

**Strength Training:** 

# **What Approach?**

## Five guidelines that will help you decide what works best for your athletes

ew coaches would dispute the fact that strength training can reduce an athlete's risk of injury and increase his or her performance potential. Many coaches will, however, argue over the best approach to the training process.

The different approaches—and the abundant amount of conflicting information—often leave athletes confused.

Coaches and athletes are also quick to jump on the bandwagon of successful teams or programs, a practice which frequently adds to the confusion.

For example, at the conclusion of the 1997 college football season, two schools were named NCAA cochampions: Nebraska and Michigan.

Both schools have a long history of success on the gridiron. But, if you were to compare their strength-

by Matt Brzycki, Coordinator of Health Fitness, Strength & Conditioning, Princeton University training programs, you'd be in for quite a surprise.

Not only are their approaches vastly different, they are downright contradictory!

- One program suggests fast repetitions, the other controlled speeds.
- One suggests mostly multiple sets, the other mostly single sets.
- One recommends split routines, the other total-body workouts.
- One primarily uses free weights, the other primarily uses machines.
- One uses periodization, the other does not.
- One favors one-repetition maximum efforts, the other discourages them.
- One advocates plyometrics, the other opposes them.

And, get this: They have been using these basic approaches for more than two decades!

Yet, both Nebraska and Michigan have highly successful football programs made up of athletes who are very big and very fast and very strong.

The same story holds true in just about every other sport. Teams are winning despite vastly different approaches to strength training.

So, how do you choose a program that will help you get bigger, faster, stronger?

#### **GUIDELINES**

Ultimately, you must decide what works best for you and your athletes. In your decision-making process, you have to ask yourself the following questions:

#### Is it Productive?

It makes no sense to invest time in a strength-training program that doesn't produce meaningful results.

A program will be productive as long as it is based upon the Overload Principle: To increase the muscles in size and strength, you must stress—or overload them—beyond their present capacity.

In layman's terms, you must challenge the muscles with progressively harder workloads.

This can be accomplished effectively through a Double Progressive Technique: Every time you work out, you must attempt to increase either the weight you use or the repetitions you performed in your previous workout.

In short, you must impose demands upon your muscles that they haven't previously experienced by either using more weight or performing more repetitions.

## Is it Comprehensive?

The approach must be comprehensive in several ways.

First of all, the strength-training program must address all of the major muscle groups in the body, not just the showy ones. Frequently, muscles injured in competition (such as the neck and the groin) are ignored, while muscles that are mainly cosmetic (such as the biceps and the triceps) are highlighted.

Secondly, a thorough strengthtraining program targets all of the athletes on the team, not just the weight-training buffs.

Thirdly, a comprehensive strength-training program means that it is performed year-round, including the playing season.

Remember, it is during the competitive season that your athletes have to be at their best in terms of strength and conditioning.

#### Is it Practical?

The approach must be easy for your athletes to understand. It shouldn't be allowed to become grossly overcomplicated and confusing. The use of pseudoscientific terminology coupled with inflexible instructions on the sets, reps, intensity, and volume of activity in rigidly defined "phases" of periodization only add to the confusion.

Strength training is actually quite simple and should progress in resistance and/or repetitions from one workout to the next.

## Is it Efficient?

The approach you choose should practice the maximum possible benefits in the least amount of time. An approach that requires

## NATIONAL STRENGTH AND CONDITIONING ASSOCIATION'S









The NSCA Sport Specific Training Conference offers coaches an exciting opportunity to learn baseball and football training techniques, methods, and new research from industry experts. A sample of the many conference sessions is listed below. Call Patrick at the NSCA for a preliminary program!

1999 SPORT

# SPECIFIC TRAINING CONFERENCE



January 8-10 Nashville, TN



530 Communication Circle, Suite 204 Colorado Springs, CO 80905 (719) 632-6722 e-mail: nsca@usa.net

## Football Track

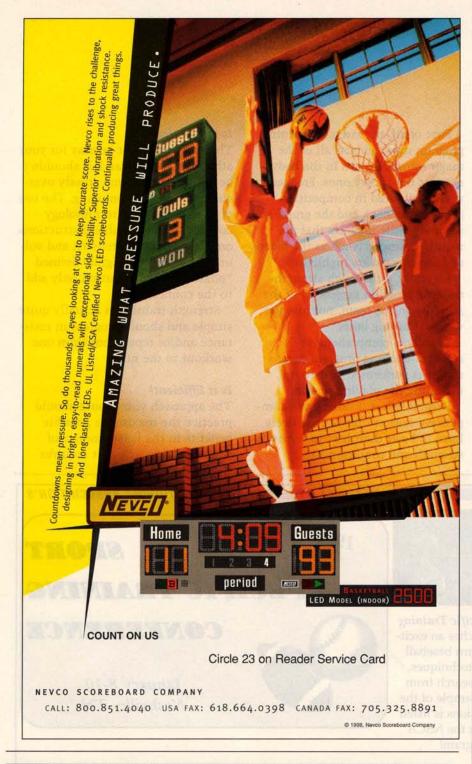
Acceleration Drills for Improved Performance

Power and Endurance
Training for the 4th Quarter

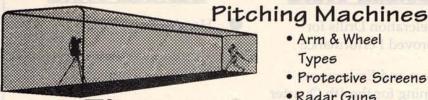
Position Specific Conditioning

## Baseball Track

- Hand-Eye Training
- Trunk-Lower Extremity Power for Throwing
- Acceleration, Reaction, and Agility Development



## BASEBALL BATTING CAGES



- · Arm & Wheel Types
  - Protective Screens
  - · Radar Guns
  - Tunnel Nets

SPORTS
TECHNOLOGIES 800-529-6664

901-794-1549 FAX

P.O. Box 751 625 • Memphis, TN 38175

Circle 24 on Reader Service Card

## TRAINING CONTINUED

more than one hour per workout or more than three sessions per week is neither practical nor necessary. A time-efficient approach will give your athletes more time to perfect their skills, perform sport-specific conditioning, and prepare for academics.

#### Is it Safe?

At first glance, many approaches look great. Closer inspection may reveal problems in safety. This is unacceptable. Since strength training is designed to reduce the risk of injury on the playing field, how

"Using potentially dangerous techniques in the weight room to prepare for potentially dangerous sports is like banging your head against the wall to prepare for a concussion."

> Ken Mannie. Michigan State U. Strength Coach

can the athlete be exposed to potentially dangerous exercises in the weight room?

Movements that have an unreasonable amount of orthopedic risk include the power clean and snatch, plyometrics (especially those that are done vertically), and any exercise done with an explosive speed of movement.

Ultimately, it will be up to you to make the decision on which approach to use in the weight room-the one that is most productive, comprehensive, practical, efficient, and safe for your athletes.

COACH & ATHLETIC DIRECTOR