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A DEFT DOSE OF VOLUME

More isn't always better: James Hobart explains how certain experienced athletes can add training volume to increase work capacity.

BY JAMES HOBART, CF-L3

CrossFit programming thrives upon intensity, not volume.

This focus on intensity is a cornerstone of the CrossFit Level 1 and Level 2 curricula, and it is also one of the reasons many like CrossFit: fitness in an hour or less. Intensity is also a foundational piece of CrossFit Founder and CEO Greg Glassman's "World-Class Fitness in 100 Words": "Keep workouts short and intense."

For years we've trusted in and consistently witnessed the benefits of less-is-more high-intensity workouts. Any affiliate owner will tell you athletes of all ages and abilities reap fitness benefits from 60 minutes of training that include a warm-up, one workout and a cool-down.

Glassman has also said, "Be impressed by intensity, not volume," and, "Past one hour, more is not better."

If all that's true, why do we see so many athletes adding training volume to gain a competitive edge, and how do they do it appropriately to maximize fitness? We aren't recommending more training volume, but we do believe some approaches are better than others when athletes are ready for additional work.

Volume: Problems and Solutions

The most common programming questions I receive as a CrossFit Seminar Staff coach and CrossFit Games competitor focus on training volume. Volume—particularly over the last few years—wiggled its way back into a programming methodology that is very effective without it. And this shouldn't surprise us, as many perennial CrossFit Games competitors follow a regimen well beyond the standard three-days-on, one-day-off pattern seen on CrossFit.com and elsewhere.

It's a fool's errand to cram multiple workouts on top of each other in hopes of finding a shortcut to fitness.



Top crossFit athletes have the mechanics, consistency and training history that allow them to carefully increase workout volume.

Volume is alluring for many reasons. Some athletes who are trying to break into the upper echelons of Open and regional performance look to tack on extra volume in order to try and close the gap, and affiliates sometimes attempt to squeeze more and more into the relatively brief CrossFit class in order to follow suit. But don't mistake volume for intensity and end up training for 90 minutes at 60 percent when 60 minutes at 90 percent might have been more valuable. Similarly, paying little attention to recovery is costly. It's a fool's errand to cram

multiple workouts on top of each other in hopes of finding a shortcut to fitness. Some strong-willed people just don't know when enough is enough.

Athletes at the top of our sport who find benefit from extra training volume stand upon a nearly unshakable foundation of mechanics and consistency. They are thoroughly competent at linking these cornerstones with intensity. If you or your athletes require frequent scaling, extra workouts are not the solution.

Coaches, understand that every athlete will continue to improve with a single CrossFit workout per day. Volume is not the cure-all; effective coaching is.

Similarly, if you or your athletes struggle with mechanics, then once again volume isn't the answer for you. Increased rehearsal of poor movement patterns and shoddy mechanics—more for more's sake—is a loser's gambit. You will just ingrain bad habits more frequently.

As a coach, you need to know what everyone trains for. The majority of athletes in an affiliate are training for life, and for them the occasional two-a-day might be fun, but training once a day four to five times a week will be enough. They won't ever need more to obtain a lifetime of fitness. This is one of the most elegant mechanisms of CrossFit. Even those athletes chasing better scores in the Open or a competitive edge in a weekend competition will find effective preparation in a single session a day and focused skill work.

Athletes looking to take on more volume need to show up prepared, and this group is likely limited to competitors who rarely need to scale, can post competitive times on all workouts, and have no issues making mechanics and consistency corrections. The timeline to develop this type of foundation before adding volume is specific to every athlete. Some might reach this point in six months, others in a year. And for some athletes, it might take multiple years or never occur at all. Coaches, understand that every athlete will continue to improve with a single CrossFit workout per day. Volume is not the cure-all; effective coaching is.



2009 CrossFit Games champ Mikko Salo is known for his high training volume, but few can match his capacity.

Every year since I competed at the CrossFit Games in 2009, I take the fall off from higher-volume training. I'll jump in on local affiliate classes, hang out, go outside, and learn and play new sports. Sound familiar? Every year, I still see significant improvements during these periods. I experience personal bests with less volume. Because of this, as well as the concerns listed earlier, we need to realize that volume isn't necessarily a solution—it's a problem for three distinct reasons.

First, volume isn't necessary if the goal is simply getting fitter. In fact, it can be counterproductive or, worse, harmful when misapplied. This can't be said enough. Over the long term, every athlete would continue to improve work capacity across broad time and modal domains with a single daily dose of constantly varied functional movements executed at high intensity.

Second, intensity and effective variance must be maintained in order to maximize results as volume increases. Any aspect of fitness that we neglect to train with intensity will suffer, and extra volume simply cannot replace variance when training for general physical preparedness (GPP). That said, it can be very difficult to preserve variance and intensity with additional volume; doing so requires careful planning and preparation.



A lifetime of fitness is possible with just one workout a day.

Third, effectively implementing multiple workouts within the standard one-hour time frame common to CrossFit classes is difficult if not downright impractical. Not only is it difficult to manage a group during multiple workouts in a single hour, but doing so also significantly impedes the trainer's ability to cue, correct, improve, maximize safety and attend to athletes. Class



At regional CrossFit competitions, chippers are often paired with another workout before or after, giving athletes some ideas about how to train for such combinations.

management and cueing are important topics that warrant their own article, but they're worth mentioning here in the context of volume.

With all that in mind, volume can allow you to attack and improve more areas of your fitness if you are able to avoid simply going through the paces without intensity. Consider having the capacity to hit both a short, heavy workout and a longer, lighter workout in the same day. Variance and cautious volume allow us to continually improve multiple areas of fitness provided intensity is maintained. Volume combined with intensity will also wear you down, which provides a chance for athletes to train stamina and endurance and to learn to perform when they aren't at their best. This can be very important when training for multi-day, multi-event competitions.

These positives come at a cost. It will be much harder mentally and physically to maintain intensity as volume increases, and it is therefore very difficult to produce results and hit personal records. Extra volume also requires extra rest. Too much volume without ample recovery results in over-reaching or overtraining, which can push athletes back rather than drive them ahead.

A Theoretical Template for Adding Volume

Given that CrossFit so effectively addresses general health and fitness with one 60-minute session three to six times per week, it is usually only the competitive CrossFit athlete who considers additional volume. In some cases, general athletes will put in extra time to address a weakness, but it's more common for higher-level athletes to attempt to use volume to create success in competition. As such, CrossFit competitions can give us some clues as to how to successfully train with greater volume. The past isn't always prologue with regard to CrossFit competitions, but you need to know your history, and the last six years can offer some direction.



The CrossFit Games average about three events per day, and athletes can expect to be tested in time domains well above 20 minutes.

At all Levels

- Single-modality max-effort events (lifts or gymnastic efforts) are often tested shortly after another workout or later in the day after a singlet, couplet, triplet or chipper. This is very much in keeping with Glassman's advice to "blur the distinction between strength training and metabolic conditioning for the simple reason that nature's challenges are typically blind to the distinction."
- Variance remains critical, but the last five Open competitions tested around 16 different movements.

Regionals Level

- The CrossFit competition schedule is announced far ahead of time, and we often know how many days the Regionals and the Games will be—plan accordingly.
- The most common format is two events a day. The regional competition has featured three events per day approximately 25 percent of the time.
- The average number of regional events across three days is approximately six (about two sessions per day).
- Since 2010, single-modality tests, couplets and triplets for time show up more than anything else. Heavy weightlifting tests show up the least.
- On a two-event day, the most frequent combination since 2011 is chipper plus couplet/triplet/chipper (about 60 percent of the time).
- The second-most-frequent combination on a two-event day is single-modality effort plus couplet/triplet/chipper.
- Chippers range from six to 25 minutes and average about 19 minutes.

CrossFit Games Finals

- Since 2007, the average number of events per day is three.
- Since 2012, the Games spread approximately 13 events across five days, with at least one rest day.
- Single-modality events show up roughly twice as often at the Finals compared to any other scheme.

- Single-modality tests have included everything from a one-rep-max jerk to moving heavy sandbags to short sprints emphasizing agility.
- Events 20 minutes and longer are a staple, as are running, swimming and moving odd objects.

The body has limits, and coaches and athletes need to ensure ample rest and proper nutrition.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
Single session	Double session	Single session	OFF	Double session	Single session	Single session	OFF

Table 1: Two days with two workouts.

Based upon this information, how would you start adding volume to an athlete's program? Let's imagine we have an athlete who—barring injury—performs 99 percent of the programmed workouts as prescribed but only does one workout per day, including warm-up and cool-down. Begin with two two-a-day sessions per eight-day block, and consider the following cycle:

From Day 2 to Day 5, the athlete will complete five sessions—in the ballpark of the average number of events seen at regionals in recent years. Throughout this time, coaches must maintain a sharp watch over the athletes' performance. First and foremost, coaches must ask if the athletes are maintaining a level of intensity equal to or beyond that exhibited before volume was added.

The goal is to incrementally increase volume until it replicates the physiological stresses of the regional or Games weekend (about six or seven events in three days). The table below shows how you can do that, with six workouts placed from Day 1 to Day 3. Once you've got that load in place, I recommend filling the rest of the week with single sessions, rest days and enough skill practice to ensure consistent technical improvement. Skill work, while technically challenging, is not meant to be for time or intensity and can easily be incorporated into warm-ups, cool-downs, or periods before, after or between strength or conditioning sessions.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
Double session	Single session	Triple session	OFF	Single session	Single session	Single session	OFF

Table 2: Increased volume over a three-day period to replicate volume of past regional competitions.

I also recommend varying where you place your single, double and triple sessions. Falling into the same pattern every week will not yield success, as one cannot predict the exact nature of a day of CrossFit competition.

What you program on each day is ultimately up to you, but paying attention to some of the trends and patterns listed above is useful. Always doing the same thing—often “strength and then a met-con”—will lead you astray, as there's no guarantee competition will follow the same pattern, and athletes might be asked to lift heavy after a conditioning test.

Athletes and coaches also need to plan carefully. Trying to fit everything into a single hour can be difficult at times and impossible at others. If an athlete has the freedom, I recommend a workout plan that is similar to the structure and timing of a day of competition at the regional or Games level. In some cases, athletes might want to follow the probable timing of an upcoming local weekend competition. This, of course, highlights the need for competitive athletes to invest more than an hour a day—something that is neither required for general fitness nor an option for many busy athletes.



Shaun Cleary/CrossFit Journal



Author James Hobart (left) said a great training partner—such as Austin Malleolo (right)—will drive intensity way up and can delay the need for additional volume.

Recovery is also critical as volume increases. The body has limits, and coaches and athletes need to ensure ample rest and proper nutrition. Are athletes getting enough sleep? Are they eating enough to support performance but not excess body fat? Are they enjoying the process or are they starting to look cranky and worn out? Are intensity and performance being maintained or improving? Are athletes aggravating nagging injuries? Are athletes fresh when they enter the gym or are they experiencing unreasonable soreness related to a lack of recovery? Are athletes honestly communicating with themselves and their coaches or are they ignoring signs of over-reaching or overtraining? All of these questions are critical when increasing volume.

Other Critical Elements

Remember that programming and volume are just pieces of the puzzle. The magic is in the movements and the atmosphere. I've been extremely fortunate to train with some of the best CrossFit athletes over the last eight years, and I can attest to the truth of this statement from Glassman: "Men will die for points." Training partners make a world of difference, providing both camaraderie and motivation.

Before you play with volume, find someone you hate losing to. A rival becomes a powerful training tool who will push you to levels of intensity you'd avoid on your own. Some of my most painful workouts have come against one of my closest friends and greatest rivals, multi-year Games athlete Austin Malleolo. We often joke that we aren't going to train together anymore because it hurts too much.

"It's not what you do but who you do it with that matters," Malleolo has said.

He's also said, "I'd rip my bottom lip off if it meant winning."

You can't replace that level of competition with volume, though volume can amplify it when applied with a deft touch.

In closing, I want to return to intensity. Intensity is essential and it hurts, but it is required to greatly increase fitness. Volume is no substitute.

If you add volume and start producing results that are poorer than they would have been without volume, you need to retool your approach. Perhaps back off and start again. Volume can benefit you, but not at the cost of intensity and variance.

Chris Hinshaw works with some of our sport's best, including Games podium finishers Katrin Tanja Davidsdottir, Camille Leblanc-Bazinet, Rich Froning and Mathew Fraser. Once while working with Froning and CrossFit Mayhem Freedom, Hinshaw said there is little point to "adding on more running volume if you start to slow down Then you are just spending more time practicing running slow." Keep this principle in mind and consider how it applies to all areas of your training.

"You don't need harder workouts, you need to go harder in your workouts," Games veteran Tommy Hackenbruck quipped last year on Instagram.

Hackenbruck's advice echoes Glassman's foundational wisdom, which is worth repeating: "Be impressed with intensity, not volume."

Intensity and variance are the keys. Volume is secondary but can still produce results if implemented properly. ■

About the Author

James Hobart found CrossFit.com in 2007. While attending law school in 2010, he gained a position on CrossFit's Seminar Staff. In between then and now, James traveled to nearly every continent teaching new coaches at CrossFit's Level 1 and Level 2 seminars. He's competed at every CrossFit Games since 2009, and when he isn't working out he stays equally obsessed with Australian shepherds, any decent bowl of ramen and anything gravity propelled.