

STRATEGIC WEIGHT TRAINING

for

HIGH PERFORMANCE ATHLETES

Action Guide



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Preface

Strategic Weight Training for High Performance Athletes delivers powerful training techniques for getting the best results, in the shortest time, most economically.

This Action Guide highlights and expands on key points in the DVD to help coaches design highly effective transfer-targeted weight training programs for athletes in local settings.

Scientific language is avoided in this user-friendly DVD and Guide. The bibliography lists secondary sources (books and websites) that were consulted, wherein original sources can be accessed.

The DVD and Action Guide are organizationally parallel. This Guide is not a verbatim transcript of the DVD. However, when important sections of the DVD have been transcribed verbatim, these sections are indicated by numbers in parentheses that correspond to time codes in the DVD. For clarity, plus (+) signs indicate expanded sections not included in the DVD.

(Excerpt from Part 3)

+Readiness for Lifting and Training

Simple tests of flexibility and strength are indicators of an athlete's readiness for sports training. Pre-activity testing indicates the level at which athletes should begin training, serves as a baseline measure on which to show gains, and may signal the need for corrective exercises. Use these tests in Step 1 (Assessment) of the ADVISER Model (Part 7).

Hamstring Flexibility:

The **sit-and-reach test** is a universal field test of trunk flexion. It is a good measure of hamstring flexibility, but not of low back flexibility. As a rule of thumb, 90 degrees or more of hamstring flexibility is recommended for most sport activities. Limitations can adversely affect performance of the pulling lifts and sprinting, and may increase the risk of injuries.



Hip Flexor Flexibility:

Test the hip flexors in the lunge position, at the knee, and at the low back. Moving freely through ranges that exceed the neutral position is often necessary in athletic competition. Limitations can limit performance in the split jerk, sprinting, and other sport activities.

(Excerpt from Part 4)

- Make weight training **meaningful**. Athletes are more motivated when they believe that training exercises will directly improve competitive performance.
- +**Mentally practice** correct movements. Once the athlete executes correctly, he or she should repeat movements both physically and mentally. Mental practice is particularly effective for skills requiring power.



David Rigert mentally rehearses a winning effort before he lifts the bar in competition. Mental practice is used to accelerate skill learning as well to prepare for competition. Mental practice triggers activity in the same muscles involved in the physical performance of a skill, but not enough to cause movement.

David Rigert (Bruce Klemens Photo)

- Present instructions in a **positive-negative-positive** format. Rather than convey only what went wrong with an attempt, identify what the athlete did well, then pinpoint what needs improvement, and end with a positive comment.

These are just a few of the many instructional techniques rooted in motor learning literature. The following section (not addressed in the DVD) concerns the readiness of the athlete to receive and carry out instructions.

+The Stages of Learning

The stages of learning give coaches a frame of reference for applying instructional techniques based on the athlete's skill level. There is no definitive point at which an athlete moves from one stage to the next, but the 3-stage model is a guide.

The Cognitive (Mental) Stage:

The skill is new to the athlete, so he or she is trying to understand what it involves. *Cognitive* means that he or she is in the thinking process.

At this stage, coaches should use "bullet points" to describe and demonstrate the major movements. Details are not yet important, but key features are.

Initial learning is most impressionable. Providing clear instruction early in the learning process promotes safety as well as correct lifting technique. Limiting variations in weight load at this stage is often helpful.

The Associative Stage:

The athlete understands and can execute major movements, but coordination is not yet smooth.

At this stage, the coach:

- Further breaks down the skill, as necessary, continuing to link each action to the whole skill;

(Excerpt from Part 5)

Skill-Building Medicine Ball Exercises (55:53)

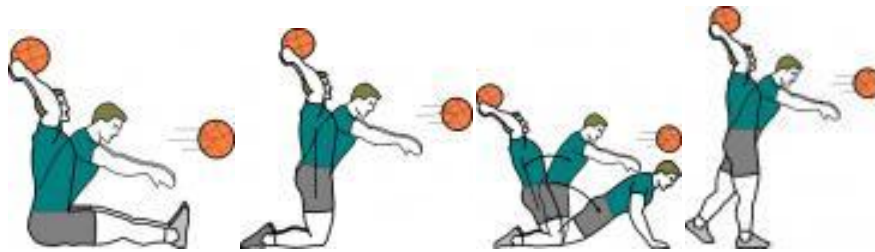
Medicine ball workouts offer a variety of activities for **strengthening** as well as **sport skill simulation** that can be integrated into practice sessions.

For example, medicine ball exercises can simulate the kinetic chain of movements in golf or tennis; batting in softball or baseball, or throwing a discus. Athletes can mentally focus on the correct execution of the kinetic chain of movements used in skills, including:

- driving off the back leg,
- leading with the hip,
- transferring the weight from the power leg to the front leg,
- blocking forward momentum with the front leg, and
- following through.



Exercises for basketball and soccer emphasize explosive trunk action and weight transfer as the ball is projected at different angles used game play.



In skills where one side of the body plays a dominant role, practice with the non-dominant side capitalizes on **bilateral transfer** to enhance performance.