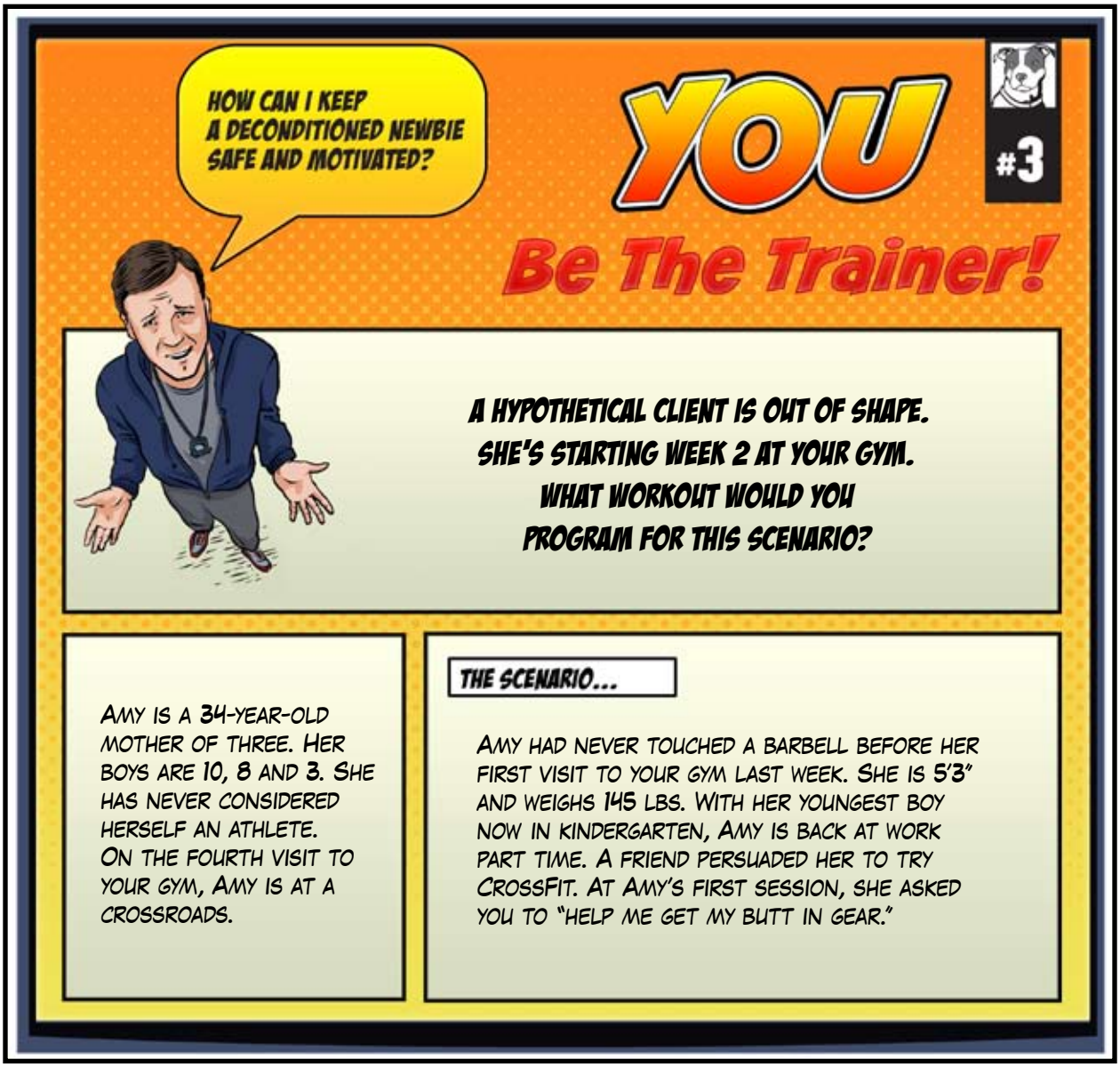
the CrossFit JOURNAL ARTICLES

August 2009

TITLE	AUTHOR
You Be The Trainer #3	Budding, et al.
The Dead Elk and the CrossFit Question	Eich
Inside Gym Jones	Berger
Anything for a T-Shirt	Deavers
One Hundred Miles of Trials	Skowron
Teamwork Gets Athletes to the Games	Orlando, Khalipa, O'Connor, and Burke
Coaches and Athletes: The Psychology of CrossFit	Shrago
How We Got Here: CrossFit vs. the Fitness Industry	Webster

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

the CrossFit JOURNAL ARTICLES



Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

THE DETAILS

Amy has no formal athletic background. Over the years, she has done some running and sporadic training at a Globo Gym.

Amy has a nice hybrid bicycle that she actually rode—once.

You require all new clients to do three private training sessions before joining group classes. You use these sessions to go over the nine basic movements from the Level 1 certs: squat, front squat, overhead squat, press, push press, push jerk, deadlift, sumo deadlift high pull and med-ball clean.

Amy got wobbly at the bottom of the squats. Otherwise, she moved well. Her regular jumps were good. But she got confused when trying to jump with PVC.

Amy did short workouts at the end of her three private sessions last week.

What the workouts were and how Amy did follow in the column at the right.

MONDAY

Max rounds in 5 minutes of:

3 knee push-ups

5 AbMat sit-ups

7 squats

Amy got six rounds.

WEDNESDAY

15-12-9 reps each of:

12 dumbbell push presses (12 lb.)

PVC front squats

Standing ring rows

Amy completed the workout in 8:14 but had to re-do nearly a dozen squats because she didn't go deep enough.

FRIDAY

Three rounds of:

20 deadlifts (22 lb. bar)

20 wall-ball shots (6 lb.)

Amy completed the workout in 6:26.

It was a close call, but you told Amy she was proficient enough to join regular group classes. You would have preferred Amy do a few more privates, but her budget doesn't allow it.

TODAY'S PROPOSED WORKOUT:

It is now Monday. Amy is in for her first group class. She reports that she was very sore over the weekend, particularly in her inner thighs and quads. It's a little better now, but she's still uncomfortable.

Amy says she had some pain in her neck after the sessions on Friday and on Saturday. You ask if she still has it. She hesitates, rolls her head around, and says, "Yeah. No, not really. I guess."

You ask if it could have been some soreness in her traps from going overhead. You touch her traps where they attach at the neck and she says, "Oh yeah, that's it."

The class of 10, mostly newer CrossFitters, is scheduled to do the medicine-ball clean sequence from the Level 1 Cert as a warm-up. After some work on kipping pull-ups, you were going to do skill work on kettlebell swings.

The scheduled class workout is four rounds for time of:

10 medicine-ball cleans

10 kettlebell swings

10 jumping pull-ups

10 burpees

You had planned to have Amy use an 8 lb. medicine ball and 12 kg kettlebell.

Do you stick with the plan?

As always, Tony Budding set the problem and gets the last word. Post your thoughts to comments now. Or continue reading to find out what three of our top trainers think. Do you agree them?

3-2-1... GO!

THE TRAINERS

CHRIS SPEALLER
CROSSFIT PARK CITY

MIRANDA OLDROYD
CROSSFIT 801

CHRIS SPEALLER
CROSSFIT PARK CITY

I like the proposed workout in general. But it's just going to be too much for Amy.

The soreness in Amy's inner thighs makes it apparent she is pretty deconditioned. The 60 wall-ball shots on Friday may have pushed her over the edge. On the positive side, Amy is becoming more aware of some muscles she may not have been using in the past.

Working on medicine-ball cleans is important. Even if Amy falls short of mastering the skill completely today, she is likely to feel better.

While the rest of the class is warming up, I would pull Amy aside for some squat therapy. It would be nothing too intense. I'd just have her crank out 10 good squats, then move on jumping pull-ups, pass-throughs and other mobility drills.

Instead of the class WOD, I would have Amy do:

Row 200 meters
8 pop and drops with a 6 lb. medicine ball
8 jumping pull-ups

Row 200 meters
6 pop and drops
6 jumping pull-ups

Row 200 meters
4 pop and drops
4 jumping pull-ups

Row 200 meters
2 pop and drops
2 jumping pull-ups

This is a tough call. It would be far easier to just see how Amy does on the class WOD. But Amy is new to CrossFit and hasn't worked out in a while. I don't want to scare her away. I don't want her thinking CrossFit is "too tough" for her.

The higher rep ranges and squatting/overhead work seemed to take a toll on Amy. I'm learning what kind of capacity she has and adjusting accordingly.

The squat is the cornerstone of much that we do, so we have to work on it. The 10 reps in the warm-up won't wear Amy out before the WOD. Let's lay off the inner thighs by not doing medicine-ball cleans, kettlebell swings and burpees.

The Concept2 rower is a great way to warm Amy up and take most of her joints through a range of motion. The pop and drop is a portion from the medicine-ball clean progression that I think will help with the "jump" issue in the long run. It also forces her to stay tight in the catch position, helping with squats. The idea is to kill two birds with one stone while giving Amy some much-needed encouragement.

The jumping pull-ups shouldn't create any additional soreness in Amy's traps because we are pulling instead of pushing. Amy can push hard on the rows because the other movements have only 20 reps each. But we can even adjust the length of the row if the need arises.

Post-workout, I would have Amy stretch out and foam-roll her sore spots.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

Miranda Oldroyd
CrossFit 801

There's nothing really wrong with the planned workout. But it may not be right for Amy.

Amy is a lot like many of my real clients. Most families in my state (Utah) have at least three kids. Many moms here work only part time or don't work at all.

Amy's inconsistent workout history and unused bike tell me she finds it difficult to stick to exercise programs. People like her often give up if things become "too hard" or "too painful." I don't want Amy's soreness to scare her away.

So far, Amy has done squats every day. This is fantastic because the bottom of the squat is a weakness. But it has also made her really sore and uncomfortable. Is Amy comfortable being uncomfortable yet? Probably not.

But I would modify the workout. Instead of the medicine-ball clean progression for the warm-up, I would go over the jerk progression with a light medicine ball or training bar.

I would have Amy do the kettlebell swing with the class and keep it in her workout because the depth is minimal. It's another opportunity to teach Amy midline stabilization and the importance of keeping her weight back on her heels.

I would dump the rest of the movements to give Amy's quads and adductors a break. I would add short runs to loosen up her legs. I'd top things off with strict presses to practice overhead movement without repeating the push press and without making the workout movements too complicated too quickly (which would be the case with the push jerk).

My workout would be four rounds for time of:

Run 250 meters

15 kettlebell swings
(12 kg if solid, otherwise lighter)

9 strict presses (25 lb.)

Amy is still in a preliminary phase. I want to be careful to do everything I can to promote regular attendance and consistency of movement.

I always try bear in mind individual capabilities, both physical and psychological.

Is Amy physically capable of doing the planned workout? Of course she is. Is she psychologically ready to be even more sore than she already is? Maybe not.

Mental toughness is often harder to achieve than physical toughness. We need to give Amy a chance to learn what she is made of. When people find that place, they start asking for stronger Kool-Aid!

Chuck Carswell
CrossFit HQ

In a real-world scenario, I would want to find out much more about Amy's weekend. What did she do and how did she feel? Everybody gets sore, especially in the beginning. Was it really severe for Amy?

Unfortunately, Amy isn't available for questioning because this is a fictitious scenario. So here are my notes and comments about what Amy did last week.

1. 60 wall-ball shots with a 6 lb. ball on Friday.
2. 60 deadlifts with a 22 lb. bar wrecked her legs for most of the weekend.
3. Squats in all three sessions last week.
4. Traps are tender to the touch today.
5. A lot of aggressive opening of the hip is scheduled for today. It's more of the same.
6. The overhead work today is a pull, instead of the pushes in Amy's last two workouts.
7. Burpees today? Yuck. They rate A+ in "suck factor" for the entire body.

I would carefully dose and monitor the warm-up. I would have Amy start with a 10 lb. kettlebell and swing it straight out in front of her face for 7-10 reps. If things went well, she could progress to heavier weight and full range of motion swings, again for 7-10 reps. We would rinse and repeat until we found a weight that Amy could handle with near-flawless technique and minimal trap discomfort.

I would not eliminate the medicine-ball review altogether, but my expectations would be limited. I would ask her to observe, but not perform, any shrugging motion today.

Assuming Amy moves relatively well through the warm-up, her workout would be four rounds for time of:

10 kettlebell swings
(scale down from 12 kg if necessary)

10 jumping pull-ups

Run 200 meters

In general, moving the hip and knee through a full range of motion is essential. But Amy is still sore from last week. So there will be no medicine-ball cleans or burpees in Amy's workout today. Both the swings and jumping pull-ups are full-range upper-body movements but have limited lower body movement. Both are great for Amy's sore lower-body.

Assuming she keeps her current schedule, Amy will be in the gym two more days this week. My plan would be to progress slowly, managing her soreness, mechanics and consistency as I move her closer to intensity.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

THE LAST WORD
TONY BUDDING, CROSSFIT HQ

Amy is a new client who is very deconditioned relative to most CrossFitters. She needs to take baby steps on all fronts.

Even the functional movements that CrossFit considers basic can be strenuous for previously inactive people. It's a key point that sometimes eludes new trainers, especially if they are good athletes themselves.

Amy has three kids, so she's hardly been sedentary. But the soreness she experienced from the workload of last week is all the evidence we need to know about what she can handle.

All three of our trainers recognized this and scaled the workout way back.

I found it interesting that they all added a monostructural met-con element—running or rowing—in the 200-meter range. It's a wise decision. Both the athlete and trainer can vary the intensity.

Miranda and Chuck wanted to limit Amy's range of motion in the hips and knees to minimize soreness. Speal wanted movements simplified but was willing to move Amy into the bottom of the squat again. The squat is certainly the most important movement in the arsenal. At the reduced volume, Amy should be fine.

Jumping pull-ups are generally not a wise choice in workouts for new clients. A correlation may exist between jumping pull-ups (especially with the negative stressed) and rhabdomyolisis. If they are used early in an athlete's regimen, the key is to limit the volume. Also, make sure the athlete doesn't slow down the negative; the lowering of the body should be at full speed until some capacity is developed. Taller boxes can be used so most of the work is being spread throughout the body.

Speal suggested 20 jumping pull-ups with a row and the pop-and-drop medicine-ball squats. Chuck suggested 40 jumping pull-ups with kettlebell swings and runs (kind of a mini-Helen). With the right size box and good management of Amy's intensity, these should both be very safe.

Possibly the most important piece that all three trainers mentioned is keeping Amy motivated. The psychology of training is immensely important. The sessions our trainers programmed will get Amy moving toward her goals with minimal frustration.

You can't get fit without discomfort and soreness. But if you induce too much soreness too soon, you're very likely to lose the client. That's a very real possibility given Amy's history.

Training is a relationship business. It's a long game. These top trainers addressed all sides of the issue. They set Amy on the best course for long-term success.

the CrossFit JOURNAL ARTICLES

The Dead Elk and the CrossFit Question

Paul (Apolloswabbie) Eich finds himself on top of a mountain wondering if his CrossFit training will pay off.

Paul Eich

Courtesy of Paul Eich

In retrospect, you might say it was all part of life's rich pageant. At the time, I was preoccupied by an immediate concern: how the hell would I move a 500-lb. elk carcass through the deep snow, down a mountain and into a vehicle before the sunset brought mountaintop cold, coyotes and perhaps mountain lions?

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

The Hunt Is On

It was January 2009. I was pursuing a boyhood dream of hunting elk and found myself testing CrossFit's claims to produce a general physical preparedness that lends itself well to unknown and unknowable challenges. It was Day 4 of a five-day elk-hunting trip. I was on snowshoes in almost two feet of fresh snow, 6,500 feet up a mountain in Utah.

My companion was family friend Ed Little. We had yet to harvest an elk, but I'd picked up useful skills, including the ability to spot and distinguish game through binoculars at ranges of over 800 yards. I was still an elk-hunting novice, but I was no longer dead weight.

And my CrossFit workouts had already paid off. Early on, I'd figured out that a Pose-style forefoot-weighted step was best for a good snowshoe stride. Forefoot weighting ensured I didn't sink back in the shoe, which was both awkward and dangerous to my bad knee. I had followed Brian MacKenzie's advice to "focus on the hamstring pull" and kept my feet under me with short, quick steps.

By Day 4, both Ed and I were feeling the effects of our snowshoe exertions, having covered a GPS-verified 10 miles. When we spotted elk a good two miles from the truck, Ed tried to shake out his sore hips and knees. Sixty-plus years of wear and tear were telling him "no go." Ed bowed out of the hunt. I was on my own.

As I made my way up the mountainside, I noted that CrossFit has fundamentally changed how I move. My previous climbing method included a forward lean of the torso, loading up the quads and extending what felt like my knee. That was much less efficient than a CrossFit-inspired vertical torso that enabled maximal glute and hamstring engagement to drive powerful hip extension. It sounds like a subtle change, but the effect was dramatic after a long climb. My training in functional movements was helping me use my body better.

I sneaked across the peak of the southern end of a ridge, moving toward the elk cows I had spotted earlier. It was then that I saw the head of a lone cow not 30 yards in front of me, crossing left to right. I chose not to take the moving shot and ran forward to try to get on the same side of the hill as the animal. I did, and she stopped running. I fired, but with overmuch haste. The cow ran off and out of sight.

Courtesy of Paul Eich

"Sixty-year-old mountain goat" Ed Little accompanied the author on his elk hunt/CrossFit workout.

Courtesy of Paul Eich

After spotting a herd making its way up a ridge, Eich had thoughts of adding elk meat to his diet.

I followed and saw the cow running up the next ridge, many hundreds of yards away. She ran directly up its face, blazing a trail through what I soon discovered was the steepest terrain I would hike. I searched for her tracks and followed them for over a half mile. It was slow going in deep, soft snow. I knew I wasn't going to catch up with the animal. I'd burned up a couple hours tracking, and I needed to take stock and find more elk.

That's when I saw the next herd working its way up the next ridge. The week's biggest lesson become clear: persistence is the key, especially for a novice.

Inventing a New WOD

This herd of elk, a dozen or so cows with a few bulls, was higher than I was. To get a shot, I had to close distance by moving up and over the crest of the ridge I was on. I arranged my gear to enable a long belly crawl. I covered 120 yards this way, stopping every so often to check my position relative to the elk. When the rangefinder told me they were only 325 yards away, I settled into the snow for the shot. My rifle was as steady as if shooting from a bench. When shooting at live game in the field, one can't help but be reminded of the Buddhist idea of "one perfect moment." The demands of the moment and the uncertainty in the outcome can produce a sublime experience. When done right, the "Boom!" comes as a bit of a surprise. My cow collapsed at the shot.

When I found the cow, I couldn't get over how beautiful the animal was, though it makes perfect evolutionary sense that a human would perceive the source of such dense, potent nutrition as "beautiful." I wished I had more time to soak it in, but I had a long drag ahead of me after field-dressing an animal that weighed approximately 500 pounds. And I only had three hours until sunset.

All of a sudden, the day began to feel like a CrossFit WOD: Dead Cow Drag.

I shucked a knife and taught myself how to field-dress an elk. Turns out it's not all that different than field-dressing a deer, except you get elbow-deep as opposed to wrist-deep. It was a new experience to field-dress an animal while managing the risk of having the animal slip down the mountain and taking me with it.

The cow had come to rest on an incline, which was good, but it was covered with thin slush and littered with rocks exposed by the sun. That was bad, as the rocks and oak

Courtesy of Paul Eich

Eich found the Pose technique works during a WOD or a snowshoe hike at 6,500 feet.

scrub made for poor footing and high friction. The slush provided a little help in sliding but increased the tricky footing. The hill wasn't going the way I needed to move the animal. That meant a drag across the ridge face—I would have some help from gravity, but not much.

The pulls were intense. They felt like a succession of 300-plus-lb. deadlifts, with the complication of rocks to trip over and slush to slip in. I could only pull hard enough to move the animal if I left my gear. All of a sudden, the day began to feel like a CrossFit WOD:

Dead Cow Drag

Before the sun sets:

Pull a bunch of off-balance 300-lb. deadlifts

Backtrack 20 meters up a mountain to grab 40 pounds of gear

Run/slide back down to animal and repeat until one mile is covered.

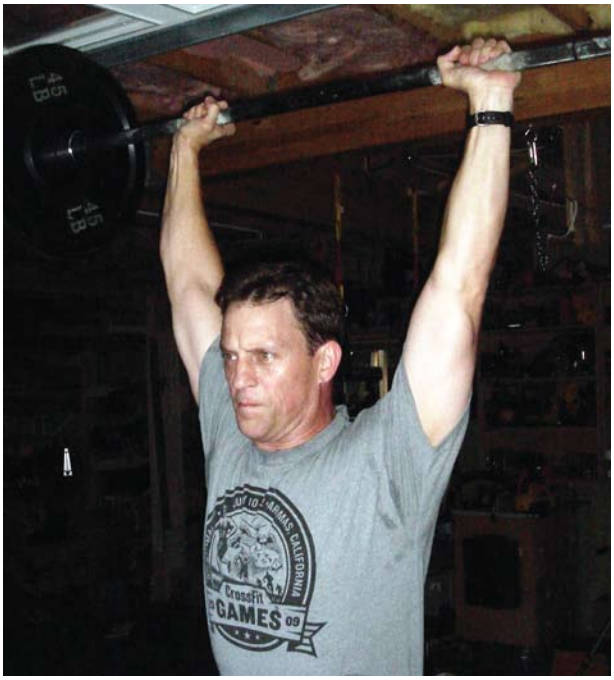
It was beautiful in a very CrossFit way.

Embracing the suck on punishing WODs such as Mr. Joshua had in fact prepared me for a challenge I had never imagined.

I pulled for an hour, covering a quarter mile before the cavalry arrived. Reinforcements consisted of Ed; a local hunter called M.D., who had given us hunting tips; and M.D.'s son. Apparently they had been keeping tabs on my progress with binoculars. M.D.'s first question was, "How many times did you fall?" Ed, M.D.'s son and I pulled the elk for another hour to reach the snowmobiles nearly a mile away.

In getting the cow around or over obstacles, "work capacity under the curve" was on display from start to finish.

My hosts tossed a beer my way, and I was humbled that they thought I had earned it. Earning the respect of the locals should never be taken for granted.



Courtesy of Paul Eich

Paul (Apolloswabbie) Eich believes CrossFit prepared him to drag a 500-lb. elk across the wilds of Utah.

Courtesy of Paul Eich

The author after setting a new PR on the unofficial CrossFit WOD Dead Cow Drag.

The sun was almost gone and the temperature had plummeted. As if to say to goodbye, a group of six or so cows creased the ridge above us as we sat around chewing the day's events over. A quick check showed they were a scant 325 yards away. They checked us out as if we were quite interesting, and we laughed. Sitting on our butts swapping stories and laughing was a much easier way to hunt.

We crowded onto snowmobiles, and after withstanding the 30-mile-an-hour blasts of air and managing not to fall off during the ride back, I watched as M.D. and his team effortlessly hung the elk in their barn.

At that point, the impact of the four-mile hike in snowshoes at altitude, the dead cow drag, and a sunrise-to-sunset dose of snow-reflected sun hit me with the force of Three Bars of Death. I couldn't stop shivering, even after 20 minutes of the truck ride home. I could just muster the focus to speak. The shower helped, but the real recovery didn't start for over an hour after I was out of the elements. Bone tired? Hell, yes—but thrilled and ready for some celebratory Lagavulin single malt, followed by my first taste of bacon-fried elk heart.

Mastering the Unknown and Unknowable

My work capacity across broad time and modal domains was tested—and then some. The 14-plus miles on snowshoes tested the oxidative energy pathway, the sub-maximal efforts such as the hillside ascents and much of the cow dragging tested the glycolytic pathway, and the short, maximal efforts challenged the phosphagen pathway. In getting the cow around or over obstacles, "work capacity under the curve" was on display from start to finish.

Throughout, I never wondered whether I could go where needed. I never doubted I could get the animal off the mountain. At the time of the kill shot, my fatigue level was not a hindrance. I have little in the way of observable, measurable and repeatable criteria to evaluate my performance under the curve, but I'll substitute the following subjective report: I met the unknown and unknowable challenges that arose.

That night, I went to bed expecting to feel sore the next morning. I woke up feeling fine. After completing the final tasks—skinning the carcass and delivering it to the butcher—I visited CrossFit Park City and jumped into a workout. Thanks, as always, to Chris and Sarah Spealler for their hospitality.

Of greater significance than the Dead Cow Drag WOD was filling my freezer with nearly 150 pounds of the best meat one can get. Paleo Diet geeks, eat your hearts out. I look forward to the next two years or so, when I can take my oldest son elk hunting in the wild to get in touch with our paleolithic roots.

When you reach a milestone in your life, you make certain realizations that persist even after time passes. One of those lessons is that the pursuit and sometimes accomplishment of large goals can take us to a better, more vivid life. I have meat in the freezer, memories to relish, experience to give my next hunt a higher probability of success, and friendships made and strengthened. That's pretty close to "as good as it gets."

✦

About the Author

Paul (Apolloswabbie) Eich is a CrossFit Level 2 certified instructor. He is in his 19th year of service as a naval officer and has logged over 3,000 hours in U.S. Navy aircraft. Paul trains in his garage gym and at CrossFit Memphis, and he blogs at apolloswabbie.blogspot.com.

Courtesy of Paul Eich

the CrossFit JOURNAL ARTICLES

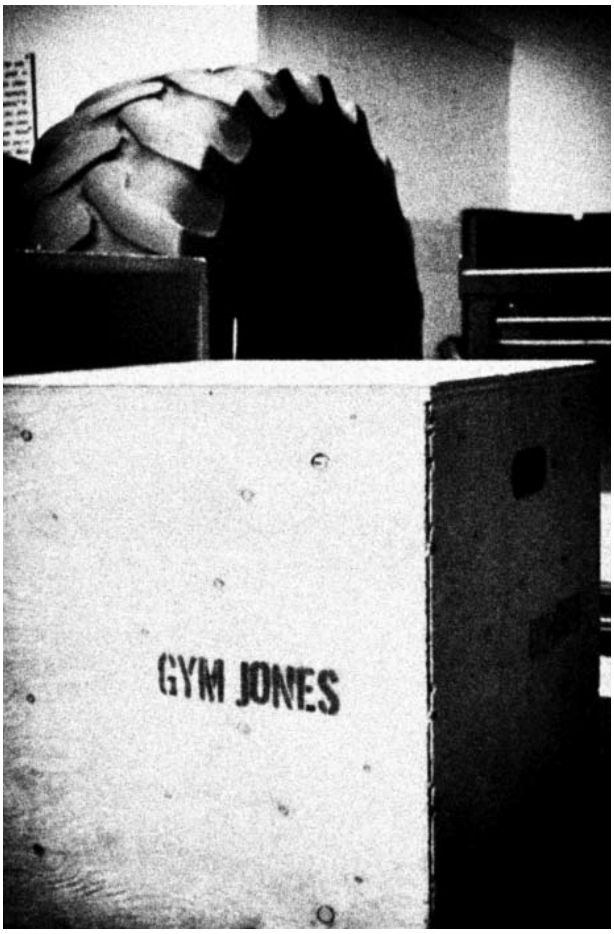
Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

the CrossFit JOURNAL ARTICLES

INSIDE GYM JONES

One of CrossFit's top athletes attends a Gym Jones seminar and tries to keep an open mind. But he's left wondering about the substance of the program.

Russell Berger



This is the story of my experience at Gym Jones, but the real story is a lot bigger than me.

The first time I heard the name "Gym Jones," I was waist deep in the swamps of Fort Eglin Air Force Base in Florida. I was in Ranger school, an Army leadership course that leaves most of its participants starved and hallucinating from sleep deprivation.

"Wasn't Jim Jones some kind of cult leader?" someone asked. "Didn't he eat people or something?"

"Not *Jim.* It's not a person. It's the name of the place: *Gym Jones.*"

This also happened to be the first time I heard the word "CrossFit." I didn't even know what a power clean was, but I was willing to talk about anything that took my mind away from giant mosquitoes and jungle-rotted skin.

All anyone knew at the time was that CrossFit.com and GymJones.com were both fitness websites that had produced ass-kickers with impressive regularity. I wasn't fond of the wax-covered-skeleton look I had recently developed, and I wanted to try something new. A few months later, I looked up CrossFit.com and did something called "Murph."

Tasting *Their* Kool-Aid

The story of my love affair with increased work capacity is pretty typical. I started following the main-site WODs and saw astounding results within a few weeks. But it wasn't long before I again ran into that *other* website: GymJones.com.

Gym Jones is owned by Mark Twight, a 47-year-old veteran mountain climber of considerable accomplishment. Twight's resume includes success on some of the most dangerous and difficult routes in the world and the authorship of two well-received books. Twight now trains U.S. military special operations forces in mountaineering. He may be most famous for having trained the cast and stunt crew of the movie *300*. For a time, Gym Jones was a CrossFit affiliate. After a falling out, Twight separated from the CrossFit community. You can read Coach Glassman's account of what happened in comment No. 85 here. He wrote about Twight again here.

At first, I could only guess what Twight was really up to with his training methods. The Gym Jones website was dark, minimalist and intentionally cryptic. The only thing that was obvious from the site was that Twight didn't train many athletes. I later learned the number was even smaller than I suspected: fewer than 30.

At first, I could only guess what Twight was really up to with his training methods. The Gym Jones website was dark, minimalist and intentionally cryptic

Maybe something about leaving the Army and enrolling in a public college made me appreciate Twight's unapologetic elitism. Or maybe I just dug the stark black-and-white photography. Whatever it was, Twight's intentional concealment of his methods added to the attraction. I quit following the CrossFit main-site WODs in the summer of 2007 and began my own regimen based on the few clues Twight disclosed on his website. I started a blog about my progress. In short order, I received an encouraging e-mail from Twight himself.

Soon after, I started having doubts about my new methods. A few of my clients started showing minor overuse injuries, which compounded my concerns. But was I really using anything close to Twight's methods? Twight handcrafts individual workouts for members of his tiny band. My own interpretation of his training was still just a guess. I downgraded tire flips and slosh pipes to the category of "fun but less effective" and began sticking to the CrossFit main site.

A year later, I still couldn't answer a basic question: "What is Gym Jones?" By that time I was the owner of a CrossFit affiliate in Huntsville, Alabama. But I was still curious about Gym Jones. When the *CrossFit Journal* offered to pay my $1,800 registration fee for a Gym Jones Athletic Development Seminar, I jumped at the opportunity.

Day 1

In February 2009 I drove through a parking lot in suburban Salt Lake City, Utah, scanning numbers on tinted glass doors until I found the one I was looking for. There was no sign and no apparent life forms. Maybe I should have expected this sort of seclusion. After all, Twight's website says:

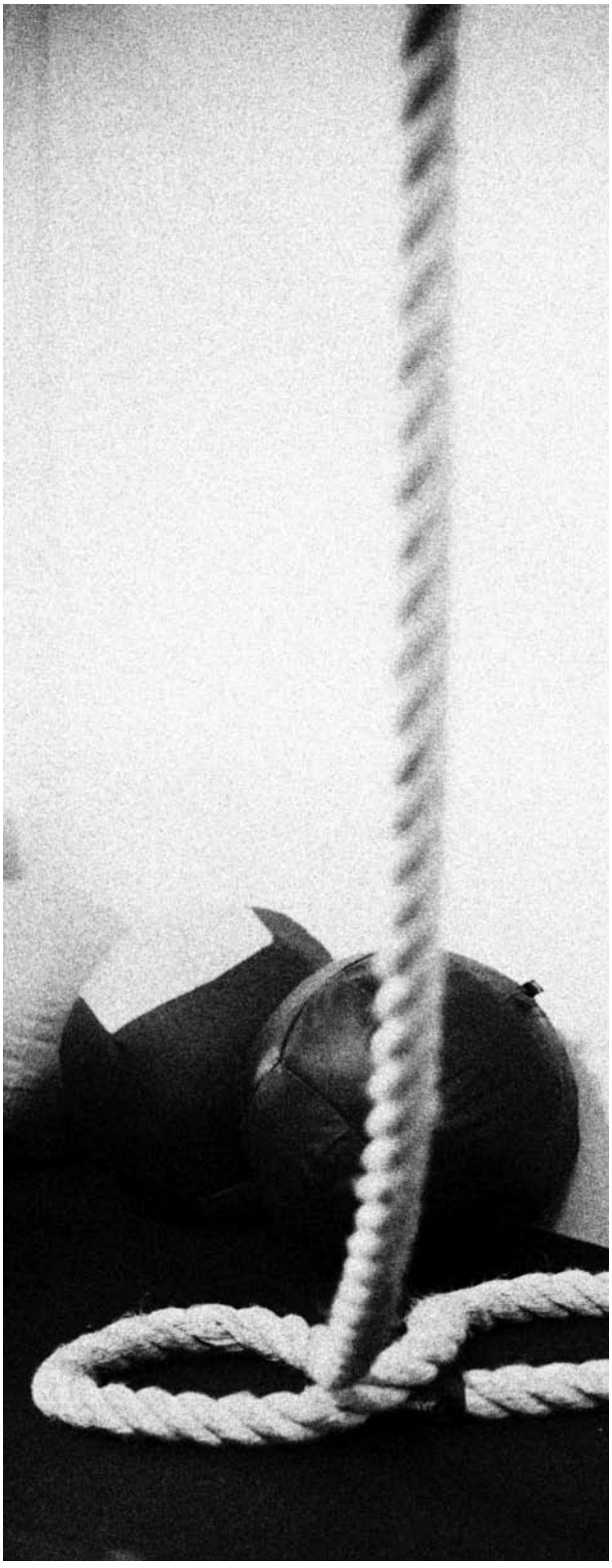
> *Gym Jones is not a cozy place... The support of a like-minded group, dedicated to The Art of Suffering, provides a safety net. Individuals push harder and risk more in the company of trustworthy peers. It's one reason the gym is not open to the public...*

I pulled open the dark glass door and walked in. This was it. The tires, barbells, ropes, rings and high ceilings gave Gym Jones the signature bare-bones decor of a CrossFit affiliate. The place was strictly business, right down to the drab concrete walls. I walked toward the back of the gym. A cluster of chairs held nine other students, all signing liability waivers and flipping through thin white binders.

I introduced myself to Twight as a trainer and CrossFitter but didn't mention I was an affiliate owner (information easily available via an Internet search). Twight was a relatively small guy with the wiry build I would expect from a serious endurance athlete. Maybe I had assumed from his harsh, stern and often confrontational writing style that I was going to be shaking hands with a real hard-ass. But Twight's demeanor surprised me. He was soft-spoken and calm. He even showed a hint of shyness while trying to break the ice with our group.

First on the agenda was getting to know each other. Twight asked us to give our names, fitness backgrounds and reasons for attending. One student was an American soldier who had paid a great deal of money out of his own pocket to fly in on leave from a mechanized unit in Germany. Another was from the Australian military, and two were squad leaders from the 3rd Ranger Battalion in Fort Benning, Georgia. The rest of the class was made up of a few general fitness enthusiasts, including an aspiring climber. I felt at home to have some guys from Battalion present, but I was a little awkward when it came to our introductions. Everyone else seemed to have a beef with CrossFit. They variously called CrossFit "too random" and "too dangerous" and complained of overcrowding at CrossFit Level 1 Certifications.

Twight seemed unsurprised at the criticism. He got right to the point: "What we do, and what CrossFit does, it's the same stuff. But training must be *individualized* or after a certain point you make no progress." Then Twight dove into his training philosophy. He was assisted by his two trainers, a mountain-bike racer named Josh and UFC fighter Rob MacDonald.



The key points:

1. The mind is primary
2. Outcome-based training
   (train "for an objective")
3. Functional training
   (high degree of transferability)
4. Movements not muscles
   (transferable training does not isolate muscles)
5. Power-to-weight ratio
   (you must carry your engine)
6. Train all energy systems, emphasizing
   the most important (individual choice)
7. Training is preparation for the real thing: do
   something with your fitness
8. The mind is primary II
   (confidence, chemicals, carriage)
9. Nutrition is the foundation
   (outcome-based eating: eat "for an objective")
10. Recovery is more than 50 percent of the process

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

The Gym Jones training manual defines fitness as "the ability to do a task." That's it. And it's pretty simple when compared to "increased work capacity across a broad range of time and modal domains" (IWCABTMD). At Gym Jones, athletes engage in what Twight calls "outcome-based training." He explained that Gym Jones athletes don't train to win in the gym. They train to win races, fights, combat or any other individualized task they might dedicate themselves to.

What exactly does that mean? Twight uses the phrase "optimal fitness" to explain the different needs of specialized athletes. The optimal fitness needed to win a fight, for example, might not be the same as the optimal fitness for winning the Tour de France. Unlike IWCABTMD, his definition allows athletes to have substantial troughs in work capacity and still be considered fit.

I'm a junkie for solid, measurable definitions. That's part of why I love CrossFit. Twight's definition of fitness seemed attractively concise but not exactly bullet-proof. CrossFit measures the ability to do a task across a broad range of time and modal domains. CrossFit calculates fitness as the average of these measurements for a given athlete. The definition never changes. Twight's definition of fitness, on the other hand, is measured against a hypothetical ideal created for each athlete, making his definition of fitness infinitely variable.

Nothing is wrong with setting specific goals for specific athletes. If you're in the business of winning races, that's really all that matters. Letting your work capacity become deficient in one area to highly specialize in another? No complaints. But here is my problem: fitness, even when poorly defined, suggests an inherent breadth in ability. Twight's definition willingly ignores that breadth.

---

*What we do, and what CrossFit does, it's the same stuff. But training must be **individualized** or after a certain point you make no progress.*

—Mark Twight

The Gym Jones Training Principles

Two hours into the seminar, it was time for some specifics. Twight spelled out his training gudielines:

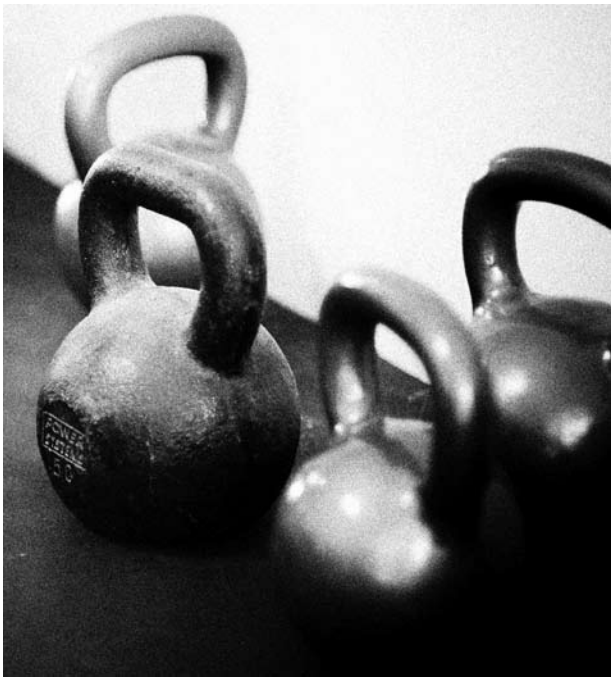
1. Don't train to muscle failure
2. Intensity isn't always the answer
3. Don't rely on circuits
4. Don't rely on stopwatches

This was a big departure from what CrossFit teaches. Twight said, "You can't throw people into intensity that quickly." He expressed concern about the safety of the CrossFit methodology and went on to say that CrossFitters "talk about rhabdo like it's a badge of honor." Twight also said constant high-intensity work isn't sustainable and "it's also chemically addictive, which makes it easy to trick yourself into thinking you are improving endurance."

Twight holds that CrossFit methods lead to decreases in performance after a few years. He has seen this in himself and in athletes he trained. Training to muscle failure broke athletes down and prevented proper recovery. So did the constant high intensity. The heavy reliance on circuits trained them to accept decreased performance over the course of a workout. Twight concluded that running a stopwatch all the time and going hard all the time eventually stopped working.

He shared some of his solutions, including "The Ladder," an exercise in which two athletes rotate through work-rest intervals. They accumulate reps on a sliding scale to prevent hitting muscle failure. A ladder workout using pull-ups might look like this: I do one pull-up, you do one pull-up. I do two pull-ups, you do two pull-ups. We go to six and start over. Rather than working as fast as possible, the focus of the ladder is on consistency and rest.

The "breathing ladder" is like a sick, oxygen-deprived cousin of the ladder. Twight had written an essay on his website describing the breathing ladder, and I was more than familiar with them from my time spent experimenting with his training. The athlete first picks a "big" movement, like a kettlebell swing or power clean, and then chooses a rep scheme. After one rep, he or she takes only one breath. Two reps: two breaths. Three reps: three breaths. And so on. The result is a more stressful version of the regular ladder, usually ending



with failure after uncontrollable respiration causes you to breathe more than the scheme calls for. Twight calls this "panic breathing."

Though he tried not to mention CrossFit by name, Twight's position was abundantly clear: high-intensity, time-priority workouts don't work for long. I was surprised by his claim. How was it that thousands of athletes across the world had followed CrossFit with great success but Twight's own crew of fewer than 30 had run into burnout and decreased performance?

The answer turned out to be simple. During its time as a CrossFit affiliate, Gym Jones hadn't followed the main-site WODs. The workouts posted on Twight's website looked, smelled, tasted and felt just like CrossFit workouts. But Twight's experiment with CrossFit, much like my own experiment with Gym Jones, was woefully inadequate. Both were based on subjective interpretations of methodology, complete with the possibility of self-induced regressions and shitty programming.

Twight might be dead-on in naming too many high-intensity circuits as the reasons for his poor results. But he was the one calling the shots, designing the workouts and setting the schedule. If he thought he could do it himself because he knew better, he was wrong and was blaming CrossFit for his own mistakes.

Tackling a Gym Jones Workout

It was time to put the Gym Jones training philosophy to work. After another short break, we moved around the corner to the main room. It was a black, rubber-floored area about the size of a tennis court. MacDonald began leading us through the first practical exercise of the seminar: the air squat. The Gym Jones teaching points for the squat were virtually the same as those of a Level 1 CrossFit Cert: squat below parallel, keep your weight on your heels, keep spinal extension, and maintain an upright posture. The movement was well explained, and the student-teacher ratio of around three to one was vastly superior to a CrossFit cert. But I did see a few rounded backs that went uncorrected.

After some work on squat variations and kipping pull-ups, it was time for some real fun. Twight and his trainers started pulling down Concept2 rowers and grabbing kettlebells. "Partner up!" someone said. "We're about to do a workout called 'Tailpipe.'"

Finally. I was ready for a little brain de-frag.

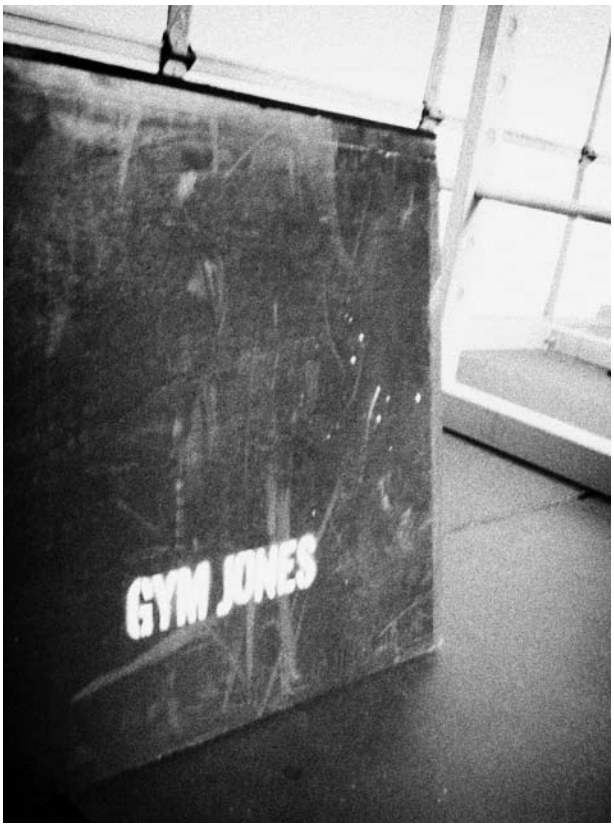
I partnered up with a guy about my size, and we were given a pair of 45-pound kettlebells. Just before we started, someone asked where the name Tailpipe came from. "When you're done," Twight explained, "it feels like you've been sucking on the tailpipe of a car."

Twight holds that using CrossFit methods leads to decreases in performance after a few years. He has seen this in himself and in athletes he trained.

I strapped into the rowing machine and pulled a fast 250 meters while my partner held our two kettlebells across his chest in a rack position. As soon as I was done, I scrambled off of the rower, cleaned the kettlebells and waited. The psychological stress of keeping 90 pounds across my chest after a hard row was unique. I wasn't doing anything with the weight. I was just holding it and trying to breathe. Just holding, holding, holding...

We switched and repeated this for three rounds. Tailpipe didn't exactly fit CrossFit's "large loads over long distances quickly" principle. Nor did it lend itself well to measurement. The workout wasn't terribly difficult. Even rowing as fast as I could, the amount of power I could exert was limited. I thought back to one of the first guidelines of the Gym Jones training philosophy: "all training programs must include psychological stress."

Tailpipe seemed to be a Gym Jones version of a who-can-eat-more-wasabi contest. The winners are those who can suck it up more and hold their kettlebells longer. By design, this workout was really just a suck-fest. Physical adaptation was taking a back seat to psychological stress. This was a big part of what Gym Jones was all about: training mental fortitude. But what's the benefit of having athletes suffer without accurately measurable, productive output? If I was going to have a hard time getting oxygen, why not swing that kettlebell instead of just holding my diaphragm down with it? The event seemed at odds with one of Twight's first comments from earlier in the day: "Just because it's hard doesn't mean it works."



Day 2

Day 2 began with a session on diet. The advice was pretty solid. The Gym Jones folks showed an understanding of hormonal response. They advocated small, balanced meals and paleo foods and openly ridiculed the food pyramid. The twist came when they condemned the Zone Diet. Twight said: "Weighing and measuring food is as much an eating disorder as sticking a finger down your throat. There is no reason to be neurotic about food... It's easy to get high-centered on the details of eating, and if it's complicated, no one will do it. So keep it as simple as possible." After hearing a few snide comments about CrossFitters counting almonds, I started to get the feeling that what really bothered Twight about the Zone was its unofficial marriage to the CrossFit community.

Things seemed to be getting back on track when Twight moved into his lecture on rest. He said, half-jokingly, "There is no such thing as overtraining, only under-recovery." His litmus tests for poor recovery included:

1. Increased waking pulse
2. Higher resting pulse
3. Weight loss
4. Increased fluid intake
5. Progressively later bedtime
6. Fewer hours of sleep
7. Needing an alarm to wake up

Next was a list of useful "regeneration tools" for speeding the recovery process. Twight made some good suggestions: foam rollers, deep-tissue massage, contrast showers and getting eight or nine hours of sleep every night. But he also pushed acupuncture, "Rolfing" (structural integration of soft-tissue manipulation) and a number of bizarre therapies I had never heard of. One, "percutaneous electrical neural stimulation," sounded like something from the interrogation room of a KGB prison. The process involves electrically charged needles stuck deep into muscle tissue near nerves to relieve muscle pain. I decided I'd be sticking to contrast showers and the occasional rub-down.

It was then time for another practical exercise. We migrated into a big circle and watched as MacDonald began teaching the deadlift. His instruction was

the CrossFit JOURNAL ARTICLES

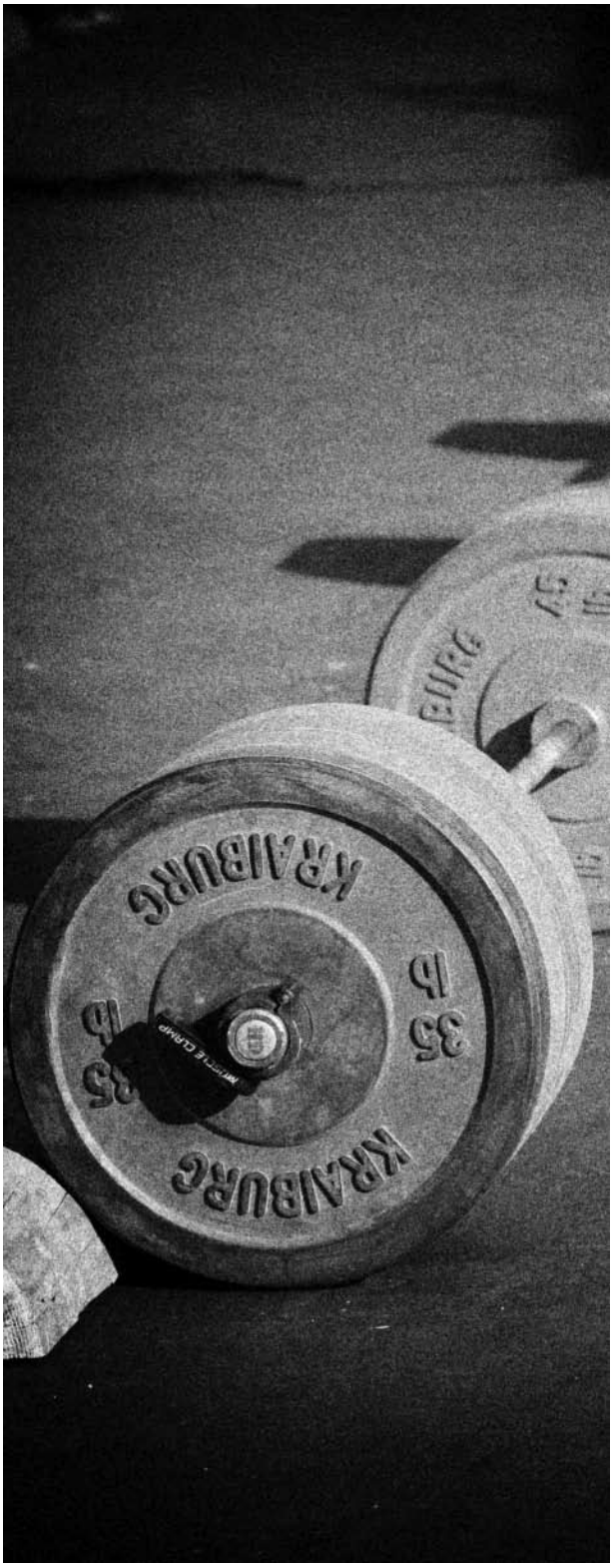
Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

accurate and effective: weight on the heels, chest high and back extended, with the bar under the shoulders. He covered all the basics of a good pull with one exception: he made no mention of holding the breath during the lift, something all coaches I've trained with believe is absolutely necessary.

Discussion shifted to the back squat, which Twight said is "too easy to do wrong" and can cause knee and back injuries. Instead, Twight's training emphasizes the deadlift and the front squat. MacDonald then incorrectly explained the role of the weightlifting belt, referring to it as an unnecessary support that doesn't really help—which is actually true if the lifter isn't properly holding his breath during the lift. I began to get the feeling that strength training wasn't exactly a strong point of Gym Jones.

I'd guess that strength giants like Mark Rippetoe and Dave Tate would say that Twight's mistaken ideas were simply a result of his not teaching back squats correctly (though Rip might not use such pleasant phrasing). Sure, poorly executed back squats can get you injured, but how could they be more dangerous than poorly executed deadlifts or front squats?

Regardless, we ended up getting a pretty effective lesson in the deadlift. The class split up into small groups, each with its own coach, and we began working up to a one-rep max. Our trainers were careful to prevent anyone from pulling with a rounded back. They successfully coached a number of students to new PRs.



When Doing More Work Is Wrong

Next up was a workout called "Jonescrawl": three rounds for time of 10 deadlifts at 115 percent of bodyweight and 25 box jumps to a 24-inch box.

Twight explained again that pacing ourselves through this workout would allow for superior times compared to "going all out." He advised us to step down from every box jump. But I still wasn't buying Twight's theory. I believe that his own faulty programming had led to his problems, and that his athletes just weren't capable of sustaining the all-out pace Twight advised against.

Twight watched me warm up by jumping into full hip extension after landing on the top of the box. He told me I was doing "bullshit CrossFit came up with (for athletes) to get faster times." I pointed out that not only was I technically doing more work, but I was also

exceeding Twight's range-of-motion requirements by jumping upward off of the box. He agreed to let me try.

I blew through the first round. The deadlifts felt like I was working with a PVC pipe, and I knocked out all 25 box jumps without pause. I could feel the eyes of every trainer in the room watching me. The second round was harder. I felt my lungs burning in response to the Salt Lake City altitude, the phlegm catching in my throat from a nasty case of bronchitis I'd been trying to get rid of, and the burn of quickly accumulating jumps.

After a short struggle, it was over.

Under Twight's watchful eye, I had beaten everyone in the room and matched the best time ever recorded at Gym Jones for Jonescrawl.

But here is my problem: fitness, even when poorly defined, suggests an inherent breadth in ability. Twight's definition willingly ignores that breadth.

I had achieved my score by using "bullshit" CrossFit box jumps and refusing to pace myself, so the reaction to my performance wasn't exactly warm. Twight was the only trainer to congratulate me as I stood bent over, coughing my lungs up onto the floor. By the time I was moving again, Twight and his instructors were using my performance as an example of what *not* to do.

First, I had gone straight to the ground after my last box jump. Twight instead teaches that athletes should row or ride an Airdyne directly after finishing a workout in order to "actively recover." Next, they pointed out that my rounds had become progressively slower, something I could have prevented with pacing.

The most important point, however, was that my fast finish didn't mean I was fit. MacDonald explained the stopwatch is "just a cue to ask questions." This was something I was going to need them to explain. Twight elaborated.

"Getting a faster time on a workout doesn't necessarily mean the person doing it has gotten fitter. There are many other factors to account for." He said these factors included range-of-motion deterioration, proximity of stations during a circuit, and increased movement efficiency. Twight claimed any of these factors could decrease an athlete's time without actually improving their fitness—another big deviation from CrossFit philosophy.

Gym Jones vs. The Real World

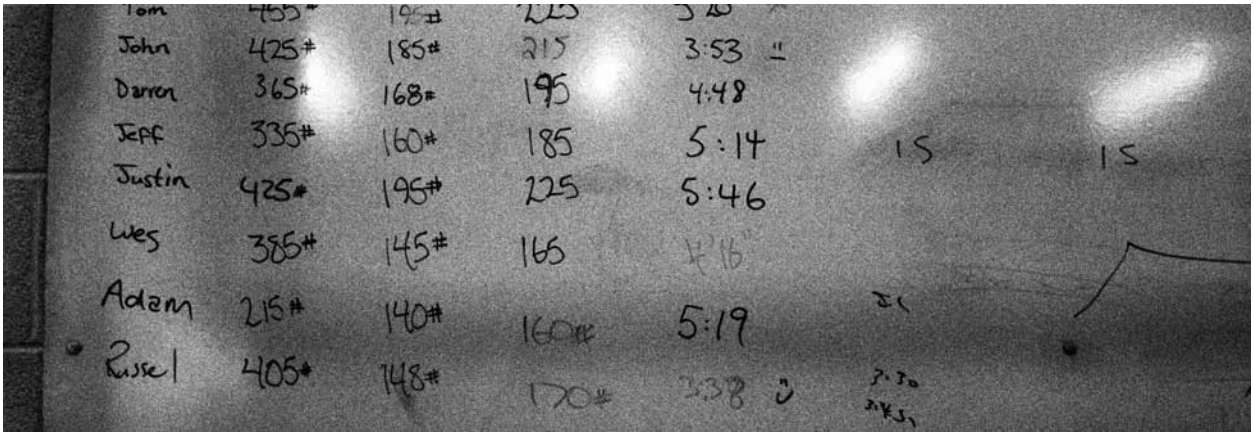
We say that improving your measurable performance, whether it's adding 10 pounds to your clean or cutting a few seconds off your Elizabeth time just by "improving your technique," does, in fact, demonstrate improved fitness. On the other hand, improving your time by allowing range-of-motion deterioration is different. You are doing less work, so it is not a measurable improvement in fitness.

I understood Twight's point that there was no *organic* change in the body when technique was improved, but I couldn't agree with his conclusion. After all, by his own definition, fitness is just "the ability to do a task." Increased technical ability, efficiency of movement and even skill are all things that would improve the ability to do any task. How do you measure fitness otherwise? Was there some way of separating "legitimate" improvements in fitness from increased technique and skill?

I raised my hand and asked, "How does improved technique on the clean, and that improvement's ability to produce a faster circuit time, not improve your fitness?" I even threw in an example that seemed to fit Twight's definition of fitness: "Wouldn't that improved technique help me clean an incapacitated soldier off the battlefield?"

Twight answered: "Improving your technique at cleaning a bar doesn't improve your efficiency cleaning any other object." He was arguing for an extremely literal interpretation of training specificity. While I would agree wholeheartedly that specific tasks like moving a wounded person must be trained just as specifically as mag-changes and first aid, my personal experience told me Twight was dead wrong. More importantly, if nothing done in the gym transferred into real-world results, then what the hell were we doing?

MacDonald went on to criticize CrossFitters for posting YouTube videos with fast work but poor form. I started to get the feeling that the dislike Gym Jones trainers showed for running stopwatches and the Zone was mostly just dislike of CrossFit.



The Program

The seminar was drawing to a close. We had only one more topic to cover. It was the pot of gold at the end of the rainbow: the hidden methodology Twight uses to determine his programming. After years of staring at white-on-black font and scratching my head, I was finally going to learn how—and why—Twight was doing what he was doing.

The why turns out to be pretty simple. Twight's methodology is based on his primary critique of Crossfit-style training: "Random stuff eventually stops working." Eventually, Twight explains, this system causes athletes to plateau.

In order to combat this inevitable barrier, Twight teaches that athletes must "send the body consistent messages." What does this look like? Rather than working on every aspect of fitness continually, Twight's athletes spend short periods of time (usually four-to-six weeks) on specific aspects of training—the equivalent of a "CrossFit bias" period.

To explain, Twight drew a large diagram on the whiteboard, breaking all training down into five basic categories:

1. Foundational Period
2. Strength Period
3. Power Period
4. Power-Endurance Period
   (short, long and intermittent)
5. Endurance (if necessary for sport)

Yet Another Contradiction

The Gym Jones training system relies on a form of periodization leading up to an athlete's event, season or, in the case of soldiers, deployment. Training is planned in reverse, up to a year away from competition.

To start, all athletes go through a foundational period focused on improving general physical preparedness (GPP). This period fixes imbalances, rehabilitates injuries and builds strength. It develops "the base fitness needed to begin more focused and intense training," according to Twight's manual.

MacDonald referred to this period as "WTF" work, or "whatever the fuck." (Basically, it's the very same random stuff Twight discovered quits working after a while.) Once an athlete plateaus in the foundational period, he or she is ready to begin "real training" at Gym Jones.

This real training begins with a strength period, proceeds to a power stage, and then goes on to a power-endurance stage that mixes long- and short-duration "steady-state" efforts. These periods are tweaked based on each athlete's primary needs. During the strength phase, an athlete would spend two out of three days in the gym doing heavy deadlifts or front squats. On the non-strength day, she would pick from another domain (power endurance, for instance).

Twight says his method of "sending a consistent message" allows better focus and faster progress than just doing "random stuff." He acknowledges that this type of short-term specialization typically results in a loss of ability in other areas, so he makes sure athletes finish a phase with greater ability than they need. The excess will be shed during the next phase, and the athlete will be right on target come game day.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

Hard Work—But for What Purpose?

Twight went on to create an imaginary training schedule for MacDonald and started plotting his first strength-focus day.

The result looked like this:

Generic warm-up

Specific warm-up

Work up to a 1RM deadlift

So far, I was on board. But we weren't done.

After completing the strength workout, MacDonald would also do Jonescrawl—the deadlift/box-jump circuit to which I had donated my lungs the day before. Two workouts in one training session? I asked about the purpose of the second workout. MacDonald answered nonchalantly: "It's to make you feel like you worked hard." Were they serious? A 1RM attempt on the DL wasn't enough hard work?

Twight had said earlier that you could only really go "truly hard" two or three times a week. Now, I raised my hand again. "Couldn't you train hard more often if you did Jonescrawl the next day instead of packing two or three different efforts into the same workout?" MacDonald looked irritated. He knew where I was going with this. "Now you are getting into three days in a row, and that just doesn't work."

Three days on and one day off made a lot more sense to me. But that was a CrossFit thing. And like the other CrossFit things we had encountered at the seminar, it seemed to rankle Twight and his trainers.

To be fair, maybe three days of training in a row doesn't work for some people. As a fighter who trains other fighters, MacDonald has to incorporate sport-specific training into his overall plan. But the two men were painting with a broad brush, drawing sweeping conclusions from a tiny pool of data.

I'm still convinced that Twight's plateau is likely the product of his own bad programming.

Criticism of CrossFit—Without Evidence

And what about Twight's other claims? Twight had said that CrossFit "throws people into high intensity too quickly." I'd heard this claim before, and it was just as hollow coming from Twight. Like so many before him, Twight seemed to have missed the obvious "Start Here" button on the CrossFit.com homepage and its straightforward advice:

> *In any case it must be understood that the CrossFit workouts are extremely demanding and will tax the capacities of even the world's best athletes. You would be well advised to take on the WOD carefully, cautiously and work first towards completing the workouts comfortably and consistently before "throwing" yourself at them 100 percent.*

Twight's other big beef with CrossFit was its supposed lack of individualization. But a group of 20 average CrossFitters, all doing the same WOD, could be doing as many as 20 completely different workouts. Take the benchmark Diane, for instance. The process of scaling and substitution that goes on beforehand individually identifies what weights, exercises and ranges of motion each participant can effectively work with.

What's more, the workouts themselves change based on the individual weaknesses of each athlete. For anyone strong enough to muscle through the reps, Diane is a short, brutal, lung-burning circuit. If strength is your weakness, you might spend 45 minutes pulling single deadlifts and grinding through handstand push-ups.

And what about the claim that CrossFit just stops working after a certain point? There is simply no evidence for this. All across the country, CrossFit athletes are regularly setting PRs. But more importantly, the performances of the world's fittest today are significantly better than they were just two years ago. And that is from pure CrossFit programming.

But one more time (with feeling), I'm still convinced that Twight's plateau is likely the product of his own bad programming. I raised my hand and explained to him that after years of CrossFit, I had set a 20-pound PR on the deadlift the week before attending his seminar. He pressed me to be serious with him and seemed genuinely skeptical that such a feat could be possible.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

More Contradictions and Confusion

The way I see it, the huge diversity of skills, movements and exercises used in CrossFit gives athletes the ability to improve indefinitely. They can focus on a plethora of individual tasks. They can focus on the same skills during warm-ups, attend specialty certs, try new sports or just practice, practice, practice.

Early in the seminar, Twight had given us some sound advice: "Make sure objective measures stay objective." He explained that if a workout isn't measurable, it's useless. "Fuck perceived exertion," he concluded. I couldn't have agreed more. But how exactly do you measure workouts without a stopwatch? And weren't all the workouts we did, with the exception of the deadlift, measured by a stopwatch? Twight discouraged reliance on high-intensity circuits and competition, but all our workouts were timed, competitive, high-intensity circuits.

We were also told that intensity was a drug. When overused it produced mediocre results. But in our programming lecture, MacDonald had said, "Intensity is the key." I started to wonder if I needed to have my hearing checked.

During the last workout of the seminar, we moved between six separate stations, with a different exercise at each one. We worked as hard as possible for 45 seconds, with 15 seconds to transition to the next station. After three rounds, I asked Twight if this type of workout should involve counting reps at each station to accumulate a score. "This was a Fuck-You Friday," he responded. He said that measurement wasn't really the point because "the idea is to just go as hard as you can."

Another contradiction. I was at a loss.

Gym Jones: Prove Your Point

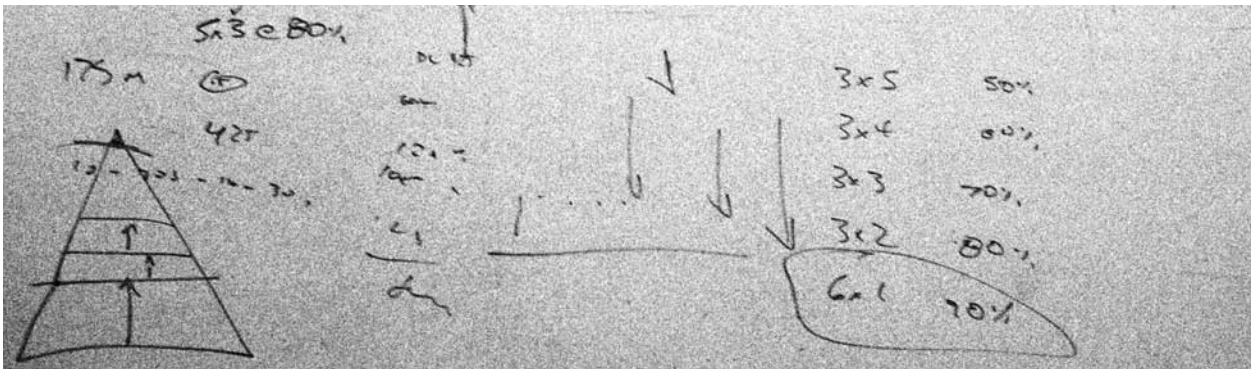
The Gym Jones Seminar wasn't a bad event. It was by no means poorly taught, though I would have preferred less time spent teaching push-ups and some instruction on the Olympic lifts, which were never even mentioned. But Twight and his instructors know more than a little about fitness.

Twight himself was personable, helpful and extremely eager to answer military-specific questions. He even stayed for two hours after the scheduled end of the seminar for a Q&A session on endurance efforts, refueling and training for difficult selections.

Sadly, Twight's better qualities were frequently overshadowed by his animosity. The result was a seminar mired in bitterness, sarcasm and hostility to all things CrossFit.

Twight said that measurement wasn't really the point because "the idea is to just go as hard as you can." Another contradiction. I was at a loss.

Reasonable people can disagree about fitness philosophies. But Twight and his trainers seemed to me to have formed conclusions about the nature of fitness based more on pride of authorship than on science.



The word "CrossFit" never appears in Twight's training manual even though Twight had called Gym Jones and CrossFit "the same stuff" early in the seminar. But Greg Glassman is No. 55 of 64 individuals on Twight's list of influential sources (far below Mike Boyle and just above "listening to punk rock").

Twight and his trainers have a good grasp of functional fitness. Their work with highly specialized athletes is intriguing. But the military applications struck me as dubious. Twight was advocating individually specific training and individually specific goals. The students in the room were mostly soldiers, whose duties require the most universally demanding fitness needs of any demographic: the ability to deal with the unknown. What they need most is general physical preparedness (GPP).

Twight's pitch was simple: CrossFit has problems. We found them, and we can show you how to get around them. Unfortunately, I'd never noticed these problems. If Twight's system really does produce higher levels of GPP and more successful athletes, he only has one thing to do: show the world. So far, he hasn't.

Maybe Twight is onto something I'm just not aware of. Maybe I'm not yet ready for "real training." Or maybe Gym Jones just doesn't have much to offer. One thing I'm sure Gym Jones does offer is the allure of elitism.

Members of the special-operations community and professional athletes have a lot in common. They are usually competitive, type-A personalities. When you're a specially selected badass (or like to think you are), it's not hard to convince yourself you're above getting workouts from a free website available to the general public. For me, Gym Jones had seemed like the secret monastery at the top of the mountain that shared the world's greatest fitness knowledge only with those determined enough to make it to the top. The idea that the value of knowledge is equal to the difficulty of attaining it is wildly flawed. But it's seductive. I fell for it.

Does this mean that Gym Jones doesn't improve the performance of their athletes? Not at all. But until Twight or someone else can produce athletes with greater GPP than their CrossFitting peers, I'll be sticking to the CrossFit main-site WODs.

✦

About the Author

Raised in Atlanta, Russell Berger spent four years in 1st Ranger Battalion and saw numerous combat deployments. After starting CrossFit in 2004, he left the military, moved to Alabama and opened Crossville Huntsville. He currently splits his time between running his gym, training, writing for CrossFit and spending time with his family. He won the 2009 Dirty South Regional Qualifier and finished third in the trail run that opened the CrossFit Games.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

the CrossFit JOURNAL ARTICLES

Anything for a T-Shirt

The author went from being a White House photographer to a CrossFitting law-enforcement officer, bringing along his love of T-shirts.

Mike Deavers

I am a T-shirt guy.

Let me explain. It all started with cop shirts—smooth, clockwork-operator, high-speed cop shirts. You've seen them. Something with a witty slogan and some sinister illustration that loudly proclaims, "I'm a cop." Thankfully, that phase was short-lived, and I've survived long enough to tell this tale.

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

T-shirts: Badges of Honor

Next were the race T-shirts. Being a bit of a runner at the time, I managed to collect dozens of them. Silly, tacky, funny reminders of some 5K or 10K long since past. Pay your entry, get a shirt. Wear it, sleep in it, clean the floors with it, but never, ever part with it.

Those race shirts are great reminders, in my head at least, of a powerful struggle, a fight against one relentless enemy: the clock. Each shirt stands, or rather lies folded, as a reminder of pain and difficult quests to beat a predetermined time. The shirts are badges of honor, if you will, that anyone in the running community will recognize as proof of suffering.

Running was my introduction to intensity and effort. Racing became my epic battle.

My quest for real fitness eventually led me to the CrossFit main site, and I experienced the natural phases of shock, curiosity, interest and passion—just like you. While trying to become a fitter police officer, I was hooked. Then I ran across a man named Jeff Tucker at a little shop called GSX. I never looked back.

I loved that shirt and felt like I earned it with blood, sweat and tears. You couldn't buy it. You had to fight for it. How cool is that?

As my journey into CrossFit progressed, I was given my first affiliate shirt. That's right, the mythical GSX shirt with Melissa Byers on the back doing a pull-up in a mini-skirt, with **"got pull-up?"** on the front. Straight to the deep end.

I loved that shirt and felt like I earned it with blood, sweat and tears. You couldn't buy it. You had to fight for it. How cool is that?

I quickly found that wearing the shirt would encourage people to ask me about it. Here was my chance to spread some love for CrossFit and tell how it can lead you from sickness to wellness to fitness. I was a disciple spreading the word of functional fitness on my back.

Courtesy of Mike Deavers

Jeff Tucker of GSX Athletics sporting the classic Infidel T (top), and the famous Melissa Byers "got pull-up?" T-shirt.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

Earning Your Wardrobe

As my journey continued, I had the chance to visit some other affiliates in the area. Each had their own heraldry, available in sizes small through extra large. Each spoke my language and knew my struggles. We were the same, yet different.

Soon enough I began collecting T-shirts—small mementos of the journey and of cool people met along the path. Carlos and Lisa from CrossFit Houston? Anything to support their box. Vic Zachary from CrossFit Bayou City? Oh hell yeah, I know that dude. It's all right there. How better to show some love than to pick up a shirt for a few bucks and maybe leave behind a T of your own? What a great fundraiser for a box!

Support the cause against muscular atrophy.

The shirts became a great source of enjoyment for me, as well as an affirmation of the CrossFit community I love.

CrossFit: Drink the Kool-Aid.

Nice Snatch.

CrossFit: Smoke You Like Cheap Crack.

You can all relate. Ever see a stranger at a coffee shop or an airport wearing an affiliate shirt? That person probably wasn't a stranger for long. The ice was broken instantly: "Know my story without hearing a word. See it in my eyes and on my back—we're of the same tribe."

Combat CrossFit.

CrossFit Kettlebell Instructor.

Specialization Is for Insects.

See it in my eyes and on my back—we're of the same tribe.

Now, two years on this road to functional fitness, I've found myself over on the dark side: full-time police officer and full-time GSX trainer. I help shape our image, craft our heraldry and sharpen the vision Tucker has laid out for us and our tribe. My love of the medium now has me helping to design the shirts. Who would have thought? Giving something back in some small way. Spreading the love. Representing elite fitness everywhere we go.

Anything for a T-shirt—for those willing to pay the price.

✦

About the Author

Mike Deavers is a police officer with the Dallas/Fort Worth International Airport Police Department, where he works an explosives-detection K9 named LIyons. Mike is a former Federal Air Marshal and former official White House photographer. He also serves as a CrossFit trainer at GSX Athletics and runs the gym's blog. Deavers has attended the following CrossFit certs: Level 1, Basic Barbell, Kettlebell, Olympic Lifting, Nutrition, Exercise Science and Gymnastics.

Courtesy of Mike Deavers

Instant camaraderie: How many times have you made a friend because you were wearing a CrossFit T-shirt?

the CrossFit JOURNAL ARTICLES

One Hundred Miles of Trials

How the author became the youngest finisher in a 100 mile race, and what Brian MacKenzie and Carl Borg of CrossFit Endurance think it means.

Shane Skowron

Courtesy of Shane Skowron

I was 20 years old on July 18, race day of the 2009 Vermont 100 Mile Endurance Run (VT 100). On July 19—28 hours and 26 minutes later—I was its youngest finisher.

During my training in the months leading to the race, I used CrossFit Endurance methodology and I seldom ran more than five kilometers at a time. I averaged about 20 miles a week. Prior to the VT 100, my longest run was a single 50 mile race.

I've never been to a CrossFit cert. In fact, I have never been to a CrossFit gym. All my training was done in my backyard in North Brookfield, Massachusetts, or in New York City parks. Everything I knew about fitness training and ultrarunning came from Internet research. I read message boards, blogs, e-mails, articles and abstracts. My athletic background is not extensive. I was a member of my high-school cross-country, track and ice-hockey teams. But I was not a star in any of those sports. I began CrossFit in August 2007 at 18. Since that time I have completed two marathons, two 50 kilometer runs, a 50 mile run and a 100 mile run.

The Precedent for This Type of Training

Many ultrarunners prepare for a 100 mile run by training approximately 60 to 100 miles per week, with half of those miles done in a two-day period. There is little precedent for low-mileage ultra-training.

Brian MacKenzie and Carl Borg, who developed CrossFit Endurance, have both completed 100 mile races using their own methodology and continue to train this way. CrossFit star Greg Amundson was able to complete 80 of a planned 100 miles in 24 hours. He had never run more than 10 kilometers in his life and had done no running to prepare for the event.

Ultrarunner Matt Mahoney does three runs per week for a weekly average of 20 miles. He's built an impressive ultrarunning resume that includes the daunting Hardrock 100. Other ultrarunners have completed 100-milers on weekly maintenance mileages of 30 to 40 miles, often supplemented by other modes of training.

To many ultrarunners, the idea of training 20 miles per week for a 100 mile ultra is absurd. Several people told me I was unlikely to finish.

The Training Program

I chose to use a low-mileage program to complete the VT 100 because overall athleticism was as important to me as the ultra itself (I hope to become a Navy SEAL officer after graduation from college). It's extremely difficult to see gains in strength, power and speed while running high weekly mileage.

Five or six days per week I did a CrossFit WOD, including a few pure strength workouts. Three times a week, approximately five hours before the CrossFit WOD, I did a running workout inspired by CrossFit Endurance.

To many ultrarunners, the idea of training 20 miles per week for a 100 mile ultra is absurd. Several people told me I was unlikely to finish.

CrossFit heavyweight Greg Amundson (right) managed to complete 80 of a planned 100 miles relying only on CrossFit methods. Brian MacKenzie (left) of CrossFit Endurance helped with a few tips during the run.

I ran more than five kilometers only 13 times in the seven months before the VT 100. Two of those occasions were 50 kilometer races in January and in April. One of them was a 10 mile run followed by 30 mile walk (the latter was due to a navigational error and was not supposed to be part of my programming). One run was 13.1 miles, and the rest were 10 miles or less. All other runs were short intervals and time trials.

This table shows my last six weeks of training before the VT 100. My training in the weeks prior was similar. The precise details of each workout are on my blog, beginning here.

The table does not include warm-ups, stretching or skill work. I have not learned the Pose technique advocated by CrossFit Endurance, though I believe it would have benefited me in the VT 100.

Selections for Programming

I did not follow the schedule of any single CrossFit site. I took most of my workouts from the CrossFit, CrossFit Football and CrossFit Endurance sites.

I designed my training so my lower body was constantly bombarded with heavy stimuli but was barely able to recover. My reasoning? If my body could handle heavy back squats and sprints one day followed by Fran, a 10 kilometer run and a deadlift met-con in subsequent days, then my legs would be able to handle the stress of running for hours at a time. Having strong legs meant they would be less likely to break down. I wanted to combine that strength with running endurance training for the best results.

I was not afraid to use workouts lasting only a few minutes because they provide heavier stimuli. I did not consider non-running endurance workouts (such as doing hundreds of burpees, for example) to be as valuable. My research led me to the conclusion that endurance in one modal domain does not transfer completely to endurance in another.

I added a few workouts with calf raises to my training because my calves seemed to be the weak link in my lower extremities.

All my CrossFit training was done in Vibram Five Fingers, and my running was done in racing flats so my feet could be exposed to the same stimuli. With the running workouts, I trained on the largest hills I could find because the VT 100 has 14,000 feet of elevation gain.

Shane Skowron's Training for the VT 100

(beginning June 1, 2009)

DAY	CROSSFIT ENDURANCE	CROSSFIT (STRENGTH & CONDITIONING)
1	None	Push jerks: 5-5-3-3-1-1-1-1
2	2 x 1200 m uphill, recover downhill, 1:00 rest	3 rounds of: 10 CTB pull-ups 10 front squats (166 lb.) 10 burpees
3	None	4 rounds of: Run 400 m 30 knees to elbows 15 deadlifts (245 lb.)
4	Hilly interval 30:20 x 8	Back squats: 5x3
5	None	Murph with 20 lb. vest (35:21) Run 1 mile 100 pull-ups 200 push-ups 300 squats Run 1 mile
6	None	None
7	13.1 miles	None
8	None	Power cleans: 8x1 (max 183 lb.)
9	3 x 500 m steep uphill, 5:00 recoveries	21-15-9 reps of: Snatches (95 lb.) C2B pull-ups
10	None	7 rounds of: 3 jerks (155 lb.) 6 pull-ups 9 push-ups
11	3 rounds of: Run 1:00/rest 1:00 Run 1:00/rest 0:45 Run 1:00/rest 0:30	Elizabeth (10:40) 21-15-9 reps of: Squat cleans (135 lb.) Ring dips Tabata calf raises
12	None	Warm-up only
13	5.4 km race (21:30)	Hang power clean snatches: 7x3
14	None	Cindy (29 2/3) 20 minutes of: 5 pull-ups 10 push-ups 15 squats
15	None	100 body-weight back squats (147 lb.)

Shane Skowron's Training for the VT 100 cont...

DAY	CROSSFIT ENDURANCE	CROSSFIT (STRENGTH & CONDITIONING)
16	None	1.5 mile carry (75 lb. bag of plates) Calf raises, calf jumps
17	Tabata 20:10 x 8	30 front squats (147 lb.) Run 400 m 75 burpees
18	None	Grace (4:29) 30 ground to overhead (135 lb.) Tabata calf raises
19	Run 6:00/recover 3:00 Run 4:00/recover 2:00 Run 1:00/recover 0:30 Run 0:30/recover 0:15 Run 0:15	Hang squat snatches: 8x1
20	4 x 5 km with 10:00 rests, carried hydration pack	None
21	None	None
22	4 x 5:00 on/3:00 off, wet trails	Squat cleans: 8x1 (max 201 lb.)
23	None	10 rounds of: 3 deadlifts (275 lb.) 6 ring dips 9 knees to elbows
24	6 x 200 m steep uphill with 3:00 rest	Back squats: 8x1 (max 282 lb.)
25	None	Power snatches: 100 lb. minute ladder
26	None	Fran (3:00) 21-15-9 reps of: Thrusters (95 lb.) Pull-ups
27	110 minutes on mountain trails	None
28	None	6 rounds of: 3 push jerks (166 lb.) 6 C2B pull-ups 9 clapping push-ups
29	Intervals 30:20 x 8	21-15-9 reps of: Deadlifts (235 lb.) Ring dips Knees to elbows
30	None	Front squats: 5x3
31	2 x 900 m uphill with 6:00 rest	12 minutes of: 5 ground to overhead (135 lb.) 5 C2B pull-ups Tabata calf raises
32	None	333 weighted step-ups (40 lb. to 19.5 in. bench)
33	10 mile run 30 mile walk (lost my way)	None
34	None	None
35	None	Push jerks: 8x1 (max 210 lb.)
36	None	20 minutes of: 5 thrusters (95 lb.) 7 hang power cleans (95 lb.) 10 sumo deadlift high pulls (95 lb.)
37	6 x 1:30 on/1:30 off	21-18-15-12-9-6-3 reps of: Front squats (166 lb.) V-ups
38	None	GI Jane 100 burpee-pull-ups
39	6 x 200 m steep uphill with 5:00 rest	Power cleans: 5x3 (max 188 lb.)
40	Rest	Rest
41	8 km at 90%	Back squats: 5x5
42	None	Angie (13:59) 100 pull-ups 100 push-ups 100 sit-ups 100 squats
43	None	Grace (3:56) 30 ground to overhead (135 lb.)
44	Tabata 20:10 x 8 at 50%	None
45	None	None
46	None	None
47	None	None
48	Run 100 miles in VT 100	None
49	Run 100 miles in VT 100 (continued)	None

After the event... I had no soreness whatsoever in my quadriceps, hamstrings, glutes or upper body. I attribute this to training with heavy weights.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

The VT 100 is 70 percent gravel and 30 percent trail. I trained mostly on dirt and asphalt, and occasionally on trail.

I minimized recovery times by eating an appropriate post-workout meal, sleeping at least eight hours per night, and submerging my lower body in a tub of ice water for 25 minutes several times per week.

Race nutrition

Stomach issues are one of the most common reasons runners cannot finish an ultramarathon. Yet I had no nutritional problems whatsoever during the event.

Before my longer runs, I experimented with eating strange foods and seeing how my stomach reacted. Several months ago I tried using Brian MacKenzie's technique of eating a double cheeseburger before a 10 mile run, and I had success. I experimented with other foods including coconut oil, whey protein, ground beef, grapes, almonds, raisins and gels.

I maintained a high-fat "primal" diet during training, in contrast to the high-carbohydrate diet of most ultrarunners. I was able to add a few pounds of muscle mass through caloric excess and maintained a low body-fat percentage.

During the VT 100 itself, I did not follow the primal diet but rather ate the food provided at the aid stations. I supplemented during the race with coconut oil, SaltStick tablets, and L-glutamine tablets. The only downside of this sudden change in diet was an acne flare-up.

The Running of the VT 100

I began the VT 100 at 4 a.m. on June 18 with the simple goal of finishing under 30 hours. I did not know how my body would react after 50 miles.

I ran a smart race, staying well fed and well hydrated and running at a pace to cover 100 miles. I passed all the mid-race medical checks and felt mentally acute and physically stable the entire way. I crossed Mile 50 in about 11 hours 30 minutes, a half hour under my goal time. I arrived at Mile 70 on pace to finish under the prestigious 24-hour mark. After Mile 77 I began to experience severe foot maceration (painful skin pruning), which made running painful. I learned foot pre-taping techniques, but I did not do them properly, and I did not have a crew to assist me.

Courtesy of Shane Skowron

By overloading his lower body with intense workouts in the months leading up to his race, Skowron believes he was able to effectively prepare for the physical strain of running 100 miles.

Shane Skowron used CrossFit WODs five or six days a week to prepare of his 100 mile race.

A detailed description of all of Skowron's workouts is available online here.

Around Mile 80 sleepiness began to take a toll on my pace, though I resisted sleeping.

Starting from Mile 85 I began to get chafing in the crotch area, which got progressively worse as the miles added up. By Mile 90, the chafing made it overwhelmingly painful to run, and I had to resort to a fast penguin waddle. I finished the race this way, crossing the line at 8:26 a.m. the day after I had started.

Recovery

Recovery was quick. I did not suffer any injuries before, during or after running 100 miles. After the event, I took two days completely off and enjoyed whatever foods I wanted. I experienced soreness in my calves, ankles, shins and feet for the two days after the race. I had no soreness whatsoever in my quadriceps, hamstrings, glutes or upper body. I attribute this to training with heavy weights.

By the third day, I returned to CrossFit training and met my PR levels on the weighted pull-up and also the following day on the squat clean. The soreness in the calf muscles lingered for a few days but was no more severe than soreness I've experienced as a result of certain CrossFit workouts.

Conclusion

In retrospect, I believe I was prepared for the distance I attempted. My finish is proof, though I think I was capable of a sub-25-hour finish. Unfortunately, lack of experience and bad luck meant factors such as foot maceration, blisters and severe chafing added hours to my time. It was extremely frustrating to have to walk and waddle in the last 10 miles simply because my skin could not take it. I desperately wanted to run that section, and my legs were willing. At no point during the run did my muscles or joints fail me.

The only change I would have made in my training: adding a few sleep-deprivation workouts so I could have experienced physical exertion while sleepy.

I will continue to follow a similar plan for any future endurance events I attempt because I am pleased that CrossFit and CrossFit Endurance enabled me to meet my goal. I intend to learn the Pose method to improve my training. Because I now have more experience training for, tapering for and running ultramarathons, I expect to see significant improvements in the future.

Brian MacKenzie of CrossFit Endurance Comments:

First, congratulations to Shane on his enormous accomplishment. Carl Borg and I have been reading Shane's blog and tracking his progress throughout his training. It's incredibly interesting to us that someone so young can actually put together a training program, more or less on his own, for a distance he has never experienced.

The goal of finishing in less than 30 hours shows tremendous humility and respect for the distance. It's something most people do not have. Shane's belief that he could have finished in 24 hours is not far from the truth, either. Many things can occur in these races. Nothing is guaranteed. Especially finishing.

Shane's concluding paragraphs show he understands what he needs to work on and is ready to make changes. I do have some nutrition advice: set up drop bags at specific aid stations. That way Shane can have foods he knows he wants to eat and won't have to rely on the aid-station medley.

"I have long believed that the best use of CrossFit is to achieve greater success in your sport... Others are now seeing the potential."

— Brian MacKenzie

On to shoes. I don't believe the Vibram Five Fingers are a viable shoe for the gym. A flat shoe with a little more construction (e.g. DC skateboarding shoes) would have been better. Shane might benefit from larger strength gains and more explosive movements without neglecting the stimulus of the foot.

Looking ahead, developing strength and conditioning while increasing stamina outside the 10 K is imperative for success in future events. And it seems like Shane is already on the way. As a 20-year-old CrossFit Endurance athlete, Shane has tremendous ability to recover. He's already reaping the benefits of his youth and strength.

Not that it's needed, but Shane's accomplishment provides further validation of the CrossFit Endurance methodology. The same might be said of Greg Amundson's performance (in which I was able to personally take part).

I have long believed that the best use of CrossFit is to achieve greater success in your sport. That was the thought behind CrossFit Endurance and CrossFit Football. Others are now seeing the potential. The mixed martial arts world has embraced CrossFit and seen huge gains.

Mark my words: it is only a matter of time before athletes in many sports more fully embrace CrossFit. We already see athletes continuing to compete at the highest levels when they "should" be retired. Athletes everywhere are beginning to use less volume and a serious strength and conditioning program that includes Olympic lifts. In so doing, they are starting to achieve their full potential. A changing of the guard is underway, and if Shane continues, he will probably be part of it.

Carl Borg of CrossFit Endurance adds:

One of the most potent lessons learned here is Shane's understanding of how much more is possible with proper technique. Shane completed the race on whatever his current run form allowed. Wanting to learn technique is something that usually comes with age and wisdom—and after a handful of injuries.

I do have one training suggestion. The Tabata calf raises, albeit creative, should have been swapped for more explosive Olympic lifts. The concentric contraction and the burn of the calf raises was the idea, but it's the eccentric loading of the calf during running that causes the soreness. Again, once Shane learns the proper technique this will not be an issue.

As the CrossFit/CrossFit Endurance style of training becomes rooted in the endurance community, we look forward to seeing athletes like Shane continue to emerge and achieve new heights of power, speed and stamina without logging huge mileage. It all boils down to one word: performance.

And the editor gets the last word:

We are pleased to announce that Shane will be attending a CrossFit Endurance Certification as Brian and Carl's guest. We look forward to following Shane's progress.

✦

About the Authors

Shane Skowron hopes to pursue a career in Naval Special Warfare. He is a senior at Fordham University in New York City, where he studies computer science.

Brian MacKenzie and Carl Borg are the founders of CrossFit Endurance.

Courtesy of Shane Skowron

Skowron hopes to use CrossFit and CrossFit Endurance to finish his next 100 mile race under the elite 24-hour mark.

the CrossFit JOURNAL ARTICLES

Teamwork Gets Athletes to the Games

Many people are involved in getting a single athlete to the CrossFit Games. Rob Orlando tells his behind-the-scenes story and finds other competitors shared his experience.

Rob Orlando, with Jason Khalipa, Eric O'Connor and Patrick Burke

Weeks after competing in the 2009 CrossFit Games, many questions are still tumbling around in my head. Among them: is CrossFit really an individual sport? Or is there a team involved? Do athletes compete against themselves or each other? What does it take to get an athlete ready for the CrossFit Games?

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

I set out to write a personal account about the supporting cast that helped me get to Aromas, California. But then the editors of the *CrossFit Journal* asked a brilliant question: is this story specific to me or did other athletes take the same journey to get to the Games?

Great Coaches Are Behind Every Athlete

I sent the following e-mail to all my fellow athletes:

> Each athlete has a "team" that helps them get ready for and compete in the Games. No athlete can do it completely alone. Some of the roles that might have been filled would be: training group, gym members, financial supporters, Oly coaches, fellow competitors, spouses and family members. Every one of these people plays a part in assisting the athlete. They do so selflessly and without expecting any form of payback. And for doing so, they deserve a piece of the spotlight.

Almost immediately, I got a hit from my new friend Jason Khalipa. He was on his honeymoon in Greece when he wrote:

> Where do I begin? There are a number of individuals who have helped me on my road to the CrossFit Games 2008 and 2009. However, I want to acknowledge one individual in particular for the unbelievable amount of time and effort he has contributed to me: Austin Begiebing of Crossfit Unlimited not only introduced the sport of CrossFit to me but has played an enormous role in my success over the last two years as an athlete, coach and business owner. About four months before the 2009 Games I asked Austin what type of programming I should follow and who should program it for me. In less than a second Austin volunteered… From that day on, I received an e-mail every day for four months with exactly what workouts I should be completing. Austin took me to a different level this year. His hard work and dedication is something that is hard to find in many people. And I feel honored to have him as my coach and friend.

I know how Jason feels. Coaches are amazing people. They know when to push and they know when to put the brakes on. They can tell when their athletes are ready to make a breakthrough and when they're ready to fold. So thank you to all the coaches who helped get someone to the Games.

Jason Khalipa lists Austin Begiebing of CrossFit Unlimited as one of his most dedicated supporters.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

A Family Affair

Family members, especially spouses, play a huge role in athletes' success. They understand and embrace the commitment necessary to compete at the Games. Sometimes the spouse sacrifices as much—or perhaps more—than the athlete. Meals alone, weekends filled with workouts, constant conversation and strategizing about how best to prepare for battle—spouses have to be ready for everything.

I received another response to my query from competitor Eric O'Connor. He wrote:

> We had a baby girl, Naomi, on May 17. Our regionals were only a few weeks before our baby's due date. So it would have been perfectly understandable for (my wife Steph) to say that she would rather have me at home than to be traveling to the regional qualifiers for the weekend. Instead of asking me to stay home (which I would have done), she was extremely supportive and encouraged me to go and do my best. I made sure that if anything happened I would know ASAP and be on my way back home. Perhaps the biggest way she helped me was by making sure that she was the one to get up to do the night-time feedings. I never asked her to do this. She just went and did it without saying a word… I am truly blessed to have such a supportive wife. If roles were reversed I don't think that I would have been able to be as selfless as she was.

Eric's account is a mirror image of my own. My daughter, Hayden, was born on March 21, 2009, which was right before the Northeast Qualifier in Albany, New York. My wife Lauren worked hard to keep our household running smoothly during my prep for the qualifiers. She was nursing an infant and taking care of my three-year-old son Logan while I worked 80 hours per week running my affiliate, Hybrid Athletics/CrossFit-Strongman. Never did I hear a complaint—only encouragement.

There was always a Zone-friendly meal when I got home from work. All I had to do was train hard and eat right. Without my wife, I could not have been so focused. I heard Josh Everett say he was the luckiest man in the world because his wife was so supportive of his athletic endeavors. With all due respect, Mr. Everett, I am the luckiest man in the world. My wife is a living expression of selflessness. For that, I am truly thankful.

Eric O'Connor had a baby girl shortly before the Great Basin Qualifier. His wife Steph took care of the late-night feedings, and O'Connor finished second in the regional event.

Training Buddies: Friendly Competition

What about training partners? What role do they play pre- and post-qualifier? I was lucky enough to have a small group of WOD partners. Tim Burke, Mike Burke, Stephen Masso, Christina Boccuzzi and Katie Burke all played a part in getting ready for our regional qualifier in Albany. To prepare, we completed almost every other regional-qualifier workout as a group and compared our times to one another. Our days were spent salivating at the prospect of competition. We all liked the idea of winning.

It's a strange thing when you compete against someone you've worked out with every day for months. Going into the final workout at the Albany regional, Tim Burke and I were tied for points. I managed to scrape by with a decent time in the final WOD, and I made the Aromas cut—barely.

The real story is what happened after that. I'm talking about the attitude of my training partners who hadn't made the cut. There was no hostility, no resentment and no bitterness. There was only happiness for me. It caught me off guard. At this point, my training partners could have gone back to their own priorities. Instead, they rallied around me and pushed me harder than ever. We started doing track days on Sunday mornings. They sacrificed chunks of their weekends to help me run 400s, hills, sprints, etc. The support and loyalty was more than flattering: it was humbling. I just hope someday I can properly find a way to say, "Thank you."

Fellow competitor Patrick Burke agrees with me on the importance of training groups. He wrote:

> Everyone in the gym was incredibly supportive. I did a handful of workouts with the class while my girlfriend coached. During every WOD, people would be beside me cheering, "CrossFit Games, baby!" I pushed harder with my athletes cheering me along in the WODs. They (the coaches and my girlfriend) were always there asking my strategy and working with me to keep my diet, sleep and workouts in check. For the last two weeks prior to both the regionals and the Games, they helped do the morning classes so I could sleep in. All of that really helped me out. I couldn't have done it without them.

Financial Support

What about money? How much does it cost to get to California from Australia, Africa or Connecticut? It was brought to my attention that the competitors from CrossFit Copenhagen raised almost $50,000 to make the trip to Aromas! How do you do that? By being part of one of the most generous, kind, appreciative communities of athletes that has ever existed. My gym is full of people who simply "get it."

For example, one of my clients came to me before the qualifiers in Albany and said, "Rob, I want to pay for your hotel while you're away. Don't worry about anything—period. Just focus on the competition. I'll take care of the finances."

Pat Burke (right) says the people in his gym pushed him to new levels and helped him earn a trip to The Ranch.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

He did just that. His secretary booked my hotel reservation, sent me reminders and made sure I needed nothing. Then, leading up to Aromas, he opened his wallet again to pay for my hotel, car and flight! His advice was the same: "Go out there focused and do the very best you can. Don't waste a moment thinking about anything but the competition."

Coaches are amazing people. They know when to push and they know when to put the brakes on. So thank you to all the coaches who helped get someone to the Games.

This kind of reassurance is worth way more than the dollars. Sincere thanks to my financial supporters for helping me out. Without you, the trip would not have been possible.

The Role Call

There are so many other people on my team to thank. All the members at my gym, Hybrid Athletics, deserve a special thanks. Collectively, you pushed me, encouraged me and made me feel like I actually had a shot at winning. Specifically, here are a few people who made a difference:

- ***Kathryn Shirley*** is a long-time friend and trainer who spends time at Hybrid. We had many discussions leading up to game day, and they were always uplifting. You sent me out there thinking I was a contender. Thank you for keeping my spirits up when I needed it most.
- ***John Lockwood*** is an example of a person who sacrifices for others. He's a firefighter in Stamford, Connecticut, and he's a great friend and motivator. After working a 24-hour shift, he'd come directly to the gym to coach me through a workout, pushing me faster and faster and keeping track of my rounds while I was in an exercise haze. Those workouts hurt—but not as badly as if I had done them alone.
- ***Alistair (Aussie) Boyd*** sent me encouragement from across the world via e-mail and voice mail after the Albany regional. He followed the Games site like a hawk and made sure to share his valued training ideas, nutrition information and WOD suggestions along the way. Following the regional, he left me one of the kindest voice mails I have ever received. I have not erased it and I will not do so anytime soon.
- ***Ben Kelly*** of CrossFit Performance, you were instrumental in the final days of prep for Aromas. Your workout ideas were spot-on for the competition, and I pushed myself harder during those workouts than at almost any other time in my career. Thanks for your tireless effort and dedication to a fellow CrossFitter.

CrossFit is a community of special people. We need to spend some time looking around at what an amazing collection of athletes we have playing our sport. It's a sport where only one athlete competes at a time, but each represents a team of people who have helped them along the way. Every athlete, if he or she spent some time, could come up with a long list of people who have played a role in their successes. These people don't look for the spotlight—but they certainly deserve it.

✦

About the Author

Rob Orlando, owner of Crossfit-Strongman in Stamford, Connecticut, placed fifth in the Northeast Regional Qualifier and 22nd at the CrossFit Games in Aromas. He started doing CrossFit about a year ago and still competes regularly as an amateur strongman. He holds several North American Strongman records and hasn't lost a strongman competition since starting CrossFit. At his last competition in Philadelphia, he finished the day a perfect 5-0 over five events.

the CrossFit JOURNAL ARTICLES

Coaches and Athletes: The Psychology of CrossFit

The author, a British psychologist and CrossFit trainer, offers coaches advice on how to get better results by building better rapport with athletes.

Steven Shrago

Coaching is not just about stopwatches, whiteboards and learning progressions. It's about relating in a meaningful way to a diverse group of people.

At the core of the CrossFit model is the relationship between athlete and coach. This relationship may be on a one-to-one basis or as part of a group.

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

Coaching knowledge and virtuosity are strong determining factors in the results achieved by individual athletes. But sometimes coaching relationships do not work as well as hoped. That doesn't have to happen. So how to improve the athlete-coach relationship?

Let's start with a truism: everyone is different. From physical size, ability, capacity and potential through to more subtle and ethereal concepts like beliefs, personality and values, it's clear we are all unique. Your mum was right about that. Coaches need to bridge differences to relate to everyone in productive and effective ways.

Neurolinguistic Programming—NLP

Neurolinguistic programming (NLP) is the study of personal and interpersonal effectiveness. The researchers and practitioners of NLP have developed a number of theoretical models to help people understand and develop the skills to improve their effectiveness.

One of the cornerstones of interpersonal effectiveness in NLP is described as "rapport." Rapport can be described as "being on the same wavelength," "speaking the same language" or "feeling in sync" with the other person. It feels comfortable and easy to get along with someone with whom you have a rapport. It happens naturally with people we get along with, and often with people we would like to get along with, as you can see in the examples of "chatting up" pictured below.

In my experience, a coach's rapport-building skill is the single biggest factor in building solid relationships with athletes. Dare I say it's even more valuable than coaching ability itself? Think about some good or great coaches you have worked with in the past. Most of them were able to get on your wavelength and used that connection to get you to work harder.

Matching/Mirroring

People tend to mirror each other physically, verbally and psychologically when they are in rapport.

Look again at the pictures below. Notice how in each picture the body language of each person almost exactly mirrors that of the other. This is even more remarkable in the group picture. Notice how each friend leans forward, resting an elbow on a knee. The picture doesn't look staged; this is just how the group felt comfortable at the time.

> *"If the brain were simple enough for us to understand it, we'd be too simple to understand it."*
>
> *—Ken Hill*

Malias/Creative Commons

Physical manifestations of a good rapport between people include mirroring of gestures and body positions. Good coaches can use this to develop a link to their athletes.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

The degree of matching and mirroring can be quite subtle, too. Notice the couple in the picture at the bottom right of Page 2: the woman almost exactly copies the posture and gestures of her partner, even though she isn't on the phone.

Rapport tends to happen naturally when we are with people we like. However, it sometimes happens unconsciously where we are trying to impress another person and inadvertently take on some of his or her mannerisms.

The athletes want to impress Burgener, of course, and to avoid burpees, I suppose. So to impress the coach, they tried, unconsciously, to look like him.

For example, Mike Burgener tends to cross his arms quite frequently. That doesn't mean anything in and of itself. It's just a mannerism. However, have a look at the effect his mannerisms have on an entire group at an Olympic Lifting Cert. In the second picture, a number of students have their arms crossed "Burgener-style" in front of them.

Why? The athletes want to impress Burgener, of course, and to avoid burpees, I suppose. So to impress the coach, they tried, unconsciously, to look like him. I'll wager that none of them was of aware of it at the time, either.

If that's what rapport looks like when it's going well, then what does it look like when it isn't going well? In short, it looks opposite: mismatched postures, gestures and language. A typical giveaway of poor rapport is the tilt of the head. When people are in rapport, their heads tend to tilt to the same side.

Have a look again at the pictures of people in rapport (Page 2). Notice how the head of each person tilts to match those of the others? When you pay attention to small things like body language, you can learn about the dynamics of interpersonal relationships.

You can try an experiment with a friend. Note which way he tilts his head and tilt yours to the opposite. If he is a good friend, he'll probably tilt to meet yours after a few seconds. Notice how awkward it is to hold a conversation with heads tilted the "wrong" way.

Now apologize to your friend.

Keith Wittenstein/CrossFit Virtuosity

Coach Mike Burgener often crosses his arms—but anyone who's been to an Olympic Lifting Cert knows it isn't a sign of disinterest.

Keith Wittenstein/CrossFit Virtuosity

Body language is contagious when a group is in sync. Here, students unconsciously mirror one of their coach's favorite poses.

Coaching Progressions

Typically, when individuals or groups are in rapport, you tend to see the same patterns of body language across the group; e.g., tilt of the head, position of the arms and legs. You can also look for people physically leaning towards the coach and laughing and smiling together.

When groups are not in rapport, and thus not engaged, you will tend to see all sorts of positions. Examples include people not paying attention or doing their own thing. You might even see little sub-groups forming. When that happens, you risk not getting your message across and even losing people entirely.

So what can you do about that as a coach?

I'll outline three progressions you can work through to develop your awareness and skills around building rapport with your clients. They increase in complexity and build on one another. I would recommend you give each one a good go before progressing to the next. It goes without saying that although these skills have great utility in CrossFit context, they're also pretty useful in life outside the box.

I'd also say that you should feel free to experiment. There is no magic bullet that will work for all people at all times. Try something, watch the result and decide whether the outcome was what you wanted. If it was, keep on truckin'. Otherwise, try something else.

The three progressions are:

1. Active listening
2. Building rapport
3. Rich communication

A cohesive group is often characterized by very similar physical responses from each individual.

Active Listening

Active listening is a psychologist's way of saying: "Pay attention." But it's paying attention with more than just your ears. It involves "listening" with your eyes, ears and emotions to get as full an appreciation of others as you can manage. Ultimately, unless you are genuinely and consciously aware of how people are different from each other and even you, it will be difficult to tailor your approach to meet their needs.

By listening with your eyes and ears, I mean:

> How does the individual hold herself physically?
>
> What mannerisms does she have?
>
> What sort of words does she use?
>
> How quickly or slowly does she speak?
>
> How does she act when unsure of something?
>
> How does she act when excited?
>
> How does she act when worried?
>
> What sorts of questions does she have?
>
> To which side does she naturally tend to tilt her head?
>
> Does she tend to move toward things or away from them?
>
> Does she tend to make eye contact or avoid it?
>
> Does she ask questions?
>
> Does she do things just to please you as a coach?

But be careful: despite conventional wisdom, the meaning of body language is far from universal. Crossed arms can infer a multitude of different thoughts and emotions depending on the context and the person.

Active listening is also mentally tiring. It's not something most people are required to do on daily basis. As we get older, we tend to rely on experience or instincts, which are effectively mental shortcuts. Active listening opens your senses to the noise of human interaction without filtering. This information will be an invaluable asset in helping you build rapport with a wider variety of people.

Building Rapport

I prefer the term "building" to "manufacturing" because it sounds less Machiavellian. At least that's what I tell myself.

This progression builds on the previous one by using the information you've gathered to inform decisions on what you can do to build rapport. The simplest approach toward building rapport, especially with people you don't know well, is matching or mirroring. This is the subtle activity of physically or verbally reflecting the other person's style in your own. And I really mean subtle. Really. No one likes a copycat.

So if someone tended to tilt his head to the left side when talking to you, you would subtly tilt yours to your right to match. The picture of the two women mirroring each other (Page 2) is a very good example of this.

Go gently, however. If the other person has a pronounced tilt of the head, you don't need to match it for intensity. Also, if your partner constantly changes sides, don't feel you have to move your head through a full range of motion to keep up.

Other things to watch for are body position. Is an athlete directly facing you or standing at an angle? Is he leaning toward or away from you? What leg is he carrying his weight on? How is he holding his arms? All of these observations can be subtly mirrored to build the mutual feeling of rapport. Watch and listen carefully to see if the rapport is building. When you smile, does he smile with you? When you get a little more animated, does he follow? When you lean forward, does he?

This is where it is very useful to understand more about your own style. Grab a video camera and record one of your coaching sessions. What did you notice? What were your habits? What do you need to be aware of when building rapport with others?

So how can you make your communication with others more effective while building on the active listening and rapport building? You can use the mode of communication that connects best with the individual's representation of the world.

Another area to focus on is language. Does an athlete tend to use certain words? Does he speak in a specific tone, pace, pitch or volume? These are also good options for matching. A common example is speech volume. Some people or groups are naturally quiet. Standing in front of them and booming out instructions in your best motivational style might not always be the best route to building rapport and understanding. Try standing a little closer and speaking more quietly at the start. See if that engages the group or individual more effectively. When dealing with a noisy, talkative group or athlete, feel free to ramp up the volume.

Observe what other coaches and trainers do. See if you can learn anything from their style. Determine what works best for you.

How is Lisa Lugo responding to Mark Rippetoe's instruction? How is Rip getting his point across? What physical clues show that she's getting the message?

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

Rich Communication

For the final progression, I'll start with a statement about the word "communication": it's heavily overused and widely misunderstood.

Communication is not:

> What you say.
>
> How you say it.
>
> Listening to other people say things to you.
>
> E-mail.
>
> A phone call.
>
> Having a meeting.

Communication is the message you get back. Think about that for a moment.

Now think about how many steps it takes to get from "the message I want to send" to "the message I get back."

1. The message the coach wants to send (in her head).
2. The method the coach uses to send the message (what she says and how she says it).
3. The amount of the message received by the client (none, some, all).
4. The client's interpretation of the message received (good, bad).
5. The client's thoughts and feelings about her interpretation.
6. The message the client wants to send back.
7. The method the client uses to send the message back.

Effective communication has only really taken place once the client has sent her message back to the coach and the coach is satisfied with the answer. If the coach is not satisfied with the answer—and the answer may be words or actions—then she needs to change steps one and two. After all, the very definition of madness—or indeed poor communication—is doing the same things and expecting a different outcome. If this is true, then why, when faced with misunderstandings, do some people just loudly and slowly repeat what they already said?

Each coach has his or her own style of communication, which includes visual, auditory and kinesthetic components that get the message to the athlete. Tanya Wagner used Coach Burgener's advice to snatch 135 lb. at the 2009 CrossFit Games.

Many athletes respond well to visual cues such as those given by Adrian (Boz) Bozman (right) and Chris Spealler—but some do not. How do you coach that athlete to a new PR?

So how can you make your communication with others more effective while building on the active listening and rapport building? You can use the mode of communication that connects best with the individual's representation of the world.

NLP describes three basic representations of the world, which are generally reflected in their language usage:

Visual: tends to see, understand and describe the world in visual terms and mental images; e.g., "I see what you mean," "Look at this," and "Watch carefully."

Auditory: tends to relate to the world in terms of sound, voices and noises. Tends to listen in order to understand and err toward the logical and methodical; e.g., "Sounds good to me," "I hear what you are saying," and "Listen to me."

Kinesthetic: tends to relate to the world in terms of physical senses, feelings and emotions. Often needs to touch or feel things to understand them; e.g., "I can't get to grips with it," "Hold on," and "Feel the pressure."

The most common style in Western cultures is visual (approximately 65 percent of the population), followed by auditory (30 percent), and then kinesthetic (five percent). In reality, everyone tends to use all styles to some extent with a clear preference for one or two of them.

To get a quick sense of your preferred style, visit this Web site and complete the questionnaire.

The best coaches carefully listen and observe their athletes and are prepared to offer a wide variety of cues to success. Here, Coach Greg Glassman uses Lani Lau to demonstrate the air squat.

To understand how these styles might work in a coaching context, consider the cues related to the most basic movement in CrossFit: the air squat.

Visual

Physical demonstration of the movement ("Watch this.")

Pointing to key aspects of the movement as they happen.

Cue: arms straight out in front of your body.

Cue: hips back and down.

Cue: feet shoulder width apart.

Cue: toes pointed at 30 degrees.

Cue: knees out.

Cue: maintain lumbar curve.

Cue: crease of the hips below the knee.

Auditory

Detailed, logical and sequential description of the movement as it takes place

Cue: the elongated pronunciation of the word "pull" as the coach describes the effort of "pulling your body into the bottom position."

Cue: the elongated pronunciation of the word "drive" as the coach describes the effort of "driving off your heels and up."

Cue: sharp, militaristic pronunciation of the word "straight," when describing the "stand straight upright" portion of the movement.

Cue: directive, elongated pronunciation of the word "hold" when telling clients to hold their position at the bottom of the squat.

Kinesthetic

The physical feeling of completing each stage of the movement; e.g., the sensation of maintaining the lumbar curve.

The physical sensation of any hands-on adjustment the coach makes.

Cue: feel the weight on the heels.

Cue: stretch your arms up higher.

Cue: tighten up your core.

Cue: breathe in and hold.

Cue: pull yourself down into the bottom.

Cue: push your knees out.

Cue: press off your heels.

Look at the cues. Which seem more like your style? Do you use cues from all three sections or just two? Only one?

In order to create rich communication—what you say and how you say it to get your message through to others—you should be aiming to cover all three of these representation systems simultaneously.

If you have the time, listen to President Barack Obama's inauguration speech. His words are laced with imagery (visual) and emotional context (kinesthetic). Furthermore, much has been made of the tone, volume and pace of his delivery (auditory).

The beauty of this approach is that you have complete freedom to create memorable, rich cues for all the movements you coach or are learning. There are no such things as the "best cues" to use; there are only cues that work for some people and those that don't.

Cues for Coaches

The most important tips for coaches are as follows:

- Work on your active listening. Use this to inform your rapport building, especially with people or clients you don't know well.
- Keenly observe the results and make changes where necessary.
- Finally, build up a varied toolkit of cues for each movement. If one doesn't work, try something different. After all, no two people are the same.

As a final note of inspiration, I'll share a couple of cues used by Andrew Stemlar, CrossFit Level 2 trainer and owner of CrossFit London:

On "hips back and down" for squatting movements: "Imagine that a rich and sexy person is standing behind you. Press your rear end out and try and impress them."

On active shoulders in the overhead squat: "Imagine that you have a pair of angry squirrels in your hands. They are trying very hard to attack each other. Keep them high above your head and pull them apart as hard as you can."

On "elbows high" as you drive out of the front squat: "Imagine that you have strings attached to your elbows. As you come out of the squat, feel yourself being pulled up by your elbows."

Andrew is a genius.

✦

Courtesy of Steven Shrago

About the Author

Steven Shrago is a paleo-eating, CrossFitting organizational psychologist from London, England. He has worked with a wide range of organizations, including the BBC and law-enforcement agencies. He cautions that neurolinguistic programming is just one map of underlying human complexity and is no more right or wrong than other models of personality and behavior.

Further reading

The NLP Knowledge Centre

West One Neuro-Linguistic Programming

the CrossFit JOURNAL ARTICLES

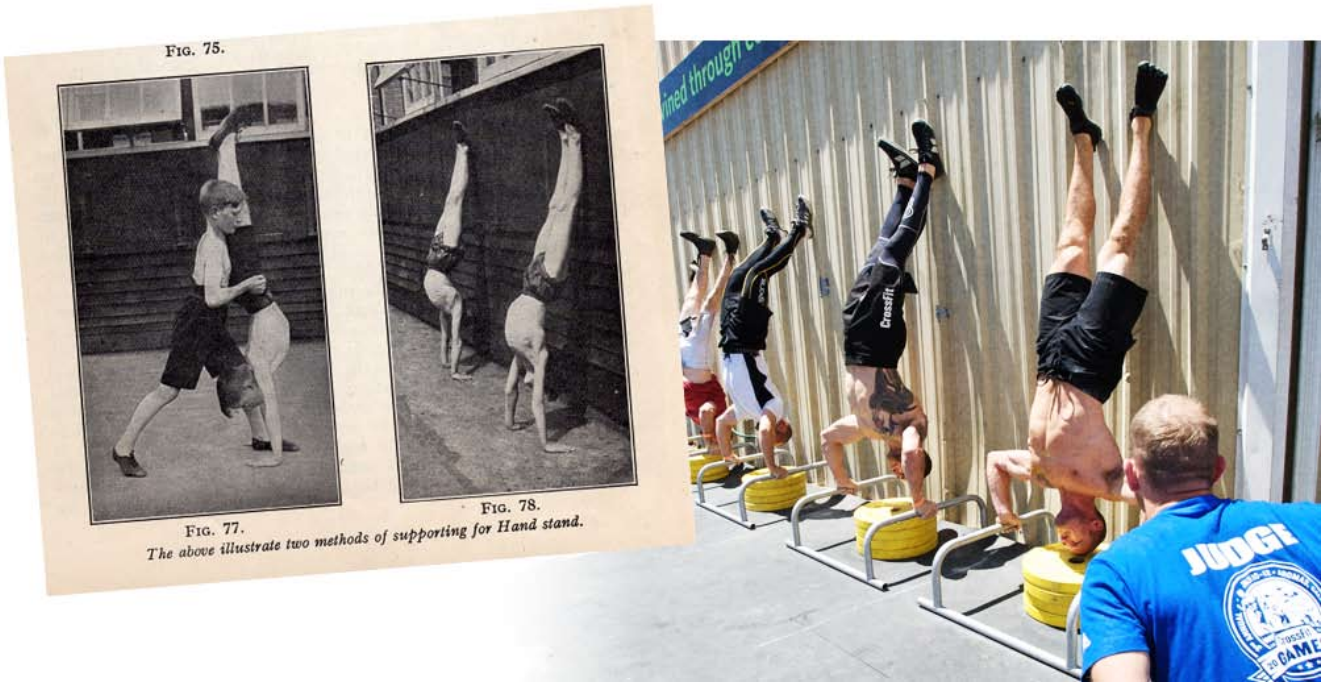
Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

the CrossFit JOURNAL ARTICLES

How We Got Here: CrossFit vs. the Fitness Industry

A CrossFitter who teaches undergraduate courses in exercise education finds a connection between our detractors and the evolution of physical-activity guidelines. He takes a look at what's next.

Dr. Tony Webster



Many academics and fitness professionals are highly suspicious of CrossFit. In turn, CrossFitters are often quick to dismiss conventional fitness approaches. It doesn't have to be this way. Call me optimistic, but I think we can learn a lot from each other. CrossFit is forging an impressive path, but it can't afford to ignore conventional fitness wisdom entirely. At the very least, an understanding of fitness history and current scientific research can help us defend and promote our methodology.

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

Exercise and Health—Then and Now

Some very brief but very important perspective is in order. In the past three to four decades, our understanding of the health benefits of exercise has deepened tremendously. We now understand that physical activity is necessary for health and that millions of years of evolution have firmly imprinted this requirement into our genetic makeup. The problem we now face is an "obesogenic" 21st-century environment that conspires against our paleolithic genome. Lack of physical activity and poor nutritional habits have been major contributors to the unprecedented current levels of obesity, heart disease, cancer and diabetes in Western society. These are the so-called diseases of modern civilization.

By the 1970s, sufficient scientific research linking exercise to improved health had accumulated to support construction of the first physical-activity guidelines. The American College of Sports Medicine (ACSM) took the lead in this area and is still probably the most respected institution around the world for all matters related to exercise. In 1975, the first edition of the ACSM's ***Guidelines for Graded Exercise Testing and Exercise Prescription*** was published. Table 1 shows the original recommendations for the type, frequency, intensity and duration of exercise, along with subsequent modifications found in updated issues of the book.

The media and the public still idolize endurance athletes as the "fittest" individuals on the planet. The much broader view of fitness forged by CrossFit is, in my view, its greatest strength.

Until 1990, the definition of "exercise" was rather limited. Early public-health guidelines spoke only of aerobic exercise with little recognition of resistance or flexibility training. Many would argue this bias persists today. The media and the public still idolize endurance athletes as the "fittest" individuals on the planet. The much broader view of fitness forged by CrossFit is, in my view, its greatest strength.

The guidelines in Table 1 have evolved over the years. The goal of the earliest recommendations was to improve cardiovascular fitness with structured exercise sessions. The problem was that many were left with the impression that exercise not meeting these criteria was of little value. By the late 1980s, things had changed. Sufficient information had accumulated to suggest lower amounts of exercise had significant positive effects on cardiovascular health (see Figure 1).

Table 1: Dose of aerobic physical activity recommended in the ACSM's ***Guidelines for Graded Exercise Testing and Exercise Prescription*** (1975-2000).

Objective and year of edition	Activity *Frequency (days/wk)	Duration (min/day) **	Intensity (% HRR) ***
Cardiorespiratory fitness:			
1975	3 – 5	20 – 45	70 – 90
1980	3 – 5	15 – 60	50 – 85
1986	3 – 5	15 – 60	50 – 85
1991	3 – 5	15 – 60	40 – 85
1995	3 – 5	20 – 60	40 – 85
Health promotion:			
2000	7	≥ 20	40 – 85

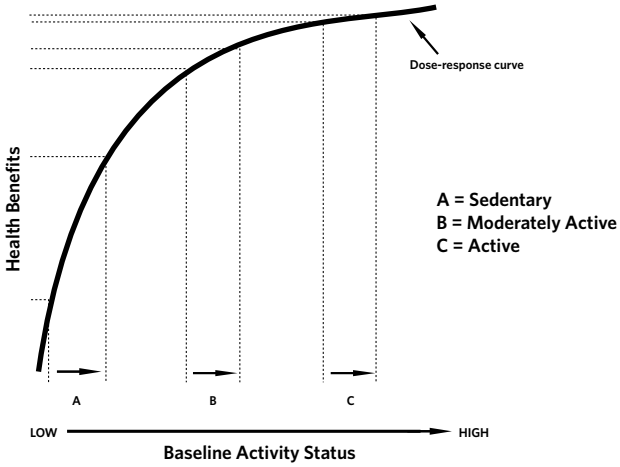
* Any activity that uses large muscle groups and is rhythmical and aerobic in nature
** Continuous activity except for the guidelines from 2000, which were for cumulative totals, with a minimum of 10 minutes of activity per session
*** Percentage of heart rate reserve (the difference between resting heart rate and maximal heart rate)

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

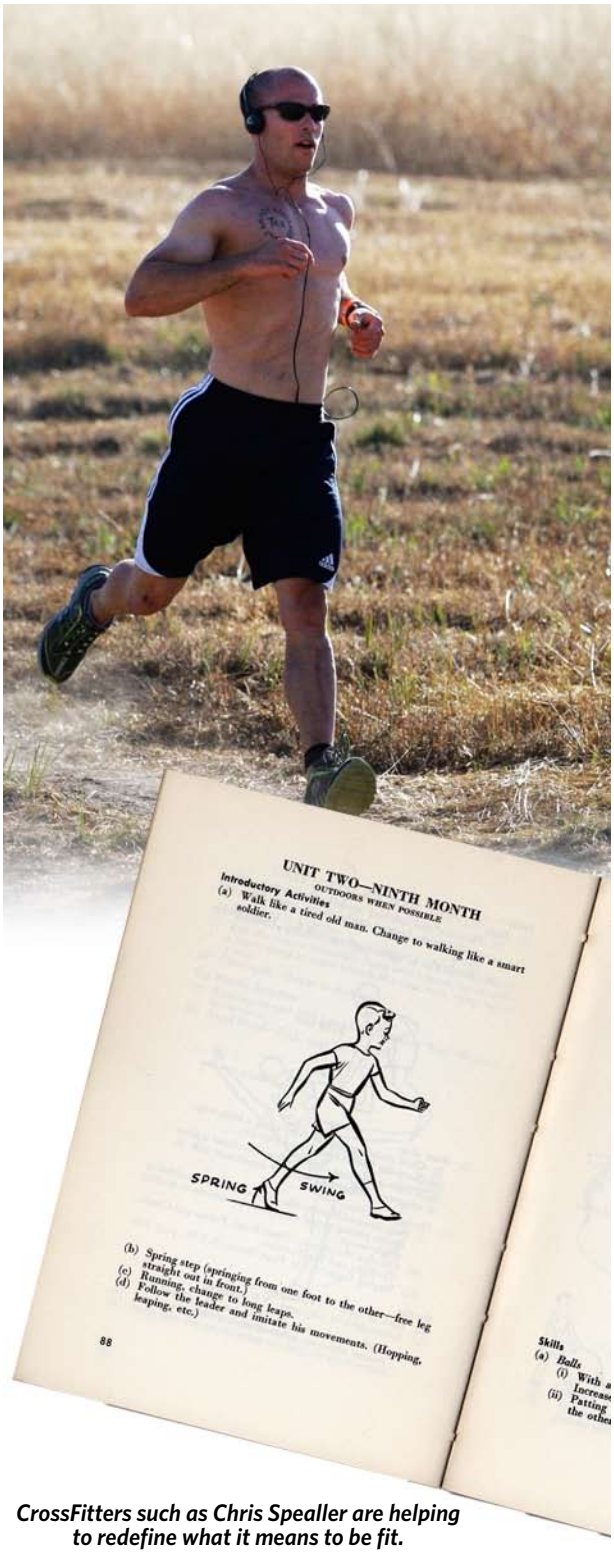
The implication was clear: sedentary individuals had a great deal to gain by engaging in low-to-moderate amounts of physical activity. Getting "off the couch" might just help ward off that catastrophic premature heart attack. (Note that the relationship shown in Figure 1 is now better understood. The shape of the curve varies depending on the specific health benefit concerned.)

Figure 1: The relationship between amount of physical activity and potential health benefits



The discovery of the relationship in Figure 1 led to a fundamental shift in thinking regarding exercise recommendations for public health. The 1990 ACSM position stand signalled a shift away from an exclusively performance-related fitness paradigm towards one that placed greater emphasis on lower levels of activity and health. To quote the position stand: "The ACSM recognizes the potential health benefits of regular exercise performed more frequently and for longer duration, but at lower intensities than prescribed in this position statement."

The next significant development was the 1995 joint report by the Centers for Disease Control and Prevention (CDC) and the ACSM. Terminology was greatly simplified and the message was clear and concise: "Every U.S. adult should accumulate of 30 minutes or more of moderate physical activity on most, preferably all, days of the week." Moderate activity was defined as equivalent to a brisk walk that "noticeably accelerates the heart rate." Vigorous activity was defined as equivalent to jogging which causes "rapid breathing and a substantial increase in heart rate."



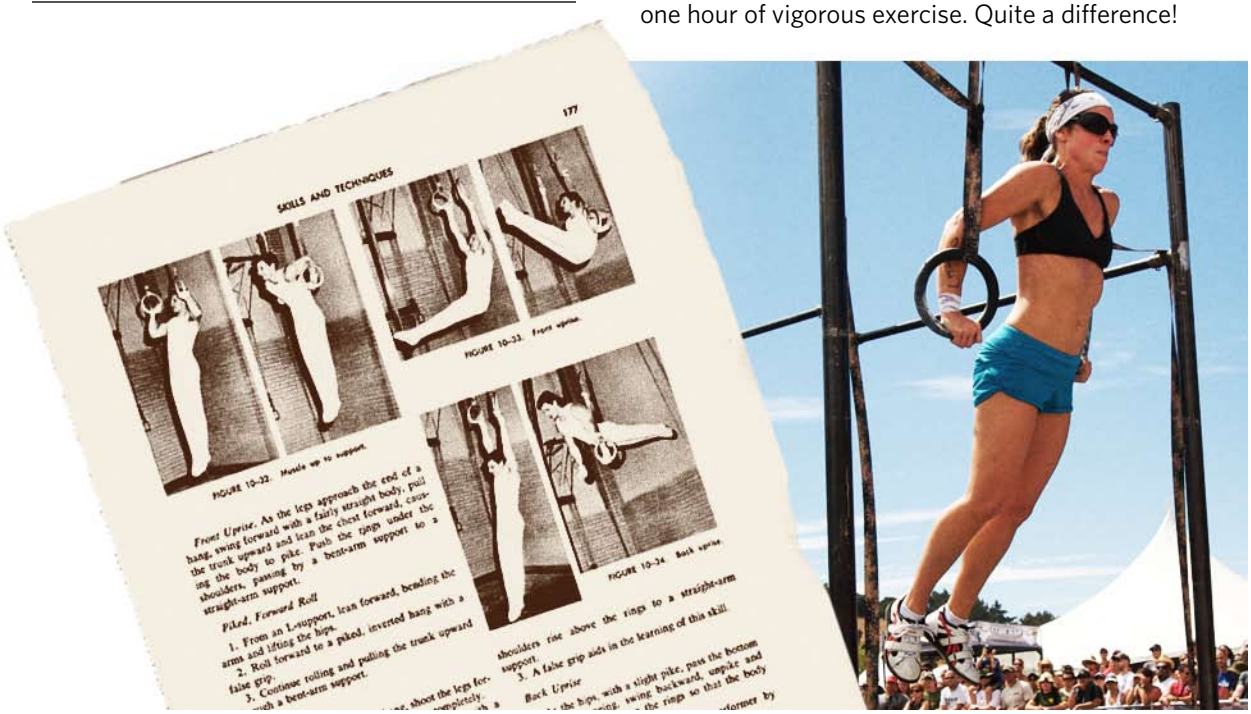
CrossFitters such as Chris Spealler are helping to redefine what it means to be fit.

The target population for the 1995 CDC/ACSM statement was clearly the large group of sedentary American adults who accounted for much of the public-health burden of chronic disease. Also note the word "accumulation." The prescription could be met by accumulating three 10-minute bouts of activity during the day as opposed to one continuous bout of exercise. This was a further important step in the evolution of lifestyle-friendly activity guidelines. The aim was to make physical activity more achievable and more attractive to more people.

It's safe to say that a CrossFit-style program performed three to five times per week will almost certainly provide a weekly dose of "vigorous" aerobic exercise that would easily satisfy current public health guidelines.

The message of the 1995 CDC/ACSM report can still be seen in the most recently updated physical-activity guidelines for public health. In 2007, the American Heart Association (AHA) and the ACSM released a joint updated recommendation that contained an important recognition of the potency of vigorous physical activity. The AHA/ACSM guidelines state, "To promote and maintain health, all healthy adults aged 18 to 65 years need moderate intensity aerobic (endurance) physical activity for a minimum of 30 minutes on five days each week or vigorous intensity aerobic physical activity for a minimum of 20 minutes on three days each week." (If you check the current recommendations regarding aerobic activity for healthy adults on the CDC website, you will see a recommendation that is essentially identical).

The addition of the vigorous-intensity phrase was significant. It acknowledged the efficacy of higher intensity exercise for achieving fitness and health benefits. The most frequently cited barrier to physical exercise is "lack of time," so this new addition has important implications. Consider the total exercise time required per week: five bouts of 30 minutes equals 2.5 total hours of moderate exercise. Three bouts of 20 minutes equals one hour of vigorous exercise. Quite a difference!


177

SKILLS AND TECHNIQUES

FIGURE 10-32. Muscle up to support.

FIGURE 10-33. Front upraise.

FIGURE 10-34. Back upraise.

Front Upraise. As the legs approach the end of a hang, swing forward with a fairly straight body, pull the trunk upward and lean the chest forward, causing the body to pike. Push the rings under the shoulders, passing by a bent-arm support to a straight-arm support.

Piked, Forward Roll

1. From an L-support, lean forward, bending the arms and lifting the hips.
2. Roll forward to a piked, inverted hang with a false grip.
3. Continue rolling and pulling the trunk upward through a bent-arm support.

shoulders rise above the rings to a straight-arm support.
3. A false grip aids in the learning of this skill.

Back Upraise

CrossFit has taught the fitness world that the rings aren't just for specialists—they can be used for general fitness.

It's safe to say that a CrossFit-style program performed three to five times per week will almost certainly provide a weekly dose of "vigorous" aerobic exercise that would easily satisfy current public health guidelines.

Resistance Training Guidelines

Until the 1990s, very little emphasis had been placed on resistance training for health, perhaps due to the fact that strength training had an image problem. It was viewed as a "fringe" activity, the domain of young males in search of muscular development. Increasing research evidence through the 1980s and 1990s supported the role of resistance training for musculoskeletal health and overall quality of life. Research has now clearly shown resistance training can have favorable effects on the overall functional capacity of all people, influencing everything from muscular fitness to cardiovascular function, balance and fall prevention. Risk of adult-onset diabetes, certain cancers and coronary problems can be reduced. It can even produce favourable effects on psychological well-being.

The basic ACSM recommendations for resistance exercise endorse a body-part approach... . I believe it is a rather restricted view of resistance exercise that merely reflects what we are comfortable with and what has been studied.

The result is resistance training has now become a central part of the fitness movement. Today, women and seniors are taking up resistance training in increasingly greater numbers for its health benefits. That's a big change in the fitness landscape from 10 or 20 years ago.

The ACSM says adults should perform "activities that maintain or increase muscular strength and endurance for a minimum of two days each week." More specifically, it is recommended that: "8-10 exercises be performed on two or more non-consecutive days each week using the major muscle groups. To maximize strength development, a resistance (weight) should be used that allows 8-12 repetitions of each exercise resulting in volitional fatigue."

The recommendations go on to state that "muscle strengthening activities include a progressive weight training program, weight bearing calisthenics, stair climbing and similar resistance exercises that use the major muscle groups." (For more detail, see *Progression Models in Resistance Training for Healthy Adults*, the ACSM's recent in-depth review specifically on resistance training.)

The basic ACSM recommendations for resistance exercise endorse a body-part approach that has been the staple in gyms for decades. Most of us have been there and done that at some point in the past. I believe it is a rather restricted view of resistance exercise that merely reflects what we are comfortable with and what has been studied.

Another interesting point is that resistance exercise and aerobic exercise are typically portrayed as quite separate types of activities done with different equipment designed to address different facets of health. This, of course, is an entirely human delineation. Coach Greg Glassman is correct in saying that nature has no regard for the distinction between cardio and strength training. CrossFit has broken through this mold. It has intentionally blurred the distinction between the two forms of training through creative use of gymnastic movements and weights that pack an impressive aerobic punch. I believe the day will come when we will understand that we have been far too limited in our view of resistance training.

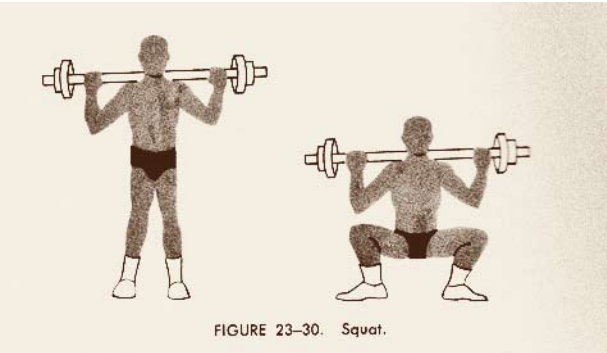


FIGURE 23–30. Squat.

You know the drill: knees track over toes, lumbar curve is maintained, weight is on the heels and the hip crease is below the knee.

When it comes to resistance training, CrossFit has been pioneering in other ways. Instead of a body-part approach, CrossFit emphasizes performance and functionality. Strength days are true to their name with repetition schemes that challenge the muscles' ability to apply high levels of force. Power training and Olympic lifting movements are essential components of CrossFit. It is a tragedy that this very important aspect of fitness is so neglected in the fitness industry. Numerous scientific studies have clearly shown the importance of muscular power, especially as we age.

Purists may scoff at the lack of formal periodization in CrossFit, but they forget that CrossFit's specialty is not specializing. Its goal is to develop broad and inclusive fitness. Many underestimate the potency of the CrossFit approach in other ways. The team atmosphere, the learning of new skills, the use of stopwatches, the friendly competition, the constant variety—these are all intangible but powerful factors lacking in the traditional approach. For an overview of some of these factors, I would urge you to read the recent article in the *CrossFit Journal* by Chris Cooper titled *The Secrets of Sticking With It*.

Fitness is about being able to move your body, whether you did it in gym class in 1972 or whether you do it at your local CrossFit affiliate.

Stretching and Flexibility Guidelines

Regular stretching improves joint range of motion and function and may enhance muscular performance. The importance of flexibility for optimal musculoskeletal health and quality of life as we age has now been appreciated. This goes some way to explaining the recent popularity of activities such as Pilates and yoga.

Information regarding stretching and flexibility was only incorporated into exercise recommendations in 1998. Until that point, attention to flexibility was very much an afterthought incorporated into exercise workouts only as part of warm-ups and cool-downs. The current guidelines regarding stretching and flexibility are as follows:

> A general stretching program that exercises the major muscle/tendon groups (lower extremity anterior chain, lower extremity posterior chain, shoulder girdle, etc.) should be developed using static, ballistic, or modified PNF (contract/relax, hold/relax, active/assisted) techniques. Static stretches should be held for 10 to 30 seconds, whereas PNF techniques should include a 6-second contraction followed by 10- to 30-second assisted stretch. At least four repetitions per muscle group should be completed for a minimum of 2-3 days a week.

For many athletes, including CrossFitters, flexibility work seems to take a back seat to everything else. At my gym, we have had great blog discussions about flexibility and the necessity of a dedicated stretching program. Many believe if you perform CrossFit exercises with adequate range of motion, you will develop all the functional flexibility you will need. I understand this point, but I believe some additional flexibility exercises are a good idea for most. Focus on problem areas after your workout or at other times in the day. I happen to believe that regular stretching or yoga practice is an excellent physical and psychological complement to the demands of intense CrossFit training.

The Efficacy of Physical-Activity Guidelines

The underlying aim of public-health physical-activity guidelines has always been to educate the public in the perhaps-blind hope that people will become more physically active.

It's probably fair to say the general public is more educated about exercise than it was 10 or 20 years ago. But the real question is if people are more educated about physical activity, are they more likely to do it and stick to it? Apparently not.

In a recent review of this question in the scientific journal ***Sports Medicine***, it was stated that "the effect of physical activity guideline characteristics on behavioural characteristics is not particularly robust." The authors go on to say, "Factors unrelated to the recommended guidelines may be of greater importance when considering behavioural adherence issues. Social cognitive, personality, and environmental or socioeconomic factors have amassed considerable evidence as correlates or determinants of physical-activity."

Are the basic physical-activity guidelines enough for optimal health and fitness? Definitely not. They are more likely the minimal amount compatible with health.

The bottom line is you can lecture and educate people all you like about physical activity. That doesn't mean they will do it. Sticking with exercise is determined by more subtle psychosocial and environmental factors. CrossFit is a highly effective fitness methodology, but that's only one part of the reason people do it. The final critical links in the chain are the dedicated CrossFit trainers and gym owners who are committed to helping their clients achieve greater levels of fitness, performance and—ultimately—health. It's only when you combine CrossFit with passionate CrossFit trainers that you have a truly powerful combination. CrossFit Taranis, where I work out, is one of many affiliates that really embodies this philosophy.

Is the Bare Minimum Enough?

Are the basic physical-activity guidelines enough for optimal health and fitness? Definitely not. They are more likely the minimal amount compatible with health, and they obviously fall short if optimum fitness is your goal.

Sandbag sprints are not in the ACSM guidelines for physical activity—but maybe they should be.

Loren Cordain, an expert on the Paleolithic Diet and evolutionary aspects of nutrition and exercise, estimated that the 1998 ACSM recommendations accounted for less than half of the energy expended in hunter-gatherer societies. In other words, the guidelines fall far below the level of physical exertion for which our genetically determined physiology and biochemistry have been programmed through evolution.

So what ***is*** the optimal amount of exercise for fitness and health? That's a good question, and one that continues to receive lots of research attention. In a nutshell, we have no idea. Physical activity is very difficult to measure accurately, and every human is different. What might be an optimal dose of exercise for my health may not be nearly enough for you. So the notion of a one-size-fits-all public-health physical-activity prescription is probably pie in the sky.

The Future of Physical-Activity Guidelines

Where we are headed in terms of exercise recommendations? Guidelines currently exist for different populations including youths, the elderly and various diseased populations. I think we will see exercise scientists continue to produce further tailored guidelines for more specific segments of the population, with recommendations geared toward diverse groups characterized by age, cultural status, health status, etc.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com

It is a natural scientific tendency to place individuals into neat categories. While this makes sense from a research perspective, I can't help but feel it overcomplicates the issue. The bottom line is humans of all ages, shapes and sizes have similar exercise needs. We are all genetically designed (i.e., required) to run, jump, throw, lift, carry and climb to varying degrees. The only difference is that while a high-performance athlete pursues functional dominance, a frail, elderly individual seeks functional competence. These goals can be pursued using methods that have far more in common than conventional wisdom often leads us to believe. Personally, I think the CrossFit prescription and its emphasis on variety and functionality is closer to meeting our genetic physical-activity needs than any other fitness approach.

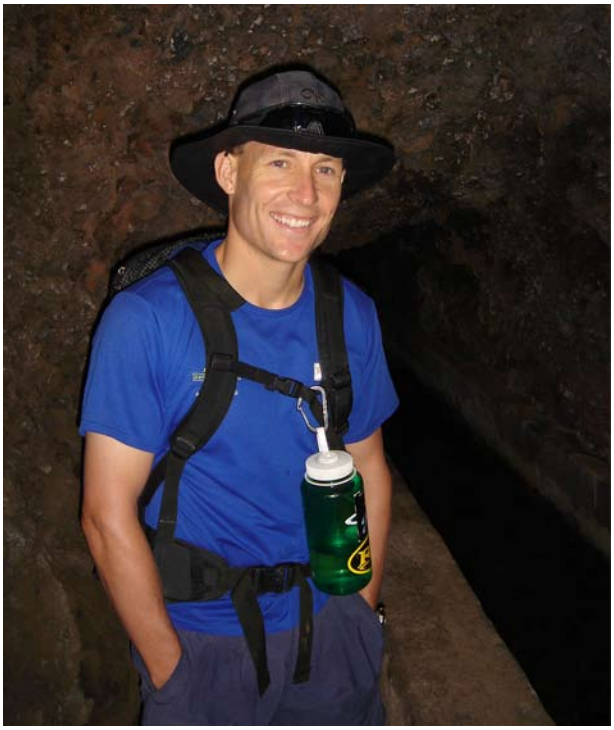
More and more research studies are demonstrating the efficacy of shorter high-intensity exercise bouts in improving not only fitness but also a whole range of health markers.

More and more research studies are demonstrating the efficacy of shorter high-intensity exercise bouts in improving not only fitness but also a whole range of health markers. In fact, plenty of scientific evidence suggests vigorous activity has inherently greater health benefits than moderate activity. Thankfully, this has been partially recognized in the most recent physical-activity recommendations from the ACSM.

I envision future guidelines will increasingly emphasize the importance of quality (intensity) over quantity (volume) of physical activity. But this will have to be balanced by the higher probability of injury or medical complications associated with high-intensity exercise, especially in unfit or diseased populations. This is where an important reminder is due: CrossFit is a potent and effective conditioning tool that, like any other high-intensity fitness approach, has the potential to cause harm unless used sensibly. Remember that proper mechanics create consistency, which in turn results in intensity. Those new to CrossFit must learn the safe mechanics of the movement and be able to consistently repeat them before being exposed to high-intensity work.

Used safely and sensibly, I believe CrossFit has potential not just to change people's lives, but also to change the fitness industry for the better.

✦



About the Author

Tony Webster has a PhD in exercise physiology and currently works within the Pacific Institute for Sport Excellence at Camosun College in Victoria, British Columbia, Canada. He has his Level 1, Basic Barbell and Olympic Lifting certifications. He trains and coaches at the recently expanded CrossFit Taranis.

the CrossFit JOURNAL ARTICLES

Subscription info at http://journal.crossfit.com
Feedback to feedback@crossfit.com
Visit CrossFit.com