

VISION AND MENTAL TRAINING

In literature, eyes are known as windows to the soul, but in basketball, eyes can be the doorway to success. Visual acuity, peripheral vision, and depth perception all play a role in basketball success by helping you locate the ball as well as providing sensory information about where the ball and players are at any given time. We've all heard coaches say, "Keep your eye on the ball!" and indeed developing this skill will help you be a better player.

Like the cardiovascular, respiratory, and muscular systems, training of the eyes must be included in any conditioning program. Vision training is inexpensive and requires little time to realize results.

Although everyone can benefit from vision training, this program will particularly help athletes who have poor hand-eye coordination, bad timing in positioning, excessive eye rubbing, squinting, an increased injury rate, poor balance, and inconsistent performance. Many times the initiation of vision training reveals a need for prescription glasses or contact lenses, as was the case for Charlie Sheen's character in the baseball movie *Major League*, who had incredible pitching talent, but poor accuracy because he couldn't see properly.

When you visit an eye doctor or optometrist to determine whether your vision needs correction, the exam will make use of both a traditional eye chart as well as more sophisticated methods for evaluating eyesight. The doctor will also measure binocular vision, depth perception, reaction time, eye teaming, and focusing ability, as well as hand-eye coordination, reaction time and visual speed and accuracy.

Even if you think your vision is perfect (many doctors consider both 20/20 and 20/40 to be acceptable) keep in mind that headaches are a good indicator of eye stress.

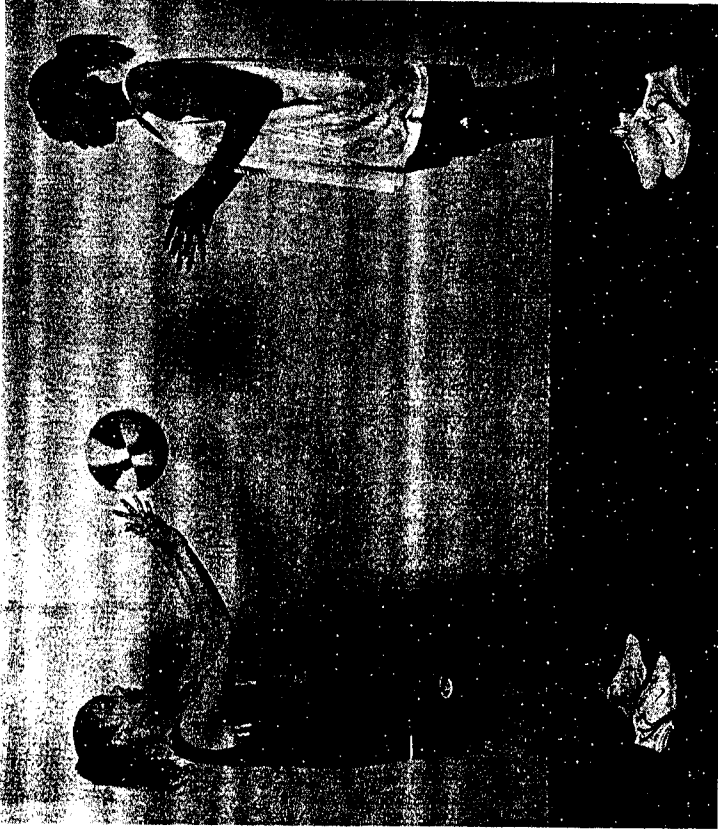
If you're one of the lucky ones whose vision is problem-free, vision training can still be of enormous use to improve dynamic visual acuity, depth perception, and peripheral vision. Dynamic visual acuity refers to the eye's ability to focus on a moving object, and can decrease with eye fatigue. Depth perception relates to how the eyes focus and fixate on an object. It allows you to gauge the arc and effort needed to make a shot given a certain distance, as well as judging other players' positions. Consistent over or under shooting may be an indication of a problem with depth perception. Peripheral vision refers to the ability to see laterally, ideally 180 degrees. It is said that New York Knicks legend Bill Bradley had 195-degree peripheral vision; talk about eyes in the back of the head!

Applying Vision Training

The following exercises can be conducted at home, requiring little time and equipment. Try to complete the exercises daily. Each exercise requires only 3 sets of 10 to 15 repetitions. Unlike weight training, there are no intensity limits to vision training. Focus visually and mentally on the object and tasks at hand.

Visual Acuity Exercise B

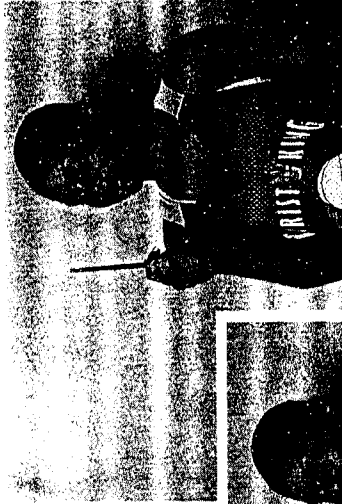
Tape or paint 4 colored squares on a basketball. Two players will pass the ball back and forth, concentrating on seeing 1 color at a time.



Visual Acuity Exercise A

Hold a pencil in front of your face at arm's length.

Bring the pencil slowly toward your nose, focusing on the pencil until you see 2 images of it. Bring the pencil back to arm's length and repeat the process.



Peripheral Vision

Have a partner stand behind you while you are looking forward. Your partner will move to either side of you, holding up a number of fingers. Identify the number of fingers held up as soon as they appear to you.

40

Depth Perception

Hold a pencil near your nose (without seeing double) and another at arm's length.

Alternate positions of the pencils, moving them farther away from and closer to your face.

Mental Training

Sports psychology plays an integral role in preparing elite and professional athletes for competition. For example, the success gained by professional and Olympic athletes using mental imagery has been supported by documented research. One study conducted by the Lerner Research Institute of the Cleveland Clinic Foundation found that people who just thought about bending their elbow for 15 minutes 5 times per week increased their strength 13.5 percent, without ever lifting a weight. Try experimenting with vertical jump thoughts or making the game winning shot.

Although less frequently used at lower levels, the high school basketball player is a prime candidate to take advantage of sports psychology principles. Pressures and stress from family, friends, life, and sports can wreak havoc on an athlete's play and health. Distractions, motivation, burnout, lack of rest, improper diet, and psyching techniques are all mental factors that come into play for the high school basketball player, but are rarely addressed at this level. Despite a well-planned phys-

ical and tactical program, an athlete will not reach his or her full potential unless the mind is trained as well as the body.

Mental imagery, which blends what the athlete has observed, been taught, and should do in a given situation, has been used by athletes, with great success. Think of mental imagery as running a video through your mind over and over, breaking the skills down to the smallest details, then watching and feeling yourself perform the skill in your mind. These parameters are then repeated in order to prepare the subconscious mind to execute the skill when physically required.

Young athletes sometimes have difficulty comprehending how the mind fuels the body. When you're taught a new skill, it eventually becomes a learned response through practice and repetition. Mental imagery can help you bring these learned responses to the forefront of your mind, allowing an automatic and smooth transition to superior performance. If you observe players on the free throw line you see how some hold up the ball, aligning it with the basket. What they may also be doing is running a video through their mind: recalling the ideal body mechanics, the flight of the ball, and visualizing the ball going into the net. Surprisingly, this can be done in the brief moments on the foul line: you just have to learn to train your brain.

Technique

There are various ways to apply mental imagery. The key to success is total concentration. Some athletes choose a quiet room, others may choose rhythmical music in head phones, some like to lay down, others like to sit up. Coaches may choose to have players perform mental imagery on the bus to a game, or to arrive early for a game and have the players sit in the locker room. Mental imagery can be a short exercise while

standing on the foul line, or can last for 15 minutes or more. In either scenario, you will get the most effectiveness from the exercise if you keep your eyes closed and allow yourself to concentrate. Like all skills, the more often you practice, the more proficient you will become.

Here are some ideas to help you through a mental imagery exercise:

- Hold a basketball while doing an exercise to relate the feel of the ball on your hand to your mind.
- Watch videos of yourself or of an accomplished player executing the skills you wish to do. If you are analyzing past performances or a newly learned skill, critique and correct, but try not to criticize. Stay positive.
- Hang up pictures, not only to admire, but also to analyze.
- Emphasize a sense of confidence. Adopt an "I can do it" attitude.
- Stay relaxed and breathe smoothly.
- Break skills down in segments. For example, consider a free throw (Your coach can make a brief outline for you on how a skill should be broken down):
 - Your eyes are focused on the basket.
 - Feel and see the ball in your hand and your feet on the floor.
 - Your ankles, knees, and shooting elbow are bending to prepare for the shot as it is stabilized by your hand.

- Rising on your toes, straightening your legs, and lifting your shooting hand towards the basket, feel the ball rolling out of your hand, off of your fingers, your wrist bending down, and the ball arcing towards the basket.
- See the ball go in!
- When it comes to plays, visualize where and when you need to be at a certain point on the floor. Like teaching dance steps, draw mental lines on the floor and visualize where team mates are and where and when you need to move.
- In your mind, watch yourself and feel yourself doing the task.
- Stay relaxed and be confident.