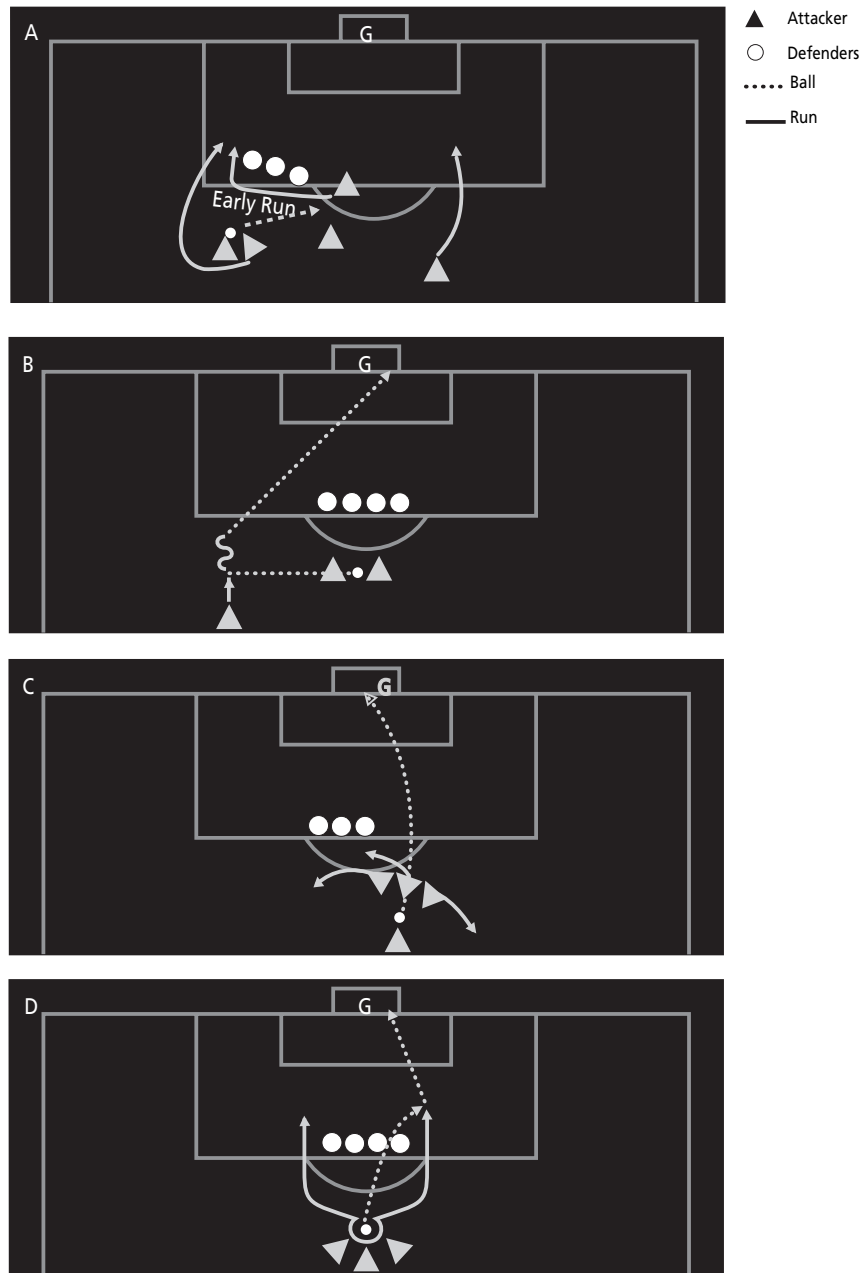


Fig. 5-13.

- Limited the number of players involved in the actual shot-taking scenario to open space near the goal.

Direct Free Kicks

A direct free kick provides the offense with a direct shot on goal over an opposing wall of players. The tactic of distracting the goalkeeper often leads to a goal.

Attacking teams often use decoy runs, disguising the shooter's approach, blocking the goalkeeper's view, or chipping the ball over the wall to try to score.

Defending Against Free Kicks

Defending against a direct free kick requires your team to construct a wall of players to block a direct shot on goal. When aligning players, put your tallest players on the post side of the wall. Your goalkeeper will be responsible for the area of the goal the wall does not block. Set up the correct number of players, and make sure your players mark other dangerous attacking players.

THROW-INS

Planning for throw-ins is most important because you will probably take more throw-ins in one game than any other set play. On an average 20–30 throw-ins occur during every game. You must plan for a defensive throw-in, a midfield throw-in and an attacking throw-in. Each throw has special importance to your coaching scheme.

Attacking Throw-In

Attacking throw-ins are intended to move the ball toward the goal by use of one or two quick passes. If you are close to the goal and you have a long thrower, work plays similar to your free kicks or corner kicks. Remember, one field player must touch the ball before a shot can score. There are two tactics: throwing to space and throwing to a player. (Figs. 5-14, 5-15)

Reminder: There is no offside on the throw-in. The long throw-in places immediate pressure at the goal mouth. (Fig. 5-16)

Midfield Third Throw-In

Players must be mobile in order to create space to which the ball can be thrown without losing possession. Players can pass or head the ball back to the thrower if they

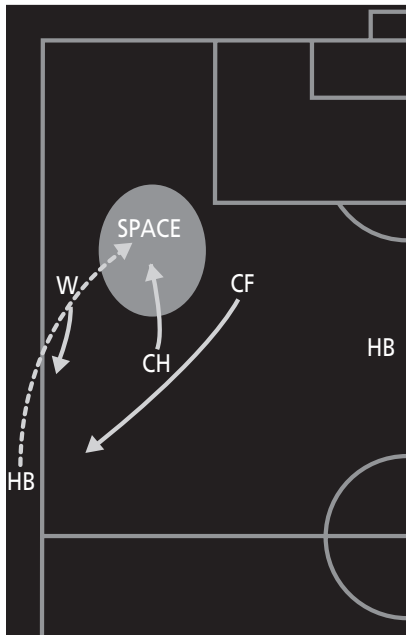


Fig. 5-14.

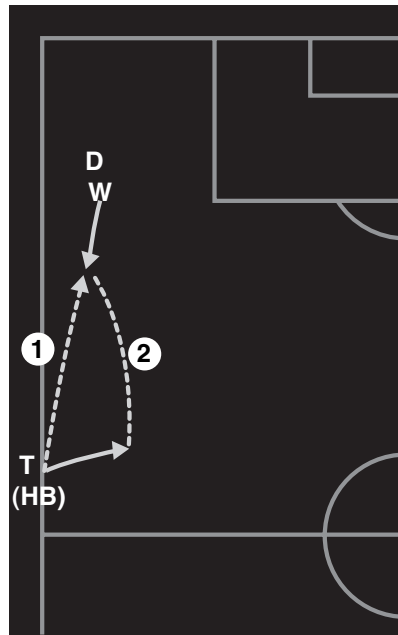


Fig. 5-15.

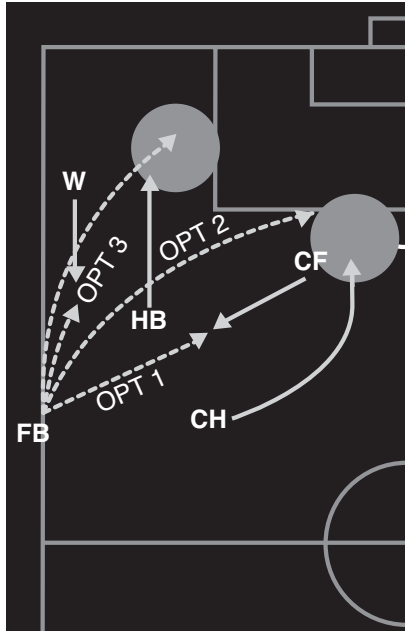


Fig. 5-16.

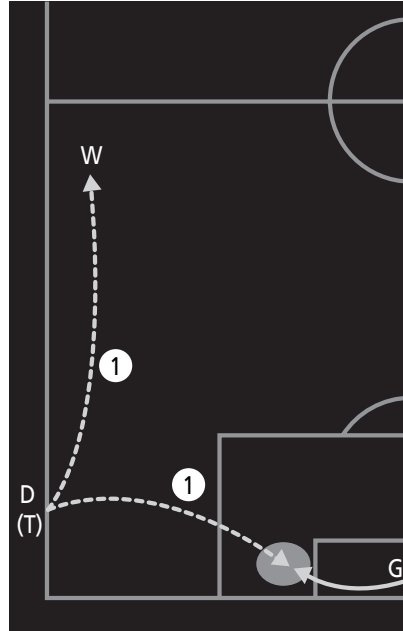


Fig. 5-17.

are all tightly marked. Once the ball is thrown, players must continue their runs in order to create space for the offense.

Defensive Third Throw-In

Throw-ins from the defensive third of the field should be played down the sideline, when possible, to keep the ball from being contested in front of the goal and to move the ball out of the defensive third of the field. The ball should be thrown to your goalkeeper when possible. Your team should continue to provide good defensive support in case the throw-in is lost. This prevents a counterattack. (Fig. 5-17)

Match Analysis

Match analysis is an important part of coaching. Your ability to analyze a soccer game is crucial to the success of your team. Knowing how and when to make changes during the course of a game is your primary coaching role in competition. And you must be able to explain those changes to your players concisely and effectively. Many coaches can devise effective training drills and teach a certain style of play, but unless a coach can analyze a game and come up with effective solutions to problems, all that is done in training is lost. It is your responsibility to provide viable solutions to your team.

Your ability to analyze a match has effects beyond immediate competition. Each game provides you the opportunity to gauge the progress of your team and to determine if what you teach in practice is put into play. Simply put, each game provides you with a blue print for your training sessions.

Even the best high school players have a difficult time analyzing a game in progress and solving problems. Your job during the game is to solve those problems. Half-time is always your best opportunity to make changes. Try not to talk too much. Your half-time talk should include no more than three major points. Remember to be concise and specific so that your players understand what is being asked of them. Half-time is not a good time to ask your players to do something that has never been taught in practice. Instead, keep your solutions as simple as possible. Help your players feel confident that they can get the job done.

ANALYZING A GAME IN PROGRESS

Watch for mismatches on both offense and defense. Be prepared to make changes

that will exploit or eliminate a mismatch. For example, if the opponent's left fullback is particularly slow and your team has an exceptionally fast forward, it would be advantageous to put that forward on the weak fullback's side of the field and play the ball into the open space behind the defender.

The following is a list of questions you can use to analyze a game in progress:

- Are we achieving our strategic objectives?
- Are we implementing our system of play effectively?
- Are we controlling the ball?
- How effective is our offense and defense in each third of the field?
- How are my players doing individually? Does anyone need a rest; is anyone playing particularly well or poorly?
- Are our offensive and defensive styles of play effective? If not, why, and how can we be more effective?
- What styles of play is our opponent playing? Are we having any specific problems that must be addressed immediately?
- What are our opponent's strengths and how can we best combat them?
- What are our opponent's weaknesses and how can we best exploit them?
- Are there any players on the opposing team who are causing us particular problems? What can be done to make those players less effective?

POST-GAME ANALYSIS

After the game is over, meet briefly with your players to assess their physical condition, schedule the next training session, field general questions, and offer some positive comments. Wait until the following day to discuss the game. It is best to analyze the game when you have had time to sit down and think things through. Discussing the game the next day at practice allows you to leave behind the emotion of the match and give a clear evaluation of both individual players and the entire team.

The following list of questions will help your post-game analysis:

- After reviewing game statistics, are there any trends in play that either helped or hurt our team?
- How and why were goals scored?

- How effective we were in making the transition from offense to defense and defense to offense?
- How effective was our offense and defense in the attacking third of the field?
- How effective were we in the middle third of the field?
- How effective were we in the defensive third of the field?
- How did each individual player perform?
- Did the team effectively implement the changes discussed at half-time?
- What drills should be included in training to help solve weaknesses?

Once you have analyzed a match, outline the areas that need work and devise practices to address those areas. Remember, you may not be able to fix everything in the span of one or two practices. Be patient and address problems in a way that best meets the needs of your team.

COMPUTATIONAL MATCH ANALYSIS

Advances in computer technology have taken match analysis to another level. Recently, computer software has been developed that allows coaches to obtain objectively evaluated game statistics. The software takes the statistical information of a soccer game and expresses that information as a graphic representation of the game. Important statistics such as shots on goal, passes, interceptions, penalty kicks, corner kicks and the range of individual players with the ball all can be viewed as they occurred on the field. Coaches can now actually see how a game developed on the field.

The software traces game activity by recording the movement of the ball and the players involved. You can then view the number and location of passes, shots, interceptions, player runs with the ball, etc. Figure 5-18, for example, shows shots on goal for the game United States versus Estonia, May 7, 1994. The graphic shows the number of the player taking the shot, the location of shot, the end of the shot, who blocked or intercepted the shot, and whether the shot scored or went out of field.

But coaches need to see more than just shots on goal. You also want to know how the offense created the shot on goal. Knowing how a team moved the ball through the field can tell you much about its offensive strategy, style of play and tactics. Figure 5-19 traces the ball movement prior to a shot on goal from the Estonia versus U.S.

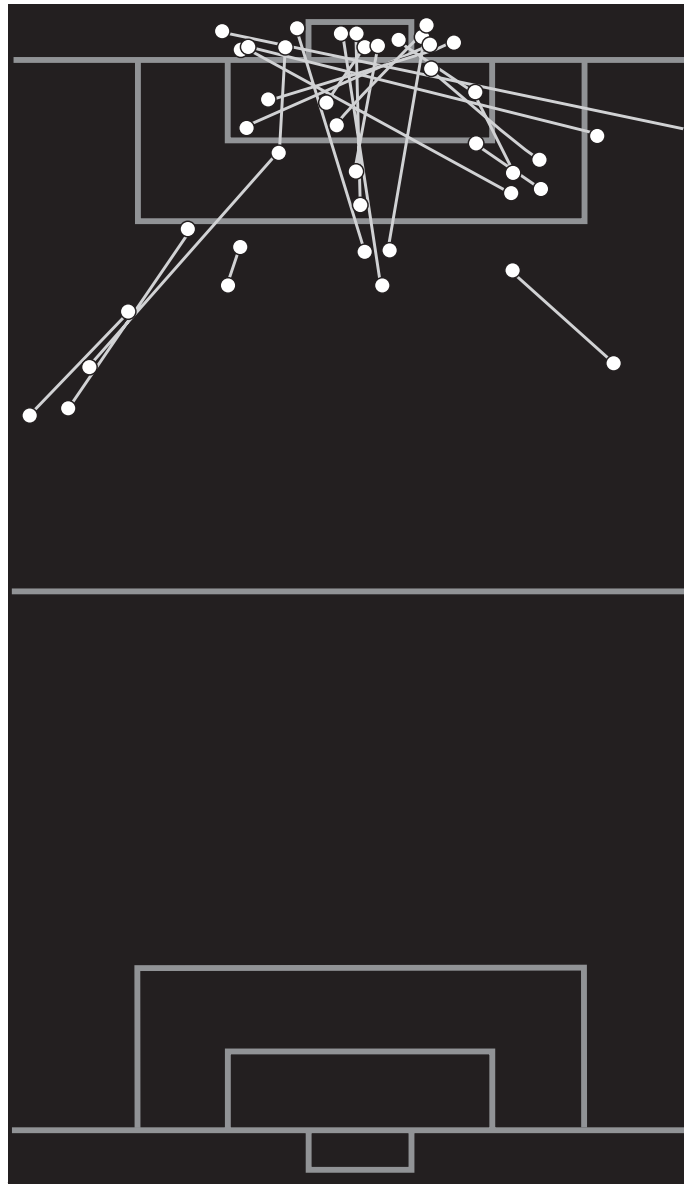


Fig. 5-18.

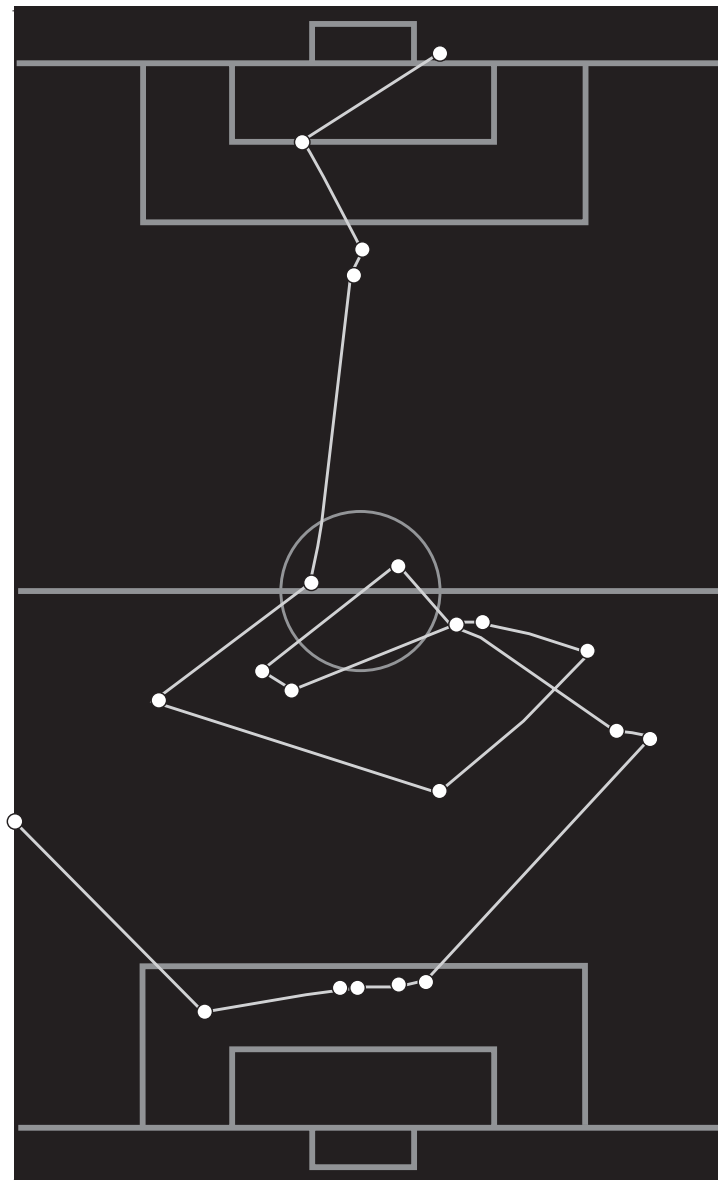


Fig. 5-19.

game discussed above. You can view each possession of the ball by either team.

So what does computational match analysis tell you?

Computational match analysis allows you to see a visual record of the match. The beauty of computational analysis is that it provides a visual display of all the activity in a Soccer game. You might, for example, want to see where on the field your central midfielder is touching the ball. On the basis of this information, you might then restrict the player's range or urge the player to be more mobile.

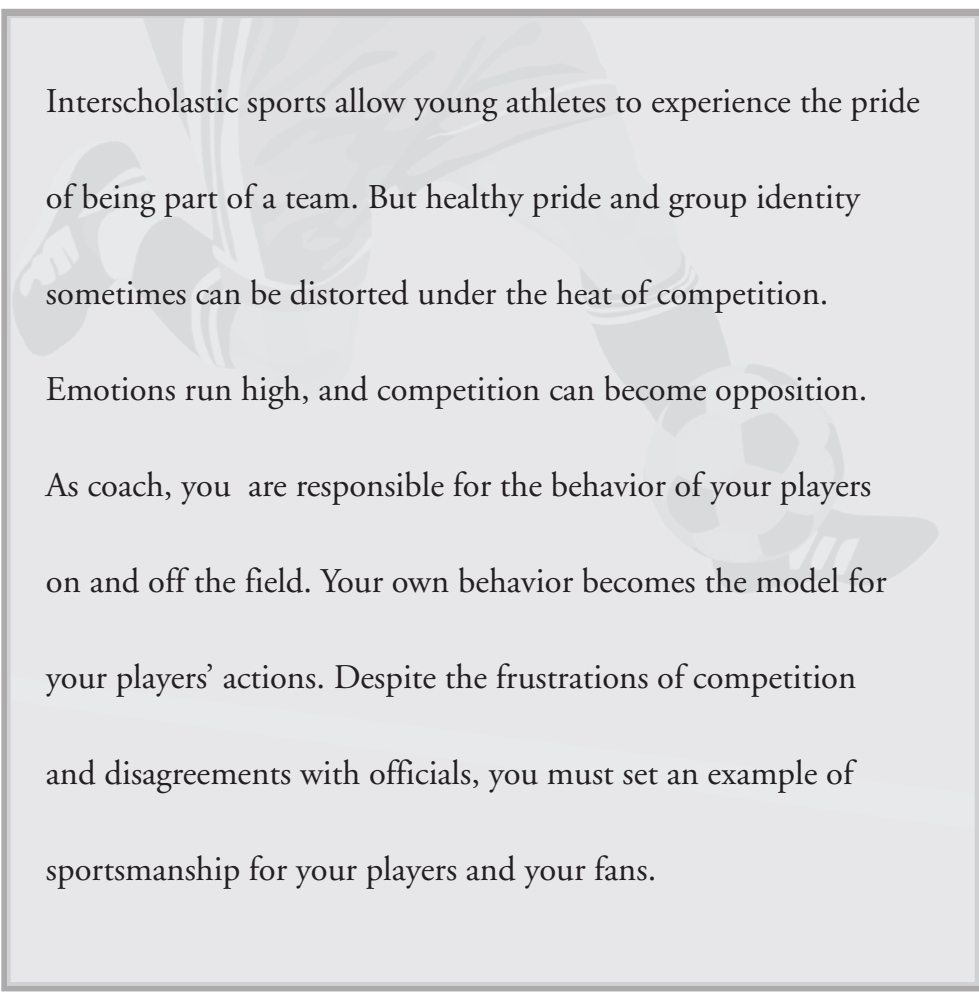
Second, computational analysis allows you to interpret the action of the game with far greater objectivity. In essence, the software adds some science to the art of coaching by allowing you to see patterns of play. Sometimes, a coach's subjective impressions are inaccurate. Sometimes, an accurate observation has a more subtle interpretation that only a deeper analysis reveals.

Computational analysis does have its limits. While it can show patterns of play and a visual view of each team's offense and defense, computational software cannot make an interpretation for you. To do that, you must know a great amount of information about individual players and each team's style of play.

Here's an example. Suppose the data shows that one of your defenders has many passes intercepted. Does that mean that the player has poor skills and makes many errors? Not necessarily. Instead, the opposition might be flooding that defender's side of the field and playing high-pressure defense when they lose the ball. In this case, your fullback's time and space are being severely limited; this could account for the high interception rate. The correct analysis depends on a full knowledge of the game.

Many people believe that Soccer is a game of random play that depends almost wholly individual skills. Computational match analysis is based on the assumption that any game produces certain discernible patterns in ball and player movement. Those patterns provide much valuable information that lets coaches adjust strategies and styles of play to help their teams play better.

Sportsmanship and the Laws of the Game



Interscholastic sports allow young athletes to experience the pride of being part of a team. But healthy pride and group identity sometimes can be distorted under the heat of competition.

Emotions run high, and competition can become opposition.

As coach, you are responsible for the behavior of your players on and off the field. Your own behavior becomes the model for your players' actions. Despite the frustrations of competition and disagreements with officials, you must set an example of sportsmanship for your players and your fans.

Fair Play

The FIFA's (International Federation of Football Associations) Fair Play Philosophy is advocated throughout the Soccer world. The following guidelines, taken from FIFA: Laws of the Game and Universal Guide for Referees, will help your program join in the "Spirit of Fair Play."

PLAYER'S CODE OF PLAY

1. Play because it's fun, not to please your parents or coach.
2. Play by the rules.
3. Don't argue with the referee or linesperson.
4. Control your temper. Don't engage in unsportsmanlike conduct.
5. Be a team player.
6. Be a good sport. Cooperate with your coach, teammates and opponents.
Without them you don't have a game.
7. The Golden Rule — Treat others as you would want to be treated.

COACH'S CODE OF PLAY

1. Remember your players are *student*-athletes. Be reasonable with your demands on their time, energy and enthusiasm.
2. Teach your players the rules and spirit of the game.
3. Allow the players to *play*. Don't constantly yell at them throughout the game.
4. Ensure that all equipment and facilities are safe for practices and games.
5. Encourage team respect for opposing players and coaches and match officials.
6. Don't play injured players. Get clearance from the player's physician or your athletic trainer.
7. Be a positive coach and role model. Reinforce good behavior and always set a good example.
8. Keep yourself educated in the game of Soccer. Attend coaching seminars, clinics and workshops. Become part of the coaching profession.

OFFICIAL'S CODE

1. Ensure that your behavior, both on and off the field, is consistent with the principles of good sportsmanship.
2. Be consistent, objective and courteous in calling all violations.
3. Discourage deliberate use of the so-called *good foul*. Such fouls can cause injuries and sometimes escalate into player confrontations.
4. Keep yourself informed of all rules changes.

The above codes are guidelines only. There may be other rules you would like to add to guide your program and make the game of Soccer more fun for all concerned.

The Laws of the Game

As coach, it is your responsibility to know and understand the rules of the game. It is equally important to teach your players the rules and to make them play within the spirit of the game. The international governing body of Soccer, FIFA, has established 17 laws that govern a Soccer game. Some of the laws differ slightly from the National High School Federation and local governing body rules. Always carry the *National High School Federation Soccer Rulebook* with you to every game.

LAW I. THE FIELD OF PLAY

The field of play must be rectangular. Its length cannot be more than 130 yards nor less than 100 yards. Its width cannot be more than 100 yards nor less than 50 yards. One goal must be anchored at each end of the field. The field is marked with a goal area, penalty spot, penalty area, penalty arc, corner areas, goal lines, touchlines (sidelines), halfway line and center circle. Flags must be placed in each corner of the field, with optional flags placed just outside the touchline on either side of the halfway line.

LAW II. THE BALL

The Soccer ball must be made of leather or some other approved material. Its circumference should be between 27 and 28 inches and its weight between 14 and 16 ounces at the beginning of the game. The ball cannot be changed during the game without the referee's permission.

LAW III. NUMBER OF PLAYERS

A team can play a game with no more than eleven players, and no less than seven, including a goalkeeper. If at any time during the game the number of eligible players on a particular team is less than seven, the game is forfeited to the opposition. Please refer to the National High School Federation and individual state rulebooks for clarification regarding substitutions.

LAW IV. PLAYER'S EQUIPMENT

This FIFA law differs from that of the National High School Federation and possibly your local governing body. Please refer to the rulebooks to determine the proper equipment.

LAW V. REFEREES

The referee is responsible for the entire game, including keeping a record of the game and acting as the timekeeper. The referee makes decisions on penalties, cautions, and ejects players for misconduct. The referee may also end the game due to inclement weather, spectator interference, etc. Time stoppage for injuries or other reasons is determined by the referee. All decisions by the referee are final.

LAW VI. LINESMEN

The two linesmen are primarily responsible for indicating to the referee when the ball is out of play and which team is entitled to a throw-in, goal kick, or corner kick; also responsible for indicating when a player may be penalized for being in the offside position. They administer substitutions, and deal with misconduct or other incidents that occur out of the view of the referee.

LAW VII. DURATION OF THE GAME

This FIFA law differs from high school rules. Please refer to the National High School Federation and individual state rulebooks for clarification on the duration of high school Soccer games in your area.

LAW VIII. THE START OF PLAY

A kickoff starts play at the beginning of each half and after a goal is scored. The ball is placed on the center spot inside the center circle. The ball must be kicked and moves

before it is officially in play. All players must remain on their half of the field, and the opposition must be outside of the center circle until the ball is in play. The player kicking the ball may not play the ball again until it is touched by another player. A goal may not be scored directly from a kickoff. The ball must be touched by a player other than the kicker before a goal can be scored. A coin toss at the beginning of the game determines which team decides between taking the kickoff or defending a chosen side first. The team that does not take the kickoff at the beginning of the game takes the second half kickoff. Additionally, the teams change ends prior to the start of the second half. Finally, a team that is scored upon is awarded a kickoff to restart the game.

LAW IX. BALL IN AND OUT OF PLAY

The ball is out of play when it has wholly crossed the endline, goal line, or touchline and the referee has stopped play. The ball is in play at all other times even if it hits the goalposts, crossbar, or referee, as long as it is still on the field of play.

LAW X. METHOD OF SCORING

A goal is scored when the whole of the ball crosses the goal line between the goal posts and under the crossbar. A goal cannot be thrown, carried, or propelled by the hand or arm of a player on the attacking team. The team that scores the most goals wins the game. If the game ends with neither team scoring, or with an equal number of goals, the game is declared a tie. Check local league rules to determine if overtime is to be played in case of a tie.

LAW XI. OFFSIDE

A player is offside when he or she is in the opponent's half of the field and nearer to the opponent's goal line than the ball, unless at least two opponents (one may be the goalkeeper) are as near or nearer to the goal line than the attacking player or if the attacker receives the ball directly from a throw-in, corner kick, goal kick or kickoff. Although a player may be in an offside position, a penalty is called only if the referee believes that the player is interfering with play or gains advantage. An indirect free kick is awarded to the opposing team from the spot on the field where the infringement occurs.

LAW XII. FOULS AND MISCONDUCT

(See the following section on major and minor fouls.)

LAW XIII. FREE KICK

Direct and indirect kicks are the two types of free kicks awarded during a game. A goal can be scored directly from a direct kick. For indirect kicks, the ball must be touched by a player other than the kicker before a goal can be scored.

All defending players must stay at least 10 yards from the ball on all free kicks. If a free kick is awarded to the defending team inside its own penalty area, all opposing players must remain outside the box and at least 10 yards away from the ball until it has traveled the distance of its circumference. If a free kick is awarded to the attacking team inside the opponent's penalty area, all defenders must stay at least 10 yards from the ball or on the goal line if the free kick is being taken less than 10 yards from the goal. The ball is in play once it has traveled the distance of its circumference. The kicker may not play the ball a second time until another player has touched it.

LAW XIV. PENALTY KICK

If any of the nine major fouls are committed by the defending team in its own penalty area, the referee will award a penalty kick to the opposing team. The ball is placed on the penalty spot 12 yards from the goal. When the kick is taken, the goalkeeper must be standing on the goal line between the goalposts. The goalkeeper may not move his or her feet until the ball has been struck. The only players allowed inside the penalty area at the time of the kick are the goalkeeper and the player taking the kick. All other players must remain outside the penalty area and at least 10 yards from the ball until the ball is in play. The kicker must kick the ball forward and may not play the ball a second time until it has been touched by another player.

LAW XV. THROW-IN

When a player plays the entire ball over one of the two touchlines, a throw-in is awarded to the opposing team at the place where the whole of the ball crosses the line. The player throwing the ball must face the field and deliver the ball from behind and over the head.

At the moment of release, both of the thrower's feet must be on the ground and on or behind the touchline. The thrower may not play the ball a second time until it has been touched by another player. A goal may not be scored directly from a throw-in. The defending team may not attempt to impede the thrower in any way.

LAW XVI. GOAL KICK

A goal kick is awarded to the defending team when the whole of the ball crosses the endline and was last touched by an opposing player. The defending team must place the ball inside the goal area. The ball must be kicked beyond the penalty area before it can be touched by another player. If the ball is touched by a player before it travels outside of the penalty area, the goal kick is retaken. Players from the opposing team must remain outside of the penalty area while the kick is being taken. The kicker may not touch the ball a second time until it has been touched by another player. A goal may not be scored directly from a goal kick.

LAW XVII. CORNER KICK

A corner kick is awarded to the attacking team when any member of the defending team plays the ball over the endline. A kick is taken from the quarter circle, with a radius of 1 yard, which is marked in each of the four corners of the field. The ball must be placed within the quarter circle at the end of the defending side's endline nearest to where the ball went out of play. The kicker may not touch the ball a second time until it has been touched by another player. A goal may be scored directly from a corner kick. All defenders must remain 10 yards from the ball until it has traveled the distance of its circumference.

The Nine Major Fouls

There are nine major offenses, or fouls, which result in either a direct free kick or a penalty kick, depending on the location of the offense.

An intentional commission of the following nine offenses is considered a major foul:

1. Kicking or attempting to kick an opponent.
2. Tripping an opponent; i.e., throwing or attempting to throw an opponent with the legs or by undercutting an opponent with the body.
3. Jumping at an opponent in a way that endangers the offensive player.
4. Charging an opponent in a violent or dangerous manner.
5. Charging an opponent from behind unless the latter is obstructing.
6. Striking, attempting to strike, or spitting at an opponent.
7. Holding an opponent.

8. Pushing an opponent.
9. Directing or stopping the ball by using the hands or arms. This rule does not apply to the goalkeeper within the penalty-area.

The Five Minor Fouls

There are five minor offenses, or fouls, the commission of which shall be penalized by the award of an indirect free kick to be taken by the opposite side from the place where the infringement occurred, subject to the overriding conditions imposed in Law XIII.

The following five offenses are considered minor fouls:

1. Playing in a manner considered by the referee to be dangerous; e.g., attempting to kick the ball while held by the goalkeeper.
2. Charging an opponent with the shoulder when the ball is not within playing distance and there is no attempt being made to play the ball.
3. Intentionally obstructing an opponent; e.g., running between the opponent and the ball or using the body as an obstacle to an opponent.
4. Charging the goalkeeper except when the goalkeeper:
 - is holding the ball.
 - is obstructing an opponent.
 - has passed outside his penalty area.
5. When playing as a goalkeeper and within the legal penalty-area:
 - Holding the ball for longer than 6 seconds without releasing the ball into play; or, having released the ball into play before, during or after the four steps, touching the ball again with the hands before it has been touched or played by another player of the same team outside of the penalty area or by a player of the opposing team either inside or outside of the penalty area.
 - Touches the ball with the hands after it has been deliberately kicked to him or her by a teammate.
 - Indulging in tactics that, in the opinion of the referee, are designed merely to hold up the game and so give an unfair advantage to the offender's team.

OFFICIAL CAUTIONS

A player shall be cautioned if the player:

- enters or re-enters the field of play to join or rejoin the game.
- leaves the field of play during the progress of the game (except through accident) without first having received permission from the referee. If the referee stops the game to administer the caution, the game shall be restarted by an indirect free kick taken by a player of the opposing team from the location of the ball when the referee stops the game, subject to the overriding conditions imposed in Law XIII.
- delays the restart of play.
- fails to respect the required distance when play is restarted with a corner kick or free kick.
- persistently infringes the Laws of the Game.
- shows, by word or action, dissent from any decision given by the referee.
- is guilty of unsportsmanlike conduct.

For any of these last three offenses, in addition to the caution, an indirect free kick shall also be awarded to the opposing side from the place where the offense occurs, subject to the overriding conditions imposed in Law XIII.

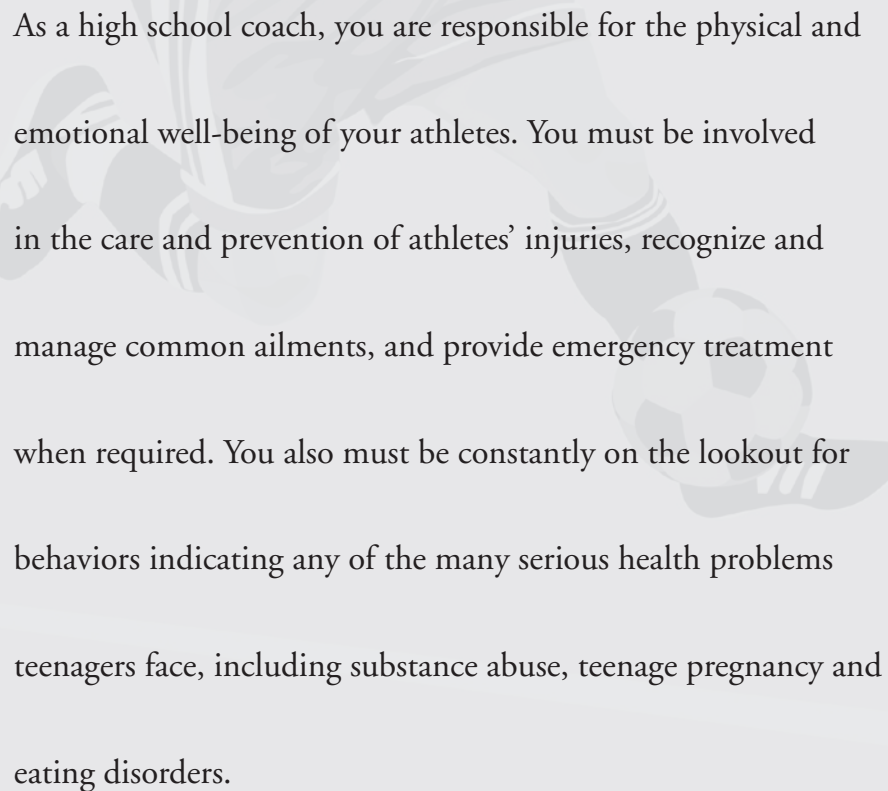
EXPULSION

A player shall be sent off the field of play if, in the opinion of the referee, the player:

- is guilty of serious foul play.
- is guilty of violent conduct.
- spits at an opponent or any other person.
- denies the opposing team a goal or an obvious goal-scoring opportunity by deliberately handling the ball (this does not apply to the goalkeeper within his or her Penalty area).
- denies an obvious goal-scoring opportunity to an opponent moving towards the player's goal by an offense punishable by free kick or a penalty kick.
- uses offensive or insulting or abusive language or gestures.
- persists in misconduct after having received a caution.

If play is stopped by reason of a player being ordered from the field for an offense without a separate breach of the Law having been committed, the game shall be resumed by an indirect free kick awarded to the opposing side from the place where the infringement occurs, subject to the overriding conditions imposed in Law XIII.

Managing Soccer Injuries & Athlete Health



As a high school coach, you are responsible for the physical and emotional well-being of your athletes. You must be involved in the care and prevention of athletes' injuries, recognize and manage common ailments, and provide emergency treatment when required. You also must be constantly on the lookout for behaviors indicating any of the many serious health problems teenagers face, including substance abuse, teenage pregnancy and eating disorders.

A Coach's Duties and Players' Rights

Chief among your responsibilities is the need to safeguard the physical well-being of your athletes. You are responsible for the prevention and care of athlete injuries. This means taking precautions to prevent injuries, administering emergency first aid, and securing or recommending professional medical treatment as soon as possible when injuries occur.

The Bill of Rights for the School and College Athlete has been developed by the American Medical Association's Committee on the Medical Aspects of Sports to define the duties and rights of athletes and their coaches in regard to the health of young athletes, as follows:

Participation in athletics is a privilege involving various responsibilities and rights. The athlete has the responsibility to play fair, to give his best, to keep in training, to conduct himself with credit to his sport and his school. In turn he has the right to optimal protection against injury as this may be assured through good technical instruction, proper regulation and conditions of play, and adequate health supervision.

AN ATHLETE'S RIGHTS

Good Coaching

The importance of good coaching in protecting the health and safety of athletes cannot be overstated. Careful conditioning and technical instruction leading to skillful performance are significant factors in lowering the incidence and decreasing the severity of injuries. Good coaching includes discouraging tactics that violate the law or spirit of the rules, or that may increase the incidence of injuries.

Good Officiating

The rules and regulations governing athletic competition are made to protect players as well as to promote enjoyment of the game. To serve these ends, the rules of the game must be thoroughly understood by players as well as coaches and be properly interpreted and enforced by impartial and qualified officials.

Good Equipment and Facilities

Proper equipment and facilities are essential to provide the protection athletes need. Good equipment is readily available; the problem lies in the false economy of using

cheap, worn out, outmoded, or ill-fitting gear. Safe and well-maintained play areas are equally important.

Good Health Supervision

Before each season, an athlete should have a thorough medical examination and medical history review. Many sports tragedies are due to unrecognized health problems. Medical restrictions to participation in contact sports must be respected.

When possible, a physician should be present at all contests and should be readily available during practice sessions. It is wrong to have a trainer or coach decide whether an athlete should return to play or be removed from a game following injury. With serious injuries, the availability of a physician may make the difference in preventing permanent disability or even death.

The physician should have the authority to determine if an athlete is healthy to play. Most coaches and athletic trainers are happy to leave such decisions to medical professionals.

As a coach, you can make a tremendous difference in preventing injuries by adhering to sound principles of conditioning and technical instruction and avoiding tactics that may lead to injuries. You have day-to-day control over the use of playing fields and the responsibility to inspect the field for dangers. Additionally, you are responsible for making sure that all equipment is safe and good repair.

Unfortunately, cost considerations often prevent trained physicians or certified athletic trainers from working all contests and practice sessions. Consequently, your responsibility for caring for your athletes is even greater. The purpose of this section is not to scare you, but to acquaint you with the most common Soccer injuries and correct injury management.

Handling a Medical Emergency

You should instantly be able to answer yes to the following 10 questions. If you cannot, you are inadequately prepared for a medical emergency that might occur during training or competition.

1. Do you have medical consent cards, documenting parental permission for emergency treatment, readily available for every athlete on your team?

2. Do you keep the medical consent cards filed in your first-aid kit? Is your first-aid kit always on hand at practices and games?
3. Do you know the contents and proper use of your team's first-aid kit? Do you have everything you need?
4. Are you aware of all preexisting medical/physical problems, such as diabetes, epilepsy, contact lenses and bee sting allergies, that your athletes may have?
5. Do you know the location of the nearest telephone from which to summon emergency medical assistance? If the phone is in a locked room, do you have a key or know where to get one quickly? If there is a switchboard phone, do you know how to get an outside line?
6. If the nearest phone is a pay phone, do you have quarters taped to the inside of your first-aid kit so there is always change available?
7. If you are not in a 911 response area, do you know the phone number for the nearest paramedics?
8. Do you know how and where to reach paramedics? What is their anticipated response time?
9. If paramedics are needed, is there emergency access to your playing field? Are there gates that will need to be unlocked? Do you have keys for those gates? Do you know where to get a key quickly?
10. Do you know the location of the hospital nearest your playing field? Will an ambulance take an injured athlete to that hospital?

Common Soccer Injuries

INJURY CHARACTERISTICS

The vast majority of Soccer injuries involve the lower extremity. They account for nearly 70 percent of all youth Soccer injuries. Knee injuries consistently represent roughly 16 percent of all injuries. Ankle injuries, which account for approximately 20 percent of all lower extremity injuries, are the most common injuries. The incidence of fractures and dislocations is low. Shin guards are mandatory and should be worn during all games and practices. Molded cleats and ribbed sole shoes appear to lower the risk of ankle and knee injuries.

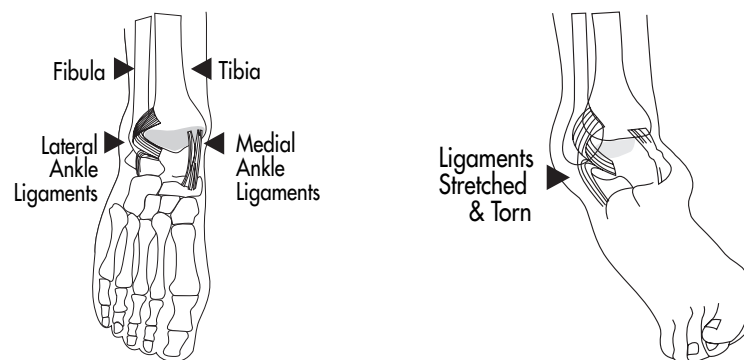


Fig. 7-1.

The most common joint sprained in Soccer is the ankle. The great majority of ankle injuries are joint inversions affecting the ligaments on the outside of the ankle. (Fig. 7-1)

Young Soccer players suffer a greater number of head, face and upper extremity injuries than older players. This may be due to more frequent falls on outstretched hands, upper extremity contact and the fragility of growing upper extremity growth plates. The higher incidence of head and face injuries may be a result of insufficient technical expertise in heading the ball, increased ball weight to head weight ratio, or increased ball weight in wet weather. Eye and dental injuries are not uncommon. These injuries can be prevented by using eye protectors or mouthguards.

Young athletes are more likely to be injured during games (62 percent) than during practice (38 percent).

Poor field conditions contribute to up to 25 percent of all injuries. Poor conditions can result from weather or poor maintenance. Field repairs should be made whenever possible.

INJURY RECOGNITION AND IMMEDIATE MANAGEMENT

Sports injuries tend to fall into two broad categories: **trauma injuries**, those that result from one single event or episode such as torn ligaments, and **overuse injuries**, those injuries which result from repetitive use and overload, such as tendinitis. While both types of injuries can sideline a player, you have a special responsibility to manage trauma injuries efficiently and with proper caution.

Most athletic injuries suffered during practices or games are acute. These injuries occur

as a result of a force that stretches or compresses tissues to the extent that they tear. When these tissues tear, bleeding results at, in, or around the site of injury.

WOUNDS

Three types of wounds are commonly seen in Soccer: abrasions, lacerations and punctures. With **abrasions**, the epidermis and dermis of the skin are scraped away by a rough surface. Dirt and debris predispose the wound to infection unless it is cleaned properly. Superficial bleeding occurs from the capillary bed, but usually stops shortly after injury. **Lacerations** are smooth or jagged edged cavities caused by sharp or pointed objects that cut the skin and underlying tissues. Bleeding can be severe, and infection can occur. **Punctures** are wounds produced from a sharp pointed object. Bleeding is not usually severe; however, the chance of infection is high.

When managing any wound, control the bleeding and prevent infection. If the wound is severe, you may have to immobilize the wounded body part to help control bleeding. Such situations are rare, however. Bleeding usually can be controlled by direct pressure. After bleeding is controlled, clean the wound and apply a sterile dressing. Deep lacerations and punctures should be examined by a physician. (Fig. 7-2)

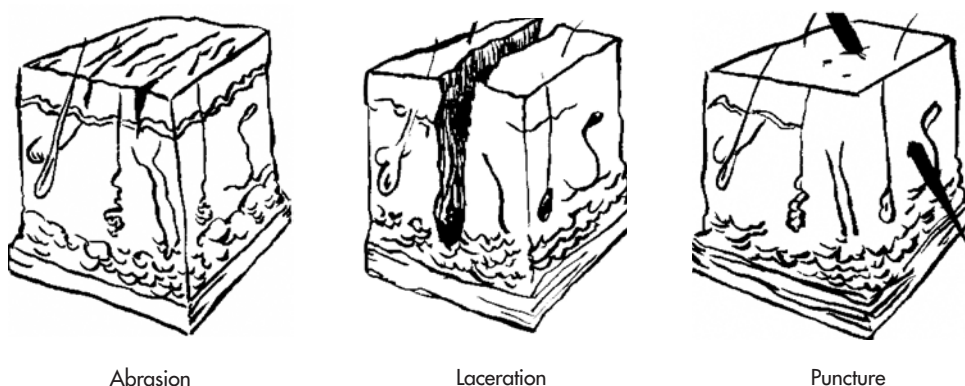


Fig. 7-2.

SPRAINS

Sprains are injuries to ligaments, the tough bands of soft tissue that connect bones to each other. A sprain is an overstretching of a ligament beyond its normal range of motion. A **first-degree sprain** is a mild stretching of the joint ligaments. The athlete may be unaware of the injury until well after the incident, when slight swelling and pain appear. Although the athlete may not lose any range of motion, it is best to give

the ankle extra support and possibly rest for a day or two. Treat the injury by elevating, icing and compressing the afflicted joint. If there is no improvement after 48 hours, seek medical treatment.

Second-degree sprains involve partial tearing of the ligament. There is swelling and sometimes bruising. It may take 4–6 weeks of rest, rehabilitation and medication before an athlete can return to playing. A splint or taping that limits movement can keep the injured area from being reinjured while still allowing joint movement.

Third-degree, or severe sprains often require surgery to repair a rupture of the ligament. Rehabilitation takes several weeks and sometimes months. Sprains needing surgery usually end an athlete's season. After a severe sprain, only a physician should approve an athlete's return to training and competition. Any return to activity should be preceded by an exercise regimen that strengthens the muscles on each side of the injured joint. The athlete should pass a functional evaluation that includes running a figure-8, a zig-zag pattern and coming to a complete two-footed stop without favoring the injured joint. Also reinforce and protect the joint with tape or a brace. However, do not substitute taping for rehabilitation exercises.

Management of sprains may be best summed up by the acronym **PRICE**.

P — *Protect* the joint from further trauma. This protection may take the form of an external support (tape, elastic bandage) or removing the athlete from further activity.

R — *Rest* the joint by restricting or suspending the athlete's athletic activity. With serious sprains the athlete might need to stop all weight-bearing activity, and may need an external support or a splint.

I — *Ice* should be applied for approximately 10–20 minutes every 3–4 hours. This may be done using an ice bag or chemical ice pack, or by immersion in cold water.

C — *Compression* will help limit swelling. Compress the injured body part by wrapping it in an elastic bandage. Begin wrapping at the point farthest from the heart and wrap toward the heart. Make sure the wrap does not constrict the injury too tightly.

E — *Elevate* the injury above the heart. This will reduce swelling.

STRAINS

Strains occur within a muscle-tendon unit, and are caused by traumatic overextension or continued overuse. Strains may be accompanied by generalized or point specific pain and swelling. They can be slow to heal and may become chronic if weakness or inflexibility is not corrected. Possible causes of strains include weak opposing muscle groups, poor flexibility, inadequate warm-up, fatigue, or a sudden violent contraction.

First-degree strains, known as muscle pulls, involve a slight stretching of the muscle tissue. Symptoms are spasm of the injured muscle, pain upon contraction or stretching, and moderate pain to the touch. Recovery can range from 2–3 days to 2 weeks.

With a **second-degree strain**, the muscle stretches and there is some tearing of muscle fibers. Immediate pain and loss of function, along with a popping or snapping sound, usually occur. These torn fibers can cause a palpable gap in the muscle, a lump, swelling and discoloration from hemorrhage within the muscle. Recovery time for a moderate strain is 3–4 weeks.

In a **third-degree**, or **severe strain**, the muscle fibers are torn or even completely ruptured. Symptoms include extreme pain and muscle spasm, a palpable defect (indentation), swelling, discoloration and partial or total loss of function. Severe strains require immediate medical treatment. Ice should immediately be applied to the injured area followed by several days of ice massage treatments. Allow only unresisted range-of-motion exercises until the internal bleeding stops. An elastic wrap, putting pressure on the injury, should be worn during this time. When the bleeding stops, administer contrast treatments such as ultrasound and ice. A severe strain is usually a season-ending injury.

The most common muscle strains involve the hamstrings (muscles in the back of the leg that bend the knee), the adductors (muscles on the inside of your thigh, commonly referred to as the groin), the quadriceps (muscles on the front of the thigh that straighten the knee), the sartorius (a muscle that runs from the outside of the hip across the front of the thigh and attaches on the inside of the thigh by the knee), and the calf muscles.

The treatment of muscle strains is very similar to the management of a joint sprain. Follow the previously described PRICE method. Once the injury begins to heal, gentle stretching may begin.

CONTUSIONS

Contusions are a result of a direct blow to soft tissues or bone. Their severity ranges from first to third degree. A contusion that involves muscle is often called a charley horse. Characteristics of contusions are pain on palpation of soft tissue and bone, spasms, swelling and discoloration.

The use of the PRICE method is appropriate for contusions. If the contusion involves a muscle, place the muscle in a slight stretch while applying ice. If the contusion involves point tenderness on a bone, the injury might be a fracture.

In Soccer, most muscle contusions involve the quadriceps (thighs) and the calf muscles. Quadriceps contusions usually result a direct blow from an opponents knee or foot; calf-muscle contusions result from direct kicks.

Bone contusions usually involve the tibia (shin) or various bones of the foot. Contusions of the tibia may be prevented by using shin guards.

FRACTURES AND DISLOCATIONS

A **fracture** is a disruption in the integrity of a bone. Various types of fractures are illustrated in Figure 7-3. Fractures are classified into two broad categories, simple and compound. A **simple fracture** is a break in the continuity of bone without exposing the bone through the skin. In a **compound fracture** the bone is exposed through the skin.

Fractures and dislocations can be recognized by deformity; swelling; point tenderness; crepitus, or a grating sound; and abnormal movement of a joint.

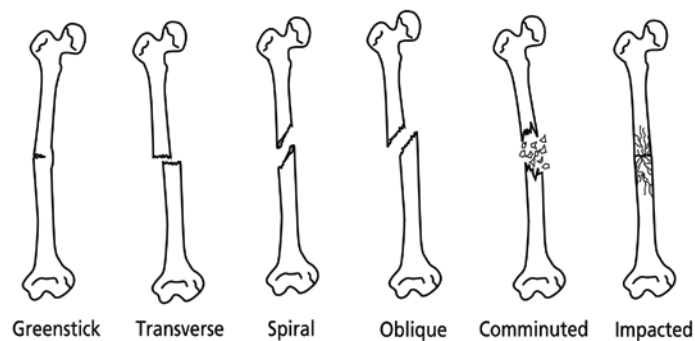


Fig. 7-3.

Dislocations are defined as a disunion of two bony surfaces that articulate with one another to compose a joint. Dislocations are divided into two broad classes, subluxation and luxations. **Subluxations** are partial dislocations in which an incomplete separation has occurred between the bony surfaces of the joint. A **luxation** is a complete disunion of the joint. Both injuries are significant and result in a loss of function.

Fractures and dislocations should be treated promptly by professional medical personnel. If immediate medical attention is unavailable and you must move the athlete, splint the injured body part in the position in which it is found *before* moving the athlete.

In the case of a compound fracture, controlling the bleeding is the first priority. After the bleeding is stopped, a sterile dressing should be applied. You should be prepared to treat the athlete for shock if necessary.

All suspected fractures should be treated as such until determined otherwise by a physician. Always err on the side of caution. The most common fractures seen in the lower extremity are usually the result of sprains or direct kicks. Most of these fractures involve the foot and ankle. Fractures of the fingers, wrist, forearm, or clavicle (collarbone) may result from falls or, in rare cases, errant kicks.

Dislocations should never be reduced (put back in place) in case the joint is fractured. Inappropriate reduction may result in greater injury. Emergency medical services should be summoned immediately. The body part should be immobilized in the position in which it is found. Ice may be applied to any suspected fracture or dislocation to minimize swelling.

The most common dislocations of the upper extremities involve the fingers and shoulders. They usually are caused by falls on outstretched limbs. Goalies are prone to finger fractures or dislocations as a result of making saves. In rare cases, a Soccer player may suffer from a lower extremity dislocation of the patella (kneecap).

STRESS FRACTURES

Stress fractures occur when the load placed on the bone is greater than the supporting muscles and tissues can absorb. Especially in female athletes, stress fractures sometimes signal an underlying nutritional or hormonal problem. However, most stress fractures result from overtraining, running on hard surfaces, and worn-out shoes.

Stress fracture pain commonly begins as an annoying irritation and gradually builds to deep, persistent pain and sharp point tenderness. Pain usually disappears at rest. X-rays often fail to detect stress fractures, since it takes 8–14 days before bone calcification makes the fracture detectable. Stress fractures may require 6–8 weeks of rest before the bone heals completely.

GENITAL AND ABDOMINAL INJURIES

Injuries to the genitalia and abdomen result from direct blunt trauma such as a collision with another player, the ball, or from being kicked.

Scrotum Contusion

The scrotum is extremely sensitive. A contusion may cause nausea, muscle spasm and incapacitating pain. Calm the athlete, and attempt to reduce the testicular spasm by flexing the athlete's hips and knees, bringing his thighs to his chest. Ice may also be applied to the lower abdomen and groin. An alternate method is to sit the athlete on the ground and lift him under the arms approximately six inches off the ground. The effect of gravity on the testicles may reduce spasm. The athlete may also be dropped gently to the ground. The mild resulting shock may also assist in relieving the spasm. If pain persists for longer than a short period of time, the athlete should be referred to a physician.

Kidney Contusion

Although kidneys are well protected within the body, injuries do sometimes occur. An athlete with a contused kidney may display signs of shock, nausea, vomiting, rigidity of the back muscles, and blood in the urine (hematuria). If hematuria is present, the athlete should be seen immediately by a physician.

Ruptured Spleen

The spleen is located on the left side of the abdomen just under the diaphragm. The spleen is a self-splinting organ, and sometimes after injury, it may splint itself, delaying hemorrhage. Slight strain later may result in a relaxation of this splinting and allow profuse hemorrhage. The athlete may display signs of shock, abdominal rigidity, nausea and vomiting. **Kehrs sigh**, which is a reflex pain into the left upper extremity and down the left arm, may also be present. A ruptured spleen is a medical emergency. The athlete should be transported to the hospital as soon as possible.

CONCUSSION

Head injuries may occur from contact with another player, the ball or the ground. A concussion is the most common type of head injury. As defined by the Congress of Neurological Surgeons, a concussion is a clinical syndrome characterized by immediate and transient impairment of neural function such as alteration of consciousness, disturbance of vision, equilibrium, etc., due to mechanical forces. Concussions may be classified as mild, moderate and severe.

Mild

The athlete experiences transient neurological impairments usually characterized by headache, tinnitus (ringing in the ears), a loss of balance and coordination, and confusion. No loss of consciousness occurs. Recovery is rapid. The athlete should be removed from practice or competition until all symptoms resolve.

Moderate

A moderate concussion may be characterized by a transient loss of consciousness (less than five minutes) that is almost always accompanied by retrograde amnesia (the inability to remember events that occurred immediately before the concussion). Headache, nausea and dizziness are also usually present. The player should be removed from the practice or game and not permitted to reenter. When attending to a player who is rendered unconscious, always treat as a severe cervical injury and summon emergency medical personnel. Treatment by a physician is mandatory. Close observation by the parents at home or hospital personnel is mandatory for a period of at least 24 hours. Return to athletics should not be permitted until all symptoms are gone and the athlete has been cleared by a physician.

Severe

With a severe concussion, the athlete is unconscious for longer than five minutes. This is an emergency medical situation that requires immediate medical attention. Any time an athlete suffers a head injury that produces a loss of consciousness, he or she should not be allowed to return to athletic activity until cleared by a physician.

Evaluating a Concussion

When evaluating an athlete who has suffered a head injury, you should check the athlete's balance by having the athlete stand feet together, arms out and eyes closed.

No loss of balance should occur. You can check coordination by having the athlete alternate placing the index finger on the tip of the nose from a position in which the arms are outstretched. Pupils should be equal in size and react symmetrically to light. The athlete should have no headache, ringing in the ears, or nausea. Mental status may be checked by asking the athlete to add serial sevens. Or, ask other pertinent questions about the person (mother's first name), place (location of game), and time (day, date). Don't allow an athlete to return to practice unless the athlete is asymptomatic, able to exhibit normal technique, has normal speed and coordination on the sideline, and is mentally focused. A concussion can be potential life-threatening injury. If in doubt, *always* err on the side of caution.

FACIAL INJURIES

Facial injuries usually occur as a result of improper heading technique or blunt trauma such as collision with another player's head. The majority of Soccer facial injuries involve the nose and eye.

Nasal Injuries

Nosebleeds may be the most common facial injury in athletics. The nosebleed is usually caused by a direct blow. Usually the nosebleed presents a minor problem, stopping spontaneously after a short time. If bleeding persists, a cold compress should be applied to the nose along with direct pressure. A sterile packing may be inserted into the nostril. Care should be taken to make sure that the packing protrudes sufficiently from the nostril to facilitate its removal. After bleeding ceases the sterile packing should be removed. The athlete should not blow his or her nose for two hours after injury. If bleeding does not stop with the above measures, refer to a physician.

Eye Injuries

Although the eye is well-protected anatomically by the bony structure of the face and the eyelid, eye injuries do occur. Foreign bodies are the most frequent insult to the eye. No attempt should be made to rub an object out of the eye or to remove it with one's fingers. The athlete should attempt to wash the object out of the eye with sterile water, or saline, and an eye cup. The vast majority of foreign bodies may be removed successfully in this manner. If you are unable to remove the foreign body and pain persists, the eye should be covered with a sterile dressing and the athlete brought to a physician. Because of the presence of a foreign body and the potential for

serious damage, the athlete should be instructed to close the other eye to decrease eye movement. It may be necessary to cover both eyes.

Eye Contusions

Although well-protected, the eye may be bruised during athletic activity. The severity of injury ranges from mild contusions to serious injuries such as orbital fractures. Fortunately, most contusions are mild. Capillary bleeding into the tissues that surround the eye cause swelling and may result in the classic black eye. Signs of more serious injury are bleeding into the tissues of the eye, faulty vision, or an inability to move the eye normally. A cold compress should be applied intermittently to minor eye contusions. Serious injuries should be covered with a sterile dressing and referred to a physician. The athlete should refrain from blowing his or her nose which can cause increased bleeding.

CERVICAL SPINE INJURIES

Fortunately, severe cervical spine injuries are rare in Soccer. The vast majority of cervical injuries fall into the category of minor sprains and strains. These minor injuries are treated in the manner previously described. Injuries that may be considered severe are intervertebral disk ruptures, fractures and subluxations of the cervical vertebrae.

The symptoms of serious cervical injury may include point tenderness, pain on movement of the neck, fear of moving the head and neck, deformity, numbness or tingling (parasthesia) of one or more extremities, muscle spasm, and weakness or paralysis of the extremities. If the athlete exhibits any of these symptoms, the injury should be considered a medical emergency, and medical personnel should be summoned. If the athlete is unconscious, you must maintain pulse and respiration until emergency medical help arrives. Whether conscious or unconscious, the athlete should not be moved. The athlete should be kept quiet in the fallen position until emergency medical personnel arrive.

HEAT RELATED INJURIES

Playing in the Heat

During competition, Soccer players normally have a core body temperature of 102–104 degrees Fahrenheit. Cell death takes place when the body temperature exceeds 108

degrees. Without special precautions, athletes run the risk of overheating when the ambient temperature rises.

The most common heat problems are heat cramps, heat exhaustion and heat stroke.

Heat cramps are muscle spasms that result from prolonged heavy sweating and inadequate fluid replacement. Treat cramps by moving the athlete into a cool, shaded place to rest. Then, replace water and electrolytes. Ice and stretch the spasmodic muscles.

Heat exhaustion results from too much playing in the heat or the cumulative effects of inadequate hydration. Symptoms of heat exhaustion are profuse sweating, headache, tingling sensations in the extremities, foggy, lack of coordination, trembling, paleness and breathing difficulties accompanied by extreme fatigue and collapse. Treat heat exhaustion by moving the athlete to a cool, shaded place. Elevate the feet; place cold towels or ice on the neck, head and abdomen; and administer fluids as tolerated. Refer to a doctor for examination.

Heat stroke is the most serious heat injury. Sweat losses are so great that the body can no longer cool itself. This is a medical emergency requiring immediate medical attention. Heat stroke can lead to death or serious complications. Symptoms of heat stroke are lack of perspiration; hot, dry skin; delirium; seizures; vomiting; cyanosis; and unconsciousness. Cool the athlete immediately, placing ice packs near the location of major surface blood vessels, like the neck. The athlete should be transported immediately to a medical facility for examination and treatment.

You can help your athletes adapt to the stress of heat through proper training. Heat conditioned athletes have lower heart rates and body temperatures, perspire earlier during exercise, sweat more and burn less energy than non-acclimated athletes. Start out by training in moderate weather conditions. As fitness grows, gradually increase the amount of training done in heat or high humidity. Eight–12 days of hot weather training should produce the desired adaptations.

When athletes are training and competing in hot weather, water loss can exceed intake. If an athlete fails to maintain adequate body fluid levels, he or she begins to dehydrate. As the body loses fluid, the sweat rate slows in order to conserve remaining water. The body then begins to overheat, resulting in poor performance or, worse, serious heat trauma.

An athlete may not begin to feel thirsty until fluids equaling 0.5-percent of body-weight are lost. Some athletes do not become thirsty until losing 2-percent of body weight (more than 1H quarts of fluid for a 130-pound athlete). At this point, general discomfort and loss of appetite occur. A 4-percent loss (5.2 pounds for the 130-lb. athlete) will result in impaired performance. The skin will become flushed, and the athlete may become apathetic. If dehydration continues, serious medical complications will occur.

Avoiding Heat Related Trauma

- Research shows that Soccer players need to drink fluids frequently throughout each day to maximize training and game performance.
- Hot, dry conditions greatly accelerate a athlete's loss of body fluids. This is called **dehydration**.
- Dehydration decreases blood volume, impairing the ability of the cardiovascular system to deliver oxygen to muscles.
- Recent studies show that drinking before competing does not cause abdominal cramping and that dehydration causes most gastrointestinal problems.
- Thirst is not a valid indicator of dehydration. By the time a athlete is thirsty, it is usually too late to replace the volume of fluid needed for maximum performance.

Drinking Guidelines

- Drinking adequate amounts of water before games should be part of your team's pre-game preparation.
- Every athlete should have his or her own 16–32 ounce water bottle and bring it filled to every workout and game.
- Recent studies show athletes need to drink 16–32 ounces of fluids (preferably water) between lunch and an hour before the afternoon's training or between waking up and an hour before a game. One gulp is roughly an ounce.
- In hot, dry conditions, athletes should drink 6–8 ounces of water just before the start of the game. Research shows that 93-percent of that water is absorbed into the bloodstream during the game, not emptied into the bladder.
- The best time to drink electrolytes (e.g., Gatorade) or carbohydrate replacements (e.g., Exceed) is after the game, not before.

SHOCK

Shock is a possible complication from injury. When a severe allergic reaction, severe bleeding, fracture, or deep internal injuries occur, the likelihood of this complication increases. Shock also may be a complication seen in the diabetic athlete.

Shock is caused by a diminished amount of circulatory fluid or blood volume. As a result, not enough blood is available to carry oxygen to the body's vital organs and nervous system. Untreated shock can cause death.

Major signs and symptoms of shock are pale skin, dilated pupils, a weak rapid pulse, and quick, shallow breathing.

Treat shock by maintaining body heat and elevating the lower extremities 8–12 inches. This attempts to provide adequate circulation to the vital organs of the body. Management will vary, however, according to the type of injury. Do not elevate a fractured leg until after it is immobilized or splinted. For head or cervical spine injuries do not attempt to move an athlete. Do not give the athlete anything to eat or drink until he or she is seen by a physician.

SIDE STITCHES

Side stitches are not really injuries, but muscle spasms caused by the conflicting movement of internal organs and the diaphragm while an athlete is running. If the diaphragm moves up as the organs move down, pain and spasm can result from the strain placed on the intercostal (rib) muscles. Two-thirds of all stitches occur on the right side of the abdomen because of the heavy weight of the liver. The resulting pain is usually felt just below the ribs.

Side stitches are linked to breathing patterns and physical fitness. Soccer players often get side stitches when they are not aerobically fit enough to handle the pace of a game. Increasing fitness and changing breathing patterns can alleviate these cramps. Athletes should learn to breathe *diaphragmatically*. Also, athletes should not eat for at least 2–3 hours before competing. The weight of a full stomach increases the likelihood of a side stitch.

Sometimes exhaling forcefully relieves the diaphragm spasm. Belly or diaphragmatic breathing (rather than chest breathing) pushes organs downward to alleviate or prevent side stitches. Research also indicates that athletes with strong abdominal muscles have less incidence of side stitches.

SHIN SPLINTS

Shin splints is a generic term for pain to the front of the lower leg. The pain is generally attributed to inflammation of the tendon of the tibialis posterior muscle or the soft tissue between the tibia and fibula. Muscles of the foot and ankle may also be involved.

Shin splints can result from poor running posture, muscle imbalances, fallen arches, lower leg muscle fatigue, or overuse stress. Shin splints often appear during the early season, when athletes are in poor condition, and also result from running on hard surfaces.

Deviations from normal mechanics can predispose an athlete to shin splints. From behind, the Achilles tendon should run directly up the calf. The ankles should not bend to either the inside or outside. When viewing the leg from the front, the kneecap should be centered over the knee. Internal rotation of the kneecap indicates foot pronation. To determine if the ankle muscles are balanced, project an imaginary line from the shin bone to the second toe. Lateral weakness is indicated if the line travels to the outside. Medial weakness is likely if the line travels to the inside. To test for muscle weakness in the anterior lower leg, have the athlete resist attempts to push against a flexed ankle. If the muscles are unable to resist, the athlete might be prone to shin splints.

Strengthening the muscles of the ankles and lower leg will help prevent shin splints. Include exercises where athletes walk on their toes, heels and both the insides and outsides of their feet. Other exercises include picking grass with the toes, pulling a weighted towel toward the foot with the toes, and flexions using elastic tubing.

Many shin splints result from poor shoe arch support. You may want to try special shoe inserts such as those made by Spenco, or tape the arches and lower leg with a simple overlapping basket weave. Taking aspirin, acetaminophen (Tylenol) or an anti-inflammatory agent, such as ibuprofen (Advil), can also help symptoms. Recommended therapy includes 10 minutes of ice massage or warm-moist heat prior to the start of a workout and 15 minutes of icing afterward. Severe cases may require icing several times each day.

ACHILLES TENDINITIS

Achilles tendinitis is an inflammation causing painful swelling or thickening of the Achilles tendon or its surrounding sheath. The Achilles tendon attaches the calf muscles (gastrocnemius and soleus) to the heel bone (calcaneus) and is surrounded by a lubricating sheath that allows the tendon to slide back and forth.

Tendinitis can start as mild tenderness and progress to a pain that inhibits movement. At its most severe, there is painful and sometimes audible friction of the tendon against the sheath, called crepitus. To an injured athlete, it often feels like two pieces of sandpaper rubbing together. Oversecretion of synovial fluid and infiltration of fibrin cause sticky adhesions between the tendon and its sheath. The adhesions restrict the ability of the tendon to slide properly and even can cause pain while resting.

Athletes with inflexible calf muscles or unstable feet place abnormal stress on their Achilles tendons. These problems can be aggravated by overstretching the tendon, increased speed work, running hills, or wearing shoes without heels (spikes). Daily stretching exercises can prevent most Achilles injuries.

Tendinitis usually is not serious unless untreated or ignored until it becomes chronic. If treated within a week after onset, there is a 95-percent chance of full recovery within two weeks.

A foam or felt heel-lift can take stress off the tendon and relieve inflammation. Training should be restricted to level surfaces and all speed-work eliminated. Gradually increase stretching both before and after workouts. Aspirin or anti-inflammatory agents combined with ice therapy will assist recovery.

PLANTAR FASCITIS

The **plantar fascia** is a wide sheet of connective tissue that runs from the bottom of the heel bone (calcaneus) to the ball of the foot. It supports the longitudinal arch when running on the toes and also when the foot flattens upon landing. Excess strain upon the plantar fascia typically causes gradual onset of pain. Acute onset might indicate a partial tear or rupture.

Plantar fascitis can be detected by palpating the entire fascia from the heel to the ball of the foot. If there is pain, a plantar fascial tear or fascitis likely exists. If the pain is near the heel, a bone spur also could be causing pain.

Rest and good running shoes are the best ways to heal plantar fascitis. Alternative training methods such as cycling or pool workouts will rest the foot. The arch can also be taped to reduce pain while running. Other methods of treatment include icing, analgesics, anti-inflammatories, deep massage, or a heel cup. In persistent cases, send the athlete to a physician or physical therapist.

BLISTERS

Blisters are caused by excess friction between shoes and the feet. The best guarantee against blisters is a pair of shoes that fit properly. Beginning athletes sometimes get blisters because their shoes are too large. Price-shocked parents often buy off-size shoes hoping that their young athletes will grow into the shoes by the end of the season.

Prevent blisters by keeping shoes as clean and dry as possible. When shoes get wet, make sure they dry thoroughly before they are used again.

When treating a blister, never intentionally remove the skin. You might want to remove the fluid by perforating the skin with a sterile needle and then pressing the skin back to the foot with a Band-Aid. Treat large and open blisters by soaking the foot in a cool solution of Epsom salts to reduce the inflammation and sensitivity of the new skin. Prevent infection and promote healing by applying an antibiotic ointment such as Neosporin before covering the blister with a bandage or sterile dressing.

CHONDROMALACIA

Chondromalacia patellae, often called **athlete's knee**, is a painful erosion of the cartilage between the knee joint and the patella that can be caused by misalignment of the lower leg, improper running technique, running on uneven surfaces, structural defects, or weak quadriceps. The erosion results when the kneecap does not track properly as it slides over the joint.

Symptoms include aching pain in and around the kneecap, usually following a long continuous run. Running hills or stairs can have the same effect. Chondromalacia sufferers usually cannot pinpoint the exact location of the discomfort. A squatting movement often elicits chondromalacia pain. Treatment includes resting the leg, icing, and strengthening the vastus medialis (inside thigh muscle). Isometric or resistance exercises, using less than 30 degrees of knee flexion, often are effective in relieving symptoms. Knee straps or tape wrapped below the kneecap also can help alleviate the pain and discomfort by improving the kneecap's alignment.

How to Ice an Injury

Ice is one of an athlete's best friends; it is especially effective treatment for most of the injuries that Soccer players experience. Ice alleviates muscle strain spasm, prevents

hemorrhaging, and reduces swelling of many injuries.

Using ice improperly, however, actually can aggravate an injury or cause frostbite. Applying ice for too long can cause increased swelling and bleeding. Also, cold increases the permeability of the lymphatic vessels that carry excess tissue fluids back into the cardiovascular system. With icing, though, the lymphatic vessels tend to drain into the surrounding muscle tissue. If an area is iced too long, greater swelling and pain may result because the lymphatic vessels will not be able to carry excess fluid away from the injured area.

Apply ice to an injury for 10 minutes — followed by a 30-minute break — followed by another 10 minutes of icing. This procedure can be repeated as often as possible for the first 24–48 hours following an injury, then 3–5 times a day until the injury is healed.

Alternatives to Soccer While Injured

When an athlete is injured, you want him or her to maintain fitness, and keep involved in the daily life of your team.

Maintaining fitness means that you must find cross-training activities that will rehabilitate, not aggravate, the athlete's injury. If the athlete requires a physician's care, you might want to recommend a medical doctor or orthopedist specializing in sports medicine. These doctors understand the need to keep an athlete as active as possible while recovering from injury. Regular M.D.s, unfamiliar with sports-related injuries, may prescribe complete rest when it may not be necessary. Regardless, always follow the physician's advice. Do not return an athlete to activity until so instructed by the physician.

You can ease the psychological stress of injury by keeping the athlete involved in your program. Athletes often enter a state of denial regarding their injuries and may experience some symptoms of withdrawal from the routine of training. These symptoms can include depression, guilt, irritability, restlessness, anxiety, frustration, sudden fatigue and isolation. Your actions can help the athlete understand and come to terms with these feelings.

Feeling useful is especially important to injured athletes. Have injured athletes lead stretching, help with drills, or assume administrative tasks that allow them to feel they are

still making a positive contribution to the team despite being unable to play. Acknowledge and praise their efforts to heal themselves, such as following the doctor's advice, doing physical therapy and rehab exercises, and maintaining their training weight.

Some injuries can be healed without interrupting training. Choose an activity that is safe, protects the injured area, and most closely simulates the athlete's regular training.

Returning an Athlete to Training

The decision to return an athlete to training requires the input of several sources: the physician, therapist or trainer, coach, and athlete. As a coach, you should always defer to the prescriptions of health care professionals and the athletes themselves. Recommencing activity usually depends on the severity of the injury and the athlete's progress in rehabilitation. As a rule, the longer an athlete misses training, the longer it takes to regain his or her previous level of fitness. Adjust training intensity, volume and frequency to avoid reinjury. Muscle soreness is common after a long layoff from training, but look for signs, such as swelling, that may indicate the athlete is overtraining. Warm-up and cool-down are doubly important. Continue physical therapy as needed, and ice the afflicted area after each training session.

Sleep and Athletic Performance

While it's true that high school athletes can survive on six hours of sleep a night, they may not be able to perform optimally with even as much as eight hours of sleep. Many world class athletes sleep up to 10 hours every night. Studies have shown that the levels of metabolic enzymes in skeletal muscle are significantly lowered with a lack of sleep, thus affecting the ability of muscles to contract and relax.

Lack of sleep also keeps the central nervous system from functioning properly. Sleep breaks down and cleans out certain chemicals that impair the function of the central nervous system. Without sleep, feelings of fatigue, irritability, depression, or nervousness result. Lack of sleep also weakens the body's immune system, increasing the chance of illness. Fatigue, lack of concentration and persistent minor illnesses are clues that an athlete is not getting enough sleep.

Establishing a sleep routine with a regular bedtime and waking hours helps establish

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the body's natural rhythm. Just getting to bed a few hours later than normal can change your body rhythm enough to affect the normal amount of deep sleep. If an athlete needs to catch up on sleep, it is better to go to bed early and keep the same wake-up time.

Performance-Enhancing Drugs & Supplements

One of the greatest challenges in sports is to address the issue of performance-enhancing drugs. Athletes at all levels of play are often tempted to use substances to improve their performance, despite the fact that these drugs may be illegal, unhealthy and/or contrary to principles of fair play. It is important for coaches to be aware of these drugs because athletes often interpret “no message” as tacit approval to use them. The World Anti-Doping Agency that oversees all international sport considers these drugs to be against the “spirit of sport” and surveys of athletes uniformly support a level playing field.

Anabolic-Androgenic Steroids

Anabolic-androgenic steroid use in athletes has been documented since the 1950's and the effects on muscle building and performance are well known to athletes and body builders. Anabolic-androgenic steroids (AAS) are a classic performance-enhancing drug and have almost no legitimate therapeutic indications in athletes. In sport they are used almost exclusively to gain a competitive advantage. Although often called "steroids" or "anabolic steroids", they should properly be referred to as "anabolic-androgenic steroids" because they are testosterone or testosterone-like synthetic drugs that result in both anabolic (increased muscle mass) and androgenic (develops male secondary sex characteristics) effects. Although athletes use AAS for their anabolic results, all AAS have varying amount of androgenic effects that are responsible for most of their adverse reactions. The result is that athletes who take AAS for their anabolic properties, to increase lean body mass or strength, cannot avoid the undesired and often harmful androgenic properties of AAS use. Finally, it is important to distinguish AAS from anti-inflammatory steroids that are called corticosteroids or cortisone. Corticosteroids are legitimately used to treat asthma and other medical conditions, as well as in the form of joint injections to treat inflammation.

AAS can be divided into two categories: exogenous and endogenous steroids.

Endogenous AAS are those that are naturally produced by the body in some amounts and can be made into drugs and consumed by athletes. The most commonly used endogenous AAS is testosterone that is made by the testes and is necessary for normal male function. Although it cannot be taken in pill form, testosterone can be injected into a muscle, absorbed through the skin by a patch or gel, or across the lining of the cheek in the form of a pellet. Studies have demonstrated that injections of testosterone in high doses can increase muscle mass.

The other types of AAS are the exogenous or synthetic drugs. These are not produced by the body and are altered in the laboratory to change how a drug behaves in the body. For example, adding certain side chains to testosterone allows the drug to be absorbed orally. Other additions increase the potency of the drug or attempt to decrease side effects. The past few years has seen the appearance of "designer" AAS that were specifically developed to avoid detection by drug testing. Some of these are tetrahydrogestrinone (THG), norbolethone and madol (DMT).

The 1990 United States Anabolic Steroids Control Act classified AAS as a Schedule III drug and limited the legitimate therapeutic reasons for using them. Due to the

increased availability of newer AAS, the 2004 Anabolic Steroid Control Act was passed and this increased the number of AAS that were considered Schedule III drugs and tightened the definition of AAS. Included in the 2004 Act were THG and norbolethone, as well as many former dietary supplements that include androstenedione, androstenediol and 19-norandrostenedione. As of this time, DHEA is still considered to be a dietary supplement and can be sold over-the-counter.

While there is no debate on the fact that large doses of AAS can increase muscle mass, the effects on actual performance are less clear. In many sports, performance is difficult to measure as it is influenced by factors other than strength alone. Despite the widespread use of anabolic steroids in athletes, there is little data to support its effects on performance. Studies have been limited to obvious targets such as weight lifting and measuring acceleration in sprinters. In addition to strength changes, there are additional AAS effects that may contribute to efficacy in athletes. Many have attributed AAS strength gains to increases in aggressiveness that encourages intensity in both training and competition. Although there are AAS receptors in brain tissue, it is unclear as to their role. Regardless of the actual mechanism, it is clear that athletes believe that AAS improve performance and have continued to use them.

Any discussion of the adverse effects associated with AAS are complicated by the fact that scientific studies use doses of AAS far below what has been reported by athletes. As a result, it is likely that medical studies underestimate the full extent of side effects from AAS use. These studies do not begin to approximate the doses used by athletes that may be 10-40 times the therapeutic dose and in multiple combinations. AAS affect virtually every organ in the body and their effects can be divided into organ system effects, psychological effects, sex-specific effects and potential effects on immature individuals.

The two systems that have been most studied are the cardiovascular and gastrointestinal systems. AAS affect the cardiovascular system by increasing total cholesterol, LDL (bad) cholesterol and blood pressure, while lowering HDL (good) cholesterol. When these are combined with the potential clotting effects of AAS, the risk of coronary artery disease dramatically increases and the possibility of heart attacks. Indeed, there are multiple reports of relatively young AAS users suffering heart attacks. There have also been reports of AAS-induced cardiomyopathy (heart enlargement) following continued use of very high doses of these drugs.

The liver is the main target organ for gastrointestinal effects of AAS with case reports of hepatocellular dysfunction, peliosis hepatitis (blood-pooled cysts) and hepatocellular adenoma and liver cancer. Almost all reports of serious liver problems are the result of the 17-alpha alkylated AAS designed to be taken orally. Reports from the former East German Republic revealed three deaths due to liver failure and several cases of severe liver damage under their AAS program.

There are several other bodily systems that are affected by AAS use, such as the musculoskeletal system and skin. There are multiple reports of tendon ruptures that have been associated with AAS use and some animal studies have demonstrated structural changes in tendons following AAS use. It may be that AAS increase the risk of tendon rupture through muscle enlargement without a corresponding increase in tendon strength. The skin will often be the most obvious organ affected by AAS use and will display acne, striae (skin stretch lines), or abscesses, the latter from injectable use.

The psychological effects of AAS have also been reported with such conditions as the inducement of personality disorders, hyperaggressiveness ('roid rage) and addiction. Although there has been a great deal of conflicting studies, a 2005 review found that AAS could cause aggressiveness, rage, delirium, depression, psychosis and mania. As with many other AAS effects, the psychiatric conditions appear to be dose dependent, meaning that the more you take, the greater the risk of side effects. Dependency on AAS is also controversial, but some studies have determined that 75% of AAS users met the criteria for dependence and addiction. Whether or not there is a true addicted state is controversial; what is clear is that it can be very hard for some AAS users to stop. Finally, there have also been several unfortunate cases reported in the media of teenagers who became severely depressed shortly after discontinuing AAS use and committed suicide.

Endocrinological effects are generally dependent on the amount of natural testosterone produced. For example, males produce about 7 mg of testosterone per day and females about one-tenth that amount. Men will thus experience decreased or absent sperm counts as well as gynecomastia (male breast enlargement) due to an excessive amount of AAS that is metabolized into estrogens that disturbs the androgen/estrogen balance. Females will experience all of the virilizing effects of AAS including male pattern alopecia (baldness), clitoromegaly, hirsutism, breast atrophy, as well as menstrual disturbances. There is also some evidence that AAS reduce thyroid function and make the user hypothyroid.

There are also many other miscellaneous effects from the use of AAS that may be idiosyncratic. There are reports of constitutional growth delay in youths, reduced immune function, and unusual tendon ruptures, such as the iliopsoas and triceps muscles. If AAS are taken by injection, the risks associated with needle use include contracting blood borne infections, such as hepatitis B, C and HIV (AIDs). Due to their illegal nature, some athletes have been known to utilize AAS from the black market. These have a serious risk for contamination with impurities, false dosages, a high risk of infection or other dangerous risks.

Allegations of AAS use in sport have been present for at least 40 years and seem to be ingrained in athletics. It is clear that they have the ability to increase muscle mass and thus significantly alter the competitive landscape in many sports.

Other Performance-Enhancing Substances

HUMAN GROWTH HORMONE (hGH)

hGH is a polypeptide hormone of 191 amino acids that is produced in the anterior pituitary. Several different isoforms are naturally produced with the predominant one being a 22 kD monomer and about 10% being the 20kD form. Due to its structure, hGH is only effective by injection and cannot be taken orally. hGH is naturally increased by exercise, stress and slow-wave deep sleep. This has led athletes to try drugs such as gamma-hydroxy butyrate (GHB) to stimulate slow-wave sleep and thus, hGH, with often disastrous results. GHB and the related compounds gamma butyrolactone (GBL) and butanediol (BD) are banned by the Food and Drug Administration, but are still found illegally. There have been several deaths and serious illnesses associated with these compounds and they should be avoided.

It is not surprising that improvements in drug testing for AAS encouraged athletes to explore alternatives for strength enhancement. There have been several reports of athletes using hGH including Ben Johnson's 1988 admission of combining hGH with anabolic steroids, the discovery of large amounts of hGH in a Tour de France support vehicle in 1998 and the confiscation of hGH from the baggage of Chinese swimmers prior to the 2000 Sydney Olympics. The effects of hGH are felt to be as a "partitioning" agent whereby protein synthesis is favored over fat synthesis. This is opposed to AAS that is a direct inducer of muscle growth.

Evidence of performance enhancement with hGH are limited because athletes take much larger doses than can be given ethically in research. One small study demonstrated some improvement in lean body mass, but no studies have definitively demonstrated increases in strength or athletic performance.

There are significant adverse effects of hGH when used in healthy adults. Short-term use can result in fluid retention and muscle edema, while long-term use can cause arthralgias, diabetes, muscle disease, carpal tunnel syndrome and acromegaly. Acromegaly is a disease of growth hormone overproduction and can result in musculo-skeletal changes, especially to the skull, jaw, hands and feet. The other concern with hGH is black market contamination. Although hGH is now biosynthesized, there is still likely some hGH on the black market that was extracted from the pituitary glands of cadavers. This has the possibility of causing infections, such as the virus responsible for “Mad Cow Disease.” Due to its popularity and difficult availability, there are a great number of counterfeit products claiming to either be hGH or increase hGH secretion. Many of these products are pills and powders to be taken by mouth and since hGH cannot be absorbed orally, their claims are dubious at best.

While there are a few studies and anecdotal reports of hGH use in healthy adults, there is no data on its use in children and adolescents. Growth hormone is used in the treatment of growth hormone deficient children and some conditions of short stature. When hGH became available, physicians were flooded with requests from parents of normal children asking for the drug so that their children could achieve extraordinary height. It would be expected that attempts to alter the growth hormone-pituitary system would result in significant risks to children and adolescents. Although there is currently no effective test for hGH, researchers are working on several different methods of detection and it is likely that a drug test will soon be available. There is significant temptation to use hGH in the youth population, not so much for muscle gain, but for height enhancement.

ERYTHROPOIETIN (EPO)

EPO is a hormone that is produced in the kidneys and is responsible for regulating the red blood cells (hemoglobin) in the body. EPO, and its related compound darbepoetin, have been synthesized through recombinant manufacturing and are available for the medical treatment of anemia. Athletes in endurance sports, such as cycling or long-distance running, began abusing EPO in order to increase endurance. This is because the amount of red blood cells determines how much oxygen can be deliv-

ered to exercising muscle. Unfortunately, too many red blood cells in the circulation can cause the blood to thicken and result in heart attacks and strokes. In fact, the suspicion is that several cyclists died in the 1980's as a result of excessive use of EPO. There is no evidence that EPO can increase muscular strength. In 2000, an effective test was developed to detect EPO and that has been commonly in use since.

STIMULANTS

Stimulants are a broad class of drugs that are related to naturally occurring adrenaline. These drugs act either directly or indirectly on the sympathetic nervous system and are available in foods (coffee, sodas and energy drinks) over-the-counter, prescription drugs or as illegal recreational drugs on the black market. They have a wide variety of actions in the body and the effect of a particular drug in this class depends on which receptor it favors. For example, some stimulants like an albuterol inhaler that is used in the treatment of asthma relax smooth muscle and open the pulmonary tree. In general, almost all drugs in this class act to speed up the heart rate, increase blood pressure and cause all of the effects of adrenaline, the "fight or flight" hormone. Some examples of stimulants include ephedrine, pseudoephedrine, caffeine, Ritalin, Adderall, albuterol, amphetamines, methamphetamine, cocaine, phenylephrine and phenylpropanolamine.

There is evidence that athletes have used stimulants since the Roman Gladiators in 600 B.C. At the 1960 Summer Olympic Games, a Danish cyclist died during competition from an overdose of stimulants. Today's athletes use stimulants for a variety of reasons. Some use them for their stimulants properties to feel more energetic, alert, to fight fatigue and improve performance. This is despite the fact that although you may feel more energetic, there have never been any controlled studies to definitively demonstrate performance enhancement. In sports where thinness is valued, such as gymnastics and wrestling, athletes use them as diet aids to decrease appetite, burn calories and lose weight. Athletes may also legitimately use stimulants to treat diseases, such as asthma and attention-deficit disorder (ADD or ADHD). Finally, athletes use stimulants as a recreational drug to get high in the form of drugs such as methamphetamine.

Depending on the particular drug, stimulants can have a great many adverse effects. In general, they can cause anxiety, heart palpitations, rapid heart rate and arrhythmias, tremors, stomach upset and insomnia. Since stimulants often increase the metabolism, there is a real concern about athletes exercising in the heat and the stimulants

contributing to heat illness. Several prominent athletes have died while exercising due to the effects of stimulants. In addition, many of these substances are addictive with the need for increasing doses and then requiring a depressant, such as marijuana or alcohol in order to slow down afterwards.

Stimulants are readily available in our culture and while small amounts of drugs like caffeine are usually not harmful, the concern is when large doses or multiple drugs are used. For example, an athlete may have 2 cups of coffee in the morning, several caffeinated soft drinks throughout the day, caffeine-containing energy drink (e.g. Red Bull®) before practice, over-the-counter pseudoephedrine and dietary supplements containing guarana or Citrus Aurantium. All of these contain varying amounts of stimulants and the combination can cause serious problems. It is imperative to be aware of the total amount of stimulants that an athlete may be consuming.

NUTRITIONAL SUPPLEMENTS

The 1994 Dietary Supplement Health and Education Act (DSHEA) unleashed a whole host of dietary supplements on the American consumer. These include vitamins, minerals, amino acids, plant derivatives and other natural and synthetic substances that come in a variety of forms, including powders, tablets and liquids. While this creates a great deal of confusion, one thing is very clear: dietary supplements are aggressively marketed to athletes.

Despite all of the conflicting information on supplements, there are a few facts that are worth noting:

- 1) Dietary supplements are not regulated by the same laws as over-the-counter and prescription drugs. There is very little regulation of dietary supplements and many studies have found that many supplements do not contain what is on the labels. As a result, it is difficult to know with 100% certainty if what is on the label is really what you are taking.
- 2) Supplements can be contaminated with impurities that will result in a positive drug test. Whether unintentionally or intentionally, some athletes have tested positive from taking contaminated supplements.
- 3) Most supplements have not been subjected to rigorous studies that prove their positive effects. Due to labeling laws, the only restrictions on dietary supplements are that they cannot claim to treat a disease. Other than that, they can legally make a

wide variety of claims without medical proof.

4) Most of the substances that are available as dietary supplements can be easily and more cheaply obtained from the diet through good nutrition.

There are a tremendous number of dietary supplements on the market with more appearing every day. Athletes are often approached to try a new product. The best advice is to check with a certified athletic trainer, physician or registered dietician before taking any dietary supplement. As a rule of thumb, if a product claims to “build muscle” it may contain a form of AAS. If it claims to “increase energy” it may contain a stimulant.

Although it is impossible to provide details on every supplement, here are a few popular types.

DHEA

Dihydroepiandrosterone (DHEA) is the only relative of AAS that was left off the 2004 Anabolic Steroid Control Act and continues to be sold as a dietary supplement. DHEA is metabolized in the body to androstenedione, which is metabolized to testosterone. It is worth noting that while very little DHEA is converted to testosterone in men, DHEA does get converted to estradiol (a female hormone) as well. There are no studies demonstrating either performance enhancement with DHEA or strength gains in normal males. Because only a small amount of testosterone results from taking DHEA, it is likely that its greatest effects would occur in females and developing adolescent males.

CREATINE

Creatine is one of the most widely used nutritional supplements by athletes and has been touted for its ability to increase strength and power. Creatine comes from three sources: it is a natural substance found in foods, the body is able to make it, and it can also be prepared synthetically as a dietary supplement. The average diet contains 1-2 grams/day of creatine from protein-rich foods such as meat and fish. It is also naturally produced by the liver, pancreas and kidneys from the amino acids methionine, glycine and arginine at a rate of 1-2 grams/day. Although 90% of creatine is stored in skeletal muscle as free creatine and phosphocreatine, it is also found in the brain and testes.

The initial justification for oral creatine supplementation was the 1992 study of a 20% increase in skeletal muscle creatine following a 7-day loading dose. Skeletal muscle phosphocreatine is rapidly depleted during 10-20 seconds of maximum exercise, but half is resynthesized after 60 seconds with full restoration in 5 minutes. Theoretically, taking oral creatine can potentially increase phosphocreatine stores and thus power.

Whether creatine supplementation actually provides performance benefit has been the subject of great debate. Most data suggest that oral creatine could only increase performance in repeated 6-30 seconds bouts of exertion where there are recovery periods of 20 seconds to 5 minutes. They found no benefit in the other situations. There is little evidence that these gains found in a laboratory or in research translate into improved athletic performance.

Another factor complicating creatine is the variation in individual response. Muscle-biopsy studies demonstrated that subjects with lower levels of both muscle creatine and phosphocreatine tended to have greater increases in creatine and phosphocreatine after taking creatine supplements. One factor is that skeletal muscle act as a “creatine bank” and cannot exceed a creatine concentration of 150-160 mmol/kg. Thus, athletes who consume less dietary creatine, e.g. vegetarians, may benefit more from creatine supplementation. That also means that once your creatine banks are full, taking additional creatine is of little benefit. There is also likely little value to high-dose creatine supplementation. If creatine is to be used, most authors recommend 0.3 g/kg/day (0.15 g/pound/day) loading for 5 days, followed by 0.03 g/kg/day (0.015 g/pound/day) maintenance. Increasing the dosage will not increase the positive effects. As with other substances, there is a direct correlation between excessive dosage and the risk of side effects.

Another area of controversy is that of adverse effects. Creatine causes water to be retained by the muscles, thus pulling water away from the circulation where it is needed and giving the potential for dehydration, muscle cramping and heat injury. Although there are anecdotal reports, controlled studies do not seem to support a large increase in these symptoms nor related gastrointestinal cramping. Another fear was that once creatine muscle stores were saturated, excess creatine would unduly tax the kidneys and result in kidney problems. While urinary creatine and creatinine excretion does increase with oral creatine supplementation, there have been few reported incidents of kidney failure in subjects with normal kidney function.

However, it would seem sensible that athletes with kidney disease or other health problems should not take creatine without physician supervision.

The most worrisome complication from creatine use is the development of lower-extremity compartment syndromes. Studies have demonstrated increased muscle size due to water retention and there are reports of acute compartment syndromes and rhabdomyolysis (muscle damage). This is an important concern given the large numbers of creatine users.

As with other supplements, there is very little information about the manufacturing and purity standards of creatine. There have also not been any studies on the interaction of creatine with other supplements or medications.

EPHEDRINE AND CITRUS AURANTIUM ("Bitter Orange" or "Zhi Shi")

Ephedrine, a sympathomimetic amine, has been implicated in the deaths of several athletes and this has prompted a closer examination of ephedrine. Until 1994, ephedrine was mainly consumed in over-the-counter decongestants and prescription drugs and the biggest concern was that it could be used to manufacture methamphetamine. The United States Dietary Supplement Health and Education Act (DSHEA) of 1994 ushered in a new era for nutritional supplements and herbal ephedra has been advertised as both a weight-loss product and an energy booster. Due to the high number of adverse effects, the US Government banned ephedra in 2003.

It is important to distinguish between pharmaceutical-grade ephedrine and herbal-extract ephedra sold as a dietary supplement. The latter has been available in China for thousands of years as Ma Huang and although its active ingredient is ephedrine (one of many ephedra alkaloids), it also contains pseudoephedrine, methylphenedrine, methylpseudoephedrine and norpseudoephedrine (cathine). The presence of multiple compounds is further exacerbated by lack of governmental oversight due to DSHEA. As with other supplements, studies of ephedra-containing herbal supplements found that half exhibited major discrepancies between content and the labels with significant lot-to-lot variations among products. This demonstrated that ephedra labels are not a reliable indicator of content.

Ephedrine is an adrenergic stimulant that causes vasoconstriction (tightening of the blood vessels), bronchodilation (opening of the lung passages), and tachycardia (fast

heart rate). As such, it has been associated with cerebrovascular events (stroke), heart attacks, major psychiatric symptoms and death. At least 100 cases of death or severe reactions have been definitely or possibly related to ephedra in the United States. In about half of these cases, the individuals were less than 30 years old. There is also a concern in that athletes may use multiple types of stimulants, such as caffeine and pseudoephedrine (pseudophed) in combination and this may increase side effects. Lastly, stimulants such as ephedra increase heat production and when athletes exercise in hot weather, this puts them at increased risk for heat illness and heat stroke.

Although athletes frequently consume ephedra products, there are no studies using ephedra-containing dietary supplements for performance-enhancement. The only related studies are a small number that used pharmaceutical ephedrine alone or in combination with caffeine. Most of these utilized military recruits as subjects and measured short-term use. Ephedra is also marketed as a thermogenic for weight loss and this appeals to athletes trying to lose weight.

Reports of adverse reactions have led supplement manufacturers to promote “ephedrine-free” products and many interpret this to mean “stimulant-free.” In actuality, these products usually contain Citrus Aurantium, otherwise known as Bitter Orange or Zhi Shi. The main ingredient is likely synephrine, but it also contains octopamine and tyramine. Synephrine is a close relative of ephedrine and has similar effects and will likely result in similar adverse reactions as the number of users increases.

L-ARGININE OR NO₂

Nitric oxide has become a popular dietary supplement due to its purported use as a “hemo-dilator.” It is touted to increase blood flow to exercising muscle, prevent heart disease, treat male infertility and kidney disorders. In reality, these supplements contain the amino acid L-arginine that is widely available in the diet. L-arginine is also synthesized in the liver and can be taken as a dietary supplement. Its popularity stems from the fact that animal studies demonstrate that increasing L-arginine in the diet can increase the formation of nitric oxide and changes in blood vessels. A small study of L-arginine revealed that although L-arginine levels increased, there was no change in the nitrate levels. Further more, 80% of the subjects in the study complained of adverse effects, including diarrhea, vomiting, headache and nosebleeds. As with other supplements, it appears that L-arginine has limited positive effects and possibly significant side effects. L-arginine is not considered a prohibited substance.

CONCLUSION

There is often intense pressure for athletes to perform and for coaches to win. Performance-enhancing drugs are readily available and there is a large temptation to use these substances. It is imperative that coaches send a clear message about discouraging the use of these drugs and recognize signs of their use. If a coach or parent does not have accurate information about drugs or nutritional supplements, it is essential to consult a professional, such as a physician, certified athletic trainer or registered dietician.

Eating for Health and Performance

Good nutrition is an important component of any successful training program. Food is the fuel of athletic performance. Though you cannot control the food your athletes eat, you can guide them toward healthy eating. To do so, you must be acquainted with the basics of proper nutrition. This chapter is a primer to help you address some of the nutritional demands and concerns faced by your athletes.

Though success in sports is determined primarily by athletic ability and proper training, nutrition affects the athlete in many ways. Nutrition is important for normal growth and development and for maintaining good health. A healthy athlete feels better, trains harder, recovers more quickly and is less susceptible to illness.

As a coach, you can have a positive influence on your athletes' attitudes about nutrition as well as their eating habits. Young athletes, in particular, respect, admire and seek advice from their coaches. The following sports nutrition information will help you guide your athletes toward better eating, and ultimately, better health and performance.

The Athlete's Diet

Coaches often want to know exactly what constitutes a “balanced diet.” A balanced diet provides all the necessary nutrients and calories the body needs to function properly. These nutrients are carbohydrates, fats, proteins, vitamins, minerals and water. Just as there are many training strategies that achieve victory, there are a number of dietary patterns that provide good nutrition.

The Dietary Guidelines for Americans are national guidelines for healthy eating. Most nutritionists agree that the nutritional guidelines developed to promote health also establish a good foundation for athletes who desire peak performance.

USDA MY PYRAMID

The USDA My Pyramid (Fig. 8-1) serves as educational tool to put the dietary guidelines into practice. The pyramid shows the foods that should be included in a healthful diet, and in what amounts. Athletes should be eating heartily from the grain, vegetable and fruit groups since these groups have the highest recommended number of servings and are nutrient-rich sources of carbohydrate. Table 1 indicates what counts as a serving from each group.

The amount of calories a person needs to eat depends on his or her age, gender and level of physical activity. Daily recommendations from the USDA dietary guidelines for high school-age boys and girls from 14 to 18 years of age are listed by food groups in the following table, (with a limited use of fats and oils, kept at 5-6 teaspoons).

CALORIE REQUIREMENTS FOR ATHLETES

Calorie requirements vary greatly from person to person and are influenced by the level of physical activity, body size and age. Therefore, it is impossible to establish a universal daily caloric requirement for athletes. Weight loss, weight maintenance, or weight gain is a matter of energy balance. An athlete's body weight will stay the same when calorie intake equals calorie expenditure. To lose weight, energy expenditure must be greater than energy intake. To gain weight, energy intake must be greater than energy expenditure. If an athlete is maintaining his or her ideal competitive weight, adequate calories are being consumed.

A number of factors influence the body weight of adolescent athletes. Many young female athletes are concerned about their appearance and eat less than they should to appear thin. However, restricting calories can have a negative impact on performance and health. As calorie consumption decreases, so does nutrient intake. The minimum requirement for high school athletes should be roughly 2,000 to 2,200 calories per day. Athletes eating less than 1,800 calories a day probably do not consume adequate amounts of vitamins, minerals and protein. This can cause depleted fuel stores, muscle wasting, weakness, fatigue, stress fractures and impaired performance.

Some athletes have a hard time increasing their calorie intake because the volume of a larger meal causes them discomfort, especially if they are training soon after eating. Athletes juggling a heavy academic schedule with training and part-time job may have difficulty finding the time to eat. These athletes can benefit from eating several small meals and snacks throughout the day.

Anatomy of MyPyramid

One size doesn't fit all

USDA's new MyPyramid symbolizes a personalized approach to healthy eating and physical activity. The symbol has been designed to be simple. It has been developed to remind consumers to make healthy food choices and to be active every day. The different parts of the symbol are described below.

Activity

Activity is represented by the steps and the person climbing them, as a reminder of the importance of daily physical activity.

Moderation

Moderation is represented by the narrowing of each food group from bottom to top. The wider base stands for foods with little or no solid fats or added sugars. These should be selected more often. The narrower top area stands for foods containing more added sugars and solid fats. The more active you are, the more of these foods can fit into your diet.

Personalization

Personalization is shown by the person on the steps, the slogan, and the URL. Find the kinds and amounts of food to eat each day at MyPyramid.gov.

Proportionality

Proportionality is shown by the different widths of the food group bands. The widths suggest how much food a person should choose from each group. The widths are just a general guide, not exact proportions. Check the Web site for how much is right for you.

Variety

Variety is symbolized by the 6 color bands representing the 5 food groups of the Pyramid and oils. This illustrates that foods from all groups are needed each day for good health.

Gradual Improvement

Gradual improvement is encouraged by the slogan. It suggests that individuals can benefit from taking small steps to improve their diet and lifestyle each day.

USDA U.S. Department of Agriculture
Center for Nutrition Policy
and Promotion
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Fig. 8-1 The USDA My Pyramid

CHAPTER 9

Eating for Health and Performance






Food Group	Daily Servings	Size Equivalents
 <p>Grain Group Make half your grains whole</p>	6 - 7 ounces	1 ounce = <ul style="list-style-type: none"> • 1 mini bagel • 1/2 cup cooked oatmeal, 1 pkg. instant • 1 cup breakfast cereal, flakes or rounds • 1 1/2 cup breakfast cereal, puffed • 1/2 cup cooked or 1 ounce dry pasta or rice • 1 small tortilla, corn or flour, 6" diameter
 <p>Vegetable Group Vary your veggies</p>	2 1/2 - 3 cups	1 cup = <ul style="list-style-type: none"> • 1 cup chopped or florets of broccoli • 3 spears broccoli • 2 cups raw leafy greens • 2 medium carrots • 2 cups raw leafy greens • 2 medium carrots
 <p>Fruit Group Focus on fruits</p>	1 1/2 - 2 cups	1 cup = <ul style="list-style-type: none"> • 1 small apple • 1 large banana • 32 seedless grapes • 1 large orange • 8 large strawberries • 8 ounces 100% fruit juice
 <p>Milk Group Get your calcium-rich foods</p>	3 cups	1 cup = <ul style="list-style-type: none"> • 1 cup milk • 8 ounces yogurt • 1 1/2 ounces hard cheese (cheddar, mozzarella, Swiss, parmesan) • 1 cup pudding, made with milk • 1 cup frozen yogurt
 <p>Meat & Bean Group Go lean with protein</p>	5 - 6 ounces	1 ounce = <ul style="list-style-type: none"> • 1 ounce meat, poultry, fish • 1/4 cup cooked dry beans • 1 egg • 1 tablespoon peanut butter • 1/2 ounce nuts or seeds

Table 1 Serving Sizes

CARBOHYDRATES

Carbohydrates, such as sugar and starch, are the most readily available source of food energy. During digestion and metabolism, all carbohydrates are eventually broken down to the simple sugar glucose for use as the body's principal energy source. Glucose is stored in the muscles and liver as a substance called glycogen. A high-carbohydrate diet is necessary to maintain muscle glycogen – the primary fuel for most sports. When athletes do not eat enough carbohydrate, their glycogen stores quickly become depleted, resulting in fatigue or staleness.

Though the body uses both the sugars and starches for energy, a high-performance diet emphasizes nutrient-dense carbohydrates. Nutrient-dense carbohydrates such as whole grain breads and cereals, rice, beans, pasta, vegetables and fruit supply other nutrients such as vitamins, minerals, protein and fiber. Sweet foods that are high in sugar (candy bars, donuts and cookies) supply carbohydrate, but they also contain a high amount of fat and only insignificant amounts of vitamins and minerals.

Fruit contains the sweetest of all simple sugars – fructose. Since fruit is mostly water, its sugar and calorie content are relatively low. Like starchy foods, most fruits are rich in nutrients and virtually fat free.

As with calories, carbohydrate needs vary among athletes, depending on the intensity and duration of training and body size. To determine how much an individual athlete needs, divide his or her weight by 2.2 to get the weight in kilograms. Then multiply the number by 6 to 8.

For example:

- 130 pounds divided by 2.2 = 59 kilograms
- 59 kilograms times 6 = 354 grams of carbohydrate

The carbohydrate content of different foods can be determined by reading food labels. As a general guide, starchy foods and fruits provide the highest amount of carbohydrate (15 grams) per serving. Table 2 gives some examples of high carbohydrate foods.

Carbohydrate Food	Serving Size	Grams of Carbohydrate
Raisins	1/2 cup	57
Banana	1 whole	27
Apple	1 whole	21
Orange	1 whole	15
Orange Juice	1/2 cup	12
Grapes	1/2 cup	8
Cantaloupe	1/2 cup	7
Watermelon	1/2 cup	6
Corn	1/2 cup	17
Potatoes	1/2 cup	16
Green Peas	1/2 cup	11
Carrots	1/2 cup	8
English Muffin	1 whole	26
White Rice	1/2 cup	17
Tortilla Shell	1 whole	1
Pasta	1/2 cup	15
Kidney Beans	1/2 cup	13
Wheat Bread	1 piece	13
Pancake	1 whole	9
Breakfast Cereals	1/2 cup	8-13
Crackers	1 whole	2-8
Plain Popcorn	1/2 cup	2
Flavored Yogurt	1 cup	42
Plain Yogurt	1 cup	16
Skim Milk	1 cup	12
Granola Bar	1 whole	67
Gumdrops	1 ounce	25
Regular Soft Drinks	1 cup	25
Jelly	1 tablespoon	13
Fig Bar	1 whole	11
Exceed Hi-Carb	1 cup	59
Gatorlode	1 cup	47
Nutrament	1 cup	30
Exceed	1 cup	17
Gatorade	1 cup	15

Table 2 Carbohydrates

PROTEIN

Protein is a major structural component of all body tissues and is required for muscle growth and repair. Protein is not a significant energy source during rest or exercise. Although athletes have slightly higher protein requirements than non-athletes, athletes usually consume enough protein unless they are not eating enough calories. Protein requirements increase when calorie intake is inadequate because the protein is used for energy rather than for muscle growth and repair.

Current research on protein requirements suggests that athletes need about 1.2 to 1.7 grams of protein per kilogram of body weight daily. For a 154 pound (70 kilogram) athlete, this represents 84 to 119 grams of protein a day. This amount is adequate for athletes who are involved in both endurance and explosive events. Table 3 gives some examples of high protein foods.

The proteins in both animal and plant foods are composed of structural units called amino acids. Of the more than 20 amino acids that have been identified, nine must be provided by our diet and are called essential amino acids. Meat, fish, dairy products, eggs and poultry contain all nine essential amino acids and are called complete proteins. Vegetable proteins, such as beans and grains, are called incomplete proteins because they do not supply all of the essential amino acids.

The body can make complete proteins if a variety of plant foods – beans, grains, vegetables, fruits, nuts and seeds – and sufficient calories are eaten during the day. Since the body utilizes amino acids from foods eaten at different meals, vegetarians don't need to combine specific foods within a meal to achieve complete proteins.

FAT

Fats, or lipids, are the most concentrated source of food energy. One gram of fat supplies about nine calories, compared to the four calories per gram supplied by carbohydrate and protein. Fats are the body's only source of the essential fatty acids linoleic and linolenic acid that are required for growth, healthy skin and healthy hair. Fat insulates and protects the body's organs against trauma and exposure to cold. Fats are also involved in the absorption and transport of the fat-soluble vitamins.

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Protein Food	Serving Size	Grams of Protein
Lean Beef	3 ounces	24
Chicken Breast	3 ounces	24
Pork Chop	3 ounces	22
Fish	3 ounces	21
Roasted Peanuts	½ cup	18
Macaroni & Cheese	½ cup	9
Whole Milk	1 cup	8
Skim Milk	1 cup	8
Yogurt	1 cup	8
Cheddar Cheese	1 ounce	7
Cooked Navy Beans	½ cup	7
Egg	1 whole	6
Luncheon Meat	1 ounce	5
Peanut Butter	1 tablespoon	4
Bran Flakes	1 cup	4
Green Peas	½ cup	4
Baked Potato	1 whole	3
Wheat Bread	1 slice	3
Broccoli	½ cup	2
Banana	1 whole	1
Orange	1 whole	1

Table 3 Protein

All athletes need a certain amount of fat in their diets and on their bodies. The challenge is eating a diet that provides the right amount. Most U.S. health agencies recommend consuming no more than 30 percent of calories from fat. Too much fat contributes excess calories in the diet, which can lead to weight gain. High fat diets can also increase the risk of heart disease and certain cancers. Also, athletes who eat too much fat often do not eat enough carbohydrate, which is detrimental to good health and optimum performance.

To lower fat intake, athletes should choose lean meat, fish, poultry and low-fat dairy products. Fats and oils should be used sparingly. Fried foods and high fat snacks should be limited.

VITAMINS

Vitamins are metabolic regulators that help govern the processes of energy production, growth, maintenance and repair. Vitamins do not provide energy, although vitamins are important for the release of energy from carbohydrates, fats and proteins.

Vitamins are divided into two groups: water-soluble and fat-soluble. Fat-soluble vitamins include A, D, E and K. They are stored in body fat, principally in the liver. Taking a greater amount of vitamins A and D than the body needs over a period of time can produce serious toxic effects. Vitamins C and the B complex are soluble in water and must be replaced on a regular basis. When athletes consume more water-soluble vitamins than needed, the excess is eliminated in the urine. Though this increases the vitamin content of the urine, it does not help performance.

Athletes should try to consume the amount of a nutrient recommended by the Recommended Dietary Allowance (RDA) or Adequate Intake (AI). The RDA and AI are the amount of a nutrient that meets the estimated nutrient needs of most people. To avoid toxicity, athletes should not exceed the Tolerable Upper Intake Level (UL) for a nutrient.

Generally, athletes who consume more than 1,800 calories a day get enough vitamins from their food. However, a vitamin/mineral supplement supplying 100 percent of the RDA or AI may be appropriate for athletes with extremely low calorie intakes or for those who avoid foods groups.

MINERALS

Minerals serve a variety of important functions in the body. Some minerals, such as calcium and phosphorus, are used to build bones and teeth. Others are important components of hormones, such as iodine in thyroxin. Iron is crucial in the formation of hemoglobin, the oxygen carrier within red blood cells.

Minerals also contribute to a number of the body's regulatory functions. These include regulation of muscle contraction, conduction of nerve impulses, clotting of blood, and regulation of normal heart rhythm.

Minerals are classified into two groups based on the body's need. Major minerals, such as calcium, are needed in amounts greater than 100 milligrams per day. Minor minerals or trace elements, such as iron, are required in amounts less than 100 milligrams per day. Calcium and iron deserve special attention because of their importance in an athlete's diet.

Iron is crucial for athletes because it assists in oxygen transport in the blood and utilization by the muscles. A lack of iron hurts performance by decreasing the capacity of the muscle to use oxygen. Young female athletes in particular are at risk of iron deficiency due to increased iron losses through menstruation and typically low iron intake. It is recommended that coaches see that their female athletes have hemoglobin levels checked at least once a year.

If one of your athletes appears to be iron deficient, you should consult your team physician for diagnosis and treatment. Supplemental iron may be prescribed for individuals whose lab tests indicate iron deficiency. However, a routine use of iron supplements by all athletes is not recommended.

The RDA for iron is 18 milligrams for women and 8 milligrams for men. Animal iron sources are better absorbed than vegetable iron sources. Vitamin C-rich foods (orange juice) enhance iron absorption. Iron-enriched or fortified cereal/grain products provide additional iron. Beans, peas, split peas and some dark green leafy vegetables are good vegetable iron sources. Table 4 lists good sources of iron and the milligrams of iron each provides.

Iron Food	Serving Size	Milligrams of Iron
Pork Liver	3 ounces	17.7
Chicken Liver	3 ounces	8.4
Oysters	3 ounces	6.9
Beef Liver	3 ounces	6.6
Dried Apricots	½ cup	5.5
Turkey	3 ounces	5.1
Prune Juice	½ cup	4.9
Dried Dates	½ cup	4.8
Pork Chop	3 ounces	4.5
Beef	3 ounces	4.2
Dried Prunes	½ cup	3.9
Kidney Beans	½ cup	3.0
Baked Beans w/Pork & Molasses	½ cup	3.0
Hamburger	3 ounces	3.0
Soy Beans	½ cup	2.7
Raisins	½ cup	2.5
Lima Beans	½ cup	2.5
Dried Figs	½ cup	2.2
Spinach	1 cup	2.0
Mustard Greens	½ cup	1.8
Peas	½ cup	1.4
Eggs	1 large	1.2
Sardines packed in oil	1 ounce	1.0

Table 4 Iron

An adequate calcium intake is important not only to prevent osteoporosis (bone deterioration), but because calcium also helps to maintain bone density and prevent stress fractures. An athlete's calcium needs are greatest during adolescence, when the bones are growing. Young women athletes who develop amenorrhea (absence of menses) have increased bone loss. This is a serious health risk, since once bone mass is lost, it may never be fully replaced.

The AI values for calcium are 1,300 milligrams for youths and adolescents ages 9 to 18. If an athlete does not consume four servings of calcium rich foods such as milk, cheese, yogurt, or green leafy vegetables each day, a calcium supplement may be necessary. One glass of milk contains 300 milligrams of calcium. Table 5 lists good sources of calcium and the milligrams of calcium each provides.

WATER

Water is the most essential of all nutrients for athletes. At rest, athletes need at least two quarts of fluid daily. An adequate supply of water is necessary for control of body temperature during exercise, for energy production, and for elimination of waste products from metabolism. Dehydration – the loss of body water – impairs exercise performance and increases the risk of heat injury.

Consuming adequate fluid before, during and after exercise is vital for safeguarding health and optimizing athletic performance. Athletes should drink 14 to 22 ounces of fluid two to three hours before exercise. During exercise, athletes should drink 6 to 12 ounces of fluid every 15 to 20 minutes. Fluid intake should closely match the fluid loss from sweating to avoid the detrimental effects of dehydration. After exercise, athletes should drink at least 16 to 24 ounces of fluid to replace every pound of body weight lost during exercise.

Thirst is not an adequate guide to fluid replacement. Most athletes replace only 50 percent of their fluid losses during exercise. Encourage athletes to replace fluids by drinking according to a time schedule rather than in response to thirst.

Sports drinks containing carbohydrate and sodium are recommended during intense exercise lasting longer than an hour. The carbohydrate helps to delay fatigue, improve fluid absorption and replace glycogen following exercise. The sodium helps to stimulate thirst, increase voluntary fluid intake and enhance fluid retention.

Calcium Food Sources	Serving Size	Milligrams of Calcium
Plain Yogurt	1 cup	415
Skim Milk	1 cup	296
Whole Milk	1 cup	288
Cottage Cheese	1 cup	282
Swiss Cheese	1 ounce	248
Mozzarella Cheese	1 ounce	207
Cheddar Cheese	1 ounce	204
Ice Cream	1 cup	175
Oysters	1 cup	343
Salmon w/ Bones	1 ounce	86
Sardines w/ Bones	1 ounce	74
Turnip Greens	½ cup	184
Mustard Greens	½ cup	183
Collard Greens	½ cup	152
Spinach	½ cup	83
Broccoli	½ cup	67
White Beans	½ cup	50
Cabbage	½ cup	49
Kidney Beans	½ cup	48
Lima Beans	½ cup	38
Carrots	½ cup	37
Prunes	8 large	90
Orange	1 medium	62
Tangerine	1 large	40
Almonds	½ cup	152
Walnuts	½ cup	60
Peanuts	½ cup	54
Pecans	½ cup	43

Table 5 Calcium

Pre-Competition Meals

The primary purpose of the pre-competition meal is to provide energy and fluid for the athlete during the game. Carbohydrate-rich foods provide the quickest and most efficient source of energy, and unlike fatty foods, are rapidly digested. Since many athletes experience abdominal discomfort if they have food in their stomachs during competition, the timing of the meal is important. To avoid potential gut distress, the calorie content of the meal should be reduced the closer to exercise the meal is consumed. A small meal of 300 to 400 calories is appropriate an hour before exercise, whereas a larger meal can be consumed four hours before exercise.

The athlete's foods and fluids should be well tolerated, familiar (tested in training) and palatable. Athletes may have to do some planning to ensure they have access to familiar foods before competition. They may need to bring their lunch/snacks in a small cooler rather than choosing from the school cafeteria's entrees or a restaurant menu. Encourage them to bring any foods that they believe will help them win.

Experimenting with a variety of pre-exercise meals in training helps athletes determine what foods they are most likely to handle before competition. Athletes should never try an untested food or fluid before competition. The result may be severe indigestion and impaired performance.

Fueling During Competition

During tournaments or meets, athletes require fluids and carbohydrate throughout the day. Some athletes may be reluctant to eat and drink because they have to compete again. However, failing to refuel and replace fluid losses can cause their performance to deteriorate, particularly toward the end of the day. Bringing along a cooler packed with familiar high-carbohydrate, low-fat meals and snacks keeps athletes from then being dependent on the high-fat fare typical of concession stands.

Since everything an athlete eats before a competition may be considered a pre-event meal, it is important to consider the amount of time between competitions. If there is less than an hour between games or events, athletes can consume liquid meals, sports drinks, carbohydrate gels, fruit juices and water. When there is an hour or two between games or events, athletes can consume easily digestible carbohydrate-rich foods such as fruit, grain products (fig bars, bagels, graham crackers), low-fat yogurt and sports bars in addition to drinking fluids. When games or events are separated by three hours or more, the athlete can consume high-carbohydrate meals along with drinking fluids.

Achieving Ideal Competitive Weight

Some athletes fight to keep pounds off; others struggle to keep pounds on. Genetics, age and training all influence body weight. Food intake and lifestyle also play important roles. Athletes will perform at their best if they achieve their competitive weight (while adequately hydrated) either in the off-season or early in the season. Allowing for an increase in lean tissue and decrease in body fat during training, the athlete should try to maintain that weight throughout the season.

Young athletes with busy schedules tend to have irregular eating habits and sleeping patterns. As a result, gaining weight or keeping it on can be a problem. Athletes who have difficulty gaining weight generally aren't eating enough calories. Athletes can increase calorie intake by changing the amount and type of food eaten, and increasing the frequency of meals and snacks. To gain weight, athletes should eat five to six times a day.

To lose weight, athletes need to reduce their calorie intake. Increasing activity in addition to reducing calories helps promote weight loss. The recommended rate of weight loss is one-half pound a week, which requires a caloric deficit of 250 to 300 calories per day. Paying attention to the amount of and types of food eaten is important. Eating fewer high fat foods such as fried foods, gravies, sauces, high fat snacks and deserts can significantly reduce calorie intake.

A safe level of caloric restriction depends on the athlete's normal dietary intake. Males should not consume fewer than 2,000 calories per day. Females should not consume fewer than 1,800 calories per day. Extreme caloric restriction can disrupt physiological function, nutritional status, hormone levels, bone mineral density, psychological function and, for young athletes, growth rate.

Eating Disorders

Losing weight to achieve the "ideal" weight, percent body fat, or appearance can become an all-consuming obsession for some athletes. As a result, athletes may develop eating disorders that jeopardize both performance and health. Although recognition of these life-threatening disorders is growing, appropriate intervention and treatment lag far behind the problem.

Eating disorders such as anorexia nervosa (self-imposed starvation) and bulimia nervosa (binge/purge syndrome) are defined as severe disturbances in eating behavior. Female athletes are at greater risk for eating disorders than are female non-athletes or males. Eating disorders are more prevalent in sports where appearance is judged, in weight-classification sports, and in sports that emphasize leanness to enhance performance.

Abnormal eating patterns do not always mean the athlete has an eating disorder. There is, however, cause for concern if an athlete shows the following signs or behaviors:

- Dramatic weight loss or extreme fluctuations in weight
- Claims to feel fat at normal or below normal weight
- Preoccupied with food, calories and weight
- Amenorrhea (loss of menstruation)
- Often eats secretively – avoids eating with the team
- Often disappears after eating, especially after a large meal
- Mood swings
- Excessive exercise that is not part of training regimen.

Do not attempt to diagnose or treat an athlete with an eating disorder. Anorexia nervosa and bulimia nervosa are very complex problems and require treatment by medical professionals. Your role should be to help the athlete contact a medical professional that specializes in treating eating disorders. If the athlete denies having a problem, but the evidence appears undeniable, consult with a physician who will assist you with the situation.

Several risk factors or triggers have been identified that are associated with the development of eating disorders in athletes. Compared to other athletes, athletes with eating disorders began both sports-specific training and dieting earlier, and felt that puberty occurred too early for optimal performance. Other triggers included prolonged periods of dieting, frequent weight fluctuations, a sudden increase in training volume, and traumatic events such as injury or loss of a coach. Many athletes who began dieting to improve performance reported that their coach recommended they lose weight. The risk for eating disorders was also increased when the weight loss was unsupervised.

While sports do not cause eating disorders, it is possible for an eating disorder to be triggered by a comment from a person who is very important to the athlete. All members of the athletic team family – coaches, trainers, athletic administrators and especially teammates – are significant people in an athlete's life. Consequently, these individuals have the power to be a helpful or harmful influence on susceptible adolescent athletes.

A great deal of caution must be given to the process of weigh-ins. The risk of triggering an eating disorder is increased when the numbers are used to set unrealistic weight goals for rapid weight loss, to browbeat or ridicule the athlete for gaining weight, or to impose excessive pressure on the athlete to show immediate weight loss.

Coaches and trainers must realize that their opinions and remarks about body weight can strongly influence an individual's eating behaviors. Commenting on someone's body size or need for weight loss (without offering guidance on how to do this healthfully) may trigger the development of an eating problem in vulnerable athletes.

As a coach, you can play an important supportive role in helping your athletes deal with the emotional and physical stresses of training and maintaining weight by:

- Providing your athletes with the basic nutritional information that appears in this chapter
- Not overplaying the impact of weight on performance
- Emphasizing that long-term, good eating habits and sensible weight control will optimize athletic performance
- Providing appropriate advice regarding weight loss/gain, rate of weight loss/gain, and target weight range.

Glossary

SOCCKER TERMS

Attacking Third of the Field: The third of the field that is closest to the goal you are attacking.

Bending the Ball: The technique of kicking the ball so that it curves in one direction or the other.

Ball Side: The side of the field where the ball is located.

Checking Run: A deceptive technique whereby an attacking player takes a few quick steps in one direction and then turns and sprints back toward the ball in an attempt get away from a defender.

Combination Play: Short-distance passes between a group of players.

Cover: The defensive concept of providing goal-side support to the defender challenging for the ball.

Cross Ball: A pass played from one side of the field into the penalty box in an attempt to set up a teammate for a shot on goal.

Devensive Third of the Field: The third of the field that is closest to the goal you are defending.

Direct Free Kick: A free kick awarded after a major foul, in which a goal may be scored directly without touching a player other than the shooter.

Distribution: How the goalkeeper begins the attack by bowling, throwing, or punting the ball to teammates.

Economical Training: Combines two or more of the methods of training in a given drill in an attempt to maximize the amount of time you are able to spend with your players (i.e., 3-versus-1 combines technique and tactics).

Far Post: The goalpost farthest from the ball.

Feinting: The use of deception to beat an opponent or catch him or her off guard.

Flooding Zones: An offensive tactic whereby a number of attacking players concentrate in the area around the ball in order to create space on the opposite side of the field so that a long pass can be played.

Functional Training: Specialized training that focuses on the skills necessary for specific positions on the field. Such training addresses a player's technical and tactical weaknesses.

Goal Side: The area between the goal you are defending and the ball or player you are defending.

Grid: A marked area, smaller than the entire field, that is used to teach technique and tactics.

Indirect Free Kick: A free kick awarded after a minor foul. The ball must touch a player other than the kicker before a goal can be scored.

Inswinger: A pass played in the air from the corner of the field that bends or swings in toward the goal.

Man-to-Man Defending: A high pressure defensive style whereby each defender is responsible for guarding a specific attacker.

Marking: To guard an opponent by staying in very close proximity.

Midfield Third: The middle third of the field, located between the defensive and attacking thirds.

Near Post: The post nearest to the ball.

Obstruction: When a player purposely ignores the ball and uses his or her body to impede the progress of an opponent. It is one of the five minor fouls.

Outswinger: A pass played in the air from the corner of the field into the penalty area that bends or swings away from the goal.

Overlapping Run: A run made by attacking from behind the ball, past the player with the ball, in order to receive a pass.

Parry: A technique used by the goalkeeper to quickly deflect the ball around the goalpost in order to make a save.

Penetrating Run: A run made by an offensive player through the defensive line and toward the goal.

Possession Pass: A pass that has little chance of being intercepted, usually a lateral or back pass.

Restart: The start of play after a foul, goal, or the ball out of play. Restarts take the form of a free kick, throw-in, corner kick, goal kick, or kickoff.

Shielding: A dribbling technique that utilizes the body to protect or shield the ball from the opponent.

Square Pass: A long or short distance pass made laterally.

Target Player: An attacker, usually a forward, who serves as an outlet for passes from midfielders and defenders. Target players are good at receiving balls passed in the air.

Through-Pass: A pass played by an attacker between or over defenders toward the opponent's goal to a teammate in position to shoot on goal. Also known as a penetrating pass.

Touchline: The line that extends from endline to endline and marks the side boundaries of the field.

Weak Side: The side of the field away from the ball.

Zone Defense: A defensive strategy used in low pressure defense whereby defenders guard certain areas on the field rather than specific players.