

1985-2005

20th

ANNIVERSARY

Fitness Management[®]

ISSUES AND SOLUTIONS FOR FITNESS FACILITIES

JUNE
2005

**CLIMBING
WALL
STEPS TO
SUCCESS**

**Defying
STRENGTH Training
Convention**

**How Facilities
Use SOFTWARE
to Succeed**

FITNESS EQUIPMENT HEALTH | DIETARY SUPPLEMENTS | SPA SERVICES

fitness Q&A

By Matt Brzycki

Can a strength-training program have too much variety?



Those who are just beginning a strength-training program, or just returning to one, will be able to perform the same routine for a long period of time. As individuals become more experienced, however, they'll need to incorporate variety into their programs. But even then, a program might not require a dramatic overhaul; rather, it merely may need a little variation, such as changing several exercises.

To a large degree, the need for variety is based on the individual. Simply stated, some people are bored easily and prefer a program that has variability. Other people aren't bored as easily and prefer a program that has stability.

That said, having too much variety, especially in the early stages of a strength-training program, isn't desirable. For one thing, too much variety makes it difficult to establish baseline levels of resistance. This, of course, makes it difficult to gauge the effectiveness of a program. Having too much variety also complicates the exercise prescription. This can leave a participant overwhelmed, confused and frustrated. **FM**

Do isolation movements have any place in a strength-training program?

Essentially, there are two types of body movements: single joint and multiple joint. A single-joint movement — also known as a “simple movement” or “primary movement” — involves a range of motion at only one joint. A good example is a pullover in which the upper arm moves about the shoulder joint. In contrast, a multiple-joint movement — also known as a “compound movement” or “secondary movement” — involves ranges of motion at more than one joint. A good example is a lat pulldown, in which the upper arm moves about the shoulder joint and the lower arm moves about the elbow joint.

The advantage of a single-joint movement is that it usually provides muscle isolation. The advantage of a multiple-joint movement is that a relatively large amount of muscle mass can be addressed in one exercise. However, a multiple-joint exercise has a distinct disadvantage because it has a “weak link.” When a person fatigues in a multiple-joint movement, it's because the resistance has been filtered through a smaller, weaker muscle that exhausts well before the larger, stronger muscle has received a sufficient workload. In an exercise such as the lat pulldown, the biceps are the smaller muscle and, therefore, will fatigue long before the upper back. So, the biceps get an adequate workload, but the upper back, which is really the target of the exercise, gets little stimulus. With a single-joint movement, such as a pullover, a person can isolate the upper back without being hindered by the limited strength of the biceps.

One final point is that multiple-joint movements usually don't allow an individual to exercise all muscles through a full range of motion. For instance, the leg press involves the hamstrings (along with the hips and quadriceps). But in the leg curl, the hamstrings are exercised through a greater range of motion. **FM**



What is the best way to perform a triceps extension using a high pulley?

If performed correctly, a triceps extension using a high pulley — which is sometimes referred to as a “triceps pressdown” — is a good exercise for isolating the triceps. At the starting position, the lifter should have a fairly narrow grip on the bar (or handle) and place the upper arms tightly against the sides of the body so that they're parallel to the torso. When performing the exercise, the lifter should raise and lower the resistance throughout the greatest possible range of motion, without significantly changing the position of the upper arms.

It's OK for the lower arms to go beyond a point in which they're parallel to the ground, provided that there's little or no movement of the upper arms. Changing the position of the upper arms during the performance of the exercise causes other muscles to be involved. For example, flaring the elbows away from the torso essentially turns the triceps extension into an exercise that resembles a close-grip bench press. Because of this action, the chest and shoulders are added to the mix.

Remember, too, that the primary function of the biceps is elbow flexion. As such, the biceps shouldn't be involved in a tricep extension, simply because the movement is an elbow extension. **FM**



Matt Brzycki is coordinator of recreational fitness and wellness programs at Princeton University, Princeton, N.J. He has more than 22 years of experience at the collegiate level and has authored, co-authored or edited 13 books.

Do you have questions that you need answered? Email them to edit@fitnessmgmt.com.