

## The Regulation of Training

By: Louie Simmons

One must consider how many lifts to do in one particular workout and calculate what percent is best used for explosive and accelerating strength. It is also important to establish the number of lifts for the development of your absolute strength. This is a major factor if you want to reach your top potential.

Also keep in mind all components of training: physical, technical, and psychological. If training is regulated correctly, then all of the above can be accomplished while increasing hypertrophy and building GPP (general physical preparedness). This can be done at one time, without the use of periodization, where one breaks up the training into different phases every 3 or 4 weeks.

By closely following the rep/set recommendations of A. S. Prilepin, here at Westside, we have had 18 lifters bench 550 or better. This method is commonly known as the dynamic method.

We use 60% of a no-shirt best bench for 8-10 sets of 3 reps. This is how speed strength is best developed. Siff and Verkhoshansky used a force plate machine to determine the maximum effort a highly skilled weight lifter could display. This lifter generated 264 pounds of force on a 154 pound bar; 154 is 58% of 264. This demonstrates the optimal relationship between force and velocity, where speed strength is best developed.

For the bench, we do roughly 120 lifts at 60% of a no-shirt max in a 1-month time period (10 sets of 3 reps equals 30 lifts per workout times 4 workouts) for the development of starting and accelerating strength. By using a weight that is 60% of a 1 rep max, a 600 pound bencher can train along with a 400 pound bencher without one over-loading or one underloading. How? The 600-pound bencher would use 360 for his sets, and the 400-pound bencher would use 240 for his sets. The workload is regulated to ones strength limits. If the 400-pound bencher uses more than 240, his bar speed is compromised, thus destroying the optimal relationship between force and velocity.

You may ask, how does a 400-pound bencher eventually bench 600? The answer lies in the improvement in and development of special exercises. When the 400-pound bencher has brought up his extensions, delt raises, and back and lat work to that of a 600-pound bencher, he has grown to be a 600-pound bencher as well.

The bench press itself is not used for muscle hypertrophy (growth). The special exercises serve two critical purposes: the development of strength in individual muscle groups and an increase in muscular size, which helps increase leverage in the bench and squat.

Prilepin's recommendations for weights above 90% (done on the max effort day) are 4-10 lifts. Here we are referring to classical lifts or major bar exercises such as good mornings, box or rack pulls, and of course, a variety of squats.

Like Medvedyev and other sports scientists, we have discovered that too many weights above 90% will cause deterioration in coordination, causing deterioration in form. When training with weights that are over 90% of your current 1 rep max for 4-5 weeks, negative effects occur to the CNS (central nervous system) and your progress will decrease. Yet, one must train with very heavy weights to make gains in absolute strength. So what's the answer? Train a bar exercise for only 2 weeks and switch. For example, do bent-over good mornings for 2 weeks, Safety Power Squat bar for 2 weeks, rack pulls for 2 weeks, and front squats for 2 weeks. These are just a few exercises to choose from. Always max out on this day for 1 rep in squatting exercises or pulls, such as rack pulls, high pulls, pulls off a box, snatch, or clean. Do a 3-rep max in good mornings. The max effort day occurs 3 days after the dynamic day.

We have adjusted the number of 90% and above lifts in one workout to 3-5 lifts. The reasoning behind this is that the special exercises for powerlifting are much heavier compared to the Olympic lifts that Prilepin's data were based on. To become very strong, a lot of lifts must be performed in limited-movement exercises, such as board press for bench pressing, rack pulls for the deadlift, and above-parallel box squatting for the squat. We have discovered it is best to do a single in most cases instead of a triple. Why? A 500-pound single equals 500 pounds of work; a 500 triple is 1500 pounds of work, which is much too demanding on the CNS. However, three reps will produce muscle tension. It is advised that the more massive lifters do 3's instead of 1's to achieve adequate muscle tension: extra body mass can reduce the range of motion in many lifters.

We will usually do a 90% weight as a last warm-up and then hopefully a record over 100%, possibly two or three PR's. We invariably go until we miss a weight. This is the best way to achieve a true max effort.

Let's look at the ratio of the dynamic day to the max effort day. Dynamic day: 120 lifts per month. Max effort day: 12-20 lifts per month. This is how we are able to train heavy throughout the year: by rotating exercises on max effort day.

Remember, do one type of training per workout day: speed bench, Sunday; speed squat, Friday; max effort for bench, Wednesday; max effort for squat and deadlift, Monday (the exercises for the squat and deadlift are the same). You cannot and should never do two types of strength training in one workout. Your brain will not know what to do when asked to do two completely different tasks in one training session.

This can be best illustrated by watching a pro-boxing match. In the early rounds, up to six, is when most knockouts occur. This is where explosive strength is demonstrated. Endurance plays little role in the early rounds. But after six rounds, the explosive strength diminishes, strength endurance is dominant, and fewer knockouts occur. Not only is it best to do only one type of special strength training per session but while doing the dynamic method using only one weight (after a warm-up), your CNS can accommodate the task it is asked to perform.

J.M. Blakley had never done speed work. J.M. did a PR of 675 in 1995, but stalled for 3 years. He is very strong, but his bar speed and reversal time were slow. By doing speed work with 315 for a short time, he made 683 on October 11, 1998, plus hit 683 again at the WPC Worlds. Then in late November he made an all-time best of 690 in a meet in New York. Remember, it is one thing to be strong and quite another to display it.

Speaking of benching, George Halbert did a 657 world record at 220 in March of 1998 at the Arnold Classic, and at 235 bodyweight he made a world record 688 on October 11, 1998, in Kieran Kidder's Blast on the Beach. George never put a bench shirt on in between meets. For the 688 he used 340 for 4 triples and 380 for 4 triples. George is perhaps the most explosive bencher I have ever seen, and the strength coaches from the Packers and the Patriots agree. George's problem was the lockout. So he utilized the floor press with 200 pounds of chain looped over the bar plus weight. So far, his best is 445 plus 200 pounds of chain, which is 645 at the top. Using four boards with bands, George's best is 475 for 3 sets of 3 reps with 150 pounds of tension from the bands, which is 625 at the top. He also did 3 sets of 3 reps with 355 on the bar plus 300 pounds of tension with bands, which is 655 at the top. Please remember, George is a pressing machine, which allows him to do 9 reps with weights of over 90%. However, most of our lifters follow the recommended 3-5 lifts over 90%.

The same holds true in the squat. This breaks down to 8-10 sets of 2 reps on speed day, which equals 64-80 lifts per month. Note that this is with bands or chains on the bar. Squat day for speed is Friday. On max effort day for the squat and deadlift (Monday), again 3-5 lifts above 90% are advised. That is, take a weight that is 90% of your 1 rep max in that lift and do 2-4 more attempts to break your PR.

To summarize, change the core exercise on max effort day every 2 weeks. Use 3-5 special exercises to complement your core exercise. Train speed bench press at 60% of your max bench without a shirt. Train speed squat in waves of 50-60%, jumping 2.5% each week, then start over with 50%. By using this system, we have had 18 men bench over 550 and 22 squat 800 or more. Lifters across the United States and all over the world are making progress with this system. I would like to thank everyone for their feedback and loyalty to Westside and to powerlifting itself.