

the **CrossFit** JOURNAL ARTICLES

A Soldier's Perspective on Functional Fitness

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0230, Somewhere in Iraq, 2004:

Lost some empty mags reloading during the ambush on the drive down here. Fuck it, that's why I brought extra. Jesus, I can't believe no one got hit. Where were they set up on us? Figure it out later. Dismount, dismount (on foot). How close are we to the house? Get the ladders (8 feet of nailed 2x4s) off the trucks (humvees) and start movin'. (It was supposed to be one block; bad roads made it four). Focus your NVGs, laser the shadows...looks clear. Scanning, scanning, scanning. Where's this goddamn house? The whole neighborhood can hear the trucks; we can't be in the open like this for long. That's the gate from the intel package. This is it. Send comms to the head shed. They didn't hear you, catch your breath. Send it again but don't talk so loud. Find a good spot and get the ladders on the wall, get over. Lawn furniture everywhere, get around it somehow, easy does it. Walking on the wall, keep an eye out for IEDs (improvised explosive devices)—this asshole might be expecting us. Jump down (7 feet). Be quiet but don't be slow. Do we have our fireteam? Check! Find a place for the breach. 14 feet, safe blast distance, right... here. Looks good. Tell the head shed we're set... Roger. Tango sierra...

BOOM! (Doors fly off hinges, windows blow out, room fills with smoke). Squat, sprint, push, run, press, throw, climb, step up, lift, heave, swing, jump, wrestle, assess, get these kids out of my fucking way, assess. How many reps? WHATEVER IT TAKES! How much longer? AS LONG AS YOU HAVE TO! Top of the third deck, get on the radio and let everyone know you're going on the roof. Who do I have

with me? NO ONE! No time, get the crash (diversionary device) out and get some! Left, right, behind obstacle. Clear. Target secure; now get off the roof. We've found NVGs on target before and snipers are everywhere. The HVT (high-value target) was on the second deck with another IED maker. Damn right he's coming with us! Carry 'em like a sack of potatoes and move these shitbags downstairs. Pull our truck around front and put 'em in back. Locals are starting to figure out what's up so finish searching the place, mount up, and let's bolt.

Combat Demands

Conducting military missions overseas requires a physical adaptation that is nearly impossible to duplicate in training. The realm in which we work is not for the specialist. Operationally as well as physically, those who focus on one domain will be punished while executing their mission. "Specialize in not specializing" is a phrase I heard at work long before there was a CrossFit Workout of the Day. The principles of variation, intensity, and functionality will prepare a soldier for what he/ she encounters overseas (i.e., anything!).

The March 2003 issue of the CrossFit Journal addresses the physical training (PT) regimens of military units: Combat offers randomized challenges that are largely anaerobic (short in duration), completely functional, totally random, and mixed generously between lower extremities, trunk/core, and upper extremities. Any physical conditioning program that doesn't readily match and train for this environment is woefully lacking. Coach Glassman suggests that most units have programs that:

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Functional Fitness (continued...)

- are too predictable and lack functionality for their trade
- lack movements requiring a coordinated effort from the entire body and produce a neuroendocrine response
- distinguish between modalities of training in a manner that will not be seen in the field
- do not incorporate functional movements done at high intensity.

The first rule of war is if you want to win, you have to kill as many of the enemy as possible. Period. The more physical assets you have to do that in any environment, under any conditions, the better. CrossFit's unique combination of Olympic lifting, basic gymnastics, and functional movements performed at high intensity with constant variation will greatly enhance a soldier's ability to do that.

Olympic Lifting

Arthur Drecshler's Weightlifting Encyclopedia states the benefits of Olympic lifting that are not available to lifters using machines. When learning and practicing the Olympic lifts, an individual will learn to:

- explode
- apply force with multiple muscle groups in the proper sequences
- accelerate objects under varying degrees of resistance
- become conditioned to accept forces from another moving body effectively.

Manually breaching doors and walls, jumping, swinging, running through or over obstacles and combatants, and heaving objects are physical skills used in combat that will be enhanced through Olympic lifting. The ability to go instantly from zero to everything you can muster can be the difference between cleansing the earth of a few more terrorists and paying the ultimate price.

Olympic lifting develops all ten physical skills present in an effective PT regimen (cardio-respiratory endurance, stamina, strength, flexibility, power, speed, coordination, agility, balance, and accuracy [CrossFit Journal, October 2002]). Research has shown that Olympic weightlifters have less than half the injury rate per 100 hours of training of those who engage in other forms of weight training: 17% vs. 35%. (Hamill, B. "Relative Safety of Weightlifting and Weight Training." Journal of Strength and Conditioning Research, 8(1):53-57. 1994). One does not have to go with heavy weight in order to reap the benefits of Olympic lifting.

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Too many operators who have endured several cycles of predeployment training followed by an operational tour overseas have hip, shoulder, knee, or back problems. A poorly developed posterior chain and a lack of conditioning to a dynamic tempo of operations contribute to injury. Retired Olympic weightlifters have lower lifetime incidence and prevalence of low back pain than a control group of

normal active men of similar age: 23% vs. 31%. (Granhed, H., et al. "Low back pain among retired wrestlers and heavyweight lifters." American Journal of Sports Medicine, 16(5):530-33. 1988).

Gymnastics

Pound for pound, gymnasts are the strongest people on the planet. They are able to manipulate and control their bodies in seemingly impossible positions. Anyone who wants to increase strength in all ranges of motion should incorporate basic gymnastic movements in their training. A soldier cannot negotiate an 8-foot wall or get into and out of the prone position with their weapon without bending their elbows or knees at least 90 degrees. Injury prevention and great strength in these positions can be accomplished with basic gymnastics. Handstands, calisthenics on gymnastic rings (push-up, dip, pull-up, L-sit), and handstand pushups are essential to developing strength, coordination, flexibility, balance, and body control.

Functional Fitness (continued...)

High Intensity and Constant Variation

Complete focus is required from a platoon/task element/task unit when in theater and during the training cycle (often up to a year long) before deployment. We perform missions in Direct Action, Special Reconnaissance, Combat Swimmer, High-Risk Mobile Security, Visit Board Search and Seizure (VBSS), Close Quarter Battle (CQB), Military Operations in Urban Terrain (MOUT), Combat Search and Rescue (CSAR), and any other mission that is assigned to us by the theater commander. We must be able to rise to whatever occasion we find ourselves faced with.

Functional Movements

While conducting operations in Iraq, we performed a number of movements that could be mimicked in most weight rooms:

- Lifting heavy objects/people off the ground (deadlift, cleans)
- Pressing heavy objects overhead/over a wall (clean and jerk/ push press)
- Standing up/sitting down while bearing weight (squat)
- Pulling oneself up over a railing, a wall, in a window (basic gymnastics, kipping pull-up, muscle-up)
- Stepping up with weight (box jumps, lunge)
- Jumping (learning hip and knee extension/explosion with cleans, snatches, lunges)
- Throwing or propelling weight (jerks, snatches, wall ball, thruster, explosive hip movement)
- Digging and carrying awkward shaped objects for unknown time and distance (strong posterior chain)
- Sprinting in 40-60 lbs of gear (explosiveness, strong posterior chain)
- Wrestling/subduing enemy combatants on stairs, a hillside, or in enclosed spaces (explosive power, posterior chain)
- Swinging sledgehammers/Hooley tools for breaching (explosive power and hip movement)
- Crawling in 40-60 lbs of gear (flexibility, range of motion in all joints)

- Walking on tops of exterior walls, negotiating rooftops, jumping down on unstable terrain (agility, accuracy, balance)

CrossFit by definition is a strength and conditioning system built on constantly varied, if not randomized, functional movements executed at high intensity. The above list consists wholly of varied or random, highintensity, functional movements! The length and duration for which they were performed depended on how fast, how long, how continually we could perform them. We had only our strength, ingenuity, and abilities. We were called on to execute during all hours of the day and night and at all levels of readiness (sleeping, away from compound, during a workout, before/after a meal). We were gone from 2 to 48 hours and there were people hell bent on killing us during these efforts. No one knew more than 24 hours in advance what our next objective would be. Combat, Coach Glassman knows, “requires an ability to perform well at all tasks, even unfamiliar tasks, tasks combined in infinitely varying combinations. In practice this encourages the athlete [soldier] to disinvest in any set notions of sets, rest periods, reps, exercises, order of exercises, routines, periodization, etc.” (CrossFit Journal, October 2002).

“Push-ups, pull-ups, and flutter kicks are essential but should be mixed with functional weight lifting and Olympic lifts. Long swims, ruck marches, and runs must be generously augmented with sprints and intervals. Randomly mix these together and execute at full capacity. CrossFit’s Workout of the Day (WOD) is based on the principle that life provides largely unforeseeable challenges and you do not get to choose when to do them. The battlefield, like nature, will choose for you.”

