Cohasset VMP Burn

VOLUME 2, ISSUE 9

Health

RNIA DEPARTMENT OF RY & FIRE PROTECTION





Upcoming events within the area

- Spartan Race 10-12 miler w/ Obstacles Nov 17, 8 AM Sacramento
- Run for Food 5K Nov 22, 9 AM 1 Mile Area in Bidwell Park
- Jack Frost 10K Dec 16, 8AM Cedar Grove, Bidwell Park

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& Fitness

THE FOOD YOU SHOULD EAT EVERYDAY

By: Cassie Shortsleeve

Turns out some nursery-school clichés are actually true: An apple a day really does keep the doctor away, according to a new study in the Journal of Functional Foods.

Researchers had a small group of 16 people eat either an actual apple, capsules packed with the same amount of polyphenols (plant compounds) in apples, or a placebo every day for 4 weeks.

The results? Those who followed the old adage lowered their blood levels of oxidized LDL--"bad" cholesterol linked to hardening of the arteries and cardiovascular disease-by 40 percent. Those who popped the capsules saw a decrease too-but not as dramatic. Researchers suspect that our bodies absorb polyphenols more effectively when they're in foods.

And sure, that seems like a helluva lot of healing power for one little fruit—and the study was small—but the ability to reduce

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Do You Really Need An Omega 3 Supplement?

Today's headlines may make you reconsider your daily omega-3 supplement: In a review published in the Journal of the American Medical Association, researchers analyzed 20 studies totaling nearly 69,000 people and found no association between people taking omega-3 supplements and decreased mortality from any cause, as well as cardiac death, sudden death, heart attack or stroke.

But don't take the results at face value. It's important to note that the group analyzed in the JAMA study are high-risk heart patients. Expecting fish oil to prevent future heart attacks or strokes in people already vulnerable to them is like expecting a Band-Aid to hold back a gushing



wound.

Say you're already overweight and have diabetes-both big risk factors for heart disease. An omega-3 supplement won't help you much. "There is no way to take these results and assume they apply to healthy people. Of course fish oil is not a cure. If someone is already falling apart, omega-3s won't put them

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Corn & Broccoli Calzones

These calzones are stuffed with a summery combination of corn and broccoli, but you can use whatever you have in your fridge. Part-skim ricotta and mozzarella make our pizza pockets lower in saturated fat. Plus a whole-wheat crust adds a nutty flavor and extra fiber. Serve with your favorite marinara sauce for dipping.

Ingredients

- 1 1/2 cups chopped broccoli florets
- 1 1/2 cups fresh corn kernels, (about 3 ears; see Tip)
- 1 cup shredded part-skim mozzarella cheese
- 2/3 cup part-skim ricotta cheese
- 4 scallions, thinly sliced
- 1/4 cup chopped fresh basil
- 1/2 teaspoon garlic powder
- 1/4 teaspoon salt
- . 1/4 teaspoon freshly ground pepper
- All-purpose flour, for dusting
- 20 ounces prepared whole-wheat pizza dough, (see Tip), thawed if frozen
- 2 teaspoons canola oil

Preparation

- 1. Position racks in upper and lower thirds of oven; preheat to 475°F. Coat 2 baking sheets with cooking spray.
- 2. Combine broccoli, corn, mozzarella, ricotta, scallions, basil, garlic powder, salt and pepper in a large bowl.
- 3. On a lightly floured surface, divide dough into 6 pieces. Roll each piece into an 8-inch circle. Place a generous 3/4 cup filling on one half of each circle, leaving a 1-inch border of dough. Brush the border with water and fold the top half over the filling. Fold the edges over and crimp with a fork to seal. Make several small slits in the top to vent steam; brush each calzone with oil. Transfer the calzones to the prepared baking sheets.
- Bake the calzones, switching the 4. pans halfway through, until browned on top, about 15 minutes. Let cool slightly before serving. Healthy Heart Variation: To reduce saturated fat even further, use nonfat ricotta in place of the reduced-fat ricotta. 334 calories, 2 g saturated fat.

Recipe courtesy of:

Nutrition

Per calzone: 350 calories; 7 g fat (3 g sat , 3 g mono); 21 mg cholesterol; 50 g carbohydrates; 17 g protein; 4 g fiber; 509 mg sodium; 250 mg potassium.



Tips: To remove corn kernels from the cob: Stand an uncooked ear of corn on its stem end in a shallow bowl and slice the kernels off with a sharp, thin-bladed knife. This technique produces whole kernels that are good for adding to salads and salsas. If you want to use the corn kernels for soups, fritters or puddings, you can add another step to the process. After cutting the kernels off, reverse the knife and, using the dull side, press it down the length of the ear to push out the rest of the corn and its milk. Look for balls of whole-wheat pizza dough at your supermarket, fresh or frozen and without any hydrogenated oils.



Apples (cont. from Pg 1)

oxidized LDL is always encouraging, says Men's Health cardiology advisor Eric Topol, M.D., director of the Scripps Translational Science Institute.

"This opens up a new mechanism that has not been reported before," he adds. "Now we just have to see if it holds up against larger studies."

In addition to protecting your ticker, an apple a day also reduces swelling of all kinds, thanks to quercetin, a



flavonoid also found in the skin of red onions. Ouercetin reduces the risk of allergies, heart attack. Alzheimer's disease, Parkinson's disease, and prostate and lung cancers. If given the choice, opt for Red Delicious. They contain the most inflammation-fighting antioxidants.

"KILL CLIFF PRODUCT REVIEW"

Kill Cliff was created by a former US Navy SEAL. The goal was to create a low calorie, recovery aid, that could be consumed on a daily basis while delivering key nutraceutical ingredients to help improve athletic performance and speed recovery.

The product was created based on the theory that an integral part of enhancing sports performance is reducing inflammation. We observed that most recovery and sports performance products were only trying to do two things – artificially increase energy and replace depleted sugars and electrolytes. We recognized that these products were missing the fact that the real culprit for reduced performance and slowed recovery is inflammation.

Kill Cliff is a revolutionary new sports recovery drink that is helping athletes around the country recover faster and train harder. Unlike most sports performance drinks that just try to boost energy and replace lost carbs and electrolytes, Kill Cliff is focused on helping you recover completely by reducing sports related inflammation and providing key nutritive enzymes for complete breakdown of your post workout meal.

Check Out The Ingredient List

If you look at the ingredient list on a can of Kill cliff, you'll notice there aren't a lot of useless sugars and stimulants in it. But you might not know what all the ingredients are for. Each ingredient serves a specific purpose for a faster and more effective recovery.

The ingredients can be broken down into four main groups:

- Anti-Inflammatory
- ■Stress Relief
- ■Circulatory health
- ■Digestive Help
- Anti-Inflammatory Agents

The anti-inflammatory ingredients in Kill Cliff are Ginger Extract, Milk Thistle, and Bromelain. Everybody who trains is familiar with the stiffness and soreness caused by inflammation. We thought, How great would it be if you didn't have to deal with those symptoms the next day? So we set to find out, and came up with Kill Cliff, and what do you know? It works great!

De-Stressing Your Body Kill Cliff contains Taurine and Ginseng Root Powder to help reduce physiological stress caused by working out. Taurine prevents oxidative stress induced by exercise and Ginseng Root Powder is an all-natural adaptogen (a product that increases the body's resistance to stress). Hard training and work outs put a lot of stress on your body, and Kill Cliff helps your body recover from that stress easier. Improving Blood Flow

We also add Green Tea Extract, Inositol, and Caffeine for overall circulatory health. Green Tea is a well-recognized anti-oxidant and removes free radicals from your body. Inositol helps your circulatory system stay strong and able to pump blood to and from your muscles more efficiently to remove waste from hard physical activity. And

while caffeine is well known as a stimulant. it also causes blood vessels to open and let blood flow more freely. Digestive Help And the last group of ingredients is a special formula specifically designed to help you get the most from your post workout meal. It contains ■Glucuronolactone, a precursor for ascorbic acid synthesis

Lipase, which breaks down fats in the diges-



tive system

■Amylase, which breaks down starches ■Protease 4.5, which helps digest protein

Invertase, which helps break down sugar

Beta-Glucanase to help break down fiber

Serrazimes, which are digestive enzymes

As you can see, no matter what you eat after your workout, your body will be ready to efficiently digest and absorb more of it to help you recover quicker and more fully, leaving you ready to get back at it.

** Mike's take on it.

I am on my third case of Kill Cliff and have nothing but good things to say about this product. It is difficult to get (currently only available by mail order in this area) and is a little more expensive than most beverages at \$2.00 a can (it is a unique product and that in itself sets it apart from trying to compare it to sodas or energy drinks). I usually have a few in my vehicle's cooler so hit me up the next time you see me for a sample. As far as it's claims, I do feel better and have less soreness after working out but that is entirely subjective and there are currently no studies to prove their claims (though there are a large amount of customer testimonials on their website that support its abilities). Just off of ingredients alone, it is all natural with the exception of a small amount of Sucralose (to offset the bitterness from the other natural products). It is only 15 calories, has only 25 mg of caffeine (about 1/3 of a coke) and comes in one flavor "Blood Orange". I personally would recommend the drink to those looking for a quality

post workout recovery drink.

IAPS Data from October2012

Reportable Injuries: 4 Record Only Injuries: 5 Injury by Activity: PT: 1 1 Incident: Training: 1 Station Duties: 6 Injury by Body Part: Head: 1 Torso/Back: 4 4 Extremities: Heat Illness: 0 Exposure: 0

"SAFETY CORNER"

- 10/5/12, Safety Communication "Valley Fever"
- 10/9/12, Safety Communication "WUI Guidelines"
- 10/16/12, Sacramento Metro Green Sheet, Dozer Rollover
- 10/25/12, Green Sheet, 12-CARRU-103004, Exploding LPG lantern

EMT Spot Redux: Five Things My Kids Taught Me About EMS

I'm blessed with two kids. They are amazing. My kids changed my whole perspective on the world. They re-framed my purpose. It's wonderful, the way a few minutes with your kids can put an entire bad day in perspective. They also force you to evaluate some of your own behaviors. (If you're lucky.)

Here are a few of the more valuable lessons I've learned from my kids.

1.) Test Your Limits.

Kids know this instinctively. The moment you create a boundary they begin testing it. There is no running in this area. How fast is running? Can we just walk really fast? What about jogging? It's like they just instinctively know that life is more fun when you're testing the limits.

Sure there are boundaries that we all have to live within but when was the last time you gave them a little test or maybe tried to actively redefine them? "OK, are you saying that I can't attend this training or that you're not willing to pay for me to attend this training? So are you saying we can't use the conference room for an EMS journal club or we can't use it during business hours?"

2.) Every New Thing Is A Chance To Learn.

Kids are like little information sponges. I had always heard this, but I didn't really get it until I had kids. When you watch the way a 5 month old goes after a toy with her hands, face and mouth, just trying to absorb every bit of information about its size, texture, color and smell you start to get it. Turn a six year old loose in the woods and watch what happens. The world is a library of experience.

Have you ever thought what your skills might be like if your looked at patients and calls with this same, "What's that?" attitude. What if you devoured history's and medication lists with the same enthusiasm as a kid with a new toy? I'm guessing your knowledge and skills would quickly become remarkable.

3.) The Fastest Way to Get Better Is To Copy Someone.

If you ever get a chance to watch a bunch

of 11 year old boys play league baseball, pay attention to how they bat. Very few of them can hit the ball well at this level. They're just moving up into fast pitch. But every one of them has a pre-swing routine. A little pattern of practice swings and adjustments that they've learned from watching their favorite players on TV. It's really very entertaining.

Nobody ever had to tell any of those boys to watch every move their baseball idols make and then copy them. They also don't spend a lot of time analyzing the exact purpose of these moves and behaviors. They just know that part of being good is watching the guys who are already good and copying them. Do you want to be better at an EMS skill? Find someone who's already really good at it, pay close attention to them and then become them each time you do the skill. Then put your own unique flair in for the next guy to copy.

4.) Whatever Happens, Adapt and Enjoy.

In Colorado our summers are typically punctuated by afternoon thunder storms. Kids learn quickly that pool, park and outdoor play often gets interrupted by the need to take refuge from the weather. When this happens there is always a few moments of disappointed ho-humming, and then they adapt. It doesn't much matter where they are forced to find shelter, the game quickly evolves to accommodate the new environment and the play continues.

Wouldn't it be amazing if all of us could adapt so well? As adults we seem to get disoriented and frustrated at the first sign of our plan becoming derailed. We struggle with change. A new med kit or a different rig assignment can shake us for hours. A protocol change or unpopular memo can ruin our day. Kids understand that in the big scheme of things those little disruptions are never worth ruining the fun over. "Wow, what a crappy memo. I can't believe we're going to do that. Hey let's go play outside!"

5.) Share Your Gum and Hang Your Pictures On The Fridge.

Kids seem to have a natural inclination to want to share their things. They display their accomplishments with zeal and always want you to check out their latest boo-boo. They relate their experiences without complex apprehensions about what the listener



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might infer or how it might reflect on their knowledge or skills.

We adults, on he other hand, get funny about that stuff. How did you feel the last time you heard one of your trips was gong to be reviewed at the next monthly call review? Did you jump at the chance to share your call and your experiences. Did you want the experience of standing in front of your peers and talking about things you did good and things you wish you had done better?

Imagine what that might be like to be completely willing to present yourself to your peers as an authentic, flawed human being still experiencing success and failure. Still striving to improve and being totally willing to allow others to share in your mistakes and perhaps learn for them as well.

You can learn a lot from a kid.



Door prop breach during a recent MCD at the CFTC.

Omega 3 (cont. from Pg 1)

back together," says Alan Aragon, M.S., *Men's Health* nutrition advisor.

What about generally healthy guys? One study in the *American Journal of Clinical Nutrition* found that overweight adults taking fish oil improved their HDL cholesterol and artery function more than taking a placebo supplement. Even in healthy, young, normal weight adults, fish oil exerts certain heart-protective benefits—lower levels of triglycerides and higher "good" HDL cholesterol numbers, to name a few. (Don't think you're safe from a heart attack just because you're lean.

This study is one of the many meta-analyses that have come out on fish oil supplements recently, says Aragon. "Some review studies show that there is a positive benefit to fish oil, and others say that there's insufficient evidence. Right now though, more studies than not are on the beneficial side of the fence," he says. (Why the conflicting reports? Each review looked at different sets of data and studies.)

Other potential issues: The *JAMA* study doesn't consider what type of omega-3 supplement these patients were taking. Some fish oil supplements go through processing that makes the omega-3s less absorbable to the body. Others contain contaminants (like mercury or PCBs), and that could make the supplements less effective, explains Aragon.

Bottom line? It's best to get nutrients from whole food sources first. Diets rich in omega-3 fatty acids have been shown to reduce inflammation, decrease triglycerides, and lower blood pressure.

If you don't eat at least two 3.5-ounce servings of fish a week, then it's a good idea to take a supplement of about one gram of EPA and DHA a day. For the record, Aragon takes fish oil daily. His pick: The Costco Kirkland Signature brand, since it contains the type of omega-3s readily absorbed by the body. "Looking at the research as a whole, there's a small heart protective effect from taking fish oil. And for me, that's worth taking a supplement."



"A group of service members, Army, Navy, Marines, Air Force and NATO forces, gathered on October 6, 2012 at Kandahar Airfield Base in Afghanistan in honor of all the fallen comrades and completed the 'Del' Hero WOD in an effort to raise money for the Ranger Foundation. CrossFit Kandahar was proud to host the event." - Steph Xie

Ten Super Foods with Super Benefits

10 delicious antioxidants to keep your health in balance

by Lauren Jacobsen

Every day the body is exposed to toxins from the environment, stress and intense workouts. This can cause an increase in oxidation on the body, free radicals including lactic acid and ammonia, and toxins that begin to build up, preventing the recovery process. Research has shown that oxidative stress can impact your ability to function and perform at your best, which we all know is important when it comes to staying on top of our "A" game! Oxidative stress can lead to increased recovery time after a workout, and rob you of energy. Although over time, our body has the ability to adapt to oxidative stress, at some point we will reach our limit! Chances are if you are working out regularly, under an extreme amount of stress-for instance, stress caused by work, intense workouts or other commitments- you are probably at your tipping point! And although elimination of stress can be the easiest answer, it is usually not always possible! Combine that with a strict diet and you are no doubt missing important antioxidants and essential nutrients that can keep your body from functioning at an optimal rate.

Don't worry— "super foods" and their supply of antioxidants to the rescue! Antioxidants can work to decrease the harmful effects of oxidative stress caused by free radicals, which are the damaging molecules that are the result of metabolic processes occurring in our bodies, whether induced by stress, exercise, environment, and aging! Antioxidants can work to halt the damage caused by free radicals by binding to active receptor sites, scavenging and neutralizing free radicals' damaging effects. Super foods can have a positive effect on building a lean body, keep your metabolism firing, your energy levels elevated and your immune system functioning optimally. What makes a food a "super food" is its ORAC value, which is the oxygen radical absorbance capacity, or the ability of a food to scoop up and neutralize free radicals. The higher the ORAC, the more antioxidant power the food possesses. Incorporate a few of the following antioxidant-rich super foods into your daily diet.

Citrus Fruit: Citrus fruit is a source of the powerful antioxidant vitamin C, which can help protect our lean muscle, and help to generate other antioxidants. Multiple studies have found that levels of vitamin C are diminished in the body of those who exercise regularly. Vitamin C can also help regenerate reduced vitamin E back to the active state, another powerful antioxidant. Vitamin C has been shown to reduce lean muscle damage when compared with those deficient in the vitamin. Another study found that vitamin C does control reactive oxidant species formed during exercise. If not controlled, these species have the ability to react with cell membranes and damage them, initiating a series of other damaging reactions. In addition to its antioxidant properties, vitamin C is needed for absorption of iron, which is necessary to help oxygen bind to hemoglobin in the blood. Oxygen is critical for proper muscle performance, and keeping energy levels high. Vitamin C is also involved with amino acid metabolism and the formation of collagen, which makes up connective tissue, and is essential for holding your bones and muscles in place, not to mention keeping our skin looking its best. Just one orange contains about 100 per-

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Kandahar CrossFit

"You only wish a rocket attack would stop this workout!"

Join us every Saturday for our workouts dedicated to fallen heroes. This is the day we will push a little harder, rest a little shorter, remember and be thankful for those who gave the ultimate sacrifice and pray for their families.



"JOSH" For time: 21 Overhead Squats, 95/65 42 Pull ups 15 Overhead Squats 95/65 30 Pull ups

9 Overhead Squats 95/65

SSG Joshua Hager, US Army Was killed in February 22, 2007 in Ar Ramadi, Iraq.

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Super Foods (cont. from Pg 5)

cent of your daily value for vitamin C. And if you would rather not have the sugar, choose lemon. Add in an ounce of lemon juice to each glass of water you drink daily.

Broccoli: Contains many potent antioxidant micronutrients including lutein, beta-carotene, vitamin C, selenium and diindolylmethane. Diindolylmethane is a potent modulator of the innate immune response system. This extract is also an excellent source of indole-3-carbinol, which can boost DNA repair in cells! Add this high-fiber veggie to your salads or eat it as a side with your protein.

Beans: Loaded with phytochemicals including saponins, protease inhibitors and phytic acid, which can help protect cells from damage. In a recent study, beans were found to be the highest antioxidant containing food! Just one half cup of red beans provides an ORAC of 13,727. Beans are a great source of protein and are inexpensive and filling.

Sweet Potatoes: Probably already on your diet, sweet potatoes are actually a great source of antioxidants. One baked sweet potato offers up an ORAC value 1199. Sweet potatoes provide vitamin A, vitamin C, vitamin B6 and are a great source of fiber. Sweet potatoes are a great source of complex carbohydrate for fitness diets, and are best prepared baked.

Berries: Packed with fiber, antioxidants, vitamins A and C, their phytochemical properties may also help reduce the risks of some diseases. Blueberries and strawberries are great berry options, but the acai berry is considered to have the highest antioxidant property of any other berry! Anthocyanins found in acai and black raspberries, which have been shown to improve mental function, concentration, memory and mental clarity. Berries also provide a source of fiber and less sugar than other fruits. Just one cup of strawberries provides 50 calories, 3 grams of fiber and only 7 grams of sugar. Add them to shakes or oatmeal.

Dark Chocolate: Rich in flavonoids and catechins, dark chocolate can promote heart health. Flavonoids in dark chocolate also help reduce insulin resistance. It is low glycemic, which means it won't cause huge spikes in blood sugar levels. It also contains several compounds that can effect mood and cognitive function, including PEA or phenylethylamine, which increases the release of feel-good endorphins. Although this super food is generally advised against during strict diets, one ounce of 70 percent dark chocolate can offer up to 170 calories and only 6 grams of sugar. Not too bad considering the benefits! **Red Bell Peppers:** Full of vitamins A, C and E and the antioxidant lycopene, which makes red bell peppers another great super food. One whole pepper provides approximately 40 calories, and also provides vitamin B6 and dietary fiber. Add peppers to your salads or eat cut them up and eat them as snacks between meals.

Spinach: Extremely rich in flavonoids and carotenoids that provide anti-inflammatory benefits as well as antioxidant benefits. Given the fact that spinach is an excellent source of the antioxidant nutrientsincluding vitamin C, vitamin E, betacarotene, and manganese- as well as a very good source of zinc and a good source of selenium, it's no wonder that spinach helps lower the risk of numerous health problems related to oxidative stress. Spinach also provides vitamin K, E, B6, B2, folic acid, folate, niacin and the minerals magnesium, calcium, iron, potassium, phosphorous and copper. This wonder food can be used as a base to leafy green salads, to omelets or even a green-based shakes!

Tomatoes: Studies have shown that a diet rich in lycopene, the antioxidant found in tomatoes, can help decrease the risk of certain cancers, as well as reduce the risk of heart disease. Fit toma-

toes into your nutrition plan by using tomato salsa as a condiment, or even cherry tomatoes in your salad.

Artichokes: Maybe not your typical diet food, but at only 60 calories each they are worth trying. Artichokes have a super high ORAC value of 7,900 and contain phytochemicals that may lower cholesterol levels. Cooked artichokes can be diced and added to salads.

References:

Bazzarre, T.L., S.M. Kleiner, and B.E. Ainsworth. Vitamin C intake and lipid profiles of competitive male and female bodybuilders. Int. J. Sport. Nutr. 2(3): 260-271, 1992. Child R., S. Brown, S. Day, A. Donnelly, H. Roper, and J. Saxton. Changes in indices of antioxidant status, lipid peroxidation and inflammation in human skeletal muscle after eccentric muscle actions. Clinical Science 96: 105-115, 1999. Clarkson P. M. Antioxidants and physical performance. Crit. Rev. Food. Sci. Nutr. 35: 131-141, 1995. Davis J. Antioxidant Superstars: Vegetables and Beans. http:// www.webmd.com/diet/features/ antioxidant-superstars-vegetablesand-beans Dekkers, J. C., L. J. P. van Doornen,

Dekkers, J. C., L. J. P. van Doornen, and Han C. G. Kemper. The role of antioxidant vitamins and enzymes in the prevention of exercise-induced mus-

cle damage. Sports Med. 21: 213-238, 1996. Gey, G.O., K.H. Cooper, and R.A. Bottenberg. Effect of ascorbic acid on endurance performance and athletic

injury. JAMA. 211(1): 105, 1970. Goldfarb, A. H. Nutritional antioxidants as therapeutic and preventive modalities in exercise-induced muscle damage. Can. J. Appl. Physiol. 24: 249-266, 1999. Jakeman, P., and S. Maxwell. Effect of antioxidant vitamin supplementation on muscle function after eccentric exercise. Eur. J. Appl. Physiol. 67(5): 426-430, 1993.

Jenkins, R.R. Exercise, oxidative stress and antioxidants: A review. Int. J. Sport. Nutr. 3: 356-375, 1993. Jenkins R.R. and A. Goldfarb. Introduction: oxidant stress, aging, and exercise. Med. Sci. Sports. and Exerc. 25:210-212, 1993.

Kaminski, M., and R. Boal. An effect of ascorbic acid on delayed-onset muscle soreness. Pain. 50:317-321, 1992.

Kanter M.M. Free radicals exercise and antioxidant supplementation. Int. J. Sport. Nutr. 4:205-220, 1994. Karlsson J. Exercise, muscle metabolism and the antioxidant defense. World Rev. Nutr. Diet. 82:81-100, 1997.

Keren, G., and Y. Epstein. The effect of high dosage vitamin C intake on aerobic and anaerobic capacity. J. Sports Med. 20(2): 145-148, 1990.

McBride et al., "Effects of resistance exercise on free radical production," Medicine and Science in Sports and Exercise, 30111:67-12, 1998.

Packer, L. Oxidants, antioxidant nutrients and the athlete. J. Sports Sci. 15: 353-363, 1997. USDA Nutrient Database Food List – http://

ndb.nal.usda.gov/ndb/foods/list



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