

## PERIODIZATION OF TRAINING

Louie Simmons

Anyone training for a meet has undergone some form of periodization. Unfortunately, most have misused a system in order to peak for a meet. Progressive gradual overload, or Western periodization, is based on a hypothetical goal. So, at any time, the percent of your contest max may be off by as much as 20%. Many times the lifter is missing weights 3 weeks from the contest. This is because their expectations are too high or possibly too low.

Training should be calculated by using a formula based on math, not dreams. I suggest everyone read books on periodization by noted authors such as Tudor Bompá or Vladimir Zatsiorsky. These books explain periodization in terms of micro- and mesocycles. After all, periodization is a reference to the division of training into a yearly plan, or even a 4-year plan, i.e., an Olympic cycle. This system is used for weight lifting, powerlifting, and track and field, and of course should be used for all sports requiring the development of power.

The former Soviet Union had so much data on training that they did not know what some top coaches were doing. Mel Siff (‘!Supertraining’!) asked how I arrived at our 3-week pendulum system. It was quite similar to that used by the great Soviet Union SHW champion Vasily Alexeev. I stated that after 3 weeks we could not become faster or stronger, so we waved back down and started over. Mel said that Alexeev found the same to be true. So with the help of Russian and Bulgarian research and that done at Westside with over 70 Elite powerlifters, plus feedback from some of the greatest powerlifters around the world, our loading is based on A. S. Prilepin’s table.

For speed work for benching we do 9 sets of 3 reps. This is known as the dynamic effort method. Its purpose is to build a fast rate of force development. For squatting, the sets vary from 12 without bands or chains (i.e., a contrast method) to as low as 3 for the last week of a circa-max phase. The reps are always 2. For speed pulls, the reps are 1 and the sets are 5-8.

The powerclean and snatch are commonly used to develop speed strength in high schools and colleges, but the powerlifts can be used for the same purpose. For the bench the bar speed should be a minimum of 0.75 meters/second (m/s) and a maximum of 1.0 m/s. Jeremiah Meyers and John Stafford have pulled 495 at 1.2 m/s for sets.

To find your total loading volume, multiply the sets by the number of reps. For example, 9 sets of 3 reps for benching with 200 pounds on dynamic day is 5400 pounds. One should always use chains or bands to accommodate resistance and help reduce bar deceleration. For squatting, 12 sets of 2 reps with 500 pounds is 12,000 pounds. Only training sets should be calculated.

At Westside we follow the “rule of 60%”. An extreme workout should occur every 72 hours. The max effort day will be about 60% of the dynamic day. This may sound easy to do, but stop and add the weights used on max effort day using weights of 70% up to max weight lifted, and you will be surprised how low the total volume is. We lift about 45 to 50% on average. The rule of 60% was introduced through Olympic lifting. Powerlifting training requires one to make much larger jumps. This makes it almost impossible to lift 60% of the total volume on max effort day.

At Westside we don't use the method of heavy efforts, where 2 reps of multiple sets are used. Using the conjugate system, we try an all-time max each week on a special core exercise. If you repeatedly use the same core exercise, you will regress, if training above 90% of a 1-rep max. The conjugate system was first used at the Dynamo Club in the former Soviet Union. They had 70 highly qualified lifters from whom to gather input.

At Westside we have had over 70 Elite powerlifters who have provided data over the years, in addition to many highly skilled athletes from all sports, just like the Dynamo Club.

The training cannot be a flat loading system; that is, the volume cannot be the same when the intensity goes from a low of 60-70% to a high of 90-100%. Through years of experience, it is known that to gain better results, one can increase the training load. This can be done by increasing the number of workouts, increasing volume, and raising intensity, making workouts more complex through special exercises.

Periodization plays different roles in training. At Westside we use a 3-week pendulum wave. After 3 weeks, we failed to become stronger or faster. To use the wave, go up in bar weight for 3 weeks using 8-10 sets with the suit straps down. Base the weight on a contest max: use 50%, 55%, and 60% over the 3 weeks. Then wave back to 50% the following week. Using weights based on a box squat max, use 75%, 80%, and 85%. For a preparatory phase that lasts 9 weeks, with a Safety Squat bar max of 640, it looks like this.

First wave	325	10 sets	2 reps
light band--70 pounds of tension	375	10 sets	2 reps
	415	8 sets	2 reps
Second wave			
med. band--140 pounds of tension	325	10 sets	2 reps
	375	10 sets	2 reps
	415	8 sets	2 reps
Third wave			
strong band--260 pounds of tension	325	8 sets	2 reps
	375	8 sets	2 reps
	415	6 sets	2 reps

You can switch bars to a 14-inch cambered bar, front squat, Manta Ray, or a regular squat bar for a 3-week wave, increasing bar weight or chain or band weight, or a combination.

For the strength speed cycle, a rule to follow is 2 weeks. To

do this, use about 50% band tension and 50% bar weight. Joe Bayles did a 2-week wave for strength speed with 520 pounds of band tension and 505 pounds of bar weight on a parallel box using 4 sets of 2 reps on week 1 and 3 sets of 2 reps on week 2 with 545 in bar weight and 520 in band tension. Going longer than 2 weeks for strength speed is too taxing on the CNS.

For speed strength Chuck Vogelpohl uses 440 pounds on the bar plus 110 pounds of band tension on the box and 260 pounds of tension at the top. This is done for a 3-week wave for 10 sets the first 2 weeks and 8 sets the third. The bar weight goes to 480 for week 2 and 520 for week 3. A speed strength cycle precedes a strength speed cycle.

A speed strength cycle should precede a circa-max cycle.

With two major meets a year, a circa-max wave will last 3 weeks. The bar weight is 47.5%, 50%, and 52% of your contest best, with 40-45% band tension. Week 1: 435 x 5 sets of 2 reps plus 440 pounds of band tension. Week 2: 485 x 4 sets of 2 reps plus 440 pounds of band tension. Week 3: Work up to a max single. "Dollar Bill", a 308, and Phil Harrington, a 181, have done 600 pounds plus 375 pounds of band tension to squat 900 and 905, respectively, at a meet. Phil's 905 was a world record at 181.

These results are very reliable. The math reveals that your contest squat is about one-third higher than your box squat max with the suit straps down and no knee wraps. The results will vary about 3% either way. Greg Panora made a box squat with 645 plus 440 pounds of bands to squat 1000 at 238 and total 2485, a world record at 242.

The larger the squat, the greater the band tension must be. The band tension must be great on the box as well.

We use a 2-week wave for a circa-max cycle if three large totals are attempted in one year. Greg

won the 2006 APF Nationals with an improvement from 2255 to 2369. In September, Greg made a 2485 total. For the September meet, Greg did 505 for 2 sets of 2 reps and 555 for 2 sets of 2 reps with 440 pounds of band tension on week 1. Week 2, he worked up to 645 with 440 pounds of band tension. He squatted 1000 pounds at the meet, a 60-pound PR.

Remember, you must have good form on both a box and a contest squat and be mentally prepared as well as being in a highly trainable state.

Training for a meet will take its toll on anyone. A period of 1-2 weeks to download the total volume and intensity must occur. This period is referred to as the delayed transformation phase. Don't take heavy weights 1-2 weeks before a meet. All this does is show a lack of confidence. If you are worried about your opener, you must be scared to death to take a third attempt in front of real judges.

For benching on the dynamic method day, every 3 weeks change the reactive method that you use, e.g., stronger bands for 3 weeks or more chains each week for 3 weeks or adding weight to weight releasers each week. The bar weight must stay the same.

For speed deadlift pulls, the bar weight is 50% of your max deadlift and 30% band tension at the top. For deadlifts the band tension remains the same, but raise the bar weight slightly for 3 weeks, then return to the original weight.

The max effort for improving the squat, bench, or deadlift must be rotated each week. A 1-week plan is always used for max effort day. The conjugate system was intended for highly skilled lifters, but at Westside, when we start a new lifter who shows promise, he is placed in one of our groups and trains just like the advanced, and it has yet to fail.

One-week and 3-week cycles are arranged to produce high results at meets, where they count. A

yearly plan must be divided into 1-week and 3-week plans to fit a year of competition. It doesn't matter how strong you are before a meet or after a meet. It counts only on meet day. With 13 lifters with totals above 2300 and 5 over 2500, our system has served us well.