Health & Fitness

Station 36 crew on the Cedar Fire

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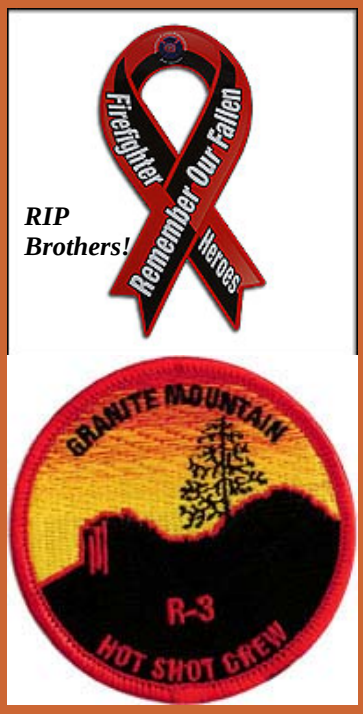

INSIDE THIS ISSUE:

The Best Times to Focus on Breathing

By: Jared Woolever, Smart Group Training

Over the past few years, the importance of proper breathing has really been embraced by many coaches and trainers, myself included. I continually see dramatic changes in people after changing breathing mechanics. I've seen drastic mobility changes within minutes. Actually let me retract that statement. I've seen drastic changes in seconds, not minutes, after changing the breath. The results don't always happen that quickly, but the immediate changes I've seen by changing the breath and rib cage position is nothing to tread lightly over.

There are numerous breathing drills you can work on. There are some quality drills that can be done using balloons, and other tools to help restore proper breathing mechanics. However, my favorite drills are extremely easy to use and require little to no set up time to perform properly. I'm going to cover my top 3 breathing drills and when I use them:

Crocodile Breathing- Lie on your belly with your forehead in your hands. Get comfortable and try to relax. Since you're on the floor, you will be able to use that as a sensory tool to ensure you're doing this drill right. The floor will provide a proprioceptive feedback to let you feel your belly breathing into the floor. Many people will start by feeling the majority of the breath through the chest with minimal movement within the abdominal midsection. Start to learn "belly breathing" in this position. However, you should not only focus on breathing into the belly. You should be striving to fill up the belly, oblique's, low back, and lungs. You should be thinking about getting wide with each breath…360 degrees every time. Another thing I've used with teaching this would be applying a very lightly tightened weight belt. You can work on filing up the entire belt with each breath. Just like the floor, the belt provides the body with feedback to "feel" if you are breathing wide or not.

3 Month Breathing- Lie on your back and bend your knees with your feet off the floor. Your hips and knees will be flexed with your feet off the ground. This allows the hips to tilt posteriorly. That is one of the things I really like about this type of breathing. It's a great tool to use if someone has a natural anterior hip tilt or "lower-crossed syndrome". You should think about keeping the spine nice and long with your ribs down and chin tucked. This will allow the spine to be as long as possible. The challenge will be holding this position while

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Cod with Coconut Slaw & Pico De Gallo

Ingredients

Coconut Almond Crusted Cod

2 cups almond meal

1/3 cup unsweetened coconut flakes

1/4 tsp cayenne pepper (more or less dependent on how spicy you like it)

Sea salt and fresh ground pepper

1 egg, beaten

1 pound cod (sub other white fish or chicken if desired)

Pico De Gallo

2 avocado, diced

1 tomato, diced

¼ cup red onion, diced

1 jalapeño pepper, seeded and diced (optional)

2 tablespoons fresh cilantro, chopped

Juice from one lime

Sea salt and fresh ground pepper

Coconut Slaw

1/3 cup unsweetened coconut flakes

3 cups cabbage, shredded

1/3 cup carrots, shredded

1/4 cup fresh cilantro, chopped

¾ cup homemade Everyday Paleo Mayo

1 lime

1 tsp Dijon mustard

1 tbsp honey

Sea salt and fresh ground pepper

Preparation

Cod

Preheat oven to 425 degrees.
Combine almond meal, coconut flakes and cayenne pepper in shallow dish and season with salt and pepper
Place beaten egg in separate shallow dish
Season fish with salt and pepper. Dredge each fillet in egg and then the almond meal mixture. Press the mixture onto the fish to get a good crust
Place fish on a lightly greased baking sheet (I used coconut oil) and bake for 15 minutes or until cooked through

Pico De Gallo

Mix all ingredients in bowl and season with salt and pepper to taste
Refrigerate until ready to serve

Coconut Slaw

Toast coconut in a small sauté pan on medium heat until it turns a light golden color. Remove from heat and let cool.
In a large bowl combine the cabbage, carrots, coconut and cilantro
In a small bowl whisk together mayo, the juice of one lime, Dijon mustard, honey, and cayenne. Season to taste with salt and pepper
Pour mayo mixture over cabbage mixture and toss well

Recipe courtesy of:

EverydayPaleo.com

Breathing (cont. from Pg. 1)

breathing properly. Just like the crocodile breathing drill, you should be thinking about breathing wide. You should be trying to fill up the oblique's and low back with each breath, and the pelvis should not rotate either. We want to take each breath by getting wide with a neutral pelvis and long spine. If you have to go into a high threshold strategy to hold this position, place the feet on a stability ball or a wall to help assist holding the legs off the floor. It's alright for it to be challenging, but you should be able to develop a smooth and natural breath while holding the position. Start with the wall and progress as you get better.

Child's Pose Breathing- If you're familiar with yoga at all, then you've probably seen this one. The child's pose is done by sitting back on your heels with your toes plantar flexed, knees tucked, heels on your butt, and your chest tucked into your knees with your hands overhead. I really like to use this one if someone struggles with getting air into the low back with either the crocodile breath or the 3 month breath. The child pose position allows you to close off the ribs with your knees, and this really helps force air into the low back to stretch the paraspinals with each breath. This is a good one for an individual really stuck in an extended posture. Getting into some major flexion and controlling a breath will be a challenge, but will be useful in getting the posture back in line.

Now that we've covered my top 3 drills, what about the timing and when to incorporate these drills into your routine? Honestly, these are quality drills that can, and should, be done as frequently as possible. A heavy majority of people in today's society are anxiety ridden, stressed to the max, and their bodies are in a state of constant fight or flight. Incorporating breathing and meditation into your routine can dramati-

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Training Tip: Less Caffeine, More Effect

By: Greg Everett
Catalyst Athletics

This one pains me to even write, but I'm going to do it for the sake of humanity. As someone who is a huge, undying fan of caffeine in obscene quantities, I have had to learn the hard way that this kind of caffeine consumption is not actually the performance enhancer we'd like it to be.

First, a lot of us have over the years substituted caffeine for sleep and lifestyle changes to aid stress reduction and recovery. It's a great deal easier to drink more coffee than to improve sleep or figure out how to not work 60-hour weeks, get along better with your spouse, and not want to lock your kids in the basement. I don't have all the answers for those problems, but I can speak on the caffeine element.

I'm not a scientist - I let Robb Wolf take care of that for me - but I know a few things, largely from my own experiences and those of my athletes and colleagues. It's commonly known that stimulants used during periods of arousal (read: stress) increase the tax on the body; that additional physiological excitement increases the degree of stress you experience physically. As a pertinent example, going through a challenging weightlifting workout is stressful; doing it with 500 mg of caffeine in your system is more stressful, and consequently, more difficult to recover from.

Some of us seem impervious to these effects and apparently function fine with absurd amounts of caffeine. Of course, most of these people are under 30 and not saddled with many of the responsibilities and obligations that keep many of us in a constant state of stress.

Before you burst into tears, I'm not suggesting your never use caffeine again--I would never be so irresponsible. What I am suggesting is three-fold. First, work on reducing stress and improving sleep to reduce your dependence on caffeine day to day. Second, reduce your overall intake of caffeine by drinking less, less often. Third, use a smaller dose of caffeine during training.

If you drink 3 cups of coffee every day, plus more or some kind of energy supplement before training, try cutting back to one cup of coffee in the morning to get you going, and then just about 125-150 mg of caffeine when you train. Eventually, try cutting down to one cup of decaf in the morning (which still has a tiny bit of the good stuff in it).

Robb and I talked a bit about this on the podcast last week, but the fact is that the ergogenic benefits of caffeine actually drop off quickly at a much lower dose than most people think - right around that 150 mg mark. However, I have found that in order to genuinely experience this, you need to reset your baseline by reducing or eliminating the caffeine you're using to keep you going all day.

I used to stop any caffeine 1-2 weeks out from a competition, then re-introduce at the meet for maximum effect. This worked, but that 1-2 weeks was miserable and I have been finding that I enjoy training a lot more (and train a lot better) if I dose with a small amount of caffeine, IF I haven't already been drinking it all day. I have been using a 1/2 packet of Advocare Spark on most training days, which is only about 60 mg. I did a local meet last weekend and used a full packet during snatch warm-ups, then about another half packet during clean & jerks, and that was just about right - I had the gas I wanted without feeling gacked out and shaky.

I have eliminated caffeine entirely for 1-2 months several times in the last couple years and there's no doubt that after getting used to it I feel better generally, excepting of course my craving for the ritual of drinking coffee in the morning and getting pumped. Decaf lets me keep that ritual without the negative effects (although I will admit, it's just not the same). Each of you will probably have to find the right balance for yourselves, taking into account everything else going on in your life, but try implementing this principle in some form and see how you feel.

IAPS Data from May 2013

Reportable Injuries:	2
Record Only Injuries:	7
Injury by Activity:	
PT:	2
Incident:	2
Training:	1
Station Duties:	4
Injury by Body Part:	
Head:	
Torso/Back:	1
Extremities:	4
Heat Illness:	
Exposure:	3
Internal:	1

"SAFETY CORNER"

5/1/13 - Blue Sheet Near Miss, Summit Incident, 13CARRU044464
5/5/13 - TGST, Fuels
5/4/13 - Green Sheet, Springs Incident, 13CAVNC0253142
5/8/13 - USFA, Calculating your BMI
5/16/13 - TGST, Industrial Accident Reporting Procedures
5/20/13 - Safety Communication 2013-2, ATG Tone Prot. Changes
5/24/13 - TGST, Safe Travel Through Construction Zones
5/29/13 - 2013 Annual Focus on Safety released

Mass Casualty Incident Reality

The EMT Spot
Medicine Moves Fast ... Keep Up

http://theemtspot.com

I've been to a few mass casualty incidents over the years. They have ranged in severity and acuity from a large group of bored teenagers with chemical eye irritation to an active shooter in a crowded school. One lesson I've learned is that the real events never look or feel anything like the mock training scenarios that we often create for training purposes. Real disasters tend to present challenges that we just can't account for in mock scenarios. This makes the lessons learned at real MCI scenes incredibly valuable. Recently, I was able to listen to Dr. Jonathan Apfelbaum MD, one of our local ER physicians, talk about his experiences at the Reno Air Race crash. Dr Apfelbaum was photographing the event when one of the aircraft lost control and crashed at the front of the grandstands.

Airplane crash at the Reno Air Races. 2011

I loved Dr. Apfelbaum's class on this subject. I think real, first hand accounts of actual MCI events, (and the specific challenges encountered) are far more productive and educational than most of the fictional MCI scenarios that we frequently create. Here is a list of some of my "take home" lessons from listening to Dr. Apfelbaum. Please note than none of these are specific learning points from the doctors lecture. These are simply my personal interpretation of his experiences.

Nothing beats a solid preplan. As a physician who had seen multiple similar events (He was also present at the Charlotte Indy race crash when three fans were killed by debris.) Dr. Apfelbaum has seen a vast difference between the responses of crews who had a plan in place prior to the event and those who did not. While you can't always preplan every venue where an MCI might occur, when things do go sideways, an emergency medical action plan is golden. Train for events where the resources are truly overwhelmed. The Reno EMS system was well prepared for this event. They had done multiple mock disaster drills in the lead up to this event. Create realistic scenarios and let them play out in real time. Afterwards, don't just pat everyone on the back and say good job. Really discuss what you learn about your system. Ask good questions and attempt to answer them. Consider the worst case scenario and start your planning and training from that model. Work backward from the most significant event you can reasonably envision.

During the Reno Air Show morning EMS briefing, one of the events EMS planners mentioned that the worst case scenario that they could reasonably envision was a plane striking the grandstands. They had already considered this possibility and planned for it. While training helps us to understand what we should do, you can't overestimate how difficult it is to detach emotionally from the process of triage. As caregivers, we are trained to care for the injured. Triaging a real human being and moving on to the next patient is incredibly hard. Consider peoples mindset and ability to function when assigning them tasks. Bystanders with medical training will offer to help, but their training and experience will vary. Medical personnel with EMS experience will be the most calm, but everyone will have an emotional response that will affect their ability to be affective. Peoples prior training is a consideration when assigning them tasks, but so is their mindset. People who can't cope with the magnitude of what's happening can still carry backboards and evacuate minor wounds. In today's world of instant social media, your MCI will likely be posted on YouTube before you clear the scene. This will help with pulling-in off duty resources to assist and bolster the system. It will also increase the number of on-lookers exponentially.

On many large and chaotic scenes, you may have to make peace with the idea that many victims will go directly from where they lay to a transport ambulance. (This has been true on every MCI scene that I have experienced. It's also the primary method used in Israel and many parts of the middle east.) Convincing bystanders / responders to cease resuscitation efforts when the patient is no longer viable is a remarkably difficult task. Especially when the responders know the patient. Kids will most likely be over-triaged. If they have an injury, they will invariably end up in the red category. Be wary of overloading your red triage category. Knowing the difference between true yellows and true reds can be one of the more challenging aspects of triage. For ambulance ingress, consider shutting down a major road and having resources respond in the opposite direction of the normal traffic flow. People will still have car accidents, heart attacks, strokes and cut fingers. Consider that you may be able to respond every single EMS resource in a 15 mile square radius, but someone will still need to take care of the normal 911 traffic for that region as well. You can't plan to exhaust the resources of an entire system without planning how you will back-fill the system. There you have it. This is, by no means, a complete list of real MCI considerations, but it is a powerful one. These lessons come from the real experiences of medical personnel responding to an extremely challenging MCI event. That makes each of them golden. And what about you? Do you have any helpful learning experiences from MCI scenes where you have been a responder? What could you add to the list?

Breathing (cont. from Pg. 2)

cally improve your performance in the gym, not to mention the positive carryover it will have into your everyday life. Here are the most common times I work on breathing in my training routines: After Foam Rolling- I like to get a minute or two of solid breathing to set each workout up for success. I usually have my clients perform a breathing drill for 10-20 breaths after performing soft tissue work. So they will foam roll, breathe, and then move on to mobility work and your dynamic warm-up from there.

Incorporate into Superset or Tri-set- I like to throw these in supersets and tri-sets. I use a breathing drill with our major strength and power lifts. I will superset a power clean, a squat, deadlift, or other major lift with breathing drill. Don't be surprised to see your numbers start to go up either. I've seen some killer results in strength gains from incorporating breathing drills.

After the workout- Breathing drills will help drive the parasympathetic nervous system. We want to get this system rolling after a workout to enhance recovery and regeneration. Finishing each workout with 20-25 breaths is a no-brainer.

Before Bed- This is usually the toughest one for people to comply with; however, the one's that do will reap the benefits. I've seen drastic changes with clients that have done this. Their whole demeanor seems to change. They seem to just "let go". You can see the stress their body has been holding on to just melt away. If you're determined to get better, give this one a shot.

The Most Dangerous Fitness Advice

Hiring a trainer can mean the fast track to a better body—or an express ticket to injury. Know when to listen and when to run.

Bernard Yang Kim never wanted to be a bodybuilder. The 31-year-old currency trader simply wanted to look chiseled—like an underwear model, he jokes—which is why he found it odd to be staring up at a 315-pound barbell. He had never benched so much weight in his life; few men ever do. But his usual trainer was out, and his gym had set him up with a substitute—one who, as it turns out, was not only overzealous but also a terrible spotter. "The bar crashed onto my chest, tearing my pectoral muscle," says Kim, who ended up in the ER. "It was excruciating."

While extreme, Kim's experience is not uncommon. There are roughly 230,000 personal trainers in the United States, a number that has jumped 44 percent in the last decade. Indeed, personal training is one of the few professions to not only blossom during a recession but also grow afterward as people turn to it for a second job and even a second career. And it's easier than ever to get certified: You can go online, take a course, and start training clients within a month.

"It's a buyer-beware market," says Mike Boyle, A.T.C., owner of Mike Boyle Strength and Conditioning in Massachusetts. "Getting hurt might be rare, but you can easily waste your time with someone who is ineffective at best and dangerous at worst."

In short, knowing how to recognize bad advice is more critical than ever. Read on for six of the worst fitness tips we've ever heard and six ways to get back on track.

BAD ADVICE: "Go big or go home."

"There's this idea that you have to train to failure to trigger growth," says Boyle. "But 'go big or go home' is a slogan for a meathead's T-shirt and a prescription for injury, not an effective training strategy. The truth is precisely the opposite—'slow and steady wins the race.'" Not convinced? Talk to Bernard Yang Kim. The key to success in the weight room is to make consistent, incremental gains that ultimately add up to the body you want.

BETTER MOVE: Train to technical failure. "You want to do as many reps as you can with perfect form," says Boyle. "Once you can't do a perfect rep, the set is over—no negative reps, no spotter assistance, no using momentum to crank out one more." When you can complete your goal reps for every set—3 sets of 10, for example—you're ready to move up in weight. "Throw another 5 pounds on the bar or grab the next heaviest pair of dumbbells," says Boyle. "It might not sound like much, but think about it this way: Even if you only go up 5 pounds every 2 weeks, you'll still add 130 pounds to your lift after a year."

BAD ADVICE: "Push through the pain."

A little bit of soreness isn't a bad thing. It just means you've pushed your body harder than usual, causing microtears in muscles that ultimately lead to gains in size and strength. "But there's a big difference between soreness and pain, and ignoring pain is a ticket to the disabled list," says Boyle. "I regularly ask my clients, 'Does the exercise make any of your joints hurt?' I don't care if the pain diminishes after they warm up—if they answer yes, that's the end of the exercise."

BETTER MOVE: Find a pain-free alternative that works the same muscles. "Just because the barbell bench press causes you shoulder pain doesn't mean you have to stop working your chest," says Boyle. "Try using dumbbells, do incline presses, or switch to pushups." Changing your grip, angle, or movement pattern alters the load and positioning of your joints, allowing you to build muscle without breaking your body.

BAD ADVICE: "Protect your spine with crunches and situps."

There's no denying that crunches and situps can help you sculpt a six-pack, but they come with an inherent flaw: repeated spinal flexion, which can increase your risk of developing a back problem and aggravate existing damage. Bottom line: By recommending crunches and situps, some trainers facilitate the very injuries they're trying to prevent, says Tony Gentilcore, C.S.C.S., a trainer at Cressey Performance in Massachusetts.

BETTER MOVE: Do stability exercises. "Stability, or resisting unwanted motion, is the true function of your core, and exercises that reinforce that function protect your spine," says Gentilcore. Try the Swiss ball rollout: Sit on your knees in front of a Swiss ball and place your forearms and fists on the ball. Slowly roll the ball forward, straightening your arms and extending your body as far as you can without allowing your lower back to "collapse." Use your abdominal muscles to pull the ball back to the starting position.

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Fitness Advice (cont. from Pg. 5)

BAD ADVICE: "Don't rest between sets."

This misguided mantra is the call to arms of many extreme-fitness programs, and it can be disastrous in practice. The reason: Lifting heavy weights recruits fast-twitch muscle fibers, which generate more force but also fatigue faster. If muscles don't have enough time to recover between sets, you won't be able to train them fully, slowing your gains and increasing your risk of injury. "Making somebody tired is easy," says Sal Marinello, C.S.C.S., president of Athletic Development Coaching in New Jersey. "But there's a difference between tiring someone out and actually improving their physical condition."

BETTER MOVE: "Understand that a 45-second break is a 45-second break," says Jonathan Goodman, C.S.C.S., founder of the Personal Trainer Development Center, an online resource for personal trainers. As a general rule, the lower your reps and the heavier the weight, the longer you should rest a muscle group before working it again. If you're doing sets of 1 to 3 reps, rest 3 to 5 minutes. For sets of 4 to 7 reps, rest 2 to 3 minutes. For 8 to 12 reps, rest 1 to 2 minutes. Rest no more than a minute for any number of reps above 12. That doesn't mean you can't work opposing muscle groups, like quads and hamstrings, back-to-back. (Think supersets and circuits.)

BAD ADVICE: "Let's see how many deadlifts you can do in 60 seconds."

"We're starting to see a lot of people getting thrown into an extreme group workout with little instruction, and then doing high reps of very technical lifts as fast as they can," says Chris Bathke, C.S.C.S., owner of Elemental Fitness Lab in Oregon. "Even athletes don't do that." When speed is your main focus, you lose sight of form, and that can lead to injury—especially if you're doing heavy Olympic lifts or powerlifting moves like cleans, snatches, and deadlifts. "I've asked people to show me an exercise that in a previous workout they repeated for time," says Tyler Smith, P.T., C.S.C.S., a physical therapist at Sports and Physical Therapy Associates in Massachusetts and a member of the elite athletic development society known as GAIN. "They'll demonstrate a horrible squat, and they did 30 of them."

BETTER MOVE: Focus on form, not speed, and start with body-weight versions of exercises until you master them. In big lifts like those we just mentioned, it's critical that you brace your core and maintain a slightly arched or flat back. If you don't, your spine can pay the price. And keep your body English to a minimum; jerky movements that boost momentum can do more harm than good.

BAD ADVICE: "Add plyometrics to your routine."

High-impact plyometric exercises, such as box jumps (leaping on and off a box or bench) and depth jumps (stepping off a bench and then springing off the floor and landing on a platform) are favorites of many trainers trying to help clients build explosive speed and a killer jump shot. But these drills can also hammer your joints—especially if you're heavier than you should be. "I once had a client who was 40 to 50 pounds overweight come in complaining of knee pain," says Mike Robertson, M.S., C.S.C.S., co-owner of Indianapolis Fitness and Sports Training. "The reason was that the previous trainer had this person doing jumps--something most fit people shouldn't even do."

BETTER MOVE: If you're already fit, jump onto a 12-to 20-inch box with both feet, and then step off one foot at a time. That gives you the explosive benefits of the exercise without destroying your knees. Better still—especially if you're carrying extra weight—swap jumps for less jarring exercises that use similar movement patterns. "The kettlebell swing is a perfect substitute," says Robertson. "It trains the same hip-hinge pattern without the high-impact consequences."

CE Answer Sheet:

Complete this answer sheet from the previous CE article and forward it to the Training Office for grading and credit. (1 CE hour Credit for successful completion)

Name:

Station:

☐ True ☐ False

☐ True ☐ False

☐ True ☐ False

☐ True ☐ False

☐ True ☐ False

☐ True ☐ False

☐ True ☐ False

☐ True ☐ False

☐ Yes ☐ No

☐ True ☐ False

☐ Burns ☐ Trauma

Be Back Next Month!

Comments: _____

Wildland Training

For Suggestions or Comments:

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"Let No Man's Ghost Say His Training Let Him Down!" -Unknown Author