

EDT and the Performance Paradigm

By Charles Staley

Date Released : 14 Nov 2007

Over the past 20 or so years, I've seen a lot of dumb stuff in gyms and health clubs, and I'm sure you have as well. From absurdly over-zealous forced reps to multi-stage strip sets that last three minutes or more to Super Slow protocols, to micro-ROM, knee-wrapped leg presses with every 45-pound plate in the gym plus your training partner on the sled to chanting "I'm building my Body For Life" with every rep to German Volume Training... the list is endless, but I suspect I've made my point. Why do all of these different training styles exist? The answer lies in an assumption that we all hold about exercise, which is embodied in the age-old maxim: no pain, no gain.

Now, truth be told, I'm a bit torn about the no pain, no gain thing because obviously, whenever you step outside your comfort zone, there's going to be some pain. It's only when pain becomes the goal that real problems arise. This is what leads to nearly all the bad training decisions that people make including the ill-fated combination I call "Questionable Quad," which is high rep, slow tempo isolation work performed on machines. When your training features all four of these components, you've got a painful workout that discourages Type IIB motor unit recruitment while encouraging Type I recruitment. The result? Lots of pain, low efficiency, low effectiveness, poor results.

Let's step back from this for a moment, and I'll ask you to answer a question for me. Let's assume you're performing a set to failure, and at that very point your training partner helps you complete an additional two reps. The question is, at the moment your partner touches the bar, are you recruiting more motor units, or less motor units? Well of course, I'm sure you've answered less motor units. Actually, the way I answer this question in seminars is "You use the same number of motor units, the only difference is, now those motor units are shared between two people."

That's usually good for a laugh, but don't miss the take-home lesson: it takes "X" amount of energy to perform "X" amount of work.

Another question I ask in seminars points at the same truth: Do you burn more calories walking a mile or running a mile?

Many people will answer that you burn more calories running a mile, but of course, that's not correct. It's admittedly a trick question. Again, it takes "X" amount of energy to perform "X" amount of work. The "work" in this case is locomoting a distance of one mile. It's the work you perform, not how you perform it, that determines energy expenditure, and consequently, the fitness gain. (Of course, the reason this is a trick question is that you do burn more calories per unit of time when you run. However, you'll finish sooner, so it's a wash)

Athletes and Exercisers

If you think in terms of calories in, calories out, if you gravitate toward high reps, slow tempos, forced reps and so on, you're thinking like an exerciser, and I'd like to change that. "Exercisers" tend to view the terrain through the prism of energy balance: if the exerciser wants to be leaner, she'll restrict calories and increase energy expenditure, with the goal of a net calorie deficit.

Or if the exerciser thinks he's a "hard gainer" and wants to beef up, he'll try to increase calories (particularly calories from protein) while conserving energy by training hard but brief and maximizing rest and avoiding aerobic activities. In other words, give the muscles reason to grow through brief, hard workouts and then create the opportunity for growth by providing a caloric surplus and plenty of building blocks in the form of amino acids.

In both cases, the approach is scientifically sound and will lead to the desired result. With that said, there's another way to conceptualize your life as a physical being, which is the development of an athletic mindset. As an athlete, your end game is defined by better performance, and you don't achieve this by exercising. You achieve it through training. Here's why I favor the athletic paradigm:

- As an athlete, your physical endeavors have a purpose. And I believe that human beings are purpose-driven by their very nature. Personally, if I'm going to lift a weight, I'd much rather do it because it adds meaning to my life, as opposed to doing it simply for the purpose of burning calories. If I'm going to run, I'd much rather go somewhere than burn calories on a treadmill.
- The peripheral benefits of training are more significant than the side benefits of exercising. Specifically, when you train as an athlete, you're very likely to improve your appearance and real-life functionality. However, when you exercise, while your appearance may indeed improve, your health and functionality may not. The thousands of crunches you're doing to tone your abs are quite likely wreaking havoc on your low back. Those countless miles on the elliptical machine are burning lots of calories, but they're also producing a ton of free radicals and cortisol.

- Exercisers are almost always engrossed in (and defined by) negative themes involving pain and restriction. But athletes are far more likely to think in terms of PR's and personal achievement. They tend to compare themselves to the best, not the worst. They're chasing excellence, not running from corpulence.
- The exercise paradigm almost always leads to a volume-based mentality, at the expense of quality. It leads anaerobic creatures into aerobic lifestyles, often with tragic consequences. Over the past few years in particular, there have been numerous accounts of well-known and/or successful marathoners and triathletes who have succumbed to an early demise, typically from heart or cardio-respiratory disease.
- Once you start thinking like an athlete, we might eventually coax you into becoming a competitive athlete. OK, I know, I know, you don't have the talent for that. Actually, I can relate, because neither do I. However, I've learned much and benefited greatly by putting myself in the competitive arena. I've made my (admittedly modest) accomplishments a matter of public record. I've made life-long friendships with fellow competitors, I've traveled to places I wouldn't have otherwise experienced, and I've successfully applied the lessons I've learned in competition to other facets of my life.

My discussion so far provides a peek into the physiological premise behind my training system called EDT (Escalating Density Training). At this point, I'd like to introduce you to the system itself, and then we'll finish up with a sample training program.

Enter EDT

Imagine a training system where each training session has a time limit and a concise objective. A system where each session is a competition with yourself, a game that fires up your competitive juices (even if you didn't know you had any). A system that produces measurable improvements every time you go to the gym. A system that finds and exploits the "sweet spot" between cardio and weight training.

With its roots in time management principles, EDT's simplicity is disarming. There are no pre-determined number of reps, sets or rest periods. Instead, your goal is to amass as many total repetitions as possible in each 15 minute "PR Zone" (PR standing for "personal record"). If I've got your attention, please continue with me as I explain the nuts and bolts of the EDT system.

Training Sessions and PR Zones

The word "workout" reflects an exerciser mindset, so instead we call it a training session. "Working out" implies dull, meaningless activity for the sole purpose of burning calories. "Training," on the other hand, implies you've got a purpose, a plan.

When you're "on" EDT, each training session is composed of between one and three 15 minute time periods that we call PR Zones. As we said, PR stands for "personal record," which is what you'll be striving to break on each and every PR Zone. PR Zones are for setting and breaking your PRs. Your PRs are like your own personal world records. They represent the best performances you've ever done. Every time you break a PR, you've got definitive proof that you're at your all-time best. Numbers don't lie.

Exercise Selection

During each PR Zone, you'll try to rack up as many total repetitions as possible, using two "antagonistic" or opposing exercises. For example, bicep curls and triceps pushdowns. Or bench presses and rows. Or even front squats and chins. There are lots of possible configurations, but the overriding idea is to select exercises based on distributing fatigue, as opposed to intensifying it. This strategy enhances performance, safety, efficiency and motivation.

EDT Loading Parameters

Let's use an upper body PR Zone to illustrate my suggested loading pattern. Your two opposing exercises are dumbbell bench presses and low cable rows. Before you start your stopwatch and begin your PR Zone, you'll need to identify (or estimate) your "10RM" weight for both exercises. That means a weight you can do a set of 10 with before reaching failure.

You'll start light and do two to three progressively heavier sets on both exercises, alternating back and forth between the presses and the rows. Perform sets of maybe five to six reps until you hit a weight that's heavy enough to give you a sense of your 10RM. (Note: This process of finding your 10RM weight only happens once. The next time you repeat that same PR Zone, you'll already know what weights to use.) The most important thing is that the weights you've chosen for both exercises are equally difficult for whatever reps you've used during your warm ups.

Once you've determined your working weights, start your timer. Initiate the PR Zone by performing your first set of presses for a set of five. Next, perform a set of five on the low row.

Fatigue Management Strategies During the PR Zone

Rest as long or as little as you like. It's one less thing to worry about. Now, as the clock is ticking, you should be going back and forth

between presses and rows, doing sets of five, resting maybe 15 to 20 seconds or so between each set. As time goes on, fatigue accumulates. When his happens, you'll use two strategies to optimize your performance. First, you'll start dropping your reps. Although you'll start the PR Zone by doing sets of five over the course of 15 minutes, you'll gradually drop down to sets of four, then sets of three and so on. Toward the very end of the PR Zone, you may even be doing sets of one. Not to worry. By this time, the weight that was a 10RM 15 minutes ago is now more like a 3RM load.

The second thing you'll do is gradually increase your rest between sets. In a nutshell, you're just organizing your sets, reps and rest periods in an effort to maximize your work output. This is the essence of the athletic mindset.

Your 15 Minutes of Fame Has Concluded. Now What?

You finished the PR Zone. Let's say you got 64 reps for each exercise. That's called your Baseline PR. It'll become your training target for the next repeat of this PR Zone. And the second time around, a couple of valuable things happen. First, when you start the PR Zone, you know you'll be finished in 15 minutes, no matter what happens. (Time constraints are reflective of all my programs by the way. Like water, work has a way of expanding into whatever size container you put it in.)

The second thing that you'll enjoy here is that you know exactly what you need to accomplish. In this case, you need to get 65 reps or better. How much better? That'll depend on your client's experience, personality type, pain threshold and other factors. EDT is scalable to almost every possible situation, making it ideal for professional trainers and their clientele.

The EDT Progression Strategy

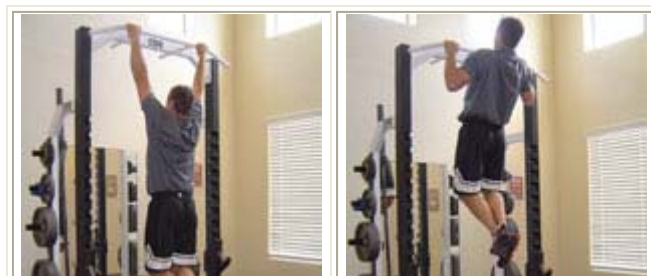
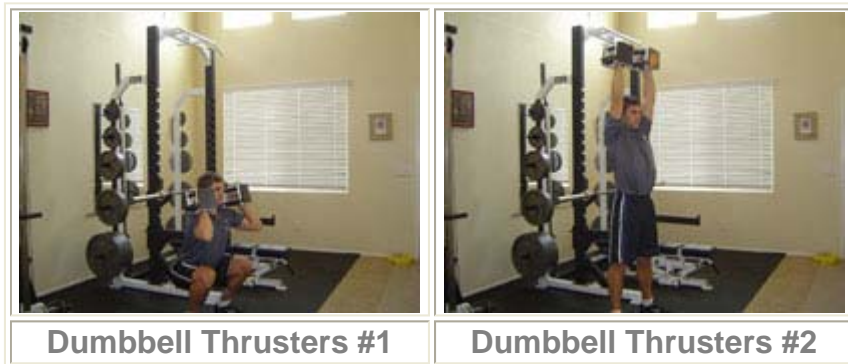
Density isn't the only focus of the training load. Like all legitimate resistance training systems, EDT encourages the end user to regularly and gradually lift heavier weights. Here's how: as soon as you can increase the total number of reps in any given PR Zone by 20 percent or more, start the next repeat with five pounds or five percent more weight (whichever is less) and start over. Similarly, if you manage to improve upon your last performance (for the same session) by 40 percent, then you'll increase your weights by 10 pounds or 10 percent (whichever is less) on the next PR Zone. This progression strategy is very simple to understand and incorporate.

A Sample EDT Training Split

The following whole body program employs what I call an "A-B Split." This simply means it's comprised of two different sessions to be performed in alternating, successive fashion. Each session features three PR Zones. This is an ambitious cycle, and it's not for beginners. Less experienced, less fit clients may require fewer PR Zones and/or different exercise choices. Use your professional discretion.

A SESSION

- First PR Zone:



Chins #1

Chins #2

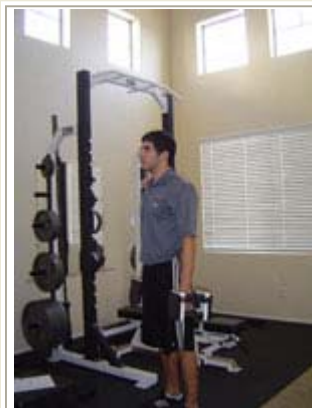
- Second PR Zone:



Incline Dumbbell Press #1



Incline Dumbbell Press #2



Standing Hammer Curl #1



Standing Hammer Curl #2

- Third PR Zone:



Barbell Roll Out #1



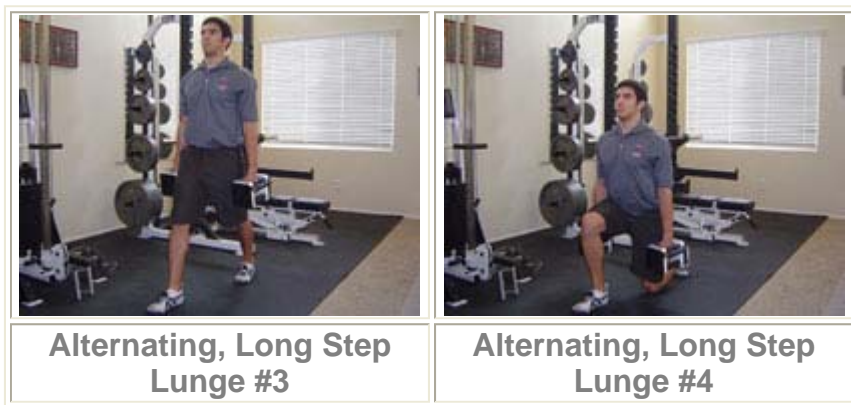
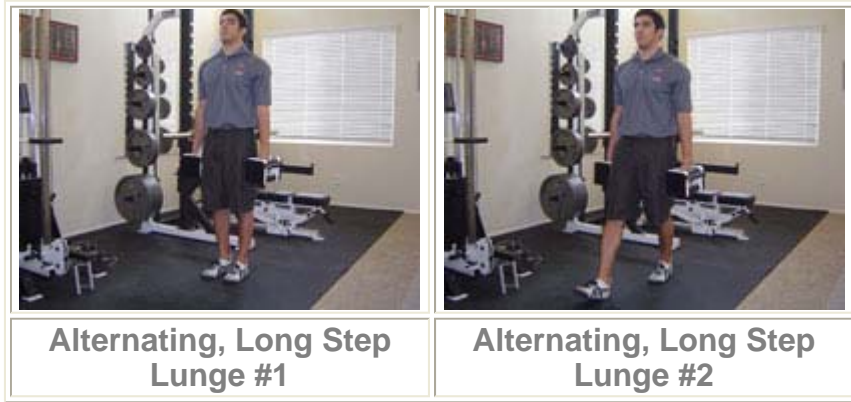
Barbell Roll Out #2



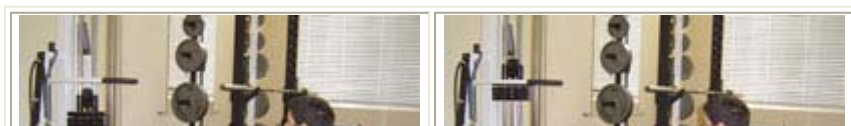
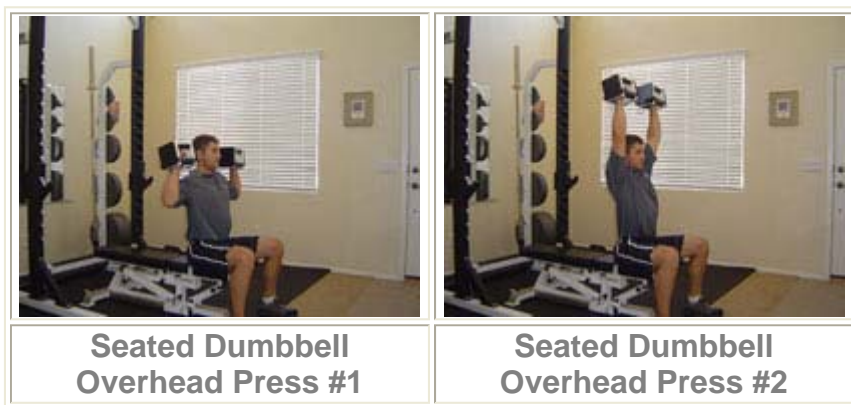
Romanian Deadlift #1	Romanian Deadlift #2
-----------------------------	-----------------------------

B SESSION

- First PR Zone: (When using unilateral exercises in EDT, the left and right sides are thought of as “opposing” exercises. This is why you see only one exercise in this PR Zone.



- Second PR Zone:



Low Cable Row #1

Low Cable Row #2

- Third PR Zone:



Back Extension #1



Back Extension #2



Standing Barbell Curl #1



Standing Barbell Curl #2

[close](#)