

## MENTOR METHOD OF TRAINING

When trying to improve performance on the field of play or on the court, whatever your sport, it is important that you understand where it all begins. For an athlete there are two phases in the training process; the first is how you prepare your body in the weight room and the second is what you do on the playing field or court in the way of performing movements specific to your sport and what areas you want to improve in. You can not perform one without the other and still expect to achieve optimum performance. Think of it as building a foundation and then erecting a structure upon that foundation.

The Mentor Method of weight training concentrates on how to perform movements in the first phase of training, specifically for power, and what you need to do in this phase to better prepare your body to excel in the second phase of training. After applying these training methods you will find that your body has been conditioned to respond much more rapidly in the second phase of training.

### POWER

What is power? Simply defined, power is moving a mass from point A to point B as quickly as possible. The power your body creates will increase strength, speed and quickness. A misconception that most



people have is that increasing strength will increase speed and quickness. Increasing strength alone does not increase speed and quickness because strength is defined by how much weight and individual can lift but not how quickly it is lifted. An example of this would be the weight lifter who can squat 700 pounds. The weight lifter has conditioned his body to lift this amount of weight but typically in a controlled, methodical movement. To create power, the method of training is completely opposite to that of strength training as movements are performed in a controlled but explosive manner.

## MOVEMENT BIOMECHANICS

There are two types of actions that muscle groups will perform, contraction and extension. Muscle contraction is called the concentric phase (shortening) and muscle extension is called the eccentric phase (lengthening). When performing a squat the portion of the movement that is the concentric phase is the one in which the weight is being pushed upwards or away from the ground. The portion of the movement that is the eccentric phase is the one in which the weight is being lowered to the ground.



## MUSCLE FIBERS

Muscle fibers associated with movement consist of two types, fast twitch and slow twitch. Without going into a complicated explanation of how these fibers work let's just say that fast

twitch muscle fibers are utilized when performing movements that require power (speed and quickness) and slow twitch muscle fibers are utilized when performing movements that require endurance.

## POWER AND MOVEMENT BIOMECHANICS

The Mentor Method of training is simple and can be applied to any particular weight lifting routine without having to drastically alter that routine. What we want to do is teach you how to lift the weight in order to enhance power. Now that you understand that fast twitch muscle fibers are utilized when performing movements that require power, we will teach you how to perform these movements such that you are recruiting these fast twitch fibers.

The concentric phase of a movement is where we want to create power as this is the phase in which muscle contraction occurs. An example of this would be a track athlete exploding out of the starting blocks. As the athlete comes out of the blocks, every muscle in the lower portion of the body (from the hips down) that is used to help propel the body forward and upward is in a concentric (contracting) phase. The faster these muscles contract, the faster the athlete comes out of the blocks.

## POWER AND THE CONCENTRIC CONTRACTION

We will use the squat as an example of how a concentric contraction applies to a track athlete coming out of the starting blocks. All fundamentals of this exercise should be completed in



accordance with the proper way to perform a squat; head and eyes up, back straight, and elbows up. The feet should be positioned no wider than shoulder width as we are trying to isolate the muscles utilized in "coming out of the

blocks", particularly the Quadriceps (front of the thigh), Biceps Femoris (back of the thigh), Gluteous Maximus (rear end), and Gastrocnemeous (Calf). The wider the feet are placed the more the hips are used in the



movement. We do not want to concentrate as much on the hips as these muscles are more for lateral stabilization. We are looking to simulate a movement that mimics the explosive movement when a sprinter comes out of the starting blocks.

When lowering the weight (eccentric contraction) it should be done so in a slow and controlled manner such that the thighs are just above parallel to the floor. Once this point is reached there should be a one second pause followed by an explosive, controlled movement upwards whereas you extend onto the ball of your feet, contracting the Gastrocnemeous muscles (concentric contraction). It is important to make sure that the proper fundamentals mentioned above are performed correctly so as not to cause an injury. Perform the movement with explosiveness (as fast as you can) yet in a controlled manner. Do not lock the knees at the end of the contraction. Control the weight and stabilize yourself in order to prepare for the next repetition.

## REPETITIONS AND THE AMOUNT OF WEIGHT

The most important thing to remember here is that the more weight you use the slower you will lift it. This will not help to recruit fast twitch muscle fibers and enhance power. A weight



should be chosen such that 15 to 20 repetitions can be performed. This is typically a repetition range that is performed when people are trying to simply shape and tone their muscles, however, let me reiterate that when performing the Gorilla Blaster Method of training it is not how many times the weight is being lifted but how it is being lifted! The faster the weight is moved through the range of motion overall, the more stress will be put on the fast twitch muscles fibers that are utilized when performing movements that require power. Let me emphasize that you should not perform the entire set quickly, only the concentric portion of each repetition. The set, overall, should be controlled and maximum recovery time (3-4 minutes) should be given in between sets. Sets of four should be performed with power exercises (squat, bench press, shoulder press, etc.) and sets of three should be performed with isolation exercises (bicep curl, tricep extension, leg extension, etc.).

In addition to how each repetition is performed it is important to point out the benefits of higher repetitions within each set. Again, how each repetition is performed will increase power but performing a higher number of repetitions will help to enhance fast twitch muscular endurance as well. The longer a fast twitch muscle fiber fires, the longer the duration of power created within the muscle. The longer that an athlete can maintain power the faster he or she will get from point A to point B. The best example of this is the 100 meter sprinter. I think we all remember a man named Carl Lewis. When watching Carl Lewis run in



his prime it seemed as if he would accelerate away from his competitors about two thirds of the way down the track. In reality he was not accelerating, it was just that everyone else was decelerating. Carl Lewis had the ability to maintain his muscular power throughout the race better

than any of his competitors. This is why it is important to enhance not

only the power of a muscle but the endurance of the fast twitch fibers. This is not possible by performing low repetition sets.

## THE BENEFITS OF FIRST PHASE TRAINING TO SECOND PHASE TRAINING

The second phase of training consists of what you do on the playing field or court to typically enhance speed, strength, quickness, and endurance.

Examples of this would be Plyometric Routines, Interval Routines, or any training regiment designed to enhance speed, strength, quickness, and endurance. When performing speed training it is important



that every repetition is performed at a maximum effort in order to recruit the maximum amount of fast twitch muscle fibers during every set. In order to perform at maximum effort it is even more important that the muscles are given almost total recovery time in between each set. The muscles should be taxed for as long as possible during the repetition but allowed to recover completely in between sets.

This is the same as the Mentor Method of performing higher repetitions in the weight room during a set but exhausting the muscles by way of explosive movements within the repetition. By applying the Mentor Method of training in the weight room you will prepare your muscles to

perform with more explosive power in the second phase of training. The more power you train with in the second phase the faster, stronger and quicker you will become!

## IN SUMMARY

What we have learned by the Mentor Method of weight training is that power is what will increase speed, strength and quickness, the most necessary and beneficial assets for any athlete. What we are looking to do is perform exercises in the weight room that will enhance power such that we will benefit more from the second phase of training on the playing field or court. This method can be applied to any exercise whether it is a squat, bench press, leg extension, leg curl, etc. If you apply this method with dedication and precision you will be on your way to becoming a more powerful athlete in your chosen sport!

## FLEXIBILITY

In order to avoid injury as well as increase performance it is important that the muscles and joints are flexible. The most effective type of stretching routine is one that is an active stretch. What this means is that there is movement involved with the stretch. The other type of stretching is called passive, one in which there is no movement involved with the stretch. The stretch that we advocate with the Gorilla Blaster Method is one that is called Proprioceptive Neuromuscular Facilitation (PNF for short).

PNF is best performed with a partner and involves interaction and cooperation between partners. What PNF does is to involve a movement (muscle contraction) followed by a stretching of that muscle. A muscle is in it's most relaxed state immediately



following a contraction. What we

want to do is take advantage of being able to stretch the muscle while it is in this relaxed state. Here is an example of a PNF stretch:

To perform a stretch for the Pectoralis Major and Minor muscles (chest), have your stretching partner stand behind you. Put your arms behind your head and then have your partner gently pull both your elbows back



until you feel a good stretch. Hold the stretch for a five count. After the count, pull the elbows forward with your partner maintaining mild resistance until your elbows are at the point you started. Next, have your partner pull your elbows back while you mildly resist until you

reach the point at which you feel a stretch. At this point relax and let your partner provide another stretch for a five count. Repeat this process for five repetitions. During the stretching phase, following your resistance forwards and backwards, you should gain more range of motion each time. You will notice that you will have a much larger range of motion at the end of your fifth repetition as compared to your first.

PNF can be applied to all muscle groups and you will find that the stretching you perform will greatly enhance your flexibility and help to prevent muscle pulls. Your workouts will be enhanced due to the fact that a more flexible muscle will hold more blood and contract throughout the range of motion of your joints much more freely!

*As with any strenuous exercise or the use of dietary supplements it is advised that you consult your physician before beginning your program. If at any time during your workout you experience dizziness, nausea, numbness, pain, or extreme fatigue, STOP what you are doing and ask for assistance. It is advised that you always exercise with a partner and in an area where there are trained fitness professionals on hand.*