

MASTER TRAINER

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Training Even More Intrinsicly

Background: A number of pieces over the last several years have emphasized a more intrinsic approach to resistance training, as detailed by Dr. Ralph Carpinelli. An intrinsic (internal) approach focuses attention on great form and precisely training muscle groups. Feedback in intrinsic training revolves around how an exercise feels and the degree of fatigue in targeted muscle groups. There is less concern or focus on how much weight is used or how many repetitions are performed. A good workout involves properly, efficiently, and safely fatiguing muscle groups.

A traditional extrinsic (external) approach primarily focuses on moving resistance from 'point A to point B'. The major purpose of the workout is to use a specific resistance and number of repetitions in each exercise. A good workout involves meeting resistance and repetition goals, hopefully, in a safe way.

Not So Subtle Extrinsic Marker: With the use of less resistance and longer duration repetitions, I

believed that I had with the exception of a couple of exercises been training intrinsicly. I also knew and accepted that at this point in my life, I was not going to be 'progressing' in a traditional extrinsic way. That is, I was not going to be readily, if at all, adding resistance and repetitions to exercises. My primary

goal for each workout was to train with a very high degree of focus and concentration and use very good form.

I thought I was completely out of what can be a confining 'extrinsic training box'.

There was though one exception. For each exercise in every workout, I tracked and recorded time under tension

(TUT) for my one work-set for each exercise. I didn't do this in a way that would undermine my attention. For example, I did not look at a large clock while performing each exercise. But, I did check my watch right before starting a set and then immediately after the last repetition. I then recorded the TUT in my training log.

Not so subtly, over the last couple of years, increasing TUT, an external marker of training, has become my major goal. I still used very good form and pride myself on maintaining a high level of focus and concentration.

Here is how I increased TUT: I extended the duration of the eccentric phase (negative) of each repetition and ended each set on the last repetition with a very long eccentric phase. You can see where this approach can over time greatly increase TUT.

“Just Perform Each Repetition With Control and Concentration and Attend To Feedback From Muscle Groups.”

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presented data about rates of death caused by exercise. While those rates go up for people with serious health conditions, across the population, the rate is very low, almost negligible. A pill then also would need to match the positive effects of physical activity and exercise with minimal adverse effects and also be very inexpensive. For example, if available across the population, a pill's feasibility would depend upon it costing perhaps 25 cents each. Most medications are far more expensive than that.

Bottom-line: Despite sensationalized media accounts, a pill is not likely to be developed that will produce all the many benefits of physical activity and exercise, produce minimal to no adverse effects, and be inexpensive. Booth and Laye noted that such accounts serve to undermine public health policy and programs. The accounts lead people to believe they can remain sedentary and just wait a couple of years for the magic pill to be ready for public consumption. The reality is that people will be 'waiting for Godot'.

At the end of the article by Booth and Laye there was a very interesting and compelling Figure. It is reprinted here with permission from the *Journal of Physiology* and Blackwell-Wiley, the publisher. The figure shows all the potential dysfunctions, conditions, and diseases that could result from going from a state of high exercise and physical activity to low exercise and physical activity. A pill would have to provide all these numerous benefits and prevent all of these problems attributable to a sedentary life style. And, if you are looking for one source of motivation to keep training, study the Figure. ♦

*"I Can't Imagine
Being Able To Stay
Motivated Without
Being Challenged!"*

Fitness After 50: Staying Motivated

by Matt Brzycki

When people do any type of endeavor for any length of time, one of the major challenges that they face is staying motivated. Training is no different.

I've been training on a regular basis for about 38 years, doing high-intensity training (HIT) for close to 25 of those years. What keeps me motivated?

My initial motivation for training dates back to 1971 when I was a 14-year-old freshman at James M. Coughlin High School in Wilkes-Barre, Pennsylvania. At a height of 5'9", I weighed an anemic 99 pounds. I vividly remember taking the Marine Corps Youth Physical Fitness (YPF) Test in "gym class." Back then, the YPF consisted of five events: sit-ups (not crunches), push-ups, a standing broad jump, pull-ups and a 300-yard shuttle run. I don't recall my performance in the broad jump or shuttle run but I distinctly remember doing 16 sit-ups in two minutes, seven pushups and exactly no pull-ups. In fact, I couldn't even bend my elbows to get a pull-up started; I just hung from the bar. That is, until my grip gave out. The realization that I was a classic 99-pound weakling was quite sobering. That single incident triggered a burning desire in me to improve my level of strength and fitness. Nearly four decades later, that memory remains in the back of my mind.

Another driving force that keeps me motivated about training is working in the fitness profession. If you're employed as a fitness professional and want to be viewed as a credible source of information, you have to be fit and 'look the part'. This doesn't mean that you have to run a four-minute mile or bench press 500 pounds; but it does mean that you have to workout. Similarly, this doesn't mean that you have to look like Mr. or Ms. Olympia; but it does mean that you have to look like you're fit. Sorry, but there's no way around it. If you're a fitness professional and your belly hangs

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over your belt, how do you expect someone to take your advice on exercise seriously? You must practice what you preach.

Variety – How I Train: One of the main things that I do to stay motivated is to incorporate a good bit of variety in my training. Other than the summer of 1983, I've always done strength training three times per week on non-consecutive days using total-body workouts. But on those three days, I perform different routines.

On Mondays, I do a traditional HIT Workout. Here, I do one set of each exercise to muscular fatigue followed quickly by a breakdown set with a reduced level of resistance. I don't do any "warm-up sets" in this or any other workout. The HIT Workout consists of 20 exercises which take me a little more than an hour to complete. Right now, those exercises are (in order) neck lateral flexion (left and right), neck flexion, leg press, prone leg curl, hip adduction, bench press, chin-up, 10-degree chest, overhead press, pullover, seated row, scapulae retraction, bent-over raise, shoulder shrug, bicep curl, tricep extension, wrist flexion, wrist extension, abdominal crunch and rotary torso (left and right). I'll vary the exercises that I do and the equipment that I use as needed but follow the same basic template. For example, I always do three exercises for each of the three major muscles in the upper-body: the chest, upper-back and shoulders. Periodically, however, I'll change the exercises and/or equipment for those areas. Sometimes I do the shoulder shrug with dumbbells; other times I do the shoulder shrug with a Nautilus Multi-Exercise machine. On most exercises, I'll do anywhere from 6 to 15 repetitions on the first set and 4 to 6 repetitions on the breakdown set, with higher repetitions for the hips and legs and lower repetitions

for the upper-body. I try to do each exercise with a four-second positive and a four-second negative (a 4/4 duration) with the exception of hip adduction which I try to do with an 8/8 duration.

On Wednesdays, I do a 3x3 ('three by three') Workout. Basically, a 3x3 is three sets of three exercises. Currently, I do a series of ball squat, incline press (angled at about 13 degrees) and chin-up that I repeat three times. I do the hip exercise with an 8/8 duration and the upper-body exercises with a 4/4 duration using a metronome for accuracy and consistency. My repetition scheme for the three sets is 8-6-5 (using the same resistance for all three sets). In other words, I try to get eight repetitions in the first set of each exercise, six repetitions in the second set and five repetitions in the third set. Those repetitions may sound low but my speed of movement is slow. Doing eight repetitions on the hip exercise with an 8/8 duration means that it takes me two minutes and eight seconds to complete the set. The 3x3 is intended to be a metabolic workout so the pace is quick with as little recovery time between exercises as possible. Using a metronome helps me do consistent repetitions and allows me to calculate my work and recovery times. A recent 3x3 Workout, for example, took me 11:55 (11 minutes and 55 seconds) to complete of which 9:04 was work time and 2:51 was recovery time. This means that I took an average of 21.37 seconds in the eight recovery intervals between the nine exercises. At the end of that workout, my heart rate was 132 beats per minute. (This workout is detailed in Figure 1.) Prior to the 3x3, I do one set of neck lateral flexion (left and right); after the 3x3, I do one set of abdominal crunch and rotary torso (left and right). In each of those exercises, I try to use a 4/4 duration.

And on Fridays, I do a 50s Workout. My goal is to do a total of 50 repetitions in each exercise. For a hip exercise, I use a repetition scheme of 30-20 or 25-25; for an upper-body exercise, I use 20-20-10, 20-15-15, 18-16-16 or 17-17-16. All sets are done to the point of muscular fatigue. The second and third sets are breakdown sets with a reduced level of resistance. I try to do all of the exercises with a 2/4 duration. The 50s Workout consists of seven exercises: one for my

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hips, chest, upper-back, shoulders, biceps, triceps and forearms. It takes me a little less than 55 minutes to complete this workout. I use three different versions of the 50s Workout, meaning that I go three weeks before repeating the same routine. Prior to the 50s, I do one set of neck lateral flexion (left and right) and neck flexion; after the 50s, I do one set of abdominal crunch, rotary torso (left and right), back extension and calf raise. In each of those exercises, I try to use a 4/4 duration.

Cardiovascular Training: I vary my cardio, too. On Mondays and Fridays, I do aerobic training within a handful of minutes or so of completing my strength training. My goal is to do 20 minutes of aerobic activity but not necessarily all at once. I typically start on a treadmill and, depending on how my legs feel, get anywhere from 10 to 15 minutes at a fast pace. Then I do the remaining time on another piece of equipment. And I offset a high-impact activity like running with a low-impact activity such as the Arc Trainer, Concept-2 rower or StepMill. In a recent workout, for example, I ran 1.78 miles on a treadmill in 12:30 and then rowed 1,802 meters in 7:30 using a damper setting of 3. (Again, this is shortly after doing about an hour of strength training.) Note: On Mondays, I do one set of abdominal crunch and rotary torso (left and right) after aerobic training; on Fridays, I do one set of those exercises plus back extension and calf raise after aerobic training.

400-Meter Run Training: In July 2006, I added anaerobic training to my fitness program. I did this in anticipation of turning 50 in 2007 and competing in the 400-meter dash in masters and senior track meets. I hadn't run in a track meet since the end of my sophomore year in high school back in 1973 (when the distances were in yards and the track was dirt and cinder.) And I hadn't really competed in anything of note since the summer of 1982 when I entered a bodybuilding contest (Mr. Wyoming Valley). When I told my wife that I wanted to start running in track meets, she thought that I was going through a mid-life crisis. I assured her that I was not; I just wanted to do something that (a) provided me with a new motivation and (b) allowed me to 'put my training to the test'.

At any rate, I do anaerobic training on Wednesdays about 20 to 25 minutes after completing my abdominal exercises (the abdominal crunch and rotary torso). My anaerobic training mainly consists of intervals (a series of sprints) on an indoor track. I keep the total distance between 1,200 and 1,300 meters; my body can't tolerate much more than that. So a workout might be 6x200 (six 200-meter sprints). Or it might be 3x300 and 2x200 (three 300-meter sprints and two 200-meter sprints). I run those as fast as I can and take a fairly brief recovery interval between each effort. The entire workout, including recovery time, takes me slightly less than 20 minutes to complete. When I'm done with the last sprint, my heart rate is as high as 148 beats per minute and I literally end up on my back, trying to 'catch my breath'. In fact, my heart is beating so hard that my entire body throbs and I can count my pulse without needing to place my fingers on my carotid artery.

Each year, I try to compete in two track meets: one indoor (around February) and one outdoor (around June or July). After I'm done competing for the summer, I continue with my anaerobic training. But for the first few months, I incorporate hill sprints every third week instead of a track workout. Here, I do six uphill sprints in an average of about 33 or 34 seconds. The entire workout takes almost exactly 20 minutes to complete. I recover just long enough to record the time of the sprint and walk back down the hill for the next sprint.

Other Ways to Stay Motivated: Varying workouts is something that I'd encourage other individuals to do as a way to stay motivated about training. Here are some additional suggestions.

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Think 'health'. Maybe the idea of slowing down the inevitable age-related decline in your muscular strength and aerobic fitness isn't enough for you to stay motivated about training. But what about decreasing your risk of certain types of cancer (as some new research has found)? Or reducing your risk of cardiovascular disease? Or lowering your blood pressure? Or increasing your bone mineral density? Or enhancing your quality of life? Training can help with those aspects of health and more.

Stay injury-free. It's difficult to stay motivated about training when you're hurt or 'dinged up'. There are several ways that you can reduce your risk of injury. For one thing, you must avoid exercises/activities that pose a threat to your orthopedic health. If your lower-back bothers you when you do the barbell squat, don't do the barbell squat. In my last powerlifting meet in March 1982, I did a 410-pound squat at a bodyweight of 162 (along with a 260-pound bench press and 440-pound deadlift). Since then, I've only done the barbell squat two or three times. I can train the same muscles that are used during a barbell squat without exposing my knees and lower-back to orthopedic stress by doing other exercises such as the leg press and ball squat. Similarly, if your knees bother you when you run long distances, don't run long distances. I've found that whenever I run for more than about 20 minutes, the impact forces start to wreak havoc on my knees and Achilles tendons. Another way to reduce your risk of injury is to do your repetitions with longer durations. This will reduce the orthopedic stress that's encountered by your joints. I try not to go any faster than a 2/4 duration in many exercises, and I try to use a 4/4 or an 8/8 duration.

Have goals. This can take many forms. Your goal might be to lose 10 pounds over the course of the next six months. Or it might be to do 10 pull-ups by the end of the year. Or it might be to compete in a triathlon before your 40th birthday. Regardless, having one or more goals will help you to stay motivated.

The topic of goal setting is an article in itself and best left for someone with greater expertise than me but, in brief, goals should be specific, measurable, attainable and realistic. When I compete in a track meet, my goal is to beat the qualifying time of 1:06.20 in the 400-meter

dash (men's 50-54) for the Summer National Senior Games. Besides being specific and measurable, that goal is attainable and realistic for me: I've achieved it in four of the six meets in which I've competed (narrowly missing another by 0.09 second).

Most of the meets in which I've competed have been in New Jersey. In my age group, there are at least four men in the state who can run 400 meters in one minute or less and were ranked among the top 40 or so in the United States in 2009; one guy was ranked #5 in the 400-meter dash and actually finished first in the 1,500-meter run and second in the 800-meter run (missing first by 0.41 second) at the 2009 World Masters Athletics Championships in Lahti, Finland. My time of 1:04.99 put me at #86 in the United States in 2009. I'm simply not in their league. In fact, if those four athletes got together and ran the 4x400 relay at this year's world championships, New Jersey would've placed sixth in the men's 50-54, just behind Finland and ahead of Italy, France and Australia.

It's not a realistic goal for me to be competitive against those guys. So I don't really care where I place in a meet. I don't race against other individuals; I race against the clock.

Keep your workouts brief (and intense). In many circles, saying that you do no more than about 2.5 hours of strength training and 40 minutes of aerobic training per week might draw a few smirks and chuckles. But for me, this volume of training is very productive and efficient. Moreover, I'm convinced that doing relatively short, high-intensity workouts has kept me motivated over the years. And that applies to aerobic/anaerobic training as well as strength training. I really don't think that I would've been able to adhere to a fitness program for this many years by doing the long, low-intensity workouts that are typical of traditional training.

While on the subject, the 2009 position stand on 'Exercise and Physical Activity for Older Adults' from the American College of Sports Medicine (ACSM) promotes at least 20 to 30 minutes per day or more 'of vigorous-intensity activities' to total 75 to 150 minutes of 'endurance exercise for older adults'. The ACSM recommends 150 to 300 minutes per week for

‘moderate-intensity activities’. In my opinion, there’s simply no need for older adults to engage in that much ‘endurance exercise’ (aerobic training). I’ve been able to stay fit – and motivated – with a volume of aerobic training that’s considerably lower. An exception, of course, is an endurance athlete such as a marathon runner or triathlete who would need a higher volume of aerobic training.

Challenge yourself. I can’t imagine being able to stay motivated without being challenged. Don’t stop at eight repetitions when you can do 10; don’t run two miles in 20 minutes when you can do it in 18. Along these lines, it doesn’t matter if you can lift 30 pounds or 130 pounds in a particular exercise. What matters is that whatever you lift is challenging for you. Personally, I’ve found that the physical and mental challenges of brief, intense workouts are very appealing and satisfying.

Record your training data. Chronicling your efforts helps you to stay focused on your goals and progress (or lack thereof). Essentially, recording your data makes you hold yourself accountable. You should track all of your training. For strength training, note the number of repetitions that you do and the amount of resistance that you use; for aerobic and anaerobic training, note the duration(s) of your effort and the distance(s) that you complete. Show me someone who says that they don’t need to record their training data and I’ll show you someone who’s been doing the same thing for so long that they have it memorized.

Final Thoughts: To be clear, I’m not saying that what I do is the best way or the only way to stay motivated. It works for me; it might not work for you. As I get older, I’ll likely change my workouts in order to maintain my motivation. ♦

FIGURE 1: EXAMPLE OF A RECENT 3x3 WORKOUT

EXERCISE	RESISTANCE	REPS	DURATION	TUL
Ball Squat	122.5	8	8/8	2:08
Incline Press	142.5	7	4/4	0:56
Chin-up	BW	6	4/4	0:48
Ball Squat	122.5	6	8/8	1:36
Incline Press	142.5	6	4/4	0:48
Chin-up	BW	4	4/4	0:32
Ball Squat	122.5	5	8/8	1:20
Incline Press	142.5	4	4/4	0:32
Chin-up	BW	3	4/4	0:24

Bodyweight (BW): 170.75

Sets: 9

Workout time: 11:55

Time under load (TUL): 9:04

Total recovery time between exercises: 2:51

Average recovery time between exercises: 0:21.37

Heart rate: 132 beats per minute

Note: The 122.5 pounds on the ball squat was the total of two 61.25-pound dumbbells; the 142.5 pounds on incline press was the total of two 71.25-pound dumbbells.