











Float plane crash in South Chico

VOLUME 2, ISSUE 8

OCTOBER 2012

Upcoming events within the area

- Ignite the Fight 5k run
 Oct 6, Bidwell Park
- Johnny Appleseed Days
 Oct 6-7, Paradise Interm. School
- National Fallen Firefighters Week
 Oct 7-13
- Celtic Celebration
 Oct 13, 6 pm
 Paradise Performing Arts Ctr
- Ride and Dine
 Oct 20, 6pm
 Camelot Equestrian Ctr
- Enloe Hospital CE Event
 Brain Attack Information
 Enloe Auditorium
 1700-1800, Free

INSIDE THIS

Running into Trouble

Outdoor Workout

Healthy Cooking

Safety Corner

EMS Corner

Egg Benefits

CE Answer Sheet

ISSUE:

Women: Running into Trouble

John Kiefer **Published:** November 7, 2011

When I look at the fat guy in the gym wasting his time on forearm curls to lose weight, I don't feel sympathy. The big tough guy getting stapled to the bench by 365 pounds, when just a second ago he couldn't even handle 315 pounds — nope, no sympathy there either. The girl who spends thirty minutes bouncing between the yes-no machines (abductor and adductor machines), who is going to have trouble walking the next day — I can't muster even an iota of pathos. Nobody *told* them to do these things. But then I watch my friend, Jessica,

running on the treadmill, day after day, year after year, running like a madwoman and going nowhere. Her body seems to get softer with every mile and the softer she gets the more she runs. I do feel pity for her because everybody, everywhere has convinced her that running is the way to stay slim and toned. There's a Jessica in every gym and spotting one is easy. The woman that runs for an hour or more every day on the treadmill, who every month or so sets a new distance or time goal. Maybe the goal encompasses the treadmill workouts; maybe it will be her fifth fundraising marathon; or maybe she's competing with runners in Finland via

Supplement your weekday routine and build muscle anywhere with this total-body outdoor workout

A busy workweek can sabotage even the best-laid fitness plans. That makes the weekend a perfect time to compensate for a missed workout, reinforce your gains, or burn a few extra calories, says Dan John, a fitness coach in Burlingame, California, and the author of Never Let Go. John's outdoor workout makes weekend exercise a snap since no gym is required. You can find most of what you need—bench, pole, solid ground—at your local park. What's more, most of the exercises work one limb at a time, helping you identify weaknesses and blind spots that you can address when you head back to the weight room on Monday.

Single-Arm Incline Pushup
Stand facing the back of a bench

By Jill Yaworski



and assume a pushup position with your feet shoulder-width apart and your right hand resting on the bench's back. (Your body should form a straight line from head to ankles.) Lower your body until your chest nearly touches the bench. Pause, and push yourself back up. Now repeat using your left arm. Next, do 2 reps with your right arm and 2 with your left. Keep adding reps until you can't do Continued on Page 5

Roasted Pumpkin Seeds

Preparation

1. Place rack in center of oven; preheat to 350°F. Line a rimmed baking sheet with parchment paper or a nonstick baking mat.

- Place pumpkin seeds in a small bowl, drizzle with oil and stir to coat. Add salt, stir to combine and coat. Spread on the prepared baking sheet in an even layer.
- 3. Bake the seeds, stirring once or twice, until toasted and golden brown, about 20 minutes.

Tips:

Make Ahead Tip: Store airtight for up to 3 days.

To harvest seeds from a pumpkin, scoop out the inside of the pumpkin. Separate the seeds from the flesh as well as you can, then place the seeds in a bowl of water. Use your hands to swish the seeds around to loosen any remaining flesh or strings. The seeds will float, so you can remove them with a spoon or your fingers. Drain the seeds on a dry dish towel or a plate lined with paper towels; pat dry with paper towels.

Nutrition

Per serving: 54 calories; 3 g fat (0 g sat, 1 g mono); 0 mg cholesterol; 6 g carbohydrates; 0 g added sugars; 2 g protein; 2 g fiber; 50 mg sodium; 98 mg potassium.



Eating Wells GOOD HEALTH .C

1 cup, for 6 servings

Ingredients

(see Tip)

1 cup fresh pumpkin seeds

1 teaspoon canola oil

1/8 teaspoon salt

Active Time: 15 minutes

Total Time: 35 minutes

Recipe courtesy of:

(cont. from Pg 1)

Nike®. The goal doesn't matter, because years of seeing her on the treadmill exposes the results: she's still — I'm not going to sugar coat this — fat. Or worse, she's fatter. I tried to rescue my Jessica from the clutches of the cardio contingent, but to no avail until a month ago when she called to tell me that a blood test had confirmed her doctor's suspicion: she had hypothyroidism — her body no longer made enough thyroid hormone. Her metabolism slowed to a snail's pace and the fat was accumulating. Now she had a culprit to blame, it wasn't the cardio causing her problems, it was her body rebelling. When Jessica asked my advice, I told her to do two things: schedule a second test for two weeks later and until then, stop all the goddamn running. Don't assume I'm picking on women or

- making fun. There are men out there who do the same, thinking cardio wipes away the gut resulting from regular weekend beer binges, but they are, in comparison, rare. I am targeting women for three very good reasons:
- 1. They are often intensely recruited for fund-raisers like Team-In-Training, lured by the promise of slim, trim health resulting from the month of cardio training leading to a marathon in addition to helping the charity in question
- 2. Some physique coaches prescribe 20plus hours per week of pre-contest cardio for women (that's a part-time job) Steady-state endurance activities like this devastate a woman's metabolism. It will devastate a man's too, but in different ways.

There's not much I hate in the fitness

world — well, that's not true, I hate most things about its present state, but at the top of the list is over-prescribed cardio. I'm not talking about walking or even appropriate HIIT cardio, but the running, cycling, stair climbing or elliptical variety done for hours at or above 65 percent of max heart rate, actually anaerobic threshold is a better measure, but not practical for day-to-day use. Trashing steady-state cardio is nothing new and the better of the physique gurus figured this out a long time ago, but even then, they only apply the no-steady-state-cardio rule to contest preparation. The non-cardio coaches fail to state the most detrimental effect, one that applies specifically to women and is a primary reason many first-time or second-time figure and bikini competitors explode in weight when returning to their normal diet. It's the same reason the Jessicas of the world run for hours per week with negative results. Studies demonstrate beyond any doubt that in women, cardio chronically shuts down the production of the thyroid hormone, T3.1-11

T3 is the body's preeminent regulator of metabolism by throttling the efficiency of cells. ¹²⁻¹⁹ T3 acts in various ways to increase heat production. ²⁰⁻²¹ As I pointed out, in "Logic Does Not Apply:

Continued on Page 3

(cont. from Pg 2)

A Calorie Is A Calorie", this is one reason using static equations to perform calorie-in, calorie-out weight loss calculations doesn't work—well, that's why it's stupid, actually. When T3 levels are normal, the body burns enough energy to stay warm and muscles function at moderate efficiency. Too much thyroid hormone (hyperthyroidism) and the body becomes inefficient making weight gain almost impossible. Too little T3 (hypothyroidism) and the body accumulates body fat with ease, almost regardless of physical activity level. Women unknowingly put themselves into the hypothyroid condition because they perform so much steady-state cardio. In the quest to lose body fat, T3 levels can grant success or a miserable failure because of how it influences other fat-regulating hormones.²²⁻³¹ In addition, women get all the other negative effects, which I'll get to. Don't be surprised or aghast. It's a simple, sensible adaption of the body, especially a body equipped to bear the full brunt of reproducing.

Think about it this way: the body is a responsive, adaptive machine evolved for survival. If running on a regular basis, the body senses excessive energy expenditure and adjusts to compensate. Remember, no matter what dreamy nonsense we invent about how we hope the body works, its endgame is always survival. Start wasting energy running and the body reacts by slowing the metabolism to conserve energy. Decreasing energy output is biologically savvy for the body: survive longer while doing this stressful, useless activity — as the body views it. Decreasing T3 production, increases efficiency and adjusts metabolism to preserves energy quickly. Nothing exemplifies this increasing efficiency better than how the body starts burning fuel. Training at a consistently plus-65 percent heart rate adapts the body to save as much body fat as possible. That's right, after regular training, fat cells stop releasing fat during moderateintensity activities like they once did. 32-33 Energy from body fat stores decreases by a whopping 30 percent. 34-35 To this end, the body even sets into motion a series of reactions that make it difficult for muscle to burn fat at all.36-41 Instead of burning body fat, the body is taking extraordinary measures to hold on to it. Still believe cardio is the fast track to fat loss?

But wait. By acting now, you too can lose muscle mass. That's right. No more muscle because too much steadystate cardio triggers the loss of muscle. 42-45 This seems to be a two-fold mechanism, with heightened and sustained cortisol levels triggering muscle loss, 46-56 which up regulates myostatin, a potent destroyer of muscle tissue.⁵⁷ Oh yeah — say good bye to bone density too — it declines with the muscle mass and strength.⁵⁸⁻⁶⁴ And long-term health? Out the window as well. The percentage of muscle mass is an independent indicator of health.⁶⁵ Lose muscle, lose bone, lose health—all in this nifty little package. When sewn together, these phenomena coordinate a symphony of fat gain for most female competitors post-figure contest. After a monthor three—of cardio surpassing the 20 hours-perweek mark, fat-burning is at an astonishing low, and fat cells await an onslaught of calories to store. 66-72 The worst thing imaginable in this state would be to eat whatever you wanted as much as you wanted. The combination of elevated insulin and cortisol would not only make you fat, but creates new fat cells so that you can become fatter than ever. 73-80

I won't name names, but I have seen amazing displays of gluttony from the smallest, trimmest women. Entire pizzas disappear leaving only the flotsam of toppings that fell during the feeding frenzy; appetizer, meal, cocktails, dessert—a paltry 4000 calories at The Cheesecake Factory vanish as the wait staff delivers each. A clean plate for each return to the buffet — hell with that, the only thing they're taking to the food bar is a spoon and they're not coming back. There are no leftovers; there are no crumbs. Some women catch it in time and stop the devastation, but others quickly swell and realize that the supposed off-season look has become their everyseason look. And guess what they do to fix it: cardio for an hour every morning and another in the evening to hasten things...

The "cardio craze" — and it is a form of insanity — is on my hit list and I'm determined to kill it. I don't know what else I can say. There are better ways to lose fat, be sexy and skinny for life, better ways to prepare for the stage. Women, you need to get off the damn treadmill; I don't care what you're preparing for. Stop thinking a bikini-body is at the end of the next marathon or on the other side of that stage. It's not if you use steady-state cardio to get there - quite the opposite. The show may be over, the finish line might be crossed, but the damage to your metabolism is just starting.

Don't want to stop running, fine. At the very least stop complaining about how the fat won't come off the hips and thighs or the ass. You're

keeping it there.

What about Jessica, my friend who's dilemma spawned this article? Luckily she took my suggestion and cut the cardio. Two weeks later, her T3 count was normal. Who would have guessed?

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Continued on Page 7

IAPS Data from September 2012

Reportable Injuries: 4 Record Only Injuries: 6 Injury by Activity: 2 7 Incident:

Training: 1 Station Duties: 0 Injury by Body Part:

> Head: 0 Torso/Back: 1 7 **Extremities:** Heat Illness: 1 Exposure: 1

SAFETY CORNER"

Safety Communication, 9/2/12, Hazard Tree Safety NMAC Safety Message, 9/3/12, Hazard Trees Blue Sheet, 9/7/12, 12-CA-NOD-003916, Firefighter Burn Injuries

- Green Sheet, 9/7/12, 12-CA-RRU-086384, Fireworks Explosion w/ Injuries
- Green Sheet, 9/13/12, 12-CA-NOD-003916, Firefighter Burn Injuries
- Safety Communication, 9/20/12, Cultivation Threat
- Green Sheet, 9/21/12, 12-CA-MEU-006376, Vehicle Accident

Practice Your Craft

When was the last time you practiced your craft. I mean deliberately practiced accessing and



using your knowledge and skills. I'm not talking about running calls. When I say practice I use the word in the literal sense. Deliberately simulating how you wish to perform and repeating the physical skill again and again.

We have an interesting view of the value of practice in EMS. We encourage practice in EMT and Paramedic training programs (or at least we should). We bring in mannequins and create scenarios and we gather around and practice. We practice sticking IVs, doing head-to-toe assessments, bandaging wounds, placing people in c-spine, using a BVM, inserting an airway, basically any physical skill is fair game for practice.

Then we stop. With the possible exception of the occasional scenario-based training, we no longer practice the physical skills associated with our jobs. We may do a little CPR once every two years. We may stop by the training center and use the BVM on an airway mannequin. But, for the most part, once we've got it, we've got it. It's almost looked at as a sign of weakness or deficiency if we practice our C-spine procedures, assessment techniques or splinting procedures.

For the most part we're far more comfortable snoozing through power point lectures in sit-and-get continuing education formats. I bring this up for several reasons.

For one, nobody else does this. Cops and soldiers qualify on their weapons but then they continue to go to the shooting range and send round after round down range. Nobody wonders if they are deficient in their marksmanship because they practice. Virtuoso musicians practice their craft daily. Surgeons practice critical procedures. Athletes practice their craft again and again.

You'd never see a world class sprinter say, "Oh yeah...I just run fast in a straight line. Got it." No sniper ever says, "OK, I figured out the whole shoot straight thing. No need to belabor the point." But we do that, don't we? Most of our skills are viewed as a learn it, do it, got it type thing.

The second reason I bring this up is because we're so bad at so many of our skills. When I wander around out there in the EMS prehospital world, I'm fortunate to encounter some of the top EMS practitioners anywhere. I'm honored to work with them. And I still encounter a lot of bad medicine. From simple things like blood pressures to our vital bread-and-butter skill sets like BVM use we do our skills poorly. In fact, for some skills like BVM use, bad technique is the norm.

And I bring this up because I often wonder how much better we could be if we practiced



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You are responsible for being the best patient care provider possible!

Seven Patient Statements That Should Concern You

As we develop our experience in EMS, we encounter certain statements that make us sit up and take notice. Sometimes we take notice because we remember a call where things started going down hill right after we heard that phrase. Other times, we've simply learned from the experiences of others to sit up and take notice. Often our best lessons come from our moments of regret.

Any time we can get the lesson without the regret is a plus. In the spirit of learning from the regret of others, I offer up seven phrases that immediately make me sit up and take notice. Hopefully you will too. Start paying close attention any time you hear your patient say:

"This is the worst headache of my life."

Headaches come and go. People who typically get headaches know their symptoms and become accustomed to the severity and length of their migraines. People who don't normally get headaches still know what a good throbbing headache feels like. When someone says this statement, it means one of two things. Either they normally suffer from headaches and today what they are experiencing far surpasses what has occurred in the past or someone who doesn't typically get headaches has something brand new going on today.

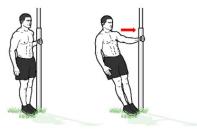
Either way, this is cause for concern. There is a long, long list of things that can cause headaches. A whole bunch of them are actually pretty scary. Regardless of how we might feel about people accessing 911 with a complaint of headache, when someone says that the pain in their head is worse than any headache in the past, pay attention. Do a thorough assessment and transport them appropriately.

"I feel like I'm going to die."

Feeling like you are sick, or feeling frightened about what might be happening to you is different than a feeling of impending doom. Sometimes, folks who are about to decompensate rapidly get a sense or feeling that they are about to decompensate. Don't take that statement for granted. It's easy to write off, "I'm going to die." remarks as overly dramatic Hollywood antics, until you have the experience of someone telling you they think they are about to die right before they die. Then it becomes a red flag.

When someone make this type of a remark, step back and reassess the situation. Take a close look at their vital signs. Reassure them that you are paying attention and you are going to do everything you can to prevent that possibility. Them make sure all your treatment ducks are in a

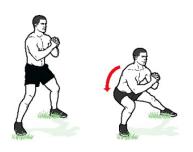
Outdoor Exercise (cont. from Pg 1)



the same number on both sides. Too easy? Try it with your feet together.

Single-Arm Row

Grab a pole (lamppost, signpost, goalpost) with your left hand and put your feet together next to it. Lean back until your arm is extended and your body forms a straight line from head to ankles. This is the starting position. Now pull your chest to the pole, keeping your left elbow tucked close to your side. Pause, and return to the starting position. Do 5 rows with your left arm, switch sides, and do 5 with your right. Keep adding 1 row on each side until you can't do the same number of reps on both sides.



Speed Skater Lunge

Stand with your feet about twice shoulder-width apart and your toes pointing forward. Clasp your hands in front of your chest. This is the starting position. Shift your weight to your right foot and lower your body, pushing your hips back and bending your right knee until your right thigh is parallel to the ground. Return to the starting position and repeat to your left side. (Keep both feet on the ground throughout the move.) Continue alternating back and forth until you've done 15 to 25 reps to each side.

Greatness is not found in possessions, power, position or prestige. It is discovered in goodness, humility, service and character.



Bulgarian Split Squat

Stand with your back about 2 feet from the seat of a park bench. Place the top of your right foot on the seat and your hands behind your head. This is the starting position. Keeping your torso upright, lower your body until your left thigh is parallel to the ground. Pause, and then push yourself back up to the starting position as quickly as you can. Do 10 reps, switch legs, and repeat.





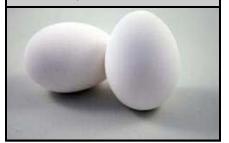
V-Up

Lie on your back with your legs together and your arms extended past your head and in line with your body. In one movement, simultaneously lift your upper body and your legs as if you're trying to touch your toes. Keep your legs straight and your head in line with your torso. (Your body should form a V.) Lower yourself back down. Do 15 reps.

BREAKFAST EGGS

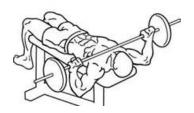
PREVENT HUNGER

- Eggs have been a pariah food for more than 30 years because they are high in cholesterol. However, nutritionists are taking a second look at eggs because they're high in good quality protein and curb appetite.
- A study from the Pennington Biomedical Research Center found that eggs decreased food intake and increased satiety (feeling of fullness). Researchers matched two breakfasts for calories and nutrient content, changing only the protein source (Eggs versus cereal). Eggs have a higher biological value than protein in breakfast cereals. Eating eggs at breakfast supplies high quality protein and helps suppress hunger. (Paper presented at European Congress on Obesity, May 18, 2012)



MEN NEED MORE REST THAN WOMEN BETWEEN SETS

• Based on research on muscle protein synthesis and neuromuscular physiology, rest longer between sets to build strength and rest less to build muscle mass. Strength and gender might influence the optimal rest interval between sets. Nicholas Ratamess from the College of New Jersey, and colleagues, found that woman need less rest between sets than men in the bench press. Researchers measured bench press power during 3 sets of 10 reps with one minute, two minutes, or three minutes rest between sets. They found that stronger people need more rest between sets and that women needed less rest than men. The results of the study have important implications for designing weight training programs for men and women, and for people with different fitness levels. (Journal Strength Conditioning Research, 26:1817-1826, 2012)



row.

"My shoulder hurts."

A whole host of chest and abdominal problems can present as referred pain to the shoulder. The shoulders are the most common area of the body to find referred pain. (A complaint of pain in a region of the body that is removed from and unrelated to actual location of the problem.) Heart conditions, respiratory ailments like pneumonia and pleurisy and injury or illness in the liver, spleen and gallbladder can all cause pain to radiate up into the shoulder.

When a patient doesn't have specific trauma to the shoulder region or another specific reason to have pain in their shoulder, we should examine the chest and abdomen with a heightened awareness that there may be an unrecognized injury or illness that is causing the shoulder pain. If the patient was seat belted in an auto accident, don't assume the pain is directly caused by the seat belt against the shoulder. A lacerated liver or spleen may be the true culprit of the pain.

Referred pain is a subtle physical sign. When a patient localizes their pain we tend to focus on that region of the body. When your patient complains of pain in their shoulder with no obvious mechanism, consider referred pain and assess accordingly.

"I don't want to go to (Insert specific hospital here)."

When a patient refuses to be attended to by their local hospital ER, there is often some sort of history behind the bias. At some point in the conversation, after we've decided where we are going, I like to come back and explore this bias. I ask, "So why is it that you don't want to be transported to (insert obvious hospital choice here)?"

Sometimes, the patients bias is related to insurance, specialization of care or history with another facility. But, often times, there has been some sort of conflict with that facility in the past. It could be related to a perceived missed diagnosis or dissatisfaction with previous care. Often, people will avoid a particular hospital because that facility is familiar with the patient and may have knowledge of some

aspect of the patients medical history that they are hiding from you.

If the patient has a particular reason to steer clear of a specific medical facility, I always want to know why.

"I'm just going to walk home from here."

Patient disposition is an often overlooked aspect of medical refusal. When patients refuse medical care, we need to take the time to ensure that they are being left in a safe place. Preferably in the presence of another, responsible person and with access to 911 if they change their mind about needing our care.

I always get nervous when a patient tells me that they are planning on walking somewhere immediately after refusing care. If they don't arrive at their destination safely, I know the scrutiny will be on me (as it should be). Any time a patient is planning on refusing care, before you have them sign your form, ask what they are planning on doing next. Then make every effort to create the safest environment possible for them prior to your departure.

If they need to go somewhere, help arrange safe transport. Check on the possibility of taking them there yourself or arranging a ride with local law enforcement or public transport. Be nervous any time someone decides to walk away from your scene.

"This is probably just indigestion."

When people start explaining how their chest discomfort is probably related to some benign cause, I immediately take notice. Denial is such a common finding in our cardiac patient population that it's actually one of the hallmark symptoms of a heart attack.

Statements like this one are often based in fear. The patient is looking for reassurance that their symptoms are not serious. If the patient is searching for reassurance, ask yourself why. When we feel indigestion, we don't normally summon 911. We take a Tums and go back to watching the next episode of Mad Men. If people summon 911 and then look to you for reassurance that they are being foolish, don't rush to agree. Take a closer look. There's probably more there than they are admitting.

"I was just sitting here and the next thing I remember..."

Syncope in the sitting position is always cause for concern. (And cardiac in origin until proven otherwise.) We see so many instances of dizziness and syncope for fairly benign causes that we can sometimes fail to recognize the subtle but critical detail that falling unconscious while seated in a resting state is highly unusual. Our first consideration needs to be cardiac and, if the patient proves themselves hemodynamically stable, then neurological.

One problem we often encounter with our syncope patient population is their embarrassment over the episode and their desire to refuse care and move on to something that takes the spotlight off of them. In cases of sitting syncope we need to be insistent about transport. Don't let patients who experience syncope while sitting refuse care without a strongly worded advisement, solid orthostatic vital signs and a detailed physician consult.

So there are my seven patient phrases that always trigger my concern. What about you. What things can a patient say that always make you sit up and take notice.



(cont. from Pg 3)

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This article had a whopping 80 cited sources and unfortunately I was not able to include them all but I wanted to include a significant many because the topic is a little controversial. Feel free to read the article and review all 80 cited sources at: http://articles.elitefts.com/training-articles/women-running-into-trouble

"If you'll not settle for anything less than your best, you'll be amazed at what you can accomplish in your lives." - Vince Lombardi

CE Answer Sheet: 7 Things that Should Concern You 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) 1. How often should you practice 6. "Denial" is not just a river your assessment skills? in Egypt, but also a major concern in a complete Regularly True On calls is good enough. False 2. Headaches are generally a benign symptom. 7. Orthostatic vital signs can be completely taken while True the patient is sitting down. False True 3. Someone's sense of False impending doom should concern you as a provider. 8. Do orthostatic vital signs True provide a benefit to the prehospital provider? False Yes 4. Referred pain typically is just muscular in nature No I didn't know what True 'orthostatic" meant in #7 and still don't know False 9. Your department is 5. Patient disposition is a responsible to make you the legitimate concern when best care provider possible. considering a patient refusal. True False True False 10. I would like to volunteer to write the next CE article. Extra credit if you get this one right. Comments:

Cooler weather and rain are coming! And that generally means two things: 1. Fire season in Northern CA is coming to a close. 2. Long drives in the near future down to Southern CA.
For Suggestions or Comments:
CAL FIRE / Butte County FD 176 Nelson Ave Phone: 530-966-8682 Fax: 530-879-3433
E-mail: Mike.Waters@Fire.Ca.Gov "Let No Man's Ghost Say His Training Let Him Down!" -Unknown Author