The Importance of Training to Failure

by Richard Berle

When working out at Body By Berle, our goal is to bring you to momentary muscular failure on every exercise. This is essential to maximize muscular stimulation.

What is failure?

Simply stated, working the muscles involved in the exercise until the weights can no longer be moved. It is essential that form **not** be compromised to avoid failure, in order to avoid injury.

What should one do when failure occurs?

When failure occurs, the trainee continues trying to move the weights for a period of 5 to 10 seconds without compromising form. Whenever possible, the negative part of the exercise should be completed normally.

Why should one not be afraid of failure?

Many people have an irrational fear of failure. In fact, failure is the safest part of the exercise.

Force = Mass X Acceleration

A client recently expressed concern over performing her exercises to muscular failure because she did not want to injure herself. That fear couldn't be further from the truth.

An injury in exercise occurs when the force of a movement is greater than the force that a joint can withstand. Keeping in mind that force is made up of mass x acceleration and that mass doesn't change during the exercise, only acceleration can increase the overall force. During a strength training exercise, a person becomes progressively weaker until his strength is less than that of the resistance (AKA failure). In the first few reps, the trainee's strength is at its peak and it's possible that he could produce that injury-causing acceleration. However, strength is so compromised by the last few reps before failure that it's impossible to produce any meaningful acceleration. Therefore, the first few reps are the most dangerous and the last reps before failure are the safest.

What are the benefits of going to failure?

When you train to failure you recruit more of your fast twitch (or fast glycolytic) muscle fibers. The fast twitch fibers are your strongest and fastest and so are capable of the greatest increases in strength and hypertrophy.

Authors of a study published recently in the Journal of Exercise Physiology have presented what is perhaps the most interesting and unquestionably one of the most important findings in exercise science in decades: **Strength training to the point of momentary muscle failure improves cardiovascular function.** In fact, this review states that "resistance training to failure can produce cardiovascular fitness effects while simultaneously producing improvements in strength, power, and other health and fitness variables."

WHEN WORKING OUT, MAKE SURE YOU GO TO FAILURE.