

# The Conjugate Method

Many have asked how Westside developed the conjugate system and why. I started training full time in powerlifting in late 1969 after returning from the army. I had my first power meet in 1966. What an experience! I lifted along with four future world champions: Milt McKinney, George Crawford, who gave me countless tips on squatting, Larry Pacifico, and Vince Anello, who was the deadlifting machine. I asked Vince what helped his deadlift. His reply, "everything helps my deadlift." It sounded vague, but Vince was using the conjugate system, although it was unnamed. George was the squat king. His training was a combination of regular squats, box squats, old Westside style (meaning Culver City, CA, style), rack squats, and good mornings, which contributed to his success. This is the conjugate system, a system of unidirectional loading that was designed to enable him to squat more. Larry Pacifico, who was a renowned powerlifter in the 1970s and early 1980s was great at everything, but his bench was unreal. His bench training was a combination of heavy-duty bodybuilding and lots of triceps work. Larry told me that 75% of our bench success was from the triceps.

With their advice, which they gave me freely at meets, and following the methodologies of the Culver City Westside group, I came up with the Westside conjugate system. Bill "Peanuts" West was the founder of the Culver City Westside Barbell Club. George Frenn was a world record holder in powerlifting and in the 56-pound weight throw. They had countless special exercises such as rack pulls, box pulls, high pulls, good mornings, box squatting on at least three different height boxes, benching with rubber mats on the chest, floor pressing, rack lockouts, and so forth. Their rotation of exercises was space-age at the time, which was 1965 to the early 1970s. The system was the conjugate sequence system, although it was not named yet. The training I was doing at the time was influenced by everyone mentioned above.

The only true problem I had was the loading. There were no Soviet secrets being leaked to the United States at that time. The progressive gradual overload system was being used in the U.S. It was divided into different time periods, or blocks, designed to work on a specific element of training. I am amazed that lifters are still using it today. It's a dead-end street. The young lifters believe it's a new form of periodization. Maybe they think the push button starters on some new cars are also new, but all cars had a starter button in the 1940s. I was always stronger a week or two after a meet or a week or two before the meet, but very seldom on meet day. The Soviets had coaches, like Matveyev, who realized there was a much better method of planning. There has always been controversy over who came up with wave periodization. Dr. Yuri Verkhoshansky has been credited with the pendulum wave. This was in 1964. Even the renowned Bulgarian coach Abadjiev had a similar plan for waving volume and intensities.

In 1972, the Dynamo Club had 70 highly qualified weight lifters do an experiment by rotating 25-45 special exercises including the classical lifts. After the experiments were done, one lifter was satisfied and the rest wanted more. It now had a name: the conjugate system. I was training alone and used lots

of special exercises for all three lifts to reduce staleness. When you use the same routine over and over, you fail to make progress. This is known as accommodation. To avoid this, a rotation of exercises small and large must be cycled in and out of the plan. I followed this system without knowing it had a name for years, 13 years to be exact.

It was in 1983 when I broke my lower back for the second time. I thought there had to be a better way. I started to buy books such as the *Soviet Sports Review*, translated by Dr. Yessis, and the Soviet training manuals that Bud Charniga Jr. had translated. Bud told me that these are textbooks. This is just what I was looking for. They opened my eyes. They are very math/physics oriented, with a basis on Newton's laws of motion. I was hooked. I had totaled my first Elite U.S.P.F. total of 1655 in February 1973. I used no gear, not even wraps on my knees or elbows or even wrists, just an Olympic weight belt, no power belt. If I wanted to continue to make progress, I had to get stronger and I had to get smarter, much smarter. I started all over. First I used the pendulum wave in 3-week cycles, going from training a heavy and a light day, to a max effort day, working to a max single depending on my level of preparedness. A severe workout can be done every 72 hours, and the second day is devoted to the development of special strengths. It could be explosive strength, commonly known as the dynamic method.

The Westside conjugate system is the best of two advanced training systems: the Soviet system, where several special exercises are used to advance the training of superior lifters and athletes, and the Bulgarian system, where near-max lifts are performed every workout. The Westside system is a combination of the two.

Science has proven that training at a 90% or above for 3 weeks will cause physical and mental fatigue. With the Westside conjugate method we switch a core barbell exercise each week to avoid accommodation. The wide variety of special exercises will perfect form. The similarities of the Westside conjugate system to the one devised by the Soviets at the Dynamo Club are obvious. The only difference is the exercises: one system for Olympic lifting and of course the other for powerlifting. What I took from the Soviets was the sequence of wave loading. A. S. Prilepin was instrumental in regulating the number of repetitions and sets at a particular intensity zone. This truly enlightened me about the importance of calculating volume at each intensity zone and why it is a waste of time to do too many reps at a given intensity zone. Men such as Verkhoshansky, Bondarchuk, Matveyev, Vorobyev, and many more helped lead the way.

Westside pendulum wave cycles last 3 weeks for speed and explosive strength and 2 weeks for strength speed work and utilize several special bars with which to establish different maxes. But because the reps and sets should remain the same at a given percent, the bar speed at this percent will remain the same. The volume will be different each week due to the difference between bar maxes. Your front squat max will be different from your safety squat bar max, and of course both will be different from your max squat. This is to avoid accommodation, which in this case is the constant overuse of the same loading patterns. The Soviets and Westside count only all-time records, which amounts to roughly 600 lifts a year, similar to contest max lifts. The Bulgarian system mandated that the current training maxes were

based on that particular day's strength, equaling about 4000 lifts a year. They were not based on a certain percent. This was determined by Coach Abadie's experiments. They used only six lifts: front squat, back squat, power clean, power snatch, clean and jerk, and snatch. One had to be well chosen for such a rigorous regiment of training. Westside's system is to max out on this day according to your level of preparedness. This means that a Westside max effort is the most one is capable of that day. It may not be an all-time record, but it is the most you are capable of on that day, week after week. This is just like the Bulgarian training with the exception of the number of lifts. They would follow this system 6 days a week. Six maximum lifts were done in the morning. After a 30-minute rest 6 more maxes on pulling exercises plus 6 max squats, front or back. This was repeated in the afternoon and evening.

Westside uses two max effort days a week, one for the squat and deadlift and one for benching; 72 hours separate a speed workout and max effort day for the same lift. Three lifts at 90% and above are advised. This is more practical for powerlifting, on the basis of using this max effort system for the last 26 years.

A lot of hours and work have gone into perfecting the Westside system. It has more variety, volume, reps, and intensity zones as well as exercises that literally number in the hundreds. It has been a 40-year odyssey of pain, work, and experimentation. Look at our Web site and compare our lifts to those of other gyms: 89 Elites, 14 who squat over 1000 and 4 over 1100; 30 who bench over 700 pounds and 4 over 800 pounds; 15 who deadlift over 800 pounds and 6 over 2500 pounds; 4 with a total over 2600 and 1 with a 2700-pound total. In addition, I have made a U.S.P.F. Elite total throughout the time period from February 1973 to December 2009, this last time at 62 years old.

I hope this explains how the Westside conjugate system was created. I found the right way to train by observing the smart and resourceful lifters who succeeded compared to those who set their own plan and failed and withdrew from Westside.

*Louie Simmons*

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## Using The Conjugate Method

Westside has always used the conjugate method. I realized I could only squat, bench, or deadlift so much by doing only those three lifts. I was using several pin levels, different box heights, and many forms of benching such as board pressing and floor pressing in the early 1970s. I found out early on that after 3 weeks of doing the same lift I regressed. That's how the 3-week pendulum wave became a constant fixture at Westside.

Westside max effort day is designed with the best of three systems. The Bulgarian max effort day is distinguished by lifting as heavy a weight as possible on that day. Their max effort day may not be the most ever lifted, but rather the heaviest weight possible on that day. They would concentrate on just a few lifts after mastering technique in the classical lifts. They were, remember, model athletes, built for their sport.

The former Soviet Union claims to have invented the conjugate method at a club known as the Dynamo Club. They had 70 highly ranked lifters and used 25 to 40 special exercises to complement the Olympic lifts. A study of this system showed that only one lifter was satisfied and the rest wanted more exercises to choose from. Many times they would do the heavy effort method. This means weight over 90% but not an ultimate record. This develops a higher total volume but less than 100% intensity. They would push the number of classic lifts near contest time and decrease special exercises.

[Westside's conjugate method](#) follows the Bulgarian system of maxing out on each max effort day. We want a new all-time record, not even 90% or 97½%, but something we have never done. Like the Soviet system, we use a multitude of special exercise during the weekly or monthly plan. Each week we use different exercises to max out on. We can train at 100%+ each week, year in and year out. Do you want

to lift 1% under your best or 1% over your best? I feel this is superior to all other systems. It trains a lifter mentally, psychologically, and physically. In our training we are used to breaking new records each week, making it easy at contest time.

Here are some examples of max effort workouts for the squat and deadlift.

1. Light front squat for warm up; rack pulls with one pin for max single; 3 to 6 sets of glute/ham raises; 3 to 6 sets of low pulley 8 to 12 reps; 3 to 6 sets of [Reverse Hyper](#) machine; 8 to 12 reps of abs while standing up, as heavy as possible.
2. 6 trips of sled pulls 60 yards with 2 to 4 45-pound plates; Safety Squat bar to max single on 12-inch high box; 3 sets of pull-through, high reps; 3 to 6 sets of chest-supported rows; 3 to 6 sets of [Reverse Hyper](#) machine, 8 to 12 reps; 3 to 6 sets of abs lying on a 6-inch roller.
3. 3 sets of hanging leg raises as warm up; rack pulls with 350 pounds of band tension for max single; 3 to 6 sets of heavy shrugs, dumbbell or barbell; 3 to 6 sets of heavy [Reverse Hyper](#) machine; sled pulls, 8 trips of 60 yards with moderate weight; 3 sets of straight-leg sit-ups.
4. Concentric good morning max 3 reps; 6 to 8 sets of belt squats heavy; 6 to 8 sets of dumbbell row; 3 sets of 45-degree back raise; 3 to 6 sets of [Reverse Hypers](#); 3 to 6 sets of leg lifts with ankle weights.
5. Box deadlift on 4-inch box max single; front squat, work up to 6-rep max; pull-through 4 sets; Ukrainian deadlifts 2 sets of 20 reps; low-pulley rows 3 to 6 sets heavy; 6 to 8 reps of 3 to 6 sets of [Reverse Hyper](#) machine, heavy; straight-leg sit-ups with weights.
6. 14-inch cambered bar off of a low foam box, 10 sets heavy; 4 to 6 45-pound plates sled pulls 60 yards; 4 sets of chest-supported rows heavy; 3 to 6 sets [Reverse Hyper](#) machine heavy; 6-inch foam roller sit-ups heavy.
7. Max deadlift on floor with 280 pounds of band tension; 3 to 6 sets of belt squat heavy; barbell rows, 4 sets of 6 reps heavy; 4 to 6 sets of low-pulley rows heavy; 3 to 6 sets of [Reverse Hyper](#) machine heavy; 3 to 6 sets of heavy straight leg sit-ups.
8. Zercher lift off of the floor to max single; 6 sets of sled pulls 4 to 6 45-pound plates; 3 sets of heavy dumbbell shrugs; 3 to 6 sets of chest-supported rows heavy; 3 to 6 sets of [Reverse Hyper](#) machine heavy; 3 to 6 sets of hanging leg raise with weight; walk ½ mile with 10-pound ankle weight and 50-pound weight vest.
9. Safety squat bar with 300 to 450 pounds of band tension max single; 45-degree hyper for 6 sets heavy for 6 reps; 3 to 6 sets of low-pulley rows heavy; 3 to 6 sets of dumbbell rows heavy high reps; 3 to 6 sets of [Reverse Hyper](#) machine heavy; 3 to 6 sets of straight-leg sit-ups heavy; walk with wheel barrow heavy

for ½ mile.

10. Floor deadlifts plus 370 pounds of band tension for a max single; 2 sets of 20 reps Ukrainian deadlift; 6 sets for 60 yards sled pulls using 5 45-pound plates; 6 sets of dumbbell rows heavy 8 to 10 reps; 3 to 6 sets of [Reverse Hyper](#) machine heavy; 3 to 6 sets of 6-inch foam roller sit-ups heavy; 1 mile walk with 10-pound ankle weights.

11. Low box squat on foam; 14-inch cambered bar to max; speed pulls 60% plus 220 pounds of band tension 8 singles; 45-degree back raise; 3 to 6 sets heavy plyo swing; 5 sets of 6 reps jumps; barbell rows 6 sets heavy; 3 to 6 sets of [Reverse Hyper](#) machine heavy; hanging leg raises with weight for 6 sets.

12. Buffalo bar and good mornings for 5 sets of 5/8-inch chains to max 3 reps; 3 to 6 sets of glute/ham raises; 6 trips of sled pulls 60 yards; 5 45-pound plates dumbbells shrugs 3 to 6 sets of 10 reps; straight leg sit-ups 6 to 10 reps.

13. Rack pulls with plates 6 inches off floor max; low-pulley rows 3 to 6 sets heavy; wheel barrow walk heavy 10 trips for 60 yards; [Reverse Hyper](#) machine 3 to 6 sets heavy; 6-inch foam roller sit-ups heavy.

14. Box deadlift on 4-inch box max single; chest-supported rows 3 to 6 sets; 3 sets of Ukrainian deadlift 20 heavy reps; 3 to 6 sets of glute/ham raise heavy; 3 to 6 sets of Reverse Hyper machine heavy; 3 to 6 sets of hanging leg raises touching toes to bar.

15. Heavy sled pulls 4 to 6 45-pound plates for 10 trips; front squat light for 6 sets on low box; low-pulley rows for 6 sets heavy; 3 to 6 sets of [Reverse Hyper](#) machine heavy; straight-leg sit-ups for 6 sets heavy.

These workouts can be arranged in any way you want. After the core exercise is done for a max single the selection of small exercises can also be mix and matched any way you want. The most advanced lifters should do 2 max effort and 1 squat workout or 1 squat and 2 max effort workouts. Remember that you have to back down on the fourth day. Friday is squat day, and max effort day is on Monday. Every 72 hours a high-volume or high-intensity workout can be done on either the bench training or the squat/deadlift training day.

During the bench max effort day the volume must change from large to small, from dynamic effort on Sunday to max effort on Wednesday. A 500 bench lifter would do about 200 pounds plus mini bands for 10 sets. This is 6,000 pounds with low intensity or low percentage.

On max effort day, if you have a 500 floor press, you start at only 70% to calculate the weights. A lesser percent won't contribute to max strength. A workout would look like this:

Warm up to 315 for reps. Now add:

365×1

405×1  
435×1  
470×1  
485×1  
505×1 (personal record)

This is 2665 pounds.

The Olympic lifting rule of 60% is that one workout should be 60% volume of the most recent workout for the same muscle groups. In powerlifting the rule is 30% give or take 5%. Why? Powerlifting commonly jumps 50 or 90 pounds per set. Olympic lifters jump 11 or 22 pounds per set. This rule of 30 is true for benching or squatting workouts.

Let's look at some max effort workouts for the bench.

1. Rack lockouts to max single; 2 sets of moderate dumbbell press flat; 6 to 8 sets of dumbbell triceps extension roll backs; 6 to 8 sets of chest-supported rows; 8 sets side and rear delt raise; hammer curl 3 to 4 sets.
2. Floor press plus 200 pounds of chain, singles; 5 sets of low-pulley rows; 3 sets of dumbbell power cleans for 20 reps; 6 to 8 sets rear and side delts; hammer curls.
3. Incline press to max single; light weight for 15 reps close and wide; dumbbell rows 6 to 8 reps sets heavy; face pulls high reps 2 sets; 6 sets straight bar triceps extension; hammer curls.
4. 2-board press raw max single; 3 to 6 sets of dumbbell extensions with elbows out to side; 6 sets of lat pull-downs; dumbbell power cleans for 20 reps for 2 sets; hammer curls.
5. Max bench with mini-bands; J.M. press 4 to 6 sets for 3 to 5 reps; 2 sets of dumbbell incline; low-pulley rows 4 to 8 sets heavy; rear and side delt raises; hammer curls.
6. Decline press to max single; incline dumbbell press for 5 sets heavy; dumbbell roll back extensions 8 sets of 8 reps; lat pull-downs for 6 sets; face pulls for 4 sets; hammer curls.
7. 2-board light band press max; drop down with close grip for max 5 reps; 2 sets of seated press 10 to 15 reps; elbows out dumbbell extensions; 6 sets of push downs; 6 sets of 15 reps of dumbbell power cleans; 2 sets of 15 reps hammer curls.
8. Foam press to max single; 6 sets of dumbbell flat bench 10 to 15 reps; low-pulley rows 6 sets; dumbbell rows 6 sets; superset dumbbell roll back with light push-down; hammer curls.

9. Floor press with monster minis to max; kettlebell press 6 sets of 10 to 15 rep max; dumbbell extensions with elbows out 8 sets of 8 reps; barbell rows 6 sets of wide grip; hammer curls.

10. Pick a dumbbell 100, 125, or 150 pounds for a 3 set max rep, no less than 10 reps per set; lat pull-downs 8 sets; face pull 3 sets dumbbell power clean; 2 sets of 15 reps hammer curls.

11. Future band press to max single; 2 sets of decline press with close grip and light weight for 20 reps; upright rows for 6 sets; hammer curls.

12. 4-board press to max 3 reps; J.M. press, work up to max 3 reps; superset with light push-downs 15 reps; dumbbell power cleans 2 sets of 15 reps; low-pulley rows for 6 sets heavy; hammer curls.

Three other max effort workouts will be with a bench shirt. Use a shirt about every 3 or 4 weeks. Last shirt workout is 3 weeks away from meet day. This comes to 15 max effort workouts to rotate in any system you want. You must after time make your own programs. No two people are totally alike, so some workouts will work better for one lifter than they do for another.

All the exercises I have discussed are similar to the classical lifts—squat, bench press, and deadlift—and will contribute to success in the contest lifts.

The Westside system makes it possible to lift a max each week all year long. I know of no other system that can do this. The Monday and Wednesday max effort days make one very strong. The speed days of Friday and Sunday make one very explosive, and all workouts with high volume make one very big through special exercises. This also helps you to perfect form by shoring up your weaknesses. What more can you ask for?

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