# The Westside System of Powerlifting: Applications for Athletes

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## The Westside System of Powerlifting

- Created by Louie Simmons
- Constantly being refined
  - Updated by Simmons and his disciples
  - Adapted by strength coaches
- Conjugated Periodization avoids some flaws of traditional periodization schemes
- Train it all together!



Source: www.t-mag.com

### Westside Principles

#### The Maximal Effort Method

- Builds strength speed and absolute strength
- Improves neuromuscular coordination by increasing motor unit recruitment, rate coding, and motor unit synchronization

#### The Dynamic Effort Method

- Builds explosiveness (ability to achieve maximum force ASAP after a muscular stretch), rate of force development, and speed strength (50-60% 1RM)
- Lifting submaximal weights at highest possible speed

#### The Repetition Method

- Promotes strength endurance and hypertrophy, strengthens neural/muscular deficiencies, and increases work capacity
- Lifting a non-maximal load to failure or near-failure

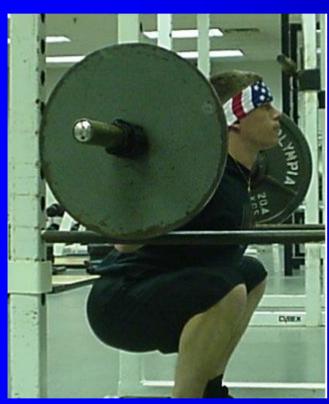
#### Westside Principles: Sample Split

- Monday: Max Effort Squat/Deadlift Day
- Wednesday: Max Effort Bench Day
- Friday: Dynamic Effort Squat/Deadlift Day
- Saturday: Dynamic Effort Bench Day
- \*Other variations (e.g. MWF) have also been implemented successfully. The split is also influenced by prioritization of weaknesses.

## A Typical Max Effort Squat/Deadlift Day

- 1) One Max Effort Exercise: Good Mornings (~70%), Low Box squat (~20%), Deadlift (~10%). Work up to 3RM, and then a 1RM. Exercise choice is governed by lifter's weakness.
- 2) Supplemental Exercise for the Posterior Chain: GHRs, SLDLs, RDLs, Pull-throughs (6-20 reps)
- 3) Accessory #1 Posterior Chain: Reverse Hypers, Hyperextensions (6-20 reps)
- 4) Accessory #2 Core: Pulldown Abs, Straight Leg Raises, Weighted Side Bends, Weighted Decline Situps (6-20 reps)

### Max Effort Squat/Deadlift Exercises





Source: www.bsu.edu/webapps/strengthlab/Home.htm

### A Typical Max Effort Bench Day

- 1) One Max Effort Exercise: Bench Press, Board (1-5) Press, Floor Press, Close Grip Bench Press, Incline Press, High Rep Stability Ball DB Presses (every 10 weeks). Work up to 3RM, and then a 1RM.
- 2) Supplemental Triceps Exercise: Lying Extension and Press variations (6-20 reps)
- 3) Accessory #1 Back: Rows emphasized, although vertical pulling is utilized occasionally (6-20 reps)
- 4) Accessory #2 Shoulders or Extra Triceps: Presses and raises, extensions and presses, respectively (6-20 reps)

## A Typical Dynamic Effort Squat/Deadlift Day

- 1) Box Squats: 8-12 sets x 2 reps at 50-60% 1RM as fast as possible, 45-60 seconds between sets
- 2) Supplemental Exercise for the Posterior Chain: GHRs, SLDLs, RDLs, Pull-throughs (3-20 reps)
- 3) Accessory #1 Posterior Chain: Reverse Hypers, Hyperextensions (6-20 reps)
- 4) Accessory #2 Core: Pulldown Abs, Straight Leg Raises, Weighted Side Bends, Weighted Decline Situps (6-20 reps)

### Max Effort Bench Exercises





Source: www.bsu.edu/webapps/strengthlab/Home.htm

### A Typical Dynamic Effort Bench Day

- 1) Speed Bench, three separate grips: 8-10 sets x 3 reps at 50-60% 1RM as fast as possible, 45-60 seconds between sets
- 2) Supplemental Triceps Exercise: Lying Extension and Press variations (3-20 reps)
- 3) Accessory #1 Back: Rows emphasized, although vertical pulling is utilized occasionally (6-20 reps)
- 4) Accessory #2 Shoulders or Extra Triceps: Presses and raises, extensions and presses, respectively (6-20 reps)

#### Important Notes

- The max effort exercises should be changed every 1-3 weeks (more often for experienced lifters). Training at 90% 1RM or more for 3+ weeks with the same exercise is associated with stagnation; switching exercises enables one to continue training at 100% and above 1RM without burnout.
- Accessory exercises are changed every 2-3 weeks.
- Some individuals perform more exercises with fewer sets of each on assistance exercises.
- Some individuals train back with lower body sessions, and some split back training into horizontal and vertical pushing and pulling (train back 4x/week).

#### Extra Workouts

- May be actual training sessions aimed at bringing up weaknesses (not full sessions) performed on off-days or several hours after a ME or DE session.
- May be General Physical Preparedness (GPP): sled dragging, strongman implements, tubing/light weight exercises specific to lifts and involved joints, Javorek complexes, body weight circuits of short duration

#### Westside GPP

#### GPP training has many functions:

- 1) fostering, strengthening or restoring habits (skills) that play a role in sports performance
- 2) Increasing or preserving the general work capacity or preserving it
- 3) Assisting the restoration process (active rest)
- 4) Reducing the likelihood of injury
- 5) Preventing the onset of monotony in training
- As an athlete's GPP improves, so too does his/her ability to adapt to new training stimuli and sport demands. From a powerlifting standpoint, GPP is important because one must be conditioned physically and mentally to perform nine maximal lifts in a period of 6-9 hours.

### Important Notes

- The beauty of Westside is its versatility as a template; exercise selection and loading parameters on supplemental and accessory exercises are dictated by the individual's weaknesses and access to equipment.
- May include lunges, cleans, pullups/pulldowns, single-leg squats, etc.
- Scapular Stability/Rotator Cuff work can be incorporated at the end of both benching sessions.
   Some individuals perform specific grip and neck training as well.

### Important Notes

- Volume Manipulation is not as black and white as in traditional periodization schemes.
- A lifter's attention to recovery, GPP, and overall work capacity dictates frequency of down weeks.
- Typical beginner programs have been designed in 9-week mesocycles consisting of 3-week microcycles. Week 9 serves as testing only (or competition). These results are used as the basis for the next mesocycle.

#### Accommodating Resistances

- Bands and Chains
- Can be used on both max and dynamic effort exercises
- Useful for a variety of assistance exercises, too
- Goals
  - On dynamic effort days, maintain original weight (50-60% 1RM),
     which is required to yield explosive training benefits
  - Overload the top portion of the lift (undertrained due to increased body leverage at this position)
  - Foster a neurological explosive strength pattern that doesn't allow one to "get lazy" at the top.
  - Learning to "outrun the bands" teaches you to develop the fast start needed to lock out a heavier weight.
  - Effectively train the start and lockout simultaneously

### Can Westside be used with athletes?

"The other day I got off the phone with a friend of mine who coaches college football. I told him that I had recently consulted with Dave Tate about applying the Westside principles for a college football player. He asked if these ideas were applicable for athletes, since Westside is a powerlifting gym. I responded by asking him what was wrong with having explosive athletes with a strong posterior chain, setting and breaking records every week, keeping a high intensity level in the gym and competition amongst players."

-Jim Wendler www.elitefts.com

Overwhelming emphasis on posterior chain





Source: www.bsu.edu/webapps/strengthlab/Home.htm

- A 1-3 RM is attempted nearly every week for both the upper and lower body
  - Provides strength coach with constant feedback on athletes' progress
  - Provides athletes with proof that hard work is paying off
  - Appropriate cycling of max effort exercises decreases likelihood of failure
  - Serves as a means of testing within each week
  - Avoids having to always put limit strength behind power – establishes static-spring proficiency

- Utilization of accomodating resistances teaches athletes to not get lazy in easiest portions of ROM
- Pays specific attention to commonly neglected muscle groups
  - Importance of back in bench press
  - Grip work (direct and indirect)
  - Major emphasis on core, triceps, hamstrings, scapular stabilizers

- Avoids traditional pitfalls of linear periodization by addressing all types of strength in the same training period
  - Absolute Strength
  - Strength Endurance
  - Speed-Strength
  - Explosive Strength
  - Accelerating Strength

#### The Types of Strength

Explosive Strength: ability to achieve maximal force as quickly as possible, usually after a pre-stretch

Speed-strength: ability to execute a movement quickly against little or no external resistance - most important with lighter loads

Starting-strength: ability to develop force at beginning of contraction before external movement occurs

Accelerating Strength: ability to accumulate working force once contraction has begun

### The Types of Strength

Four components of explosive strength:

- Absolute strength
- Acceleration-strength
- Starting-strength
- Absolute speed
- Former two contribute most with larger external resistances; the latter two contribute more with smaller external resistances.
- These components do NOT work independently of one another; starting-strength is a crucial forerunner to acceleration strength.

- Integrate O-lifts with box squats and speed pulls as dynamic effort exercises for lower body
- Integrate Push Jerks, Push Presses, Hang Snatches, Overspeed Chins, and Medicine Ball throws with dynamic effort bench pressing



Source: www.bsu.edu/webapps/strengthlab/Home.htm

- Substitute max effort exercises that are specific to the sport (e.g. weighted chins for tennis, baseball, volleyball)
- Include traditional "quadsquatting" to ensure optimal knee extensor contributions
- Incorporate deepersquats/lunges to work often-neglected VMO



Source: www.bsu.edu/webapps/strengthlab/Home.htm

- Traditional Westside GPP and extra workouts are replaced by:
  - Sport-specific practices
  - Agility work
  - Conditioning
  - Subsystems (may also be included in GPP-like warm-ups)

- Include single leg/split stance exercise in each lower body session
  - May be performed as an O-lift variation or assistance exercise, but MUST ensure significant loading (e.g. lateral movements that compromise weight are better placed in GPP sessions)
- Ensure appropriate
   balance of horizontal and
   vertical pushing and
   pulling exercises



Source: www.bsu.edu/webapps/strengthlab/Home.htm

- Some younger athletes especially those for whom hypertrophy is a foremost goal may be better off with a repetition day instead of a dynamic effort day. This is especially important if they are not strong enough to train with considerable resistance on their dynamic effort days.
- During the competitive season or periods when outside conditioning (e.g. sprinting) volume is quite high, it may be appropriate to eliminate the dynamic effort lower body session altogether.
- In essence, the speed demands of participation in the sport are allowed to take care of themselves in these situations.

#### Potential Problems

- Inattentiveness of strength coach in manipulating volume and monitoring progress (coach must recognize when sessions should be missed or volume/intensity should remain unchanged)
- Lack of athlete motivation
- Poor exercise economy
- Missed Training Sessions
- Too much, too soon (a base level of fitness especially core stability must precede a Westside-influenced program)

#### References & Further Reading

- www.elitefts.com
- www.deepsquatter.com
- www.defrancostraining.com
- www.t-mag.com
- The Coach's Strength Training Playbook, by Joe Kenn
- Supertraining, by Mel Siff and Yuri Verkoshansky
- The Science and Practice of Strength Training, by Vladimir Zatsiorsky

#### A Final Note

A special thanks goes out to the Mike Robertson, Dr. Robert Newton, and the rest of the members of the Ball State University Human Performance Laboratory for providing all the photos for this presentation.

www.bsu.edu/webapps/strengthlab/Home.htm

#### About the Presenter

Eric Cressey, CSCS, assistant editor of Rugged Magazine (www.ruggedmag.com), is currently pursuing a Master's Degree in Kinesiology with a concentration in Exercise Science at the University of Connecticut. He graduated from the University of New England with a double major in Exercise Science and Sports and Fitness Management. Although prepared in a variety of bodies of knowledge, Eric specializes in applied kinesiology and biomechanics as they relate to program design and injury rehabilitation. As a freelance writer, Eric has had over two dozen publications among Rugged Magazine, Testosterone Magazine, johnberardi.com. A competitive powerlifter, Eric has experience in athletic performance, rehabilitation, and general conditioning settings with a variety of populations. He's also one hell of a nice guy, so feel free to contact him at eric\_cressey@ruggedmag.com!