

ENDURANCE NEWS

MARCH 2010 : #68

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**Racing
through
the Alps**

**Top American
Moto At Dakar!**

Jonah Street - Page 55

**STEVIA:
Having our
cake and
eating it too?**

**Don't Get
Dropped!**

15 Days

To better training

Racing
strategies
for "shorter"
events

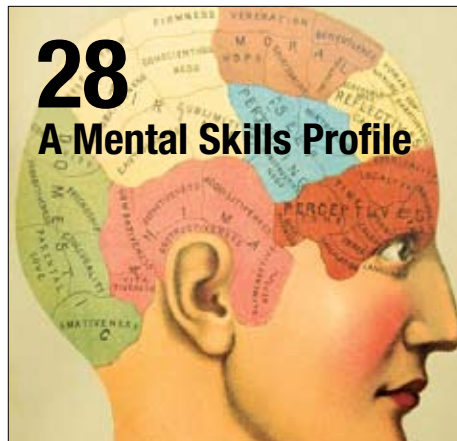
The informed athlete's advantage since 1992



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Jonah Street, the top American finisher in the moto division at the 2010 Dakar Rally. Read more about this amazing race on page 55. Photo by Marcelo Maragni

ENDURANCE NEWS

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Our Mission

The objective of Endurance News is to provide you, the serious endurance athlete, with a valuable resource that you will find informative, educational, thought provoking, and helpful in your ongoing pursuit of optimum performance and health.

Endurance News features insightful articles on diet, nutrition, training, and other topics of interest for endurance athletes - written by our staff as well as professional and elite amateur athletes and other experts in the area of nutrition and exercise.

In reading this and future issues, please remember that the views expressed in this publication will always be biased in favor of a healthy diet, hard training that emphasizes quality over quantity, and prudent supplementation to improve health and performance. But above all, we at Endurance News believe that there are no short cuts and that success can only come from hard work.

Back issues available at
www.hammernutrition.com

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HAMMER out your aches and pains

"Just an update on my Achilles tendon issue. Friday morning I rubbed some Hammer Balm on the painful area. I was a wee bit surprised about 40 min later when walking across the parking lot I noticed the pain had decreased. I kept applying over the weekend and yesterday was pain free.

I'm not exactly sure what was wrong but whatever it was, it feels gone. I guess you could say it was 'hammered' out!"

- Kevin G.

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WELCOME

2010 - Onward and Upward!

BY BRIAN FRANK



Welcome to the 68th issue of Endurance News and our second issue in this new magazine format!

I was discussing the last minute additions to this issue with some of our staff and Brad (new staff member, contributor, race director, and more) wondered what Issue #1 looked like. So, we went to the archives and pulled out an original copy - 18 years old, dark blue paper, black ink, clip art graphics, eight pages, and I wrote every word of copy in it. After all, I only had one employee at the time and he was busy packing boxes while I took phone orders and did everything else, literally. It seems like that was 100 years ago, but then again, it also seems like it was yesterday. It's been a lot of fun to oversee the evolution of this publication and the increasing amount of contributions from clients just like you. As with my company, I owe the success of this publication to you. Thank you for your support, it means the world to me.

Those of you who have been reading this publication for many years, know this to be true: our message is unchanging and uncompromising - eat less, fuel with less calories, sodium, and fluids, drink more water everyday, etc. This means cutting way down on your sugar intake (you eat more than you think), reducing salt intake as much as possible (excess sodium is still bad for you, always will be), eating less wheat, avoiding artificial ingredients like the plague, and attempting to eat as many whole foods as possible. You will find articles touching on these subjects and more in this and future issues. We will not give equal time to the opposing viewpoints - you can get those in sport-specific triathlon, cycling, and running publications as well as the general media any day of the week. If that makes this publication "biased" or "agenda"

driven, then I'll plead guilty right now.

I was reminded of the consistency of our mission in recent conversations with our bank. While admiring our growth in these tough economic times, the question was posed "What big, new initiatives will Hammer undertake in 2010 and beyond?" and almost without thinking *blink* I responded, "None, we'll just keep doing what we've been doing for 23 years and focus on improving and refining our model." This seemed to reassure him and I hope that you find it reassuring too.

We have new staff contributors in this issue, so be sure to check out Casey and Brad's articles. You'll also notice, from the cover and following pages, that we are highlighting some different "endurance" sports - I hope that you'll find these athletes, the events that they compete in, and their product usage interesting and informative; it is for me. Perhaps my background in motocross and now shifter kart racing helps my appreciation for their feats. Not to worry though, we have not gone "motor" crazy - following issues will return to our usual triathlete/cyclist/runner etc. imagery and focus.

As always, I find the reader contributions the most enjoyable part of each issue, so if you have the inclination, send in your photos, stories, and anecdotes. We've also started receiving "letters to the editor", so we've created a page for those. Write in if you have something to tell us or your fellow Hammer comrades.

Enjoy the read!

Brian Frank
Proprietor

Brian shows Steve proper helmet placement at the January Hammer Camp in Tucson. Photo: Vince Arnone



FROM THE SADDLE OF STEVE BORN

BY STEVE BORN

Welcome to the 68th edition of *Endurance News!* Sometime between this issue and when you receive the 69th edition, I'll be celebrating my 10-year anniversary with Hammer Nutrition. It's been an amazing journey, these past 10 years, and I look forward to many, many more years of working with this one-of-a-kind company and helping athletes derive the most benefits possible from proper fueling and intelligent supplementation.

Although a tremendous number of things have happened since I was hired back in mid-April of 2000, I still remember an awful lot of it quite vividly. You see, my friendship with company owner, Brian Frank, goes back a lot longer than that day he hired me. He was the one, starting in the late 80s, who spent numerous hours talking about nutrition on the phone with me and helping me get my use of his products—then under the banner of E-CAPS—dialed in. I started using these the E-CAPS supplements

(which, at the time, consisted of only a handful of products), noticed a major change in the quality of my workouts and races, and I've never looked back. Prior to that, and for the next several years, I tried/tested a number of products (I considered myself the ultimate guinea pig), but while nearly all of the products I tried proved to be a disappointment and thus discarded, I always kept the E-CAPS supplements in my "arsenal."

To make a long story a bit shorter, in the latter part of 1999/early part of 2000, I found myself in between jobs and living situations/locations. I had been using and promoting E-CAPS supplements and Hammer Nutrition fuels for over a decade—I still remember the first time Brian hooked me up with this pancake syrup-like fuel that he called Hammer Gel and a blandish-tasting endurance fuel called Energy Surge, which is now of course known as Sustained Energy (which I still love)—and wondered if there might be a possibility that Brian

would consider hiring me. I was living in Southern California at the time and Brian was heading down to Monterey for the Sea Otter Classic. He suggested that we meet to discuss the possibilities. That meeting was extraordinary in that it wasn't so much of a job interview, it seemed rather that I was finally getting to meet someone I considered a long-lost brother. You see, while Brian and I corresponded frequently over the course of 10+ years, we had never met until Sea Otter. That's why, instead of a handshake, we gave each other a hug. Brian was busy throughout that weekend with the Sea Otter expo but we did find the time to discuss the possibility of me moving up to Whitefish, MT and starting to work for him. After Sea Otter I went back to my apartment in Southern California, thought about it for a few days, then phoned Brian to say that I was very interested in taking the job. Brian then flew me up to Whitefish, showed me the operation, we went on a bike ride (the out-and-back Star Meadow ride, which still remains my favorite to this day), and I had dinner with him and his family that evening. As far as job interviews, it just doesn't get any better than that!

There was something about Whitefish that said "this really feels like home." Brian made me feel extremely welcome, the current staff at the company were very nice to me when I was introduced to them, and I—both from my longtime

use of the products and after seeing the operation—felt that working there was a perfect fit for me. I was hooked and the next thing I knew, I was moving my possessions 1400 miles up to Northwest Montana. Fortunately, finding an apartment didn't take long at all and within a day or two of moving, I was fully ensconced in my new job.

At that time, Hammer was a much smaller company, though definitely growing, and it showed in our "headquarters." From the time of my visit to the first day that I started, Brian had moved the operation from a small building on Baker Avenue to a new property he had purchased on Whitefish Stage Road. I figured that bigger facilities were in his plans, but for the time being a humble garage served as the all-in-one headquarters, with Brian's office, client service stations (desks, phones, computers, file cabinets, etc.), and shipping & receiving/order fulfillment/warehouse all jammed into it.

My office was a no-longer-in-existence trailer that was situated next to the garage, which I shared with another employee. My first job was to sift through a seemingly endless number of Dr. Bill email replies and formulate a Q & A out of them. Little did I realize that this was to be one of the first pieces of our vast goldmine of knowledge resources, and it was the start of the defining of my responsibilities for the company. Knowing that the business was growing, Brian already had plans to build and move into a much larger building. And sometime in 2001 (I'm thinking late spring to early summer?) we moved into what we now call Building "A," a magnificent two-story building with a kitchen, workout room, and bathroom/shower facilities taking up about a third of the lower floor, the warehouse/shipping & receiving department taking

up the other two-thirds of the lower floor, with the graphics department, offices, and client service stations/offices occupying the upper floor.

It was during this time that Brian asked me to help increase our event support program (a.k.a. our race bag program), which is now our primary form of marketing. Back then, we sponsored right around 100 events annually. Ten years later, that figure has grown to over 2600 events, a figure that still amazes me. That was also the time that Brian wanted me to help him complete an article that he had started awhile back – "The 10 Biggest Mistakes Endurance Athletes Make." Little did we know that this article would serve as the backbone to The Endurance Athlete's Guide to Success, a knowledge resource that Brian wanted to produce and provide to athletes that outlined our fueling guidelines. When the first edition of "The Guide" was produced it was less than 30 pages. A number of updated versions of "The Guide" have been printed since then, with a few hundred thousand copies having been distributed . . . I guess you could say it's been well received! We are now currently working on the final touches of the 9th edition of The Endurance Athlete's Guide to Success, which will most likely top out at close to 200 pages.

Not too many years after we moved into Building "A" it became apparent—due to the increasing growth of the company—that we needed even more room. A new building was constructed to warehouse product and serve as shipping and receiving – Building "B." As we transitioned the warehouse from its location on the bottom floor of Building "A" to the new building, a number of renovations were made on Building "A." In its current incarnation, the lower floor consists of kitchen/dining/laundry/shower facilities, a small lounge, an

exquisite conference room, the offices of the graphic department, and a mudroom of sorts (it's where many of our bikes are anyway). The spacious upstairs has seven offices, ample space for the client service staff stations, and bathroom facilities. It really is a pretty awesome place to come to work, and not simply because the facilities are so nicely and comfortably designed. The best part is that I get to do what I love doing (helping athletes, many of whom are now friends), and I get to do it with a group of people whom I consider cherished friends, not just merely co-workers. Plus, I get paid to do this! I mean, what more could one ask for in regards to a job?

So many things have happened over the past ten years that I've been here at Hammer Nutrition, far too many to mention (so I won't even try). I just want to say that it's been an amazing journey so far—some challenges for sure, like any job—and it's been a genuine pleasure to share both my experiences in endurance athletics and the knowledge that I've accrued with athletes, with the desire that they enjoy better workouts and race results. The saying that I'm most associated with—"I derive just as much pleasure helping other people reach their goals as I do my own; it's the best part of the job"—is as true today as it was when I first started. For those of you who have contacted me one or more times in the past decade, I thank you for letting me be a part of your athletic career. For new clients whom I've yet to work with, I look forward to the opportunity to be in contact with you. It's been ten years and I'm looking forward to many, many more!

I hope that 2010 has been a great year so far for you!

Sincerely –
Steve



Building "A" at Hammer headquarters. The garage to the left was the original Building "A"! Photo: Angela Nock



Building "B" at Hammer headquarters. Photo: Angela Nock

Contributors in this issue

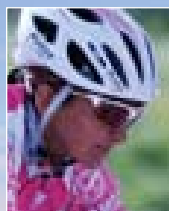
Robb Beams



Robb Beams is the owner of MotoE Performance Systems and the MotoE Performance Center in central Florida. MotoE is the largest online motorcycle coaching company that provides riders the same resources

utilized by national champions Adam Cianciarulo, Ashley Fiolek, Ian Trettel and Chris Bach. Robb is a frequent guest of the DMXS radio show, contributor to RacerX magazine, RacerX Virtual Trainer and Moto Playground magazine. For the latest copy of the MotoE Performance Newsletter, please visit: motoendurance.net.

Suzy Degazon



Suzy is an Ultra Distance Triathlete, with over 350 events all over the world. She is currently the only woman in the world to compete in 12 Ultraman Hawaii World Championships and she is a die hard Hammer

Nutrition athlete! www.suzydegazon.com

Casey Becker



Casey is a Client Advisor for Hammer Nutrition and in his free time he enjoys weight training in the gym and pretty much anything outdoors that will keep him active and busy. He has plans in the future to compete in a body building competition.

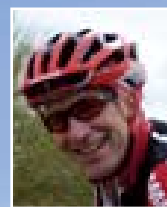
Shane Eversfield



Shane Eversfield is Head Coach at Total Immersion Swim Studio in Lake Placid, author of "Zendurance: A Spiritual Fitness Guide for Endurance Athletes" and over 25 published articles. He is currently preparing

"Zendurance Triathlon Cycling Technique" as a "vook" (e-book with embedded video) as well as a video on basic Tai Chi for athletes. Contact him at shane@totalimmersion.net

Jim Bruskwitz



Jim is a multiple-time World and National Age Group Triathlon champion, a coach (www.enduranceperformance.com), and former lecturer at UW-Madison Department of Kinesiology. He left teaching at UW last

year to study and teach EMS training.

Lowell Greib



Dr. Lowell Greib holds degrees in biochemistry, chemistry, and naturopathic medicine. He offers his expertise in sports medicine, injury prevention, and performance athletic nutrition in private clinics

in Huntsville and Orillia, Ontario, Canada. Dr. Greib is a member of the faculty at both the Canadian College of Naturopathic Medicine and the Canadian Memorial Chiropractic College and holds the CISSN designation from the International Society of Sports Nutrition. He can be contacted at askthedoc@mahiganmedicine.com or toll-free at 1-877-624-4633.

More contributors on facing page . . .

A typical, uncrowded stretch of Tucson road that we spend our days riding on during Hammer Camp. Photo: Vince Arnone

Letters

Do you have something to say? Send your letter to 'letters@hammernutrition.com' and you just might see yourself in print!

Dear Hammer,

I just received the latest copy of the Endurance News this week. Reading that publication is something to help get you through the winter and looking forward to multi-sport racing season!

Thanks for the support and opportunities you all provide your clients.

Best Regards,
Gary Vanderveer

Dear Hammer,

I read both the Athlete Education Series and Endurance News. No doubt, I would not be using Race Caps Supreme or Hammer Whey if I had not read, in depth, about their benefits. Thanks!

Rick Loggins

Chris Kostman



Chris Kostman has lived on the endurance path since 1982. Besides competing in races as diverse as the Race Across America, the Triple Ironman, and the 100-mile Iditasport Snowshoe Race, he also organizes

endurance events such as the Badwater Ultramarathon and Furnace Creek 508 races. This is his thirteenth article for Endurance News. www.adventurecorps.com.

Bill Nicolai



Bill Nicolai is an avid age group athlete who has done over 100 multisport events since his first in 1988, the same year he began using Hammer Nutrition supplements. In 2008, he became the oldest finisher ever of the Race Across Oregon, a

537-mile course with 40,000 feet of climbing and a 48-hour time limit. Recently, he has taken up road cycle racing and is having the time of his life competing in the Masters 60+ age group.

Brad Lamson



- Hammer staffer
- Goat hair collector
- Decaffeinated coffee connoisseur
- Practicing yogi master
- Co-race director for the Swan Crest 100 (www.swancrest100.com)

Randy Profeta



An avid cyclist, Randy started racing in his mid-40s. He competed in his first 24-hour solo mountain bike race on his 50th birthday. His effort was good enough to qualify for the 24-Hour World Solo Championships the

following year where he placed 1st in his class. He has raced in every World Solo Championship since 2005, placing sixth, third, second, and first once again in 2009. A Furnace Creek 508 finisher, Randy does endurance road events as well. Products from Hammer Nutrition have fueled Randy during every race.

Al Lyman



Coach Al Lyman, CSCS, FMS, has been coaching endurance athletes of all ability levels since 1999. Besides being certified with USAT, USAC, and the NSCA, Coach Al

was recently certified as a Functional Movement Screen specialist and as a clinical gait analysis expert with Medical Motion, a subsidiary of Sports Motion, Inc. In 2010, Coach Al will be conducting seminars for Medical Motion nationwide, on how to use gait analysis to enhance running performance and avoid injury. www.coach-al.com

Tony Schiller



Tony Schiller is an old-school Hammer customer, using the products since the late '80s to achieve many race wins. By adding one more overall race win somewhere in 2010, he'll join a rare

list of people who have recorded overall race wins in five-straight decades.

Super AO & AO Booster

BY STEVE BORN

Of the many factors that determine the quality of athletic performance and overall health, one that I am particularly zealous about is recovery. Those who know me—especially anyone who's attended a fueling seminar that I've done—have often heard me say three things in regards to the importance of recovery between workout sessions:

- “When you've finished training, you're still not finished with training.”
- “What you do in the 0-60 minutes after exercise is as important as anything you did in the actual workout.”
- “How well you recover today greatly determines how well you'll perform tomorrow.”

Two key factors to ensure enhanced recovery are:

1. “Refilling the tank” with high quality carbohydrates and protein. Doing this ASAP after workouts and races allows the body to replenish and increase its stores of glycogen, while also providing the raw materials (the amino acids from protein) to help rebuild the muscle tissue and support the immune system. Recoverite, or a Hammer Whey + carbohydrate combination, fulfills this aspect of recovery perfectly.

2. The consumption of antioxidant nutrients. Doing this helps neutralize the negative effects of free radical buildup, which is crucial in terms of optimizing recovery and immune system functioning.

While the first factor is undoubtedly important, in this article we'll focus on

number two, the intake of antioxidant nutrients, in particular two products that help fulfill this requirement superbly – Super Antioxidant (formerly known as Super AO) and AO Booster. Before I discuss the particulars of both of these products, let's go over free radicals and why antioxidant supplementation is so important.

Free radicals and antioxidants

Louis Pasteur, recognized as the father of modern medicine, once said, “The key to medicine is host resistance” and this is where antioxidants excel. Antioxidants strengthen our immune system, increasing our resistance to many types of toxins, bacteria, viruses, and degenerative diseases. They accomplish this primarily through the neutralization of excess amounts of free radicals. Over half a century ago, Dr. Denham Harman first proposed the theory of free radicals and the role they play in age-related diseases. Back then, when aging was primarily believed to be more of a mechanical issue, due simply to many years of wear and tear on the body, Harman's theory on free radicals was . . . well, radical. Now, however, while there are many factors that contribute to the aging process, the Free Radical Theory of Aging is widely accepted as one of the primary, if not THE primary concept as to the cause of accelerated aging and/or age-related diseases.

Researchers Bradford and Allen write, “A free radical is simply a molecule carrying an unpaired electron . . . All free radicals are extremely reactive and will seek out and acquire an electron in any way possible. In the process of acquiring an electron, the free radical . . . will attach itself to another molecule, thereby modifying it biochemically.” [R. Bradford

& H. Allen. Oxidology. Chula Vista CA: R.W. Bradford Foundation, 1997. Pp. 64-65.] Leibovitz and Siegel state: “However, as free radicals (FR) steal an electron from the other molecules, they convert these molecules into FRs, or break down or alter their chemical structure. Thus, FRs are capable of damaging virtually any biomolecule, including proteins, sugars, fatty acids, and nucleic acids.” [Leibovitz, B. & Siegel, B. (1980) "Aspects of free radical reactions in biological systems: aging" J Gerontol 35: 45-56.]

So even though some free radical activity in the body is actually a beneficial thing, allowing free radicals to accumulate and go unchecked—which they easily do, overwhelming the body's built-in antioxidant defenses—is definitely not beneficial. Dr. Misner states, “The human body uses free radicals to destroy specific microbes; however, when free radical volume accumulates in time or in high volume, mutagenic activity or degenerative disorders may occur.” Free radicals are now believed to be a primary culprit behind a tremendous range of diseases including cancer, cardiovascular disease, Alzheimer's disease, Parkinson's disease, and others.

A good portion of free radical damage results from the process of oxidation, which is somewhat of a double-edged sword. For example, whenever our bodies convert food to fuel it is done by oxidation, a vital, life-sustaining process. The down side is that the process is not 100% efficient and the metabolism of food, especially foods that are high in fats, can cause high amounts of free radicals to be produced. Dr. Misner elaborates: “Oxygen has the capacity to be both friend and foe. When energy fuels are metabolized in the presence of O₂, 5% of them create molecules that contain an odd number of electrons. The conversion of blood sugar, muscle glycogen, and fatty acids occur by oxidation. During this process pairs of hydrogen atoms are released like guided missiles, resembling a minute micro-level war, causing devastating destruction to underlying tissues and cells. If free radicals (FR's) are not

see ANTIOXIDANTS on page 10

Free radicals don't stand a chance with this dynamic duo!

The AO Booster Formula

• **Tocopherol/tocotrienol blend** – The vitamin E “family” has eight “members” –four tocopherols and four tocotrienols. Studies suggest that optimal health benefits are obtained via intake of a mixture of tocopherols and tocotrienols versus “regular” vitamin E (d-alpha tocopherol) only. One researcher writes, “While alpha-tocopherol has long been known as an important antioxidant, research has now shown that the complete vitamin E team is much more effective. The different vitamin E forms have complementary effects as free radical scavengers. Together they can fight a wider spectrum of free radicals than alpha-tocopherol alone.”

• **Lutein** – This carotenoid is a potent antioxidant, with a particular affinity for eyes and skin, helping protect them from ultraviolet (UV) damage. In regards to eye health, not only does lutein provide the macula and lens with protection from sunlight’s UV rays, it is suggested to decrease the risk of developing Age-related Macular Degeneration (AMD). Lutein aids in protecting the skin from UV and free radical damage, it helps reduce inflammation and redness in the skin, and may even be a powerful ally for the prevention of skin cancer. In addition, studies indicate that lutein and other carotenoids (a class of natural fat-soluble pigments) may have protective benefits against breast cancer. Lutein is also purported to help prevent or slow down atherosclerosis, a condition that causes the

arteries to clog and often leads to cardiovascular disease.

• **Astaxanthin** – This carotenoid, most often derived from the microalgae *Haematococcus pluvialis*, is suggested to be ten times stronger than beta-carotene and 100 times stronger than vitamin E in regards to its antioxidant capabilities. Japanese research suggests that mice supplemented with astaxanthin appeared to burn fatty acids for fuel more efficiently, were able to exercise longer, and had greatly decreased fat accumulation compared to mice not receiving astaxanthin. Other research has shown that astaxanthin reduces oxidative damage from strenuous exercise in the skeletal and heart muscles of supplemented mice. Research also suggests that astaxanthin may improve human cardiovascular health and prevent cancer, among other potential benefits, including anti-inflammation.



The Super Antioxidant Formula

• **Superoxide Dismutase (SOD)** is an enzyme and one of the powerful endogenous (that which occurs naturally in the body) antioxidants. It is responsible for neutralizing the most common free radical known as superoxide. It also aids the body’s utilization of the minerals copper, zinc, and manganese. The enteric-coated form in Super Antioxidant, which allows the nutrient to pass intake through the stomach acid to be absorbed in the small intestines, is an easy way to supplement this vital antioxidant.

• **Grape Seed Extract** has a high content of compounds known as oligomeric proanthocyanidins (OPC), flavinoids that are believed to be several times more potent than even vitamin C and E. OPCs are responsible for neutralizing three types of free radicals. In addition, the OPCs in Grape Seed Extract help strengthen and repair connective tissue and are excellent anti-inflammatories.

• **L-Glutathione** is a molecule that is produced in the liver from three specific amino acids. Along with the mineral selenium, it forms the enzyme glutathione peroxidase, which, along with SOD, is one of the body’s endogenous antioxidants, and arguably the most important one of all. Glutathione is also part of another enzyme, glutathione reductase, which has liver protecting qualities. Glutathione protects individual cells as well as the tissues of nearly the entire body and is an important nutrient in helping with the prevention of cancer, particularly liver cancer.

• **Ginkgo biloba** is an herb best known for its ability to enhance circulation and increase the supply of oxygen to the entire body. This allows it to help relieve muscle pain in addition to its antioxidant benefits. A potential benefit of increased circulation is the ability to speed delivery of antioxidants throughout the body in addition to helping eliminate metabolic wastes more quickly.

• **Gotu Kola** is another herb that has antioxidant capabilities as well; aiding in increasing circulation. It is helpful in decreasing fatigue and neutralizing blood acids and is useful for optimal heart and liver function.

• **Vinpocetine** is chemically related to and derived from vincamine, an alkaloid found in the periwinkle plant. Studies with vinpocetine indicate that it can dilate blood vessels, enhance circulation in the brain, improve oxygen utilization, make red blood cells more pliable, and inhibit aggregation of platelets. Vinpocetine also has antioxidant properties.



see *ANTIOXIDANTS* on page 10

neutralized by on site antioxidant body stores immediately, tissue damage occurs to absolutely every cell membrane touched by these imbalanced molecular wrecking machines.”

In other words—and I’m paraphrasing this from a source that I can no longer recall—“the very thing that helps give life (oxygen), is also what’s killing us.”

Free radicals are higher in people who:

- Exercise beyond 90 minutes duration
- Exercise above 80% VO2 Max
- Have a high body fat percentage - (above 15% males, above 20% females)
- Eat animal meats and dairy products
- AGE--> Older (above 40) = More free radicals
- SIZE--> Bigger (above 200 lbs) = More free radicals

The take-home message is that even though oxidative damage occurs at higher levels during intense and prolonged exercise, it occurs at ALL times—during easy workout days and non-workout days—simply through the process of making energy. In addition, free radicals are also produced from environmental pollutants and ultraviolet radiation. Also, stress of any kind creates free radicals.

With that in mind, now more than ever, as your training volume and intensity increases, and as you move toward peak season, free radical production and accumulation will be extreme. As a result, the neutralization of free radicals is crucially important. The three Daily Essentials products—Premium Insurance Caps, Race Caps Supreme, and Mito Caps—fulfill a significant amount of antioxidant needs. However, with so many types

of free radicals produced, and with the significantly increased volume of free radical production at this time of year, it’s important that your body receives a wide variety of antioxidants, all working synergistically to neutralize them. That’s where Super Antioxidant and AO Booster really shine, and they complement the antioxidants provided in the Daily Essentials wonderfully. A profile of each product, what the nutrients are and what they do, is featured on the preceding page. Check it out!

Summary

If there were only one or two types of free radicals negatively affecting our bodies, we’d be able to get by with one, maybe two, antioxidants such as vitamin C and vitamin E. The truth, however, is that there are a number of free radicals, both water-soluble and fat-soluble, which is why a wide variety of antioxidants is necessary. Additionally, not only do antioxidants work on a specific type (or types) of free radical, most-to-all of them work synergistically, supporting, augmenting, and enhancing the effects of other antioxidants . . . the oft-used saying, “The whole is greater than the sum of the parts” is quite appropriate when talking about antioxidants and how they work in the human body.

Super Antioxidant and AO Booster supply a wide range of both water-soluble and fat-soluble antioxidants. Along with the antioxidants supplied in Premium Insurance Caps, Race Caps Supreme, and Mito Caps, these two products provide even more “coverage” against the damaging effects of free radicals. At this time of the year, when training volume and intensity increases, having Super Antioxidant and AO Booster in your arsenal of recovery products is a wise strategy! **HN**

SUGGESTED USAGE

Super Antioxidant

- Non-workout days: For supporting enhanced cognitive function, 1 capsule may be taken in the morning with food.
- Workouts under 90 minutes in duration: 1 capsule after workout with recovery drink or food.
- Workouts over 90 minutes in duration: 2 capsules after workout with recovery drink.
- For supporting enhanced performance (via free radical neutralization) during ultra distance workouts and races, Super Antioxidant may be used at a suggested intake of 1 capsule every 2-3 hours.

AO Booster

- Non-workout days: 1 capsule with food.
- Workouts under 90 minutes duration: 1 capsule after workout with recovery drink or food.
- Workouts over 90 minutes duration: 1 capsule after workout with recovery drink or food and 1 capsule later on in the day with food.

What athletes are saying about Super Antioxidant & AO Booster

With the heightened awareness on H1N1 this year, and plenty of friends & family dropping like flies all around me, **I have to give part of the credit for my continued good health to daily intake of AO Booster** — two a day when I’m feeling additional stress or doing harder work, both in my training and throughout my daily life activities. . . thanks!

- Mike L.

I have been a Hammer customer for awhile and never before have I been a believer in Super Antioxidant as I was this past weekend. I trained only 4.5 weeks for the Disney Goofy Challenge due to interviewing and sickness. I used Super Antioxidant in addition to the other Hammer supplements that I’ve relied on. I attribute my decent shape, and the supplements, to returning to work on Monday with little to no pain or cramping. **It was amazing – and my friends were simply dumbfounded.**

- Kevin M.

Get your antioxidant support!

Protect your immune system, and accelerate recovery with this powerful free radical-busting duo!

SKU	SIZE	MSRP
SAO	60 capsules	\$35.95
AOB	60 capsules	\$29.95



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Heading out on another great Hammer Camp ride, Brian, Jacob, and Brendan lead the group toward the first climb of the day. Photo: Vince Arnone



Quality Control

Hammer Nutrition Products

BY STEVE BORN

PREFACE: On the Hammer Nutrition website you will find a multi-page article that outlines a portion of the procedures that our manufacturers follow in producing a Hammer Nutrition supplement or fuel. This article is far too long to print in its entirety in Endurance News, so we encourage you to visit our website to read the full-length version.

The manufacturers that Hammer Nutrition selects? Only the best!

Now more than ever, the quality of the raw materials that goes into any supplement—and, of course, the finished product—is unquestionably of vital importance to the consumer. We understand this and take it very seriously, which is why we make sure that the vendors we select to produce our products follow the strictest quality control/quality assurance procedures possible.

These qualifications are reflected in our manufacturers' certifications under the GMP (Good Manufacturing Practice) Program administered by the NPA – Natural Products Association (www.npainfo.org). This association is the forerunner in the nutritional field and is the most respected entity in regards to certification, auditing, and inspections of manufacturers in the nutritional products field. GMP Certification ensures that the manufacturers meet all the standards of quality that translate to consistency and accuracy in regards to Quality Assurance and Quality Control of:

- Facilities
- Staff
- Safety
- Sanitation
- Ingredients
- Documentation
- Batching
- Processing
- Packaging
- Shipping
- Product Support

As an example, the primary manufacturer of Hammer Nutrition supplements has been involved in natural health for over forty years. Their Mission Statement/Treatise states:

“We operate our own manufacturing facility and distribution center under GMP to ensure quality through every step of production. From research and development, through formulation, processing, packaging, and distribution, you can be assured that our staff is dedicated to quality in all aspects of our operation. We continually strive to provide our customers with exceptional products, using the finest ingredients, from the best sources, processed with utmost diligence, delivered at competitive prices, without sacrificing potency or quality.”

We at Hammer Nutrition visit their facility several times throughout the year and every time we find it to be spotless and sanitary beyond one's imagination:

- Every employee handling raw materials or finished products wears the

equivalent of a hazmat suit.

- The machinery is meticulously cleaned and sanitized frequently on a rigid time schedule. More information about this detailed process can be found in the web-version article.

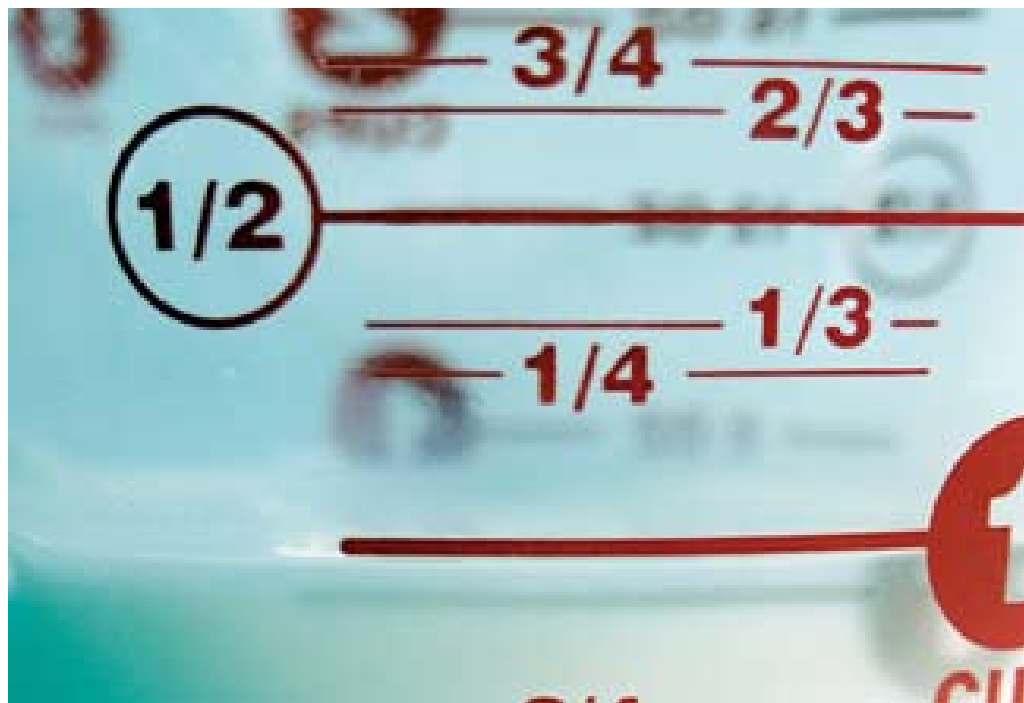
- Special ventilation units are in place in specific areas of each room to ensure that the dust-free/sanitized nature of every room is maintained at all times. In essence, every room is a “clean room.”

- Even the floors of the warehouse are diamond polished, which helps maintain the cleanliness of the surface and the integrity of the concrete.

Obtaining the finest ingredients

As you can imagine, it is a multi-step process from the ordering of raw materials to finished product. The first step is, of course, procuring the finest raw materials available. As per our demanding requirements/specifications, our manufacturers source materials from a variety of possible suppliers, using very stringent requirements, prior to providing us with available options. For example, the primary manufacturer of Hammer Nutrition supplements requires that all potential suppliers provide a Certificate of Independent Laboratory Analysis—covering no less than 15 specific items—with EVERY shipment of raw material.

In addition, if any type of botanical is used in a formula, a 27-point questionnaire (the “Botanical Supplier



Reliability Audit Checklist”) must be completed by would-be suppliers. Other manufacturers follow similar, multiple-step procedures/requirements in the procurement of raw materials and you’ll find a portion of this information detailed in the web-version article.

Where do the raw materials come from?

The saying “you get what you pay for” is usually applicable when purchasing pretty much everything, and it’s especially true when it comes to nutrients, be they vitamins, minerals, herbs, or otherwise. The key thing to know is that we NEVER cut corners when it comes to the quality of raw materials; we obtain only the finest available and never sacrifice quality simply for the sake of a lower price. We always try to obtain raw materials from the primary manufacturer, assuming of course that the nutrients meet our, and our manufacturers’, demanding requirements. The overwhelming majority of the time, this means US-based suppliers, though there are other suppliers (such as Japan) that produce certain nutrients that are superior grade to any other country.

Bottom line: If a raw material does not meet our requirements and those of our manufacturers, it is rejected.

How a Hammer Nutrition supplement is made

It may vary slightly by manufacturer, but multiple step-by-step procedures are scrupulously followed when producing a batch of any Hammer Nutrition product. As an example, one of our manufacturers follows a process that contains nearly 30 procedural steps beginning with the receipt of a purchase order to archiving one or more bottles of each batch of a given product. This is discussed in greater detail in the web-version article.

Summary

The process involved in producing a Hammer Nutrition supplement is extremely involved, meticulous, and time-consuming; this article is just the “tip of the iceberg” so to speak, and even the web-version article doesn’t cover every single detail that is involved in producing a Hammer Nutrition product. Last, but certainly not least, we also want to emphatically stress that the facilities that make our products are “banned substance-free” facilities, so cross contamination is not even possible. This means that you can use Hammer Nutrition products with complete confidence, knowing that each and every one is produced using only the highest quality ingredients and that every necessary step to ensure the highest quality product is taken. We’ve been doing it this way since Day One and we wouldn’t have it any other way. **HN**



LEGISLATIVE ALERT

Your Health Freedom At Risk

New Bill Seeks to Ban Consumer Access to Dietary Supplements : Take Action NOW!

Once again, it appears that another piece of legislation regarding supplement regulation—in the guise of “protection of the citizens”—is being proposed by the US government. It’s being called the “Dietary Supplement Safety Act of 2010,” which would lead one to believe that it’s for our benefit, when in fact, it’s hardly that at all. As is stated by William Faloon, the cofounder of the Life Extension Foundation (www.lef.org), “The proposed Dietary Supplement Safety Act of 2010 is an egregious example of how this kind of insidious legislation comes into being, and how the public is deceived into thinking that Congress is seeking to ‘protect’ them (in this case from nothing), when the real purpose of the legislation is to further enrich the entrenched drug cartel that long ago bought and paid for most of Congress and the FDA. The Dietary Supplement Safety Act of 2010 is a blatant example of how

Congress undermines free markets to enrich campaign contributors, decimates private sector innovation, and hastens the federal government’s plunge into a financial abyss.”

We at Hammer Nutrition urge you to thoroughly read the information at this link...

www.lef.org/featured-articles/Dietary-Supplement-Safety-Act-of-2010.htm

If after reading the information you agree that this bill is not in your interest, then contact your U.S. Senators and U.S. House Representative to oppose this bill. Doing this is very easy – simply click on the “Take Action” button, which appears in a few spots in the text in the link provided above.

Contact your elected officials today!
www.usa.gov

“Your Hammer Gel and Endurolytes have helped me tremendously in my training.” - Chris W.



It has been described alternately as either 30 or 300 times as sweet as sugar. Stevia has slowly gained popularity as an alternative to sugar, even though it wasn't marketed, until recently, in the U.S. as a sweetener, but a dietary supplement. We can thank the FDA for this bit of Orwellian Newspeak. A food or drug is either safe or it is not.

As of September 2009, the Food and Drug Administration has given support to two Stevia products, Truvia and Purevia, for use as a sweetener in sodas and other drinks. Approval of Stevia as a food sweetener is still pending, but once the camel's nose is in the tent things will happen automatically. What changed for a government organization that used a 1985 study that described Stevia as a mutagenic agent in the liver (possibly carcinogenic)?

Apparently, Coca-Cola and other large manufacturers of drinks and sodas have twisted some arms of the regulators, because as more people grasp Sugar Bad, Stevia Good Big Soda needs to give the people soda that appears healthy to keep up sales. Trust a corporation to turn something potentially helpful in moderation into something you still shouldn't consume. We will point to the "Hard Facts About Soft Drinks" chapter in our latest book, *Suicide by Sugar* to inform the reader that no soda is safe to drink. The primary culprit after sugar: phosphoric acid. Putting that much phosphorus into your body does as much damage to the Calcium-Phosphorus ratio as we have always said from the beginning of Dr. Appleton's career. We also described phosphoric acid as an industrial solvent possibly able to clean toilets and kill insects.

Once the soda and juice manufacturers get their products into the marketplace, eventually Truvia will also be stuffed into the rainbow of packets on the table at our favorite eateries. Presently, that rainbow includes White (sugar or sucrose), Blue (aspartame), Pink (saccharin) and Yellow (sucralose). For purely, aesthetic reasons may we suggest Green for Truvia? However, we will caution readers against these packs because we suspect that the Stevia in the Truvia packs will be mixed with dextrose or maltodextrin as the first ingredient (largest amount) in each pack as is the case with the other colors in the bin. These are sugar derivatives that will adulterate whatever is good and useful about Stevia. Mixing good things with bad things only ruins the food value of the beneficial as we have said many times explaining why many people are allergic to wheat due to a lifetime association with sugar.

So what is so good about Stevia that we actually are cautiously optimistic about the eventual release of small bags of pure Stevia powder in the supermarket for use in baking, coffee, grapefruit and lemonade? Well, despite the ignominious beginning to Stevia as a sweetener, a study that had been described as being "able to classify distilled water as a mutagen" enough people have used the product that there are health studies that show benefits for many diseases. A study published in 2000 gave stevioside (Stevia's active ingredient) to 60 hypertension patients with a placebo group of 49. Results described as significant for reducing blood pressure supplemented similar animal studies.[1]

Stevia's reputed limited effect on blood glucose naturally led to diabetes studies. A Denmark study took blood glucose readings from 12 type-2 diabetes patients before eating Stevia

STEVIA: Having Our Cake And Eating It Too?

BY NANCY APPLETON PH.D. & G.N. JACOBS

*(Source:nancyappletonbooks.wordpress.com -
Reprinted with permission from the authors)*

We are always asked about sweeteners since we really don't like sugar. Our answer is always we give limited support to Stevia and nothing else. We tell people who are healthy and still can walk away from the hot fudge sundae that Stevia is much better for you than sugar, fructose, high fructose corn syrup and the whole list of sugar alcohols and products of "Better Living Through Chemistry" that appear as multicolored packets on the restaurant table. We tell sick or addicted people to break the active phase of their sugar addiction and heal awhile before switching to Stevia.

Stevia, a plant-extract originally from Central and South America has been used as a sweetener for several centuries.

or cornstarch with their meals and a couple hours later. The Stevia group showed blood glucose levels at least 18-percent less than the starch group, leading to the possibility that diabetes patients have finally found the sweetener that will allow them to have their sweet cake and eat it too.[ii]

But, after the FDA has spent many years trying to keep Stevia out of the U.S. marketplace, we should ask if there are any side effects. A study conducted by the Burdock Group generally supports the safety of Stevia, finding no adverse effects in rats at the massive doses such studies use to determine carcinogenic or mutagen properties of foods.[iii]

And so we give Stevia qualified support because while almost no information has surfaced to say that this sweetener hurts people, we realize that the weak link in any health plan is the patient him or herself. Many of us are unlikely to moderate our consumption of Stevia because so far we just have to have ice cream, chocolate cake or soda. Too much of a good thing isn't good. But, on the range of things that are sweet but not named sugar, Stevia is a great start.

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Comments

- You will find two books and one DVD of Dr. Appleton's on the Hammer Nutrition web site. Simply click on the "Bookstore" link on the left hand page and you'll find these excellent resources there.

- In regards to a sentence of Dr. Appleton's that reads "... Stevia is much better for you than sugar, fructose, high fructose corn syrup and the whole list of sugar alcohols..." while we don't dispute that statement—Stevia may, in fact, be the best sweetener choice available—we do believe that xylitol, which is classified as a sugar alcohol, is a significantly better choice than sugar, fructose, HFCS, or all artificial sweeteners. The rationale for our position is explained in various places on the Hammer Nutrition web site, especially in the FAQ entitled "How is xylitol and stevia used in your products?" For more information on this unique sweetener, type in the word "xylitol" in the search field on the top left side of any page on the Hammer web site.

- Some extremely interesting and eye-opening information about Truvia and Purevia, including what they're comprised of, can be found at www.nutritionwonderland.com **HN**

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/ = flavor (L) Lemon-Lime (M) Mandarin Orange (O) Melon (N) Strawberry (S) Unflavored (P)

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"Yes, less is really more! Thanks Hammer Nutrition. " - Maryann R.



Why I Drink A Gallon A Day

BY CASEY BECKER

If you had asked me this question several years ago, when I began this protocol for myself, I wouldn't have had a very clear answer for you. Even today,

I'm learning new things and trying to be a "sponge", soaking up all of the information that I can possibly process/handle. On a personal note, the reason I began to consciously do this was parallel to a "competition diet" that I was working on. You see, I'm one of the few here at Hammer that is not an endurance athlete. I've referred to myself as a "gym rat." I go to the gym and I lift weights. Cardio is a part of my regimen as well and I do enjoy being active (riding, skiing, water sports, etc.), just not on a competitive level. That said, this is where the gallon-a-day first came to be a part of my routine. I did this, increasing to three gallons per day on the second-to-last day before the end, then dropping water intake half way throughout the day on the day before the end to achieve a proper "cut" look upon the completion of my diet. The significance of this you might ask? For most of you, probably nothing. That's just a little background on me and how this became a part of my daily routine.

The importance of drinking sufficient amounts of water

Doing this (drinking a gallon of water daily), I discovered that I felt much better, on both training and

non-training days. Also, I learned (and am still learning) the importance of water intake. Water makes up about 60% of your bodyweight. About 75% of that comprised in all muscle tissue and about 10% in fatty tissue. It has numerous important functions in the body, the biggest of which is sustaining life. Other "jobs" include regulating body temperature, cushioning vital organs, aiding in the digestive process, transporting nutrients in and waste out, amongst others. We've all heard the "drink eight glasses of water a day" recommendation. Sure, that's better than nothing, even better than three or six a day. For some of you, this may be pretty close, for others, not so close. A more accurate conversion is to multiply your body weight in pounds by 0.5-0.6 (oz per pound of bodyweight). This information can be found in an article that I mention later in this writing. For me that means roughly $190 \times 0.6 = 114$ oz daily. Note that there are 128 oz in a gallon. So according to this, I'm drinking 14 oz more than the calculation suggests. Not a significant over-shoot. Keep in mind that this is what is suggested for me on a "normal" day and does NOT include what I should be consuming during training efforts.

In periods of exertion, additional amounts may be needed due to what is lost through your body cooling itself (a.k.a. sweating). How much more? Good question. A great answer is located

on the Hammer Nutrition website under the "Knowledge" link at the top of the page. From there, click the "Advanced Knowledge" button. The article that you are looking for is titled "Hydration - What you need to know." It should be the second link listed. Everyone is different and will need to practice a routine and "tweak" it accordingly to fit your individual needs. Too little water can be very detrimental. Cooling functionality is interrupted, headaches may occur, dizziness and disorientation can occur, muscle fatigue will occur, and in extreme cases, death can occur. It is said that a 3% loss in bodyweight considers you to be dehydrated. A greater percentage loss in bodyweight can lead to more serious consequences, so needless to say, drinking enough fluids is important!

On the flip side, you can over-hydrate as well, which can lead to seriously negative consequences for both athletic performance and general health. When you consume too much water you basically "flood" yourself. At the very least, this can flush out electrolytes and other important minerals that your body needs to function properly. The end result of over-hydration—especially during exercise—is almost always problems such as bloating, nausea, and cramping. Severe cases of over-hydration may lead to death, which has unfortunately happened to a few athletes. So while you want to make sure

that you're consuming sufficient amounts of water, it's vital that you do not overdo it.

Fluid intake guidelines

There are three things that we at Hammer Nutrition suggest to ensure that you're consuming the appropriate amounts of fluids:

1. During exercise, keep fluid intake between 16-28 ounces per hour. As stated in the hydration article: "Based on the available research, along with the thousands of athletes we have monitored, we have found that 20-25 oz/hr (approx 590-740 ml/hr) is an appropriate fluid intake for most athletes under most conditions. For lighter weight athletes, or those exercising in cooler temperatures, 16-18 oz/hr (approx 473-532 ml) may be perfect. Heavier athletes or athletes competing in hotter conditions may consider intakes upwards of 28 oz/hr (approx 830 ml/hr). We also suggest that to avoid dilutional hyponatremia, fluid intake should not routinely exceed 28 oz/hr (830 ml/hr). The exceptions are heavier athletes, athletes exercising at extreme levels (prolonged periods at a high percentage of VO2Max), and athletes competing in severe environmental conditions. 20-25 oz (approx 590-740 ml) is the equivalent of the typical regular-to-large size water bottle, and that's an excellent gauge to work within."

2. Aside from the fluid you're consuming during exercise, drink sufficient amounts of water throughout the rest of the day. As mentioned earlier, 0.5 - 0.6 fluid ounces per pound of body weight makes a more accurate standard than the "one-size-fits-all" recommendation of eight glasses a day. Multiplying your body weight in pounds by .5 to .6 will give you the figure, in fluid ounces, that you should aim for daily.

3. Increase your fluid intake gradually! If you find that your fluid intake during exercise and/or throughout the day is inadequate (as based on our recommendations), you must increase your consumption gradually until you reach your target amount. If you increase your fluid intake too quickly—whether it's during exercise, throughout

the day, or both—this will overwhelm your body with too much fluid too soon, which definitely increases the potential for the negative consequences mentioned earlier. Two examples:

- Don't go from 30 ounces a day to 100 ounces a day "cold turkey." Increase your intake gradually over the course of several weeks. Additionally, make sure that your fluid intake is spread throughout the entire day (e.g., don't drink your daily total in the morning and not drink anything the rest of the day).

- Don't drink excessive amounts of fluid during exercise. As is stated in one of the articles on the Hammer Nutrition website: "If you override your internal mechanisms, you'll find out the hard way how your body deals with excess water intake during intense exercise. Unless you enjoy nausea, bloating, and DNFs, forget advice like 'drink to replace' or 'drink even when you're not thirsty'—it's just plain wrong."

Some final thoughts

Your body is a machine, so to speak, and to get the most out of it, you need to take care of it. As I have mentioned several times now, I am continually learning things myself and the scientific portions that describe how the body works can still be a bit over my head. I'd prefer to take this approach and be completely honest with you rather than trying to lie my way through something to attempt to come across as knowing more than I actually do at the moment. The great thing about this is that if you call me and if I can't provide immediate assistance, I have a plethora of knowledgeable resources here at my disposal and we will work diligently to get you the answers that you seek. So, with that said, should any questions come up, take a peek at the site or by all means, call us! Myself or anyone of us here would be more than happy to talk with you.

Drink up (with the right amounts and in the correct way, of course) and Hammer on! **HN**

Join the Endurance List!

Have all of your questions answered, share ideas, and learn with our friendly community.

Our "clients only" discussion group is hosted by Brian Frank, Steve Born, and a panel of professional athletes, coaches, and experts in just about anything even remotely related to endurance training.



"Though I have always been an athlete, I would consider myself far from top level . . . but I wanted to drop you a note to thank you for supporting and fueling ALL athletes." - David K.

NATE'S CORNER

BY NATE LLERANDI

BALANCE

If you look at a stream in nature, it flows down the path of least resistance. Maybe the stream grows to a great river like the Mississippi as other tributaries join it. For the most part, though, the stream or river runs quietly along – faster in some parts as it narrows and slower in others as it widens. During times like these, nature is in a state of balance from the perspective of the river.

But what happens when something throws nature out of balance? A long period of rain can cause a flash flood or can cause the river to swell and drown out entire towns. Houses are ruined, cars are swept away and people can die, among other tragedies. Something that on the one hand can be serene and beautiful can turn ugly and malicious in

the blink of the eye.

The body is no different. The body seeks a state of stasis and hates to be forced out of this comfortable way of being. As we constantly try to force our whims upon our bodies, it can bend a little bit, but it will not allow itself to break. So, we try to cram too much into our daily lives—training, work, family, kids' schedules, other hobbies, friends, etc— and eventually things start to build up like a river behind a dam. Eventually the pressure can get so great that the dam breaks. Think of the massive force behind that explosion of water. Now, equate that the body saying, "Enough!" What happens? Injury. We either get really sick or really hurt.

You see, I don't think injuries are necessarily traced back to "overuse" in the common definition of that term. Train too much or too hard and you get hurt. I don't think it's that simple. I think we get sick and/or injured when we force our body too far out of its preferred state of stasis. To me, injuries (and in some cases sicknesses) are wake up calls from the body. We've ignored the signs and the screams from the body telling us that the way we are going about things is unacceptable and unhealthy. When we employ "mind over matter", the matter (our bodies) will unequivocally and always win. Our bodies will do everything they can to keep us from killing them. Usually they are successful; they are almost 100%

successful in non-extreme scenarios.

If we don't listen, then the body takes matters into its own hands. John Doe, you're running way too much. You're never at home, you don't know what's going on with your family, you're never in bed when your spouse wakes up, you're always tired at work and your friendships are suffering. So, guess what? A little achilles tendonitis should slow you down for a bit.

Now, we can look at injuries from all sorts of angles. But, ever notice that if our sole focus is to get back on our feet ASAP and if we "test it out" before we really know we should, that injuries hang on and take a really long time to go away? Or, in some cases they never go away? Why is that? The body's capabilities to heal are amazing. Something is inhibiting that process and, I think, it can be traced back to our state of mind and how balanced our lives are.

This may be a little metaphysical, but I think it's true. Strive for balance in life and the usual suspects of injuries probably go away and stay away. Keep trying to cram a square peg through a round hole and my guess is that injuries are things with which you are intimately familiar. No absolutes, but my gut tells me this is pretty spot on. **HN**

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Chromemate - How much to take daily

BY STEVE BORN

One of the questions we recently received on the Endurance List was from a client who asked:

“I have used Premium Insurance Caps (PIC) and Chromemate for years. Historically, I've used five PIC/day on light to moderate training days and ten PIC on heavier days. I also would take one Chromemate post workout and two others at separate meal times. I'm about 135-140 lbs and 55 years old. Is it necessary to use Chromemate regularly if I'm staying on top of my PIC intake? What/how would you suggest dosing on these two Hammer supplements?”

Here was my reply:

Yes, I believe that the supplemental chromium, in the form of chromium polynicotinate (Chromemate)—above what is provided in Premium Insurance Caps and Recoverite—is merited. We discuss this in more detail in the article "Chromium - 'Trace' by classification only!" in Endurance News #62, which is available on the Hammer Nutrition website.

In the article you'll see the numerous benefits attributed to chromium. The one that I found most eye-opening was the study that showed that chromium polynicotinate prolonged the life span of test animals by more than 22%. According to the study, rats prone to aging were fed diets containing Chromemate (chromium polynicotinate),

which increased their average life span by +22% compared to rats fed the same diet without Chromemate.

Daily amounts to consider taking

Every capsule of Premium Insurance Caps contains slightly over 28.5 mcg of Chromemate brand chromium polynicotinate. So if you're taking five capsules daily, you're receiving about 143 mcg. Ten capsules daily will supply you with about 258 mcg. Every two-scoop serving of Recoverite contains a small amount as well (about 30 mcg).

In general, here are the typical dosages for chromium:

- The usual therapeutic dosage of chromium polynicotinate is 200 - 600 mcg per day.
- The therapeutic dosage of chromium polynicotinate used for the treatment of obesity is 400 - 600 mcg per day.
- The therapeutic dosage of chromium polynicotinate used for the treatment of Diabetes Mellitus Type 2 is 1,000 mcg per day. NOTE: Many clinical studies of patients with and without metabolic disease have shown metabolic benefits including improved blood sugar control, cholesterol, and insulin—with supplemental chromium doses up to 1000 mcg daily.***

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*** Wilson BE, Gondy A. Effects of chromium supplementation on fasting insulin levels and lipid parameters in healthy, non-obese young subjects. *Diabetes Res Clin Pract*. 1995

Jun;28(3):179-84.

I typically take 7-14 Premium Insurance Caps daily (depending on training volume), which supplies me with 200-400 mcg of Chromemate. On workout days I'll take a capsule of Chromemate after a workout with my Recoverite. That gives me another 230 mcg of Chromemate, which helps support enhanced glycogen synthesis. Then, I'll take a capsule with lunch (helps stabilize blood sugar levels, which helps prevent the 3 pm fade) and if I'm having a sizable, high-carb dinner, I'll take another capsule as well. On a daily basis I'll take anywhere from approximately 600 mcg - 1000 mcg.

Chromemate is super inexpensive, it's highly beneficial on a number of levels, and, according to Dr. Shari Lieberman, "There is no known toxicity for chromium, except in the cases of chromium mining and industrial exposure, which cause chromium dust to be inhaled."

With this in mind, I think that your current regimen with Premium Insurance Caps and Chromemate, as listed in your post, is spot on and very closely reflects my use of this trace mineral. My suggestion is that you continue to maintain your multiple-dose use of Chromemate because of all the benefits it provides. **HN**

"I love folks from Montana! Thank you for the generous samples of products I might not ordinarily try." - Liz P.



Is The Vegan Diet Destined To WADA-Prohibited Status?

BY BILL MISNER, Ph.D.

Prefatory Comment: "Methods" shown to extra-naturally enhance performance are banned and prohibited by WADA. One example of a prohibited "method" is intravenous injections prior to or during an event. Intravenous infusions are banned methods and illegal. Until now, NO dietary protocol has been evaluated for its performance-enhancing, extra-natural effect, if any. It is largely accepted that Americans should consume more plant foods, less packaged processed foods, and less fatty foods in order to benefit overall health and prevent disease. This article examines recent research that establishes how the vegan diet impacts athletic performance to the degree that it could attain WADA-prohibited status. Though this statement may appear "absurd," it fails to deny the surprisingly convincing supportive evidence cited.

The World Anti-Doping Agency, WADA, (under the leadership of the International Olympic Committee), provides an International Standard for identifying substances or methods shown to create a performance-enhancing advantage in athletic competition. Whether a dietary method should be listed due to its predetermined performance-enhancing effect is the question. The current performance-enhancing prohibited substances or methods list, by category, attain:

- Optimal lean muscle mass growth (anabolic)

- Enhanced oxygen transfer
- Modulated metabolic hormone effects

All performance-enhancing effects are subject to the auspices of WADA review.

Cornell University
Nutrition Scientist, Professor

T. Colin Campbell, best-selling author, concluded that a vegan diet (when appropriately applied [2]) significantly improves three metabolic pathways [3]

1. Lean muscle mass to fat mass ratio (BMI)
2. Oxygen transfer rate
3. Hormone-regulated blood glucose metabolism efficacy

If Professor Campbell's data-supported conclusions are accurate, should this dietary method be considered for WADA-prohibited status?

#1 - Vegan diet improves lean muscle mass to fat mass ratio (lowers BMI) and increases metabolism [BMR].

Campbell compared the average calorie intake of 2640 k/cal in China (from plant foods) that resulted in a lean body mass index of 21.5 as compared to a calorie intake of 1980 k/cal per day that resulted in a not lean body mass index of 27.0 in America. Vegan-source calories generate a higher basal metabolic rate (BMR) above non-vegan calories. Researchers found that rats fed vegetarian-only calories (or a diet of 95% vegan + 5% animal protein) exercised 200% more on revolutions counted on training wheels than rats eating a high protein non-vegan diet. [4] Poehlman (1988) also found that humans (vegetarians) have higher

metabolic rates than non-vegetarians. [5] Evidence that higher basal metabolic rate (BMR) occurs is immediate weight loss recorded when subjects change from non-vegan calories to a vegan (Chart I.) [6] Weight loss is observed in subjects eating 30% more calories from plant food sources than those consuming animal-source calories. Vegetarians metabolize calories at a higher basal metabolic rate than those eating animal-based foods, resulting in weight loss and lower Body Mass Index (BMI):

Body Mass Index associated with food choices on basal metabolism rate

We are what we eat and to a large extent food choices/calories contribute to either a positive or negative effect on body mass. Campbell showed how eating a vegan diet (China) reduces body mass index (BMI) by comparing them to the American non-vegan diet. [7] The Chinese consume a whopping 2640 total k/cal daily (+660 calories more than Americans), yet their average Body Mass Index is only 21.4! The average American eating only 1980 calories/day creates an obese 27.0 Body Mass Index. Consuming vegetarian calories raises basal metabolic rate is confirmed in the Chinese -26% lower BMI as compared to the average American's 27.0. [8] For the moment, consider the body-mass performance advantage of climbing a hill or sprinting with a low lean muscle mass of 21.4 BMI compared to one with a higher BMI of 27.0. For a complete comparison between the observed effects from a vegan protocol compared to a non-vegan, a menu is provided in Chart II.

#2 - Vegan diet improves blood oxygen transfer rate, prevents & reverses heart disease death.

Cardiovascular blood flow dynamics

are operant in both endurance athletes and cardio-pathological subjects. Blood flow and oxygen carrying capacity can be hindered by coronary artery disease progression in both. The athlete's exercise proficiency is not immune from the harmful effects of poor dietary choices, known to result in coronary artery disease. The progression of coronary artery disease inhibits blood flow rate and endurance performance. Esselstyn and colleagues report the vegan diet (appropriately applied 32-60 months) reversed [9] progressive coronary artery disease in human subjects [10] (Chart III.):

When a vegan menu is strictly adhered to, coronary artery disease is reversed; Esselstyn [11] demonstrated this with a before "A" & after "B" Angiogram of a subject after 32-months on a plant-food vegan diet (below).

Vegan diet's anti-atherosclerosis effect

Atherosclerosis is definitively associated with a reduced blood flow

oxygen carrying capacity whose end result is death. Atherosclerosis is prevented by a vegan diet. Where a vegan menu is practiced, the death rate decreases and survivors increase. Where a vegan menu is not practiced (USA), the death rate increases while survivors decrease. Morrison confirmed these associations by comparing the death rates associated with consuming a non-vegan diet or eating a vegan diet (reduced cholesterol & fat) over an eight-year period. He concluded that the survival rate was remarkably higher from consuming a vegan diet [12] (Chart IV.):

#3 - Vegan diet improves blood glucose efficiency, prevents & reverses Diabetes

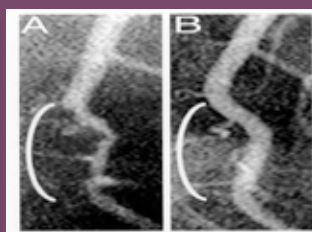
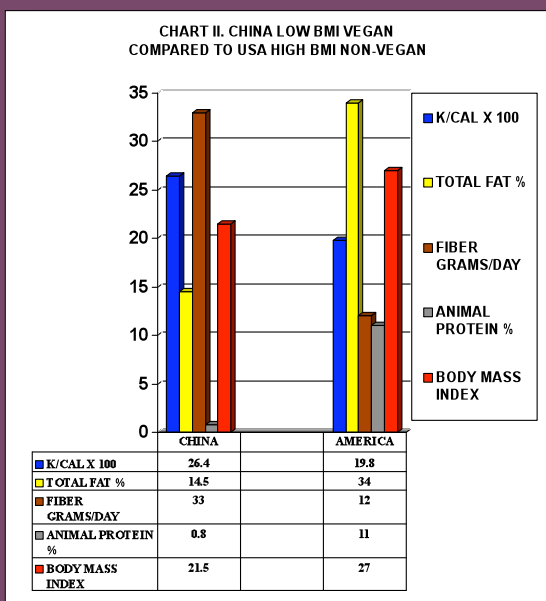
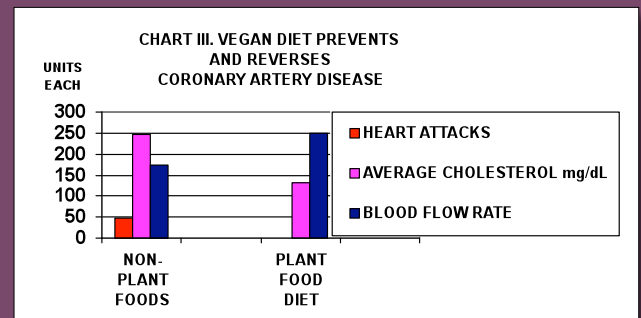
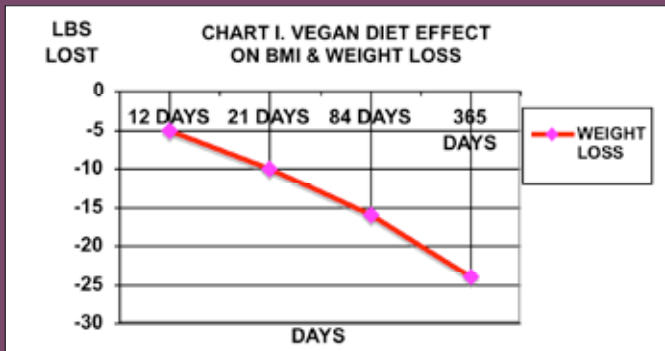
Hinsworth reported (1935) that in countries where plant foods are consumed most (Japan), death from Diabetes occurs less as compared to countries (USA) where animal foods are consumed most [13] (Chart V.).

Conclusion

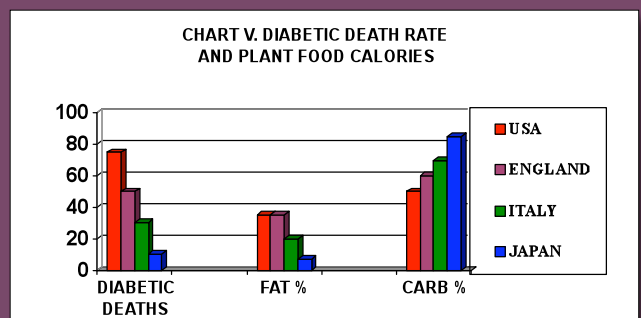
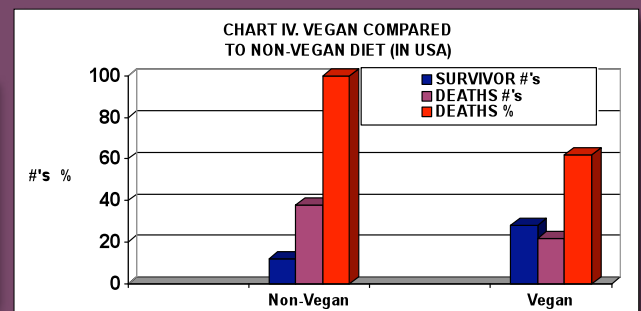
There is no question regarding the academic importance of plant foods and their potential effect on human health. If the vegan diet method is applied to periodic training, results associated with:

- Lean muscle mass to fat mass ratio increase
- Total fat mass decrease
- Cardiovascular blood oxygen flow rate increase
- Cardiovascular function increase
- Basal Metabolic Rate BMR increase
- Hormone-modulated blood glucose increase (opposed to blood sugar hormone imbalances associated with Diabetes), may be formally classified as a performance-enhancing method. Whether WADA rules this method "banned" is undetermined.

References available upon request. **HN**



Picture #1 - Coronary angiograms of the distal left anterior descending artery before (A) and after (B) 32-months of a plant-based diet without cholesterol-lowering medication show profound improvement.





A Call To All (In)Volunteers

BY JIM BRUSKEWITZ

I'm one and part of a growing corp. We sit with pads on our skin and control a gizmo that is four times the size of a cell phone. This gizmo INVOLUNTARILY contracts working muscle groups of our choosing. Once over any pre-conceived notions that this is an ineffective approach to training to enhance endurance exercise, you'll discover a few significant advantages that E-stim confers over and above other approaches to building strength.

That gizmo that I refer to is a Globus Electrostimulator. The kind of training that one can do with it is called EMS (electromuscular stimulation) or E-stim. You'll notice how unique the sensations are when you first try E-stim. You do not control the way the muscle contracts. Some find this "funny"- at least it makes them laugh. Some truly don't know what to think because it is so different from that which they are accustomed. We normally voluntarily contract our skeletal muscle to move

and do work. E-stim contractions are involuntary. To control the situation, you choose a program from a large array that will specifically control what muscle fiber types, like sprint or endurance, are trained. How forcefully the muscle contracts involuntarily is very finely controlled by you. But that which initially surprises first time users, the involuntary contraction, is an action that enables the user to train in ways that are otherwise nearly impossible.

Anytime a discussion of the efficient contraction of muscle groups arises, that discussion should be underpinned with

an understanding of neuromuscular inhibition. When a muscle group contracts, part of the muscle tissue will not respond to voluntary or involuntary stimulation of the nerves that initiate contraction. Common experience supports the idea that repeated contractions over time can improve the force a contracting muscle can exert. Why this occurs isn't revealed by going through the motions. What surprised me when exposed to the concept is that the majority of strength increases come from removing some of this neuromuscular inhibition. If more of the muscle contracts when stimulated by the nerves, more force is developed.

Let's relate this back to E-stim and the involuntary contraction. The way we remove the neuromuscular inhibition is by repeatedly contracting the muscle over time. Sounds like the way people train. We are up against voluntarily trying to get more muscle to contract so that we can gain the ability to contract more muscle. Involuntarily we can override more of this inhibition. We can do this by turning up the stimulus, stimulating more nerves, and thereby contracting more muscle. We are getting to a more forceful contraction in a shorter amount of time. Outstanding! There is more to this.

Consider someone that can't deliver the same amount of force in the right and left leg. The amount of neuromuscular inhibition side to side is different. Maybe you have noticed this. Maybe you've tried to correct it. If you've tried to correct it by cycling, an activity that more readily reveals imbalances than some other activities like running, you may have employed individual leg training or tried using the weaker leg more fully when riding (maybe with a spin scan on a computrainer etc.). It's tough. It is hard to do something long enough to gain the desired adaptations without losing focus and falling back into the old motor patterns. This is the part that excites me. It is easy and straightforward with E-stim training. Not only can you observe the muscle imbalance in any



muscle group you choose, but you can very finely and precisely adjust the level of stimulation to achieve side to side balance with each muscle contraction. It's involuntary to boot. You can't lose focus. Your old motor patterns are not the default settings anymore. You can more quickly and precisely reset the balance of strength between your right and left side.

No one plans on getting injured. It happens and when it does, inactivity to varying degrees results. I broke my hip before E-stim was even a sparkle in my training eye. As part of my rehab, the affected leg bore no weight for 10 weeks. The amount of atrophy was significant. I couldn't contract my affected gluteal (butt) muscles no matter how hard I tried. The amount of neuromuscular inhibition had dramatically increased through disuse. I could have used a Globus and built strength. I could have GAINED strength while inactive. For those with any injury that doesn't allow for joint movement, the involuntary contractions from an E-stim session do not move joints. Once normal activity is resumed, one that has used E-stim while injured can start at a much higher level of strength than the person that didn't stimulate their muscles while injured.

If you aren't excited yet, try E-stim. The excitation you get will do the body good. **HN**



I purchased a unit a couple of weeks ago and have been using it since. **My only regret is that I didn't purchase it sooner.** As I continue to close in on the half century mark, recovery times after workouts have increased as well. Now I use the muscle recovery program and I am ready to go the next day. I definitely recommend investing in one of these.

- Michael Weaver

GLOBAL EMS – AN ESSENTIAL COMPONENT FOR THE SERIOUS ATHLETE

By Dale Humphrey

After two years of utilizing a Globus Premium Sport the unit has become an indispensable element to my training and racing regimen. Simply put, it is something I cannot be without. From my perspective there are several areas that highlight the advantages and necessity of the Globus and electromuscular stimulation (EMS).

Effectiveness

The initial application of the Globus for many athletes is Active Recovery and Massage. In these modes you can carefully gauge results based on repeated trials that underscore the benefits of pre- and post-training/racing. Whether engaging in a series of hard training sessions or races the use of the Globus will increase muscular responsiveness, abbreviate recovery times and reduce the frequency of soreness and injury.

Upon acclimating yourself to the various functions you can start using the more advanced functions such as strength training. It will not take long to realize that the Globus provides high level muscular development in a manner you cannot possibly replicate with weight training or other exercises. The degree of control and accuracy of the Globus is startling once you compare and contrast it to different approaches.

Efficiency

Serious athletes, by definition, dedicate a good deal of time and energy to their base training schedule and complementary activities. The Globus is a portable device that can be used nearly anywhere and, if you choose, when performing other activities (e.g. working, reading, watching television with the family, etc.). Is your massage therapist available at a moment's notice and minutes away? What else are you accomplishing when having a massage? If you are weight training at home is it deemed a "family activity"? Without a properly equipped home gym how much time does it take to travel to a facility, conduct your workout and do everything else?

Since time is such a precious resource (especially for athletes trying to balance multiple commitments) the Globus provides a unique advantage. For those that travel it can be placed easily in carry-on luggage and used in locations where your typical resources are not available. Using Globus during post-race car travel is a true revelation when compared to a longer drive after a hard effort – without the Globus. The efficiency of the Globus is clearly superior to its alternatives – there is simply no way to replicate the unit's availability and ease of use.

Value

Many athletes, particularly triathletes, are not reserved in "buying speed". The thought of the latest bike technology translating to lower times with less effort is a common pattern. The appeal is understandable. Is the cost/benefit ratio rationale when in most instances the results cannot be validated? The Globus, used in a disciplined manner, has direct and measurable impact on a multiple of factors that translate directly to increased performance. The Globus is based on a technology that transforms your body rather than a technology that alters the equipment you use.

As to the cost the Globus, in isolation, is not something you would casually purchase. However when balancing everything it accomplishes it is truly a bargain. If you were to place a price on everything you can do with the Globus you would arrive at a figure that is multiples of the initial cost. On a pure economic basis (accounting for effectiveness and efficiency) the Globus makes immediate sense. When comparing the cost with results to other similar expenditures, the value provided by Globus is unsurpassed.

Summary

Despite the array of equipment and other devices available to serious athletes very few provide an easy to use and measurable impact on performance. The efficiency and effectiveness of the Globus is difficult to replicate. When accounting for the value of the unit there is little or no competition in the market. Take the next step in your development. Contact Hammer today for a no risk trial of a Globus EMS.



Jim Bruskewitz gets Lorenzo Brown set up for an Active Recovery workout with the Globus after a long day of riding at the January Hammer Camp in Tucson.

EMS - Electrical Muscle Stimulation

A tool to complement training

BY GIOVANNI CIRIANI

You must have heard that **Electrical Muscle Stimulation is used for rehabilitation.** But after hearing about it for sport training, most people get a good laugh, as this reminds them of the marketing hype “exercise while doing nothing and watching TV”. There is a reason for this bad reputation, because done incorrectly and with the wrong tools, EMS will not achieve any result for you. Therefore I’d like to explain what EMS can really do for you.

What EMS does

First the basics. Voluntary muscle contractions are controlled by the brain, which sends electrical impulses through the nerves that innervate a particular muscle. EMS mimics these

electrical impulses, and acting on the same nerves that innervate a muscle, cause it to contract involuntarily. It is important to understand that EMS doesn’t cause the muscle to contract, but it triggers its contraction. The energy for the contraction still comes from the same biochemical processes that make our body work. Therefore an EMS contraction is “physiologically natural”. Because our muscles are composed of different types of fibers (think of slow twitch and fast twitch fibers), EMS electrical impulses can trigger different types of contraction. By harnessing these differences EMS machines can help fine tune muscles for specific goals: development of force; development of endurance; help recover from strenuous training faster than pure rest; avoid next-day muscle soreness.

EMS is not simple and has to be done correctly. That is partly the reason why there are many skeptics. Utilizing the correct stimulation parameters is part of the answer (there are half a dozen parameters to be set correctly). For instance if one utilizes a TENS device (those typically prescribed for low back pain), the stimulation will not be adequate for a training effect on a desired muscle. Or, if one borrows an expensive clinical device, the parameters will be difficult to set and will not address a specific training goal. Thanks to advances in technology, in the last 10 years, portable and relatively low-cost stimulators have appeared on the market, already programmed for different athletic goals, putting results within reach of the sport community. In Europe they are used by a growing number of coaches and athletes. In the US the number of sport users is a much smaller niche. Since one still needs to know what to do, and have enough experience to use EMS programs consistently with the sport goal, I recommend to talk to a coach that has EMS background.

How it works

I mentioned that our muscles are composed of different slow twitch fibers and fast twitch fibers. In a voluntary contraction of slow-twitch fibers our nerves send electrical impulses, typically 10 to 20 times per second. In the case of fast-twitch fibers, our nerves send electrical impulses, typically between 40 to 80 times per second. EMS can mimic these and other nervous patterns precisely, helping to tweak muscle work toward slow twitch or fast twitch work. There are studies that have shown that EMS has the capability to modify the proportion of fast vs slow-twitch muscle fibers.

Sport applications

Several studies on individual- and team-sport athletes (eg, swimming, track and field, weight lifting, basketball, volleyball, ice hockey, rugby) have reported significant improvement in maximal strength, and in some cases even in anaerobic-power production (vertical jump and sprint ability) likely to affect field performance. These improvements, like any type of

training, follow specific routines: the EMS programs used during a session, involve a number of repetitions (10-40); the contractions are strong and long enough, and adequate rest time between one contraction and the next to allow the muscle to recharge; the EMS training is repeated several times a week; results are obtained after several weeks. This is complicated enough, but fortunately in the current generation of EMS machines, the EMS programs needed for a session are ready and properly labeled. However, the frequency of EMS training per week and the number of weeks of training are best decided with a coach who has EMS experience. In addition performance improvement of sport movements requiring neuromuscular coordination can only be obtained if EMS is used in conjunction with "voluntary traditional exercise".

Active recovery

One form of EMS though, is very successful for almost everybody, without the need of a coach. Active recovery is an EMS program that generates rhythmic muscle twitches, in fast succession, promoting blood flow. It feels like a massage, but because of the incessant and rapid nature of the twitch, it is several times more effective, and helps remove the byproducts of exercise: the breakdown of proteins and other residues that typically cause inflammation and next-day soreness. Very recent sport-medicine studies have shown that EMS Active Recovery programs are more effective than other forms of recovery. Because EMS Active Recovery generates only twitches, it doesn't cause secondary training effects, and it can be easily and safely done without knowing anything about EMS. Even performing EMS several times a day does not interfere with other forms of voluntary training, although the closer to the training, the more effective it will be.

One obvious advantage of using EMS Active Recovery is that it facilitates access to the muscle by naturally-produced biochemicals, which our body employs to rebuild stronger muscles. As a consequence, athletes who are striving to rapidly improve their performance will be able to recover faster and possibly squeeze one more training during the week. The other advantage is that by decreasing next-day muscle soreness, the athlete will be able to avoid skipping days. **HN**

Still thinking about the Globus articles that you just read?

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Hi. My name is Andy Schultz. I'm a professional mountain bike racer with the Kenda/Felt Mountain Bike Team and the head cook at The Cycling House.

If you are an avid Endurance News reader you may remember an article with a recipe for Balsamic Chicken with Pears that appeared almost a year ago. Well, I'm back at The Cycling House for the winter and am in the middle of cooking for the January Hammer Camp. I've been asked to provide another recipe from some of the food that I've cooked this week.

I love winter, not because of the cold (that is why I'm in Tucson), but because it is soup season. A soup is generally very easy to make, delicious, and warms you from the inside out. The soup that I outline below is one of the most unique and delectable soups that I have ever had and it even has some good fats and proteins in it so it is very filling. I've also included a recipe for roasted cauliflower with turmeric that my brother (also a pro mountain bike racer) makes. Enjoy!

African Peanut Soup

(makes 4-5 servings)

1 yellow onion, finely chopped
 2 bell peppers, finely chopped
 2-3 garlic cloves, minced
 28 oz. canned chopped tomatoes with juice
 8 cups vegetable or chicken broth
 1 cup uncooked short-grain rice
 2 chicken breasts, sliced (or one block of sliced tofu sautéed to crisp the outside)
 2/3 cup peanut butter
 Pepper to taste
 Red pepper flakes to taste
 Roasted peanuts

Chop your onions, bell peppers, and garlic. In the meantime, place just enough olive oil in the bottom of a pan to coat it and begin to heat it on the stove. Just before your oil begins to smoke, add the onions and bell peppers. After three or four minutes, add the garlic. As the onions begin to brown add the tomatoes, with their juice, and the broth. As the soup heats up, add your pepper and red pepper flakes to taste. Bring the soup to a boil and then allow to simmer, uncovered, for about 15 minutes. At this point you can start to make your cauliflower (recipe to the right). Add your meat or tofu, and rice. Cover and allow to simmer 30 minutes. Wisk in the peanut butter and serve. You can use the roasted peanuts for a garnish.

Roasted Cauliflower with Turmeric

Cauliflower
 Olive Oil
 Diced Garlic
 Turmeric Powder
 Garlic Powder
 Ginger Powder
 Salt
 Pepper

For this recipe you get to use your chef skills. You know, where you don't actually measure anything out, you just season it to taste. Begin by preheating your oven to 425 degrees. Cut up your cauliflower into bite-sized pieces, place them in a bowl, and toss with just enough olive oil to coat them. Dice one clove of garlic per head of cauliflower and add to the bowl. Season with turmeric, garlic, and ginger powders. Use about three times more turmeric than garlic or ginger. You want to use enough turmeric that your cauliflower takes on a nice yellow hue. Add salt and pepper. Taste often and adjust seasonings. Place on a baking sheet and bake for 30 to 40 minutes, turning once during that time. When the cauliflower is soft and has a roasted hint to it, it is done. Don't be too worried with this recipe. Roasted cauliflower is delicious so it is going to turn out good no matter what you use for seasoning.



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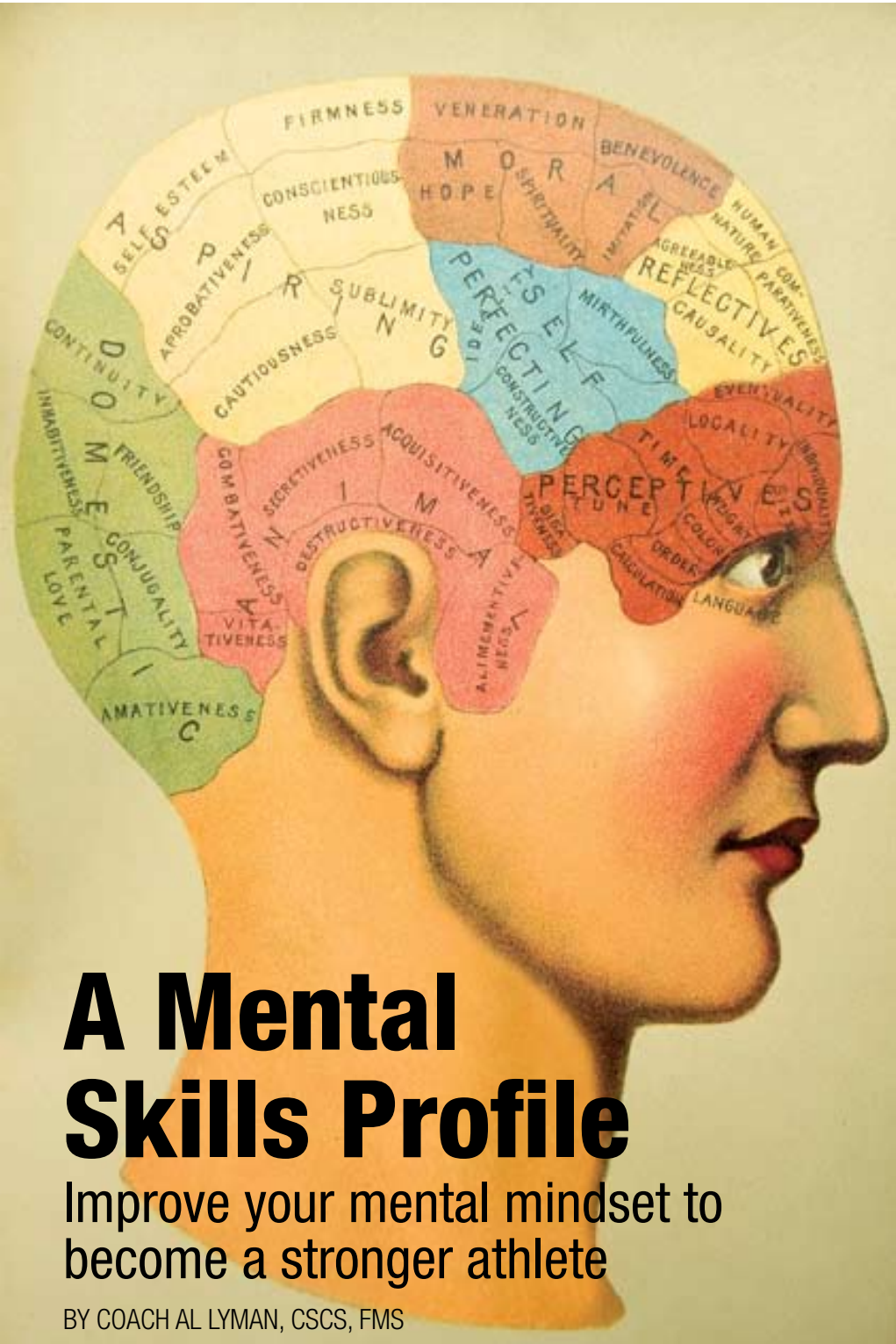
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A Mental Skills Profile

Improve your mental mindset to become a stronger athlete

BY COACH AL LYMAN, CSCS, FMS

One of the training documents that I share with new coached athletes is a **MENTAL SKILLS profile**. At the outset of our relationship as coach/athlete, I want them to become more aware of their mental skills: how they think and talk to themselves, before, during, and after training and racing. The reason I do this at the start of working together is simple: in my experience I've learned (often

the hard way) how crucial the right mental mindset is for success. I have seen athletes who worked hard to develop their mental game and become mentally strong achieve great success on the race course, despite not having a huge amount of physical talent. They were proactive and aware. On the race course, they reacted well and made smart choices when things "happened" that they didn't expect. They did the mental preparation necessary to ensure

that they didn't self sabotage their best opportunity for success. Conversely, it isn't uncommon to see an athlete who is physically gifted and trains very hard, yet hasn't given the requisite time and attention to what is happening between the ears. A negative thought or mindset can grow and lead to poor decision making, and thus sabotage any real chance for success, despite how physically well prepared the athlete might be.

This particular time of year provides an excellent opportunity to work on the mental aspects of our training and performance. Waiting until the week before your most important race to work on mental skills is too late! If you haven't already begun, start now!

The most important place to start is increasing **AWARENESS**, and along with that, self confidence. Cheryl Hart, in an article she wrote in a recent issue of *Triathlon Life*, states: "Self awareness and confidence are foundational to performance and impact your life (whether positively or negatively) like a ripple effect beyond the athletic realm. Be aware of how you see yourself (self-concept) and carefully monitor what you think and say about yourself (self-talk). Create new "tapes" that are patient, kind and encouraging. Try each day to find even the smallest, seemingly insignificant ways to bolster your self-esteem. Without that, athletes focus primarily on avoiding failure, out of fear of what others will think, rather than on setting their own standard of excellence."

I've provided a **MENTAL SKILLS PROFILE** at the end of this article to help you begin to improve your awareness, so that you can apply these concepts in your daily training. I suggest you review the profile every few weeks to chart your progress. The purpose of this profile **IS** awareness, it isn't "pass or fail." As such, you won't find a grade sheet or some other way to assess your "score." That being said, be honest with yourself. Work on areas that appear to be consistent limiters for you - become more **AWARE** of how you talk to yourself and your level of self confidence. For example, are you beating yourself up because you feel you aren't mastering skills "fast enough," or are you encouraging yourself and acknowledging the positive progress you are making.

Our growth as athletes and the process we go through, both mentally

and physically, is rarely ever linear. If it seems so at times, it is only an illusion. You will have peaks and valleys throughout the training process. Every race provides the opportunity to learn more about yourself and how you react to unforeseen challenges. In every instance, when you have prepared mentally, see the glass as half full rather than half empty, and use that mindset to reinforce the positive, you will enjoy every aspect of training and racing more, and improve at a faster rate as well. No one knows the rate of progress or where the

peaks and valleys will come, but with persistence, honest self evaluation, and improved awareness, success is virtually guaranteed.

Use this MENTAL SKILLS profile to begin to look honestly at how you think and how you talk to yourself. Work on being more positive, more self supportive and encouraging. Build the confidence, self belief, and awareness that will serve you well on the race course this season and beyond. Best of luck! **HN**

LOSING THOSE LAST POUNDS

So, the racing season is almost here and you're getting pretty fit ... with the exception of those last few stubborn pounds that just don't seem to want to leave. How do you shed those remaining "hard-headed" pounds without compromising your training? It's as simple as cutting starch out of your evening meal and replacing it with copious amounts of vegetables and salad. Eat normally throughout the day, then for your evening meal, just consume protein, salad, and vegetables. The vegetables will provide all of the carbs that you need to maintain glycogen stores. You may feel a little hungry before bed, but do this regularly (not necessarily every day) and watch those love handles evaporate.



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Mental Skills Profile

Read each statement then choose an appropriate response from these possibilities:

- 1 = Never
- 2 = Rarely
- 3 = Sometimes
- 4 = Frequently
- 5 = Usually
- 6 = Always

When finished, add up the numerical responses for the sets of statements outlined below.


Determine your rating for each using the scale at the bottom right.

- ___ 1. I believe my potential as an athlete is excellent.
- ___ 2. I train consistently and eagerly.
- ___ 3. When things don't go well in a race I stay positive.
- ___ 4. In hard races I can imagine myself doing well.
- ___ 5. Before races I remain positive and upbeat.
- ___ 6. I think of myself more as a success than as a failure.
- ___ 7. Before races I'm able to erase self-doubt.
- ___ 8. The morning of a race I awake nervous but enthusiastic.
- ___ 9. I learn something from a race when I don't do well.
- ___ 10. I can see myself handling tough race situations.
- ___ 11. I'm able to race at near my ability level.
- ___ 12. I can easily picture myself training and racing.
- ___ 13. Staying focused during long races is easy for me.
- ___ 14. I stay in tune with my exertion levels in races.
- ___ 15. I mentally rehearse skills and tactics before races.
- ___ 16. I'm good at concentrating as a race progresses.
- ___ 17. I make sacrifices to attain my goals.
- ___ 18. Before an important race I can visualize doing well.
- ___ 19. I look forward to workouts.
- ___ 20. When I visualize myself racing, it almost feels real.
- ___ 21. I think of myself as a tough competitor.
- ___ 22. In races I tune out distractions.
- ___ 23. I set high goals for myself.
- ___ 24. I like the challenge of a hard race.
- ___ 25. When the race gets hard I concentrate even better.
- ___ 26. In races I am mentally tough.
- ___ 27. I can relax my muscles before races.
- ___ 28. I stay positive despite late starts, bad weather, etc.
- ___ 29. My confidence stays high the week after a bad race.
- ___ 30. I strive to be the best athlete I can be.

DETERMINE RATING:

Mental Skill	Statements	Your Total	Your Rating	Total	Rating
Motivation	2, 8, 17, 19, 23, 30	_____	_____	32-36	5
Confidence	1, 6, 11, 21, 26, 29	_____	_____	27-31	4
Thought habits	3, 5, 9, 24, 27, 28	_____	_____	21-26	3
Focus	7, 13, 14, 16, 22, 25	_____	_____	16-20	2
Visualization	4, 10, 12, 15, 18, 20	_____	_____	6-15	1

"I purchased Anti-Fatigue Caps and Endurance Amino for the first time – wow – what a difference in energy and recovery!" - David K.

A full-page photograph of a skier in an orange suit and red helmet skiing uphill through a snowy forest. The skier is wearing a bib with the number 15. The background is a dense forest of snow-covered evergreen trees.

Ben Parsons, who finished the day in second in the rando division, stays focused during the Whitefish Mountain Whiteout. Photo: Dustin Phillips

Skiing Uphill

BY BEN PARSONS

Here I find myself again behind the windshield heading to the next aerobic adventure. If you're like me, perhaps you find that somehow your appetite is conversely proportional to the amount of time spent in your vehicle and so your body decides there is no better time to graze than the present. Of course this doesn't jive with the self discipline needed to attain race weight which is constantly in the back of my head fighting with my appetite. Currently I'm chasing down a couple of Appetat's with some delicious new Chocolate Recoverite to curb the cravings. I'll let you know how this works out for me.

This weekend brings me to the 5th Ski Mountaineering race of my season, and the 4th weekend in a row of traveling and racing. I began with a pilgrimage to Golden, B.C., plunged south to Victor, ID, took the banana boat down to Sunlight Village, CO, scurried home to Whitefish Mountain for the infamous Whiteout, and now am making my way to my old college town of Bozeman, MT for the Bridger

Bowl Skin to Win Randonee Rally. This season has been exciting, dramatic, and all the while successful as I have striven to make the U.S. Ski Mountaineering Association National Team in hopes of being one of eight in the nation to race and represent the good ol' U-S-of-A in Andorra this Spring. Once every two years the International Ski Mountaineering Federation holds a World Championship where countries from around the world send their best and brightest to hammer it out on some skinny skis on steep slopes. Since I stepped into racing last year it has been a goal to qualify for the team and represent the U.S. at a future world championship. Unbelievably, I was able to put it all together this year and will be traveling to Andorra to not only compete at worlds, but also travel on to France and race in a 4 day Ski Mountaineering stage race (the Pierra Menta) with teammate Brandon French where we will cover over 35,000 vertical feet and numerous summits while being cheered and jeered by hundreds of crazed Europeans dinging cowbells and swilling Gluwein along the way.

Ski Mountaineering is a relatively young sport in

Brandon French heads toward first place in the rando division at the Whitefish Mountain Whiteout. Photo: Dustin Phillips

the U.S. that is rapidly gaining momentum as enthusiasts find that it incorporates the aerobic, mental, and technical challenge of skiing into a single event. Races typically are held on ski hills and conquer the hardest climbs and descents as competitors battle the uphill, transitions, and downhills for the top step of the podium, or just for a personal challenge. I've found a pretty natural progression with a background as a cross-country bike racer who also grew up skiing. In fact, most of the racers on the U.S. national team come from some background of bike racing, running, nordic skiing, or adventure racing and each has dived into ski mountaineering with full enthusiasm and obsession. If you get the opportunity, try out a race. I guarantee you won't be disappointed, and they make courses adapted for multiple ranges of ability and fitness. Check out the website www.ussma.org for more information and a schedule!

Along with my experiences and experimentation with fueling during a multitude of different lengths of cross country races, I've finally been able to dial in my nutrition and supplementation needs during events of various durations. For the most part a randonee race covers 5000 vertical feet (of climbing) and lasts around two hours. The event is unique in that a racer goes at or above threshold as he or she climbs the mountain, stops at the top long enough to let the lactic begin to flush, and then bombs down the hill (quads throbbing at this point) to another transition where another uphill awaits. This goes on enough times that by the last ascent and descent, everything in your body is telling you to stop! Last year I would frequently battle cramps and late stage fatigue in the last half of the races, but this year has been a different story for a couple of reasons. Part of my success is due to the fact that I actually got on the skis a bit earlier this year and did some good foundation work to build a base. But I've also found that with the help of a routine of endurance aminos, anti-fatigue caps, race caps supreme, and endurolytes pre-race, then steady fueling of strongly mixed heed and a gel or two during the race has kept my energy levels high and cramps nonexistent. Then of course it's straight to the Recoverite in order to get the rebuild and recovery going STAT so I can go out and hit it hard again the next day!

After this weekend I've got about a month to do some more building up to World's where I can hopefully show up and represent! It should definitely be a new experience racing among hundreds of people all with equivalent race gear and winterized lycra, and we'll see if I make it through 4 intense days of back to back endurance skiing. Hopefully customs won't jack my productivity! **HN**



Hammer staffer, Jason Keister, would finish the day in second in the tele division. Photo: Bear Barinowski

Bill Riley

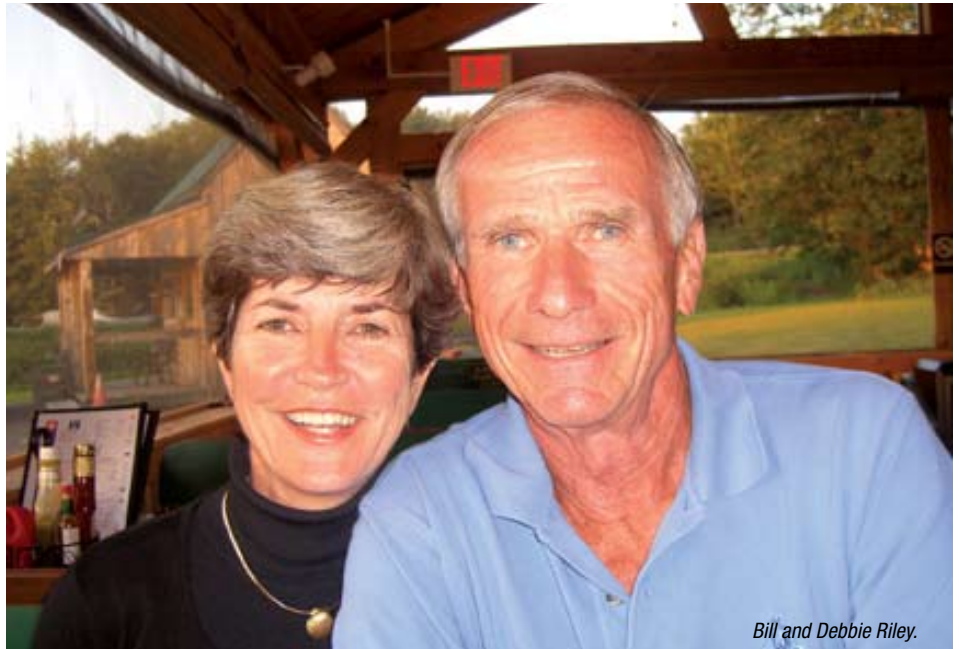
Our "spotlight" athlete in this issue of *Endurance News* is longtime Hammer Nutrition sponsored athlete, extraordinaire, Bill Riley, from Centerville, MA. This may very well be the most difficult "Athlete Spotlight" article I'll ever do, simply because Bill's accomplishments are so numerous that they could fill up several more pages than we have available . . . I hardly know where to begin!

Now that I've thought about it, what I must mention first is that not only is Bill an amazingly gifted athlete, he is the nicest person you'd ever want to meet, and as humble as they come. Whoever thinks that "nice guys finish last" has never met Bill Riley (probably because they finished far behind him!). His list of accomplishments is, to say the least, impressive. Here's a synopsis of "The athletic life of Riley":

- 6-time USAT National Triathlon Champion
- 2-time National Duathlon Champion
- 14-time USAT All-American
- 6-time USATF Age Group Athlete of the Year
- 4-time Age Group winner – Ironman World Championships
- 21 Boston Marathons

Now, I'm probably forgetting something here, but you get the idea . . . Bill is one heck of an athlete and it doesn't look like he's slowing down one bit. Case in point: We completed this interview upon his return to Massachusetts a day after winning the M70-74 age group at the 2010 USA Masters Half Marathon Championships in Melbourne, Florida, in a time of 1:33.12. How good is that time? It's a 7:07/mile average, and good enough to have placed him in the top three in the men's 50-54, 60-64, and 65-69 age groups (and fourth place in the 55-59 age group). Wow!

STEVE: Bill, for the fourth year in a row, the USATF has elected you the outstanding athlete of the



Bill and Debbie Riley.

year for the Male 70-74 age group. Congratulations!

BILL: You know Steve, some of this is luck. I'm a few years older than my competition within the age group. I get a couple of "easier" years when I first get into a new group. Then it's just a matter of hanging on and hoping that you can race really well at your best distances in the last couple of years.

STEVE: In 2009, you were the top-ranked runner on USATF-certified courses for 5K, 10K, 15K, half marathon distances; is that correct? If that is the case, is there a particular distance that you're especially pleased about being ranked #1 in?

BILL: I don't believe that USATF looks at a specific distance nor do I, but it is true that I had the best times in 2009. My training goals are to be competitive in all of the distances that you mentioned and my training for each event varies. I do prefer the shorter distances as there are more of my age group at these distances.

STEVE: We obviously don't have enough space to chronicle your entire career (though I wish we did!), so could you tell us a little bit about when you started racing and what you did?

BILL: I started running when I was 40 for no other reason than that a routine physical/stress test showed that I had an abnormally high VO2max. My doctor suggested that I would be a good endurance runner. I did nothing with multisport races until 1985 (I was around age 49 or so). I ran a ton of marathons up to that point.

STEVE: So you definitely brought a strong running background into the sport of triathlon. What made you decide to give triathlons a go and what was the first race that you did?

BILL: You know, everyone was entering triathlons. It was the rage. I even ended up as a race director on Nantucket. But my first triathlon was in 1984, the Seaside Triathlon on Cape Cod. I won my age group but it was pre-wet suit era and I learned that skinny runners do not do well in cold waters.

STEVE: When did you do your first iron distance race? What race was it and how did you do in it?

BILL: My first Ironman Distance race was the Bud Light Endurance in 1988, held on Cape Cod. I had volunteered at this race for a few years and thought that I could do the distance. I finished the event in 10:14.51 which, at the time, was a world record for a 50+ competitor.

STEVE: Would it be fair to say that



Out for a Friday "Hammer Day" ride with the club. This photo was taken at the North Shore Pool area of St Petersburg, Florida where everyday at 8:30 there is a ride. If you show up at 8:31, you don't ride. From left to right : Diane Maxwell, Ernie Alstrom, Roy MacGarrett, Tino Weidinger, Tim Grosswickle, Joanie Flaherty, Bill Riley, Debbie Riley.

in 1988 you were on a roll? I mean, you took first place in your age group in the Bud Light Endurance Triathlon, setting a 50+ world record time of 10:14.51, you won your first Ironman World Championship, and you were named All American. That'd be a defining career for most triathletes but you were just getting started!

BILL: Steve, you know, it seemed reasonably easy because of the marathon run. I had had so much experience in this area. And yes, it would have been enough, but I had been bitten by the bug. I was working for a bank that encouraged me to continue (they knew that I was training on their time) and I had a very supportive wife. You can't beat that combination.

STEVE: When did you start using the Hammer Nutrition products, which at the time were under the E-CAPS name? Who or what was it that made you interested in the products?

BILL: You know, I want to say 1987. A fellow competitor from Vermont told me about the company and their products. I remember calling Brian after the St. Croix Triathlon and following it up when I was in San Francisco visiting my sister. I actually went to his office, when it was there, and introduced myself. Boy, I must have had a lot of nerve in those early years. A few years later I ended up with sponsorship, but in the meantime, I purchased product.

STEVE: And you've obviously been using them ever since, with

excellent results. What does your current supplement and fueling program look like now? In other words, what products are you currently using?

BILL: Each morning it's Race Caps Supreme for sure. After a workout, it's Hammer Whey (Chai or Vanilla), and Recoverite if it's longer than 90 minutes. I take Premium Insurance Caps, Tissue Rejuvenator, and Mito Caps daily. During a long ride I utilize Sustained Energy and for the long runs, it's Hammer Gel.

STEVE: With such a long and illustrious career, I'd imagine it'd be extremely difficult to pick out one event that stands out as the highlight of your career. Still, I have to ask if there are one, two, perhaps three events that stand out in your mind. If so, what races were they and what made them so special to you?

BILL: Yes, we all have "those" races. My first race ever was a 5-mile road race and I finished dead last. I worked hard to avoid that scenario again! Finishing my first Boston Marathon and my first Ironman were both huge mental events. I would place Boston ahead because I put a lot of pressure on myself to do well. The Ironman was very different . . . more like you knew just a finish was a victory.

STEVE: Conversely, is there a race that you can recall where nothing seemed to go right? What was that

race and what happened? What did you learn from that experience?

BILL: Steve, they helped me out of the Boston Harbor at a USTS triathlon in the mid-80s. No wet suit and I was held on the beach under a blanket before I was allowed out on the bike. That was not a good day. Didn't happen again either.

STEVE: Looking at your resume (which, by the way, takes a long time to review!), it looks like you started doing less triathlons and more running right around the end of the 90s.

BILL: Yes, by 1998 I had migrated back to my running more and more. And with my running background, I also got more involved in duathlons. By 2002 (age 66), I was fully back to running. I realized that I could do really well in running on a national level if I didn't try to split my training between running and triathlons. Cross training had been invaluable and I realized that I had to continue to do that to keep from getting injured. And I still do that.

(Continued on next page)



Masters Long Distance Running

December 11, 2009

Bill Riley
201 Shoot Flying Hill Rd
Centerville, MA 02632

Dear Bill,

Congratulations. It is my pleasure to inform you that the Masters Long Distance Running Committee of USATF has elected you Outstanding Athlete of the Year for the M70-74 age division for 2009.

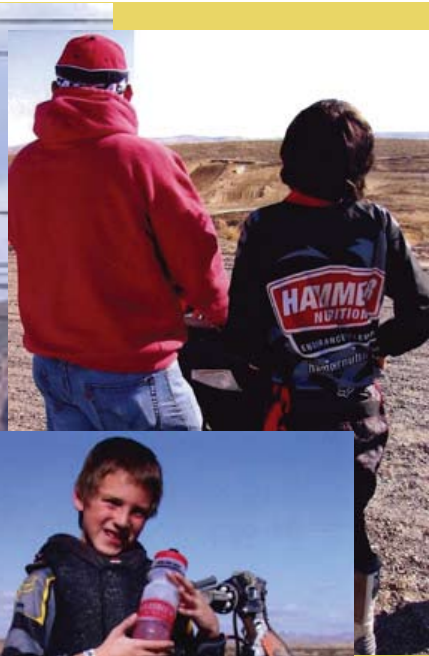
We compiled statistics for all runners in your age group, the Masters Long Distance Running Committee discussed them at the USATF Annual Meeting held in Indianapolis earlier this month, and on the basis of that have selected you for the award. We will send the awards as soon as we receive verification of the winners' addresses. Please verify/correct the enclosed postcard and return it to me as soon as possible.

USATF requires USATF membership for all USATF awards; associations, regional, or national. To ensure all your races will be considered for this award in 2010, please renew your membership before your 2010 racing season begins.

Again, congratulations on a great year, and I look forward to your response.

Sincerely,

Don



Dear Hammer Nutrition,

I want to thank you for your support of our boys during their 2009 motocross race season. Brenton Pepper, our 13 year old, rides a 85CC and won the championship in his class this year! Taje Pepper is 8 and rides a 50CC as well as a 65CC. They both ride the Wild West National circuit here in Mesquite, Nevada.

Both Brenton and Taje use the H/EED and love it! I have enclosed pictures so you can see what they do.

Thank you again, your help is GREATLY appreciated.

Jena Hood, Dennis Hood, and Jason Pepper

Jena Hood
Dennis Hood
Jason Pepper

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STEVE: So one of the reasons for your longevity and success as an athlete has been your ability to stay relatively injury-free.

BILL: Definitely. Staying uninjured while still competing at a high level is one reason for success. Of course, there are other reasons as well, with a primary one being proper nutrition/fueling/supplementation. And that's where Hammer Nutrition comes into play. I've been using the products for as long as I can remember and there is no doubt in my mind that they've played a major role in my athletic career and overall health.

STEVE: What do you do in terms of cross training?

BILL: Well, I am all over the board with that. From January to May, I ride with the St. Pete (FL) bike club three days a week and swim 3X at the huge swimming facility here in St. Pete. I train intensely as if I were planning for triathlons. I actually do a little weight work too during this period at the local gym. But in May, my running takes a priority. Biking and swimming take a second seat although I stay involved to avoid running injuries. Ninety percent of my road races are from June to October.

STEVE: What's a typical in-season workout week look like for you training-wise?

BILL: January to May looks like this:
• Mon, Wed, Fri – Bike & swim (with one run after the bike on Friday)
• Tues, Thurs, Fri, Sat, Sun – Runs.
Tuesday is track intervals at 5K pace or a Tempo run at 10K pace. Sunday is my long run of 10-12 miles.
Totals for week – Bike: 80-90 miles,
Swim: 5-6000 yards, Run: 30-33 miles

From May to October, I drop a bike and a swim and add racing on alternate weekends.

STEVE: After all the years of racing, what keeps you going? Is there something particular that keeps you motivated?

BILL: That's not so easy to answer. I do have bad days. But you know, as long I do reasonably well, have fun, and meet new people, it's good. Mostly

it's the camaraderie that makes it all worthwhile. Nothing better than a group of folks standing around yaking after a workout or a race.

STEVE: I would imagine that as long as you're healthy—and there's no reason to believe that you wouldn't be—you'll keep racing. Is that true or do you have a time frame in mind for when you plan to stop racing?

BILL: No, I have no plans to quit, although injuries may ultimately force the issue. I've learned not to overdo it. I do not take days off unless there is a race, but I do have lots of easy days. I mean real easy, where I don't wear my watch. And I play particular attention to recovery days.

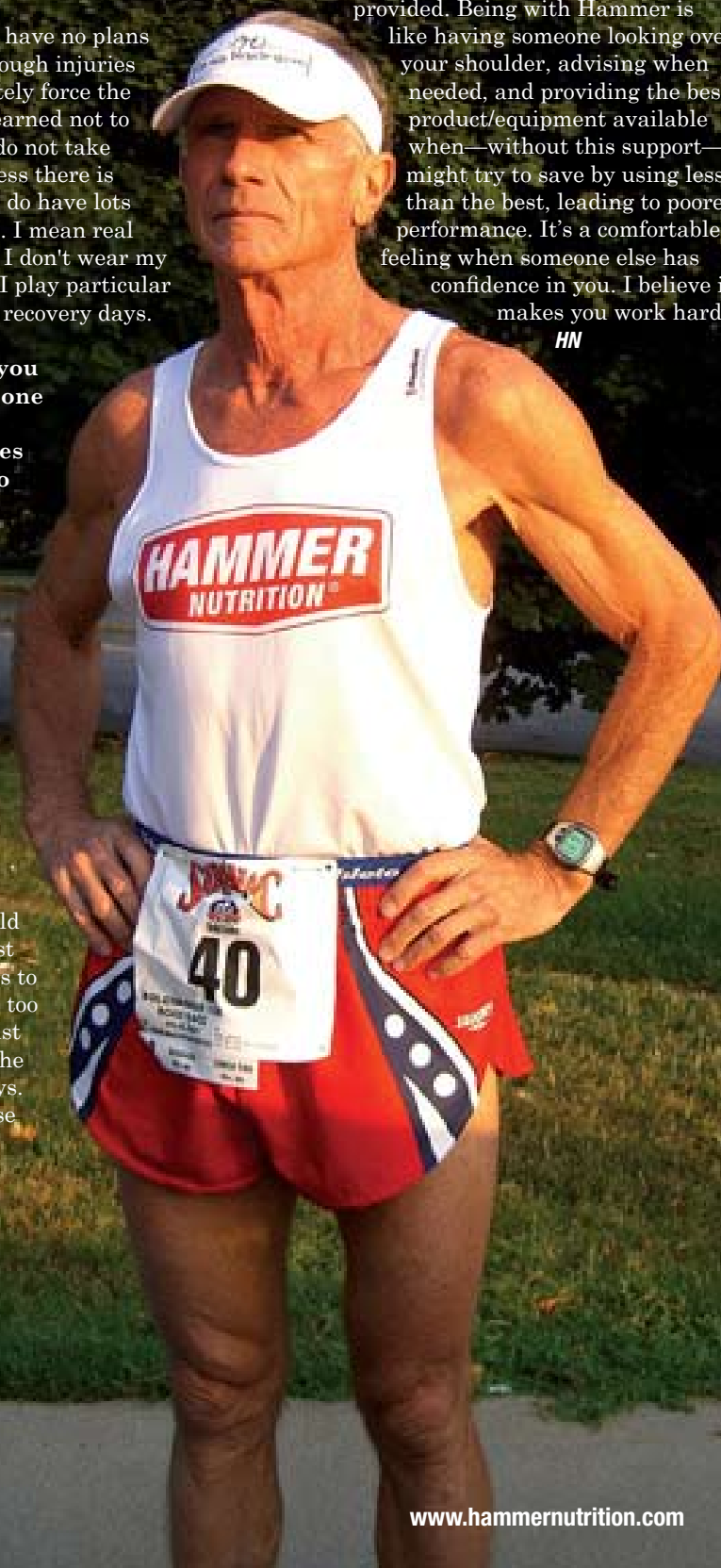
STEVE: If you could give one or two (or more) pieces of advice to someone who's just getting started in multisport racing, what would they be?

BILL: That's the kind of "talk" we all share at races. I would say the worst thing to do is to do too much too soon. You just must have the recovery days. And of course you must have good equipment, especially the running shoes.

STEVE: It's been great catching up with you Bill. You've been a great friend of Hammer Nutrition's and a great ambassador as well. Best wishes to you and Debbie from all of us at Hammer!

BILL: Thank you, I really appreciate that. I would like to say that it's been very important to me to have the kind of help that Hammer Nutrition has provided. Being with Hammer is like having someone looking over your shoulder, advising when needed, and providing the best product/equipment available when—without this support—one might try to save by using less than the best, leading to poorer performance. It's a comfortable feeling when someone else has confidence in you. I believe it makes you work harder.

HN



Rocky (Mount Cleveland) High

BY BRAD LAMSON

I rolled over after only a few hours of sleep, picking pieces of gravel out of my cheek and looking at my watch that read 4:37a.m. The dull, luminescent light was enough to make me squint, making me almost want to close my eyes and fall back to sleep. I realized that Keifer was already up with the coffee pot on the stove, disrupting the stillness in my mind while it gurgled away in its soft, percolating way. That was the alarm clock that I was waiting for.

The night before, Pete and I had driven over the Continental Divide, winding up and over on the Going to the Sun Road that Whitefish while watching the peaks and ridge lines appear, disappear, and reappear in the shadows of a crescent moon. Our plan had been thought of only several hours before while Pete and I had discovered that we had the rare occurrence of having a day off together and nothing planned. What should we do? Mount Cleveland had always been on the list; Glacier National Park's tallest peak

at 10,462 feet. My phone rang several minutes after Pete and I had ironed out the details and it was Keifer from Missoula. He was just finishing up at work and was wondering if there was anything going on for the weekend. I thought, "Wow, Keifer must have read my mind somehow." I knew it would be a "yes" and when I heard Rhea shouting in the background "I want to come to!," well, it was a party of four.

At 5 a.m. after a few sips of coffee, and of course an Espresso Hammer Gel, we were ready to go. Mount Cleveland is a fairly worthy objective for a days walk. It's about 15 miles on the Belly River trail taking you to Stoney Indian Pass to start off with, and then five miles of classic GNP goat trails along the Stoney Indian Peaks Ridge, ending at the summit of Mount Cleveland, all with about 6000' of climbing. The way home is a bit shorter, about five miles total, but you lose 5000+' in the first two miles and a bit more in the last three on a nice trail that drops you at the head of Waterton Lake. What makes it unique is that you always run with a can of bear spray in one hand, keeping in mind that the Northern Rockies Eco System is

home to a large population of Grizzly Bears. Passport, \$22 in Canadian funds, Visa card, bear deterrent spray, running shoes, 14 pouches of Hammer Gel, and Endurolytes...

Quick, nimble, and light is the way to go. After all, who wants to carry a 45lb pack and take three days to do what you could do in one? To make this run feasible, I brought two water bottles, 14 pouches of Hammer Gel, a flask of Perpetuem (mixed thick, about three servings), a bunch of Endurolytes, two Cashew Coconut Chocolate Chip food bars, some HEED in a baggie to add to my bottles when I stopped for refills, and a few pieces of bacon for the top. The less you carry, the faster you can go. One of the great things about GNP is the abundance of free-flowing springs along the trails so there is never a shortage of fresh water. One of the secrets for those long days in the park is that I usually just carry one water bottle and keep it filled whenever I come across a water source, in the other hand I carry a can of bear deterrent spray. I use a small running/hydration pack, pull the bladder out, and use it to carry gels, bars, a lightweight wind breaker, an extra water bottle, and an extra can of bear spray.

Ten hours later and a Tall Boy
in hand . . . ah what
a great

*Going down! 5,500 vertical feet in
less than 2 miles. "Thigh Burner!"
Photos courtesy of Brad Lamson*

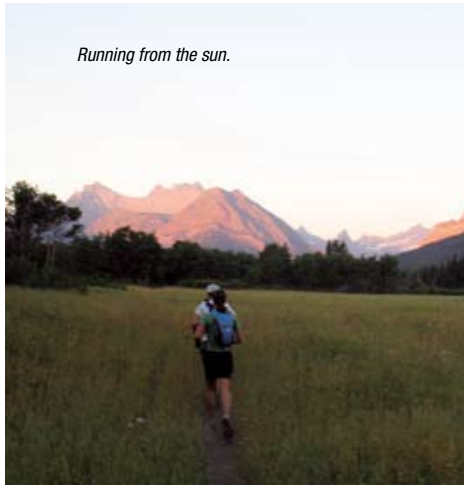
day! Memories from the day going up include: noticing the newly posted grizzly bear warning sign at the Belly River trailhead and realizing that I forgot my bear spray, as did everyone else! I soon forgot about it though with the sun rising behind my back as I watched the early morning light spread its warmth across the peaks of Glacier National Park - "The Crown of the Continent", the "off-trail section" of the well-worn mountain goat trail along the Stoney Indian Peaks Traverse, and standing on top of Mount Cleveland with four super great friends. Memories on the way down: my thighs were hammered after 5,000' of descending in less than two miles on the loose and scree-laden west face of Mount Cleveland in my road running tennies, wishing for a beer at the end, the US Customs agent at the Goat Haunt Ranger Station inviting us into her apartment where she hands us a Miller Highlife Tall Boy, diving into Waterton Lake (BRRRRRR!), the boat ride to Waterton Townsite, and the setting sun.

What was the passport for, you ask? Well, at the end of the run you end up in Alberta, Canada. The Visa card? Buying your friends a huge bag of salty chips and a six-pack of Pilsner Urquell. Priceless! A big thanks to Chris W. for the inspiration and the bacon. Only thing left in my pack? Two gels for the next adventure.

Details:

The run up Mt. Cleveland is a unique adventure in the respect that you start in the United States and finish in Alberta, Canada. The critical part is being sure that you can catch the last boat across the lake and then hitching a ride from the Waterton Lakes Townsite to the Chief Mountain Border Crossing to get your car before the station closes for the evening. Other than that, it's just like any other trail run, peak bagging adventure. **HN**

Running from the sun.



MGD over a ML any day.



A curious resident of the park.



Brad Lamson - Hammer Staffer and goat hair collector, Rhea Fuller - Can pull Miller Tall Boys out of a hat, Pete Costain - A man of oatmeal, and Keifer Hahn - No sleeping bag is to big.





15 Days To Better Training

BY TONY SCHILLER

Which of the following best describes your start to 2010 training?

Epic – Far exceeds wildest hopes

Solid – Building momentum daily

Passing – Okay but work to do

Downer – New subject, please

Critical – Season on life support

If you can't clearly and honestly answer a/b above, you could be suffering from MCAS (motivationally challenged athlete syndrome). This is no joke. It's a real condition that typically incubates immediately following the end of the previous racing season and then really shows up in January and February.

Here are the symptoms:

- Inability to lock in on a goal; feel scattered and uninspired about season's focus
- Inexplicable lack of will to follow through on desired level of training base build-up
- Growing anxiety that with each passing day time is running out to get race fit
- Exuding an increasingly negative

energy about expectations for upcoming season

If you've got some (or all) of the symptoms, don't beat yourself up or dwell on it. The fact is, all of us who race long enough, including the best athletes in the world, will battle through bouts of MCAS. The important thing is to admit it and take quick action now since it is a progressive condition that only gets tougher to beat the longer it festers. Don't let it derail your whole season.

Forget trying to figure out what's gone wrong. We could dig and dig for the reasons behind your slow start but does it really matter? Sometimes our thoughts only get in the way and make things worse. Right now you need to stop thinking about what's wrong and just admit you've broken the first commandment of endurance training: Thou shall have outstanding training habits.

Your #1 objective right now should be getting your good physical habits back. Don't worry about getting in shape. In fact, don't even evaluate your fitness, forget about it. Instead, put all your eggs into one basket: just getting your butt out the door. Since your ability to do that has been a little shaky, let's really change things up with a very specific and doable goal – the 15 Day Challenge.

For the next 15 days, starting

tomorrow morning, you're going to commit to doing two training sessions every day. As daunting as that sounds, here's the deal that makes it so doable. During the 15 day period, forget everything you know about what constitutes a workout to you. Your only goal is to complete two sessions of at least 15-minutes each, one in the AM and one in the PM. That's it. Just make sure there's a sizeable time gap between each session (before and after work). Some people will be tempted to dismiss the power of a plan with only 15-minute sessions. That would be a mistake. As simple as it sounds, it's going to be a lot more challenging than you think. But if you can pull it off, the rewards will be monumental with lots of firsts. First clear and concise training goal you've set this year, and probably, the first goal of the year you've achieved. That's huge... to get your first big win of the year. Secondly, there's no way you can manage completing 30 sessions in 15 days without transforming your daily habits to another stratosphere. The biggest shock might be how much you physically transform in such a short time. Doing shorter sessions you'll go faster and start feeling snappy, looser, and more efficient.

You'll even gain endurance and find yourself naturally wanting to go longer in some sessions. That's totally fine. Just make sure that no individual session is so long or hard that it prevents you

15 Day Challenge Planner

1	AM	2	AM	3	AM	4	AM	5	AM
	PM		PM		PM		PM		PM
6	AM	7	AM	8	AM	9	AM	10	AM
	PM		PM		PM		PM		PM
11	AM	12	AM	13	AM	14	AM	15	AM
	PM		PM		PM		PM		PM

from doing the next session later that day or the next morning. Along the way, shut off the voice of what's normal. Don't fall back into pace or distance based goals. Forget about mph, average speed, distance, heart rate or any other measuring unit. It's just go at least 15 minutes, twice a day, for 15 straight days, with no exceptions.

Two last things to help you along the way. You can do most any form of exercise in your session. That includes running, swimming, cycling, XC skiing, weight training, yoga or intensive stretching. Also, to make it real, use the chart on the opposite page to record each activity and the number of minutes immediately following each session. Pull off all 30 sessions in 15 days, that's your only goal. Do it and see the transformation that takes place. Good luck and let me know how it goes – your before and after. Email me with the subject: 15 day plan, to ts@tonyschiller.com. **HN**

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Check out the article on page 70 for more information or go to [www.hammernutrition.com/buck\\$](http://www.hammernutrition.com/buck$)



"Keep up the focus and valued commitment as you continue to provide stellar quality products." - Susan D.

Grassroots

BY CARLOS DIEGO CADAVID

GRASSROOTS . . . It's a word commonly used in the sports world referring to beginners, specifically young beginners. Originally the meaning pertained to the “common people” or “rural people” that were not part of the “elite”.

There's a small town, outside of Colombia's capital, Bogotá, called Cota. In this small, poor town there is a group of people that organizes a mountain bike school for the local kids every weekend; kids ranging from 6 to 12 years in age. It's an odd scene in the morning, watching these kids arrive on foot, not on their bikes or in their parents' car . . . you see, these kids don't own bikes. Their parents, in most cases, have an income of about \$300 dollars a month and can barely pay their bills.

These kids ride on loaned bikes, owned by the local Town Hall. Their helmets are also loaners . . . talk about



grassroots! Only the kids with the best grades and kids that keep out of trouble get to hop on these objects of desire.

Their coach, a local who does this pro bono, encourages them around a small track with bumps and turns. He then takes them up a climb where being out of breath is out of the question and getting to the top first means that they get to choose their bike first next weekend.

Recently, HAMMER NUTRITION became involved with this project, giving these kids water bottles, HEED, and a gel packet every weekend in the hopes of maximizing their experience and aiding their developing bodies to perform better during workouts. Maybe one of these kids will turn out to be a champion, but most likely they will either be average riders or not ride at all, so the investment made is not going to be measured in podium finishes or magazine coverage, but rather in smiles and the overwhelming gratitude that these kids have for a group of “gringos” that help them out . . . and that is what I call grassroots!

Thank you HAMMER NUTRITION! **HN**



Tyler Livesay trains at the MotoE Performance Facility in Haines City, Florida. Photo: courtesy of Robb Beams



The benefits of **STRENGTH TRAINING** and how to incorporate it into your weekly training - PART 2

BY ROBB BEAMS

In the last article we discussed the benefits of strength training and how to apply into your weekly program based on where you are at within your racing schedule. If you haven't had a chance to read that article, please take a moment and do so before reading any further to ensure that the below concepts are applicable.

Let's take a look at how to incorporate strength training into your weekly training regimen. The first variable to look at is where you are at in your race season (NOTE: Periodization was discussed in the how to create championship speed in 2010 article a few months back).

If it is early in the season, your focus is to prepare your body for the upcoming demands of your pre-competitive season (low priority racing). During this time frame, you are also looking to enhance your aerobic function, so to keep the stress from becoming excessive, the amount of weight is kept to a moderate level and to three workout sessions a week. During the competitive racing season, the strength component of your program needs to be reduced to two sessions (along with a reduction in the amount of weight by 10-20%) during the week to allow for ample rest for high intensity training on the motorcycle and weekend competition.

It is important to take the time and evaluate the weaknesses of your current fitness through regular field testing. As racers, we tend to work on the elements that we like to do and usually are very good at. However, to complete yourself as a top racer, you have to identify your weaknesses and address these variables specifically. With our racers, we have pre-determined field testing dates (ideally 6 weeks apart) to evaluate if the training programs we are implementing on a weekly basis are addressing the identified weaknesses of the

racers. So if your field testing results show that you are not lacking in the area of strength, your workout program in the gym will be different than a racer who lacks overall physical strength.

ASSESSMENT

The subject of strength assessment has had a lot of varying opinions on what is the correct format to assess strength as it relates to racing. At Motoendurance.net, we incorporate two elements into the assessment equation: track specific and gym specific load levels (which will be discussed in the next issue). Please keep in mind that the implementations of testing protocols are established based on the individual racer and his or her backgrounds, age and racing capabilities. The following outline is merely an example of what can be used for assessment purposes. Feel free to contact Robb (407.701.7586) to discuss the appropriate assessment model for you and your program.

Track Assessment

- Warm up on the motorcycle by free riding for 15 to 20 minutes – very low intensity
- Stretch passively for 10 – 15 minutes from head to toe
- Ride the motorcycle for another 10 minutes – free ride / low intensity
- Complete the following testing protocol: Complete with a start from the starting gate, complete two laps (based on two minute lap times – adjust your lap count to complete a 4 to 5 minute interval) around the track taking the non-

smooth lines of the track. Strive to hit the same non-smooth lines of the track each lap. Capture your lap time for both laps and then take the average of the two laps.

- Rest for 3 Minutes
- Repeat the same protocol until you have completed six (6) work/rest cycles and have captured the average lap time for each interval.
- Ride the motorcycle for another 10 minutes – free ride / low intensity
- Stretch passively for 10 – 15 minutes from head to toe

Interpreting the track results

Compare the average times from the two lap intervals and subtract the slowest from the fastest to determine the time deviation. If the racer was consistent and took the non-smooth line throughout the track, then the testing

data is going to provide a solid picture of strength.

As a general rule of evaluation: 5 seconds or more deviation – strength needs to be a high focus in the gym 3-4 second deviation – strength is a weakness in the racers program 1-2 second deviation – strength levels are strong and need to be maintained

The key point of evaluation is that it takes muscular strength to put the bike where it is not optimal (i.e. the fastest line) and where momentum is not doing most of the work for the racer. Think about your effort level when you don't get the holeshoot and you are taking non ideal lines to move up through the field. Your heart rate is high and the demands on the muscles are at the highest point. Remember, our goal with strength training is to enhance your overall strength levels and then be able to maintain that output of power for longer periods of time.

Remember, all physical training is a supplement to riding your motorcycle- nothing replaces seat time. The concept behind off the motorcycle cross training is to prepare your body to perform at a higher level for longer periods of time while reducing fatigue and potential injury. In the next issue, we will outline how to address your identified weaknesses from this assessment and how to eliminate them with cross training off of the track. **HN**

TAKE YOUR SUPPLEMENTS WITH GRAPEFRUITS OR GRAPEFRUIT JUICE

Courtesy of Dr. Bill: I know of no reason to limit the use of grapefruit juice with any Hammer Nutrition supplements. Here is why: Grapefruit juice increases the absorption, bioavailability, and potency of nutrients due to the bergamottin content of grapefruit temporarily blocking some types of Cytochrome P-450 enzymes (especially CYP3A4 enzyme) in the gastrointestinal tract. Like all Cytochrome P-450 enzymes, CYP3A4 is responsible for the (phase I) detoxification of various substances in the intestines and liver. This inhibitory effect of grapefruit juice may last for up to 48 hours after ingestion.

Conclusion: In my opinion, the effect of grapefruit or grapefruit juice is positive, favoring nutrient potency effects in human metabolism.



Tyler Livesay puts his strength training to work on the track in preparation for the AMA East Coast Supercross Series. Photo: courtesy of Robb Beams

"The HEED just seems to work like magic!" - Debbie H.

Brian Frank visits with a park ranger during a ride through the scenic Saguaro National Park outside of Tucson during the January Hammer Camp. Photo: Vince Arnone



Hot Tip - Brian's favorite instant recovery drink:

1 scoop of Vanilla Hammer Whey in equal parts rice milk and fresh squeezed orange juice (usually 3-4 ounces of each).

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ACCUMOTO Racing - Mark White

BY DUSTIN PHILLIPS



For anyone who has had the opportunity to meet Brian Frank or even speak with him, it usually does not take long for his affection of racing in all forms to make it into the subject matter. So holding true to form a few years back, he was introduced to Mark White, owner of Accumoto Motosports, and with the two of them driven by the same principals, it was a match.

Hammer Nutrition has now stepped up to support Mark's racing team. While race car drivers are not often viewed as athletes, anyone who has seriously driven will beg to differ. The conditions inside the car easily reach over 120 degrees F, and coupled with layers of fire resistant clothing, it's equivalent to running a marathon in the hottest part of the country. Sustain that for 2.5 hours while reaching high speeds and

maintaining ones focus and any driver will be looking for ways to keep their body functioning at its full potential; that is where Hammer Nutrition and Accumoto have paired up.

Keep up with the latest racing news and Hammer Nutrition at Mark's web page:

www.gomarkwhite.com

HN



Training Partners

Best friends and "man's best friend"

BY SUZY DEGAZON

At the moment, Hammer (my mini pin), is my number one training partner. He is way faster than I am; guess that's because he has four legs and I only have two! But he does a mean mile and loves running the trails. It doesn't matter if it is raining or sunny, all Hammer wants to do is run with his ears pinned to his face! Every now and again he glances back to make sure I am still running. It can get quite comical as he is so loyal. On the really steep hills, I will rest at the top and he will flop onto my Brooks Cascadias with his eyes wide and his ears high, wondering why we have stopped to look at the view.

Regardless of his "mans best friend" status, he is one of my favorite running partners; we even do interval training together where I will run 50 yards and then I shout to him and we race to the 100 yard mark . . . drat, he always wins, but one day I will beat him and I will be faster at my next 5K run, that's for sure.

Last week it rained non stop for five days. I decided that I did not want to run in torrential rain but Hammer had other ideas; after circling me with his leash, I ended up running a very wet six miles with Hammer charging full throttle at sub-seven minute miles. I probably could have been arrested for animal abuse as we were the ONLY ones running in thunder but I felt like a child every time I splashed through a huge puddle, rain soaking my face, teeth chattering, and all the time Hammer looked like a lead dog from a sled in Alaska! He was on a mission, running and enjoying every moment!

Of course Hammer is not my only training partner. I have a few friends who, excuse the pun, like to drop the Hammer! These are



Suzy, second from left, and 3 of her 2-legged training partners; Tammy, Susan, and Jodi.

friends that will climb for 20 miles, pushing each other on different grades but, more importantly, share the pain of the ride, the sweat, and hard work required to get to the top of the climb. We motivate each other and no one gets left behind. We all regroup or go back down the climb to stay with our friends. That's the beauty of training partners, they motivate you even on the days when you lack enthusiasm!

I always take extra Hammer Gels and Endurolytes to let my friends try them on our rides. As we sweat and toil over the climb, or go anaerobic on a sprint to a city limit, we are using each others energy to get fitter and stronger. It is okay not to be the fastest and have to work hard to catch up; it gives you that push that we sometimes need to do interval training.

There are days when solitary training is appropriate but training with friends who are slightly faster certainly helps. Then there are days when a long ride or run is scheduled and it is much easier to cycle for six hours with good company or run for four hours with friends to chatter with instead of going solo. Sharing training, being social, and enjoying life make it truly great to be an athlete!

So the best thing you can do if you have a dog that loves to run is to teach him to run with you; you will not be sorry, they really do make incredible running partners, although you must remember to take extra water and look after their paws! With friends, once you have a circle of good riding or running partners they will make you a better athlete, as long as you all agree on when to go hard or when to have a group ride. There is no benefit by trying to prove you are the Queen Bee unless, of course, you are called Hammer! **HN**



KEEP SONI-PURE WITHIN ARMS REACH

Soni-Pure hand sanitizer is once again back in the Hammer Nutrition product line, and it really is a uniquely phenomenal product. If you haven't tried it, you really must! Soni-Pure is petroleum-free and alcohol-free so, unlike typical hand sanitizers, it won't dry your skin or expose you to harsh chemicals. What it will do is provide an effective defense against germs and bacteria. In fact, Soni-Pure has been shown to kill aerobic bacteria, yeast, mold, and fungi 100% for up to eight hours . . . that's right – 8 HOURS! Plus, it doesn't have that awful chemically odor; in fact, Soni-Pure smells downright pleasant!

With all of the benefits attributed to Soni-Pure, it's no wonder that many people have made it a habit to keep a container in their vehicle at all times, ready to use at a moment's notice. And when you think about it, given the countless opportunities to be exposed to germs and bacteria, there are equally countless times when Soni-Pure not only comes in handy, it's a definite necessity. A 2-ounce foam-pump container of Soni-Pure is quite compact, so it'll easily fit into the center console or glove compartment of your car, pick-up, or van. It's super easy to apply but without the mess that can occur when using more liquid-y/gel-like hand sanitizers. At \$9.95 a bottle, it's a small investment to help defend against germs and bacteria, so keep a bottle of Soni-Pure in your vehicle. You'll be glad that you did!

"Soni-Pure is the best hand sanitizer I have found. It doesn't dry out your skin, lasts up to 8 hours, and smells great. I keep a container in my car and use it whenever I get done grocery shopping or any other activity that involves touching a lot of things in a public place."
- Andy Schultz



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"You guys rock . . . Hammer rules! Looking forward to another great season fueling with the Hammer!" - Jason H.

I'm a Hammer Athlete

Ursula Grobler-James

Sport: Rowing > Lightweight Double

Hammer Athlete since: Dec. 2008

Goal: Gold, London 2012

Place of Birth: Pretoria, South Africa

Current Hometown: Lake Stevens, WA

Ursula Grobler moved to Seattle, WA, from South Africa after completing her BA in Information Design at the University of Pretoria. In Seattle, she learned to row and while success on the beginner level of rowing came quickly, it was not until Ursula started being coached by Carlos Dinares, who also moved to Seattle from Barcelona, Spain, that her potential was realized.

Ursula recently won the Championship Women's Single event in the prestigious Head of the Charles Regatta in Boston. She won at the Royal Canadian Regatta by an astounding 20 seconds and in June she rowed in the Lightweight Doubles event in the Banyoles World Cup, Spain placing second, showing her versatility in competing both in lightweight and open weight categories.

She continues to train with Carlos Dinares in Seattle with support from the University of Washington's Training Center and the US Rowing National Team coaches. She works part-time at Anytime Fitness and is a well-known member in her community. She also established her own graphic design company called Grobler & James Design House, LLC.

Her goal is to represent the USA in the London Olympic Games. She moved to Seattle in 2003 and is honoured to compete for a nation that has granted her a home.



*Hiking Chuch Hill in Bellingham, Washington with Mount Baker in the background.
Photo: Carlos Dinares*

What is your favorite thing about rowing?

I love the combination of power and endurance. I love the outdoor component and the gliding on the water. I love the technical components and fitness required to perform. I love that it is so hard and needs so much training and dedication to get just a few strokes right. I love the pressure to perform. I love the challenge to get 250 strokes all perfect.

How long have you been rowing?

I started with a "learn to row" class at Greenlake for four months in 2003. But then didn't row again until 2005,

and that was recreationally. I started training seriously when I met Carlos in 2007. So I want to say I really started training and rowing in 2007.

Why Hammer Nutrition?

Hammer Nutrition is first a clean product. Nothing added because it's a cheaper option, like corn syrup! That was so important to me. Hammer Nutrition makes sense; meaning the research is there and the guys are living the lifestyle, the adventures, and looking at how to be better in our sport. How we can recover better to keep going. Since rowing is partly an endurance sport, this is exactly what I needed. I love the

Recoverite! What an amazing product. Since becoming a Hammer athlete, the advise and support from Dustin has been commendable, and I really feel so confident when training and approaching my goal to have Hammer in my camp! I'm honoured actually!

How has Hammer Nutrition helped you?

Hammer has helped me maintain, improve, and come back from some of the toughest workouts. Hammer Nutrition has added the protein and recovery I need to win! Also, my class is lightweight, so I also pay careful attention to calorie intake. Because Hammer adds nothing that doesn't need to be in the product, the calories are lower than other sport supplement products. When I travelled to Spain for six months of training, Hammer shipped me everything that I needed to take with me and it made training with unfamiliar foods around me very sustainable; I had my Hammer Bars and protein to make my shakes and things I knew and trusted. It will make competing internationally in the future much easier.

What is your most memorable experience with rowing?

There is not one moment. Rather as you say, an experience that I'm looking for every time I row. It's that experience when you are really moving the boat or the erg, and it feels so natural, easy in a way. Efficient. And you are completely in the gliding moment. The experience of being one with the boat!

What is the hardest thing about rowing?

Having the ability to change or adjust to what's happening in the boat. Having the skill to feel the boat and feel when things are not moving the boat and what you need to change to not waste any efforts on things that don't produce speed.

What is something people don't know about you (that you feel comfortable with sharing)?

I lost my brother, Malcolm, to suicide right at the time I was about to buy my first rowing boat. I almost cancelled the order and stopped rowing altogether but Malcolm was also very athletic and I knew to continue on with his spirit, I had to keep rowing. **HN**



After winning the championship single at the Royal Canadian Henley.
Photo: courtesy of Ursula Grobler-James

HIGHLIGHTS

- 2009 Head of the Charles Champ Single - Gold
- 2009 Royal Canadian Henley Single - Gold
- 2009 Rowing World Cup 1 Double - Silver
- 2009 Memorial Paolo d'Aloja Double - Gold
- 2009 Spanish Erg Championship - Gold
- 2009 FISA Team Cup 1000m Single - Gold
- 2008 Canadian Henley Senior Single - Gold
- 2008 US National Elite Champs Single - Gold

Keep up with Ursula and her dream of Olympic gold at www.groblerjames.com



Photo courtesy: Matt Lacey

World Record Broken

Ursula Grobler, 29, of UW Training Center, rowing as a lightweight, now holds the *World Record for Lightweight Women 19-29* with a time of 6:54.7.

January 30, 2010

The annual Northwest Indoor Rowing Competition took place in Seattle, WA at the Seattle University Connelly Hall. The competitors range grows larger each year, with not just rowers going for the hammer, but firefighters and the growing crossfit community.

With an hour delay, Ursula stepped on the floor ready for her event, the Lightweight Women 2000m. The starter didn't wait long to set the screen to start the countdown: ATTENTION, READY, ROW!

Ursula was determined to execute the race plan discussed with coach Carlos Dinares. She broke the world record with a time of 6:54.7. The previous record was held by USA rower, Lisa Schlenker, 6:56.7. This qualifies Ursula to compete at the C.R.A.S.H.-B. I World Indoor Rowing Championship in Boston on the 14th of February 2010. The qualifying time for Lightweight Women posted by Concept 2 is 7:12.2. Ursula will attempt to break her own record again in Boston.



What's That Smell?

We recently received an email from a client who expressed concern about the smell of the last issue of this magazine. Since we highly value our clients, and take all feedback seriously, we went straight to our printer for answers. Here's what we found out . . . as is the case with every piece of print collateral we send, the Endurance News magazine is printed on recycled paper and it is the chemicals in the paper that cause the smell. How do we remedy it? . . . we have talked at length with our printer and are currently looking into different paper options. Though it was too late to change our order for this issue, we expect to make a change for the May issue of Endurance News.



Jim O'Neal Takes Baja . . . Again!

BY DUSTIN PHILLIPS

With over 340 entries, the race, which began in Ensenada, Mexico, was witnessed by nearly 250,000 spectators along the treacherous course. Filled with massive elevation changes, rugged terrain, brutal conditions, and deadly booby traps, this race is only intended for those with the finest skills and conditioning.

The class 50 team, led by Jim O'Neal, spent months preparing for this enormous event. Fine-tuning every detail from equipment to night riding and training, this team was leaving nothing to chance. The team featured some of America's greatest racers: Andy Kirker, Dan Dawson, Jeff Kaplan, Craig Adams, Tim Withers, and Eric McKenna all joined Jim O'Neal in this quest for victory.

When the dust settled, the task was completed successfully once again! This 50 team not only won their class and finished an amazing 10th overall, they also earned the class championship title for the 2009 Baja racing series, having won the Baja 250, the Baja 500 as well as this Baja 1000 event.

Jim O'Neal, the team's rider of record, now enjoys 14 Baja Championship titles as well as 9 Baja 1000 race wins! To date, Jim is now the motorcycle racer with the single most Baja wins in history! **HN**



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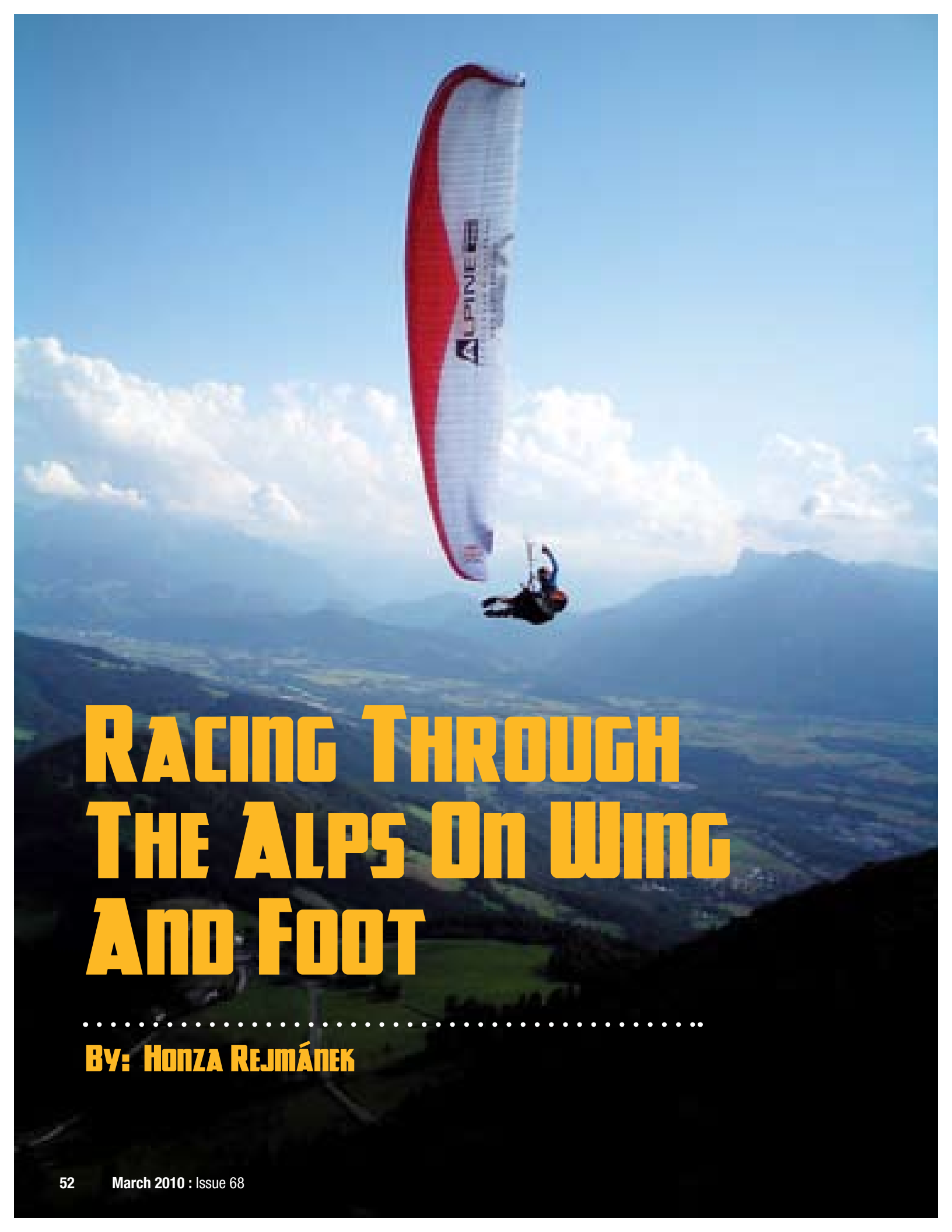
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RACING THROUGH THE ALPS ON WING AND FOOT

.....
By: HONZA REJMÁNEK

With Aidan of United Kingdom on the move and Evgeny of Russia suddenly appearing on the horizon I knew the final 22 hours of this 13 day race would be full battle mode. I would need to use every trick in the book that I had learned over the last 16 years of paragliding. In addition I knew I might need a bit of magic as well. Christian and Alex of Switzerland had locked in their first and second places at the podium. Who would stand next to these two legends was far from certain less than a day before the end of the 2009 X-Alps.

The Red Bull X-Alps began in 2003 and takes place every two years. The rules are intentionally simple. They state that you either fly or carry your paragliding kit across the Alps around given turn points that vary each two years, but have always included Mt Blanc, and have Monaco as a goal. As the crow flies it is a distance of over 500 miles. On a perfect day paragliding cross country flights of over 100 miles are possible but even a 50 mile flight is a great accomplishment given the fact that most of the route is westward against the prevailing wind. To cover even 50 miles straight line over such mountainous terrain on foot could take two days so a good flight can signify a huge leap in position amongst the 30 international competitors. The race goes on 24 hours a day, and each athlete determines their route, what weather conditions they feel they can safely fly in, and the amount of sleep they need to stay sharp enough to fly well. There are no required stops. Flying is not allowed after sunset or before sunrise. Otherwise, each competitor decides when and where to fly or hike or run. It is perfectly within the rules to land on the side of a mountain at any time and hike up and over a ridge, or just wait for the shade to pass and the thermals to get good again for flying. To keep things interesting, at the back of the field there is an elimination rule. Seventy two hours after the race begins, and each 48 hours thereafter, the competitor in last position is cut. A competitor can quit the race at any time they wish but it is usually an injury, due to overuse or hard landing, which leads to this decision. Each competitor has a supporter that follows him in a vehicle. The supporter plays a crucial role by providing meals, maps, weather and tactical planning support. The supporter can even hike up to launch with the competitor and carry water, food and clothes but the competitor always has to carry his flying and positioning/tracking equipment, approximately 25lb. The vehicle when parked serves as a welcome refuge from the elements. It is a place to sleep, eat, and take care of the feet. Last but not least, airspace violations lead to immediate

disqualification from the race. The position of every competitor is live cast to a website in real time and the event has an online audience of approximately half a million spectators. The race ends 48 hours after the first competitor makes goal.

I got my first chance to compete in the X-Alps in 2007. My supporter was Dave Hanning. I was in good physical shape but unfortunately I managed to eat something that gave me food poisoning the day before the race. Loosing a full day right at the start had me fearing the elimination rule but thanks to a decent 30 mile flight on day three, I was able to stay in the game. As I recovered from my illness I started to regain my strength and began passing other competitors. By the end of the race on day 17, Monaco still remained 90 miles away but I had managed to secure 9th place. With the allure of flying the whole route all the way to Monaco, and the determination to pay more attention to what I eat, I began to plan for the 2009 X-Alps. I also knew that what is applicable in life is even more applicable in the X-Alps, this is to; "Expect the Unexpected". In this great game there is so much that can possibly go wrong, and so many ways the body can fail you, it is almost certain that some competitors will suffer misfortune. As you start the race you can only hope that it will not be you, or at least that the misfortune will be relatively minor and not slow you down too much.

For the 2009 X-Alps, I knew the key was to adequately prepare for the perceivable problems. With five pairs of well broken in Inov-8 shoes, Black Diamond hiking poles, proper merino wool socks, and foot gels from Brave Soldier, I knew blisters were avoidable even despite 70km hikes on

see FLYING on page 53





FLYING from page 52

flat asphalt. Right after waking up I would eat a Hammer Bar and have some Caffe Late Perpetuem. Eating eggs and bacon for breakfast and taking my Premium Insurance Caps after an initial 5-10mile hike in the morning assured sustained energy and good mental clarity for the first half of the day. Throughout the day, flying or hiking, I drank Heed and Perpetuem, ate Hammer Bars and Gels and took the occasional Edndurolites. At night Dave, the same supporter as in 07, prepared meat and vegetables with quinoa, a grain from the Bolivian highlands. Just before going to bed I drank two cups of Reconvertite. To minimize navigational errors, we made sure we had a good collection of paper and GPS based topo maps of most of the route. Nate Scales, a friend and fellow competitor from the 07 X-Alps, was very generous and let us use his collection of maps. He also gave me his GPS, on which I glued a photo of my 5 month old son so I would have a copilot with me! I had gone running twice a week, and flying twice a month for the 6 months leading up to the event. I felt fit and was happy with my 2009 Axis Mercury paraglider. To be well rested, I halted all training two weeks prior to the start of the race.

At 11:30AM on Sunday July 19th, as the start gun went off, I felt very happy that we were finally starting after months of preparation and fund raising. I had great reserves of energy, and excitedly ran through the streets of Salzburg with the other competitors. The first day was not ideal for flying and much time was spent pounding pavement which lead to painful knee and Achilles' tendon problems later in the game. Sleep and flight are the only rest times for the legs in this approximately two week event. Fortunately weather was very flight friendly and I managed to avoid almost all downhill hiking in the following days with the exception of a 4,000 foot descent near Bolzano, Italy on day five that I hiked backwards to save my knees. It was too windy to fly. Much of the race was a battle with Aidan of England who ran a lot but I could usually outfly him. Towards the end we were fighting for third place when Evgeny of Russia gave us a good scare by catching up quickly. The second to last day sealed the podium position for me thanks to 9 flights totaling 50+ miles and tricky navigation through mountains whose peaks were in cloud. Dave was a great supporter and thanks to him we became the first and only US team in the history of the event to make the podium. We had fought a hard battle. We did well. **HN**



Acknowledgments:

We would like to thank all of the pilots and non-pilots alike who joined our US X-Alps team and all of the sponsors who donated to our fundraising raffle. We would like to extend a special thanks to Tony Lang of Landcor Properties, Axis Para, and the US Paragliding Team for their generous support. Last but certainly not least, we would like to thank Hammer Nutrition for their product sponsorship. We could not have reached the podium without you!

For a detailed account of the race, please visit:
www.honzair.com

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- Troy M.

"I just received and tried the new Huckleberry Hammer Gel flavor. Nice job! It's light and delicious. I'll be adding some to my autoship for sure. Thanks again!"

- Tiffany A.

"The Huckleberry Hammer Gel is awesome!"

- Willy Z.



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Erika Osborne at the booth with Jason Zellner.



I saw your booth at the Great Lakes Multisport Expo in Wisconsin a few weeks ago, talked with a great girl named Erika, and had to take a second to drop you guys a line and say that I am **LOVING** your energy gels! Thanks again for putting out a great low-sugar product that doesn't make me want to hurl! - Claire Erdmann

Don't Get Dropped

A message for the advanced athlete

BY BILL NICOLAI

If, like me, you are an age group athlete of advanced years, you might be tempted to ponder the end of your racing career. Perhaps you think you should not continue because older people cannot succeed in such activities. Abandon such thoughts; they will do you no good. You will be much happier and healthier if you continue or even increase your athletic endeavors. Your hard won athletic ability can yet take you great places and will provide a source of increasing pleasure as you age.

First let's look at some dismal facts; you ought to know the reality you face before you reject it. Below is a table that presents the number of participants by age range for typical endurance events: a large bicycle racing community, an Ironman Triathlon and a popular Marathon.

Age Group	OBRA cyclists	IM Coeur d'Alene	Portland Marathon
40-44	261	362	579
45-49	162	241	452
50-54	104	136	337
55-59	60	70	239
60-64	35	27	141
65-69	11	10	58
70-74	4	2	24
75-79	--	--	11
80-84	--	--	1

As you can see, the facts are not any prettier than my face, particularly if, like me, you are aging up into a 65 or higher age group. Yet, I am going to suggest that you ignore these statistics and consider your own situation. As you see from this chart, after the age of 50, each five years as you progress through the age groups, about half will get dropped; but it is only half, and half of any number greater than one can always include someone. That someone must be you until you stand alone, a pyrrhic victor in sport.

How you become an ultimate winner, not when to quit, in this war of attrition is the question. It is said that the great athlete of ancient Greece, Milo of Croton, lifted a calf every day as it grew until he could lift a full-grown bull. This is what you now have to do. The bull of old age is growing inexorably, but it grows so slowly that you can overcome it by not stopping. Every day you must continue to do the things you do now or even more and not stop. The tasks may occasionally seem difficult but as long as you keep doing them you will be able. But the day you admit to others, or especially to yourself, that you cannot keep it up, you will not.

A few years ago, after a couple decades of competing at the Wildflower Triathlon, always finishing below the middle of my age group, I finally found myself racking my bike among the

60 plus athletes. I was amazed at the whining attitude they displayed. One guy was telling me of his hamstring problems, another explained he had not trained much, a third expressed doubt about his swimming. I am saddened to report that what I was hearing that day is all too typical of what I encounter in athletes of advanced age. I suppose they were trying to be realistic or something, but I could not see their point, I also did not see them when I got up on the podium at the end of that race.

At the extraordinarily difficult Silverman iron distance triathlon, before the race I asked six-time world champion Dave Scott to autograph my T Shirt. Glancing at my eager but wrinkled visage he wrote the best possible two words of advice "No Excuses". In what turned out to be the best performance of my entire triathlon career, I won the 60 + age group that day. Sure, I was slow and the rest of my competitors DNF'd as did fully 40% of the starters. Perhaps most significantly, I finished ahead of all those guys who didn't show up.

The other day while riding with a race team, the ride leader, who is 53 years old, asked me when I planned to stop. My reply was that I do not plan on ever stopping. He agreed with me on this and admitted that is his plan as well. He explained that one of the guys had told him that he planned to stop when he was 58. I find it mystifying and tragic that someone would have such an intention. What purpose could it possibly serve? If you have reached advanced age and are still able to perform these active sports you have a very precious personal asset. But it is a perishable thing you possess; "use it or lose it" is a very real fact when it comes to endurance sports. As long as you keep going there seems to be no real reason why you cannot continue.

I personally intend to follow the example of Chuck Yeager, the first man to break the sound barrier in 1947. Last year at the age of 84 he was still performing in air shows flying supersonic jet fighters. He says: "You do what you can for as long as you can, and when you finally can't, you do the next best thing. You back up but you don't give up."

So, my view of the appalling reality demonstrated in the table that opens this article is that it illustrates a false but pervasive view that many very misguided people have come to believe. I take it as evidence of the folly of adopting the silly creed of "It's too hard" instead of the enabling belief of "I will". Some may think it is best to gracefully accept final and complete defeat and let your self get dropped while the pack rides on, but I know this does not apply to me. I'll have plenty of time for inaction when I am dead, so I intend to live until I die and I'd like to see you at the races. **HN**

Top American Moto At Dakar!

BY DUSTIN PHILLIPS

Jonah Street finishes 7th in moto division at ultra endurance event

After pulling out of last year's race with an injury, Hammer sponsored athlete, Jonah Street, found redemption this year. Two weeks of racing through some of Argentina and Chile's most difficult terrain, and some 5,600 miles later, Jonah and his crew finished the Dakar Rally.



With 14 stages and 176 motorcycle starters, Jonah not only finished, but finished 7th overall! That is comparable to a top ten at the Tour De France, only in rally terms. So, from all of us at Hammer Nutrition, congratulations Jonah, and enjoy that world famous Argentinian steak! *HN*



Jonah's nutritional arsenal included:





Does your morning ritual make you a better athlete?

BY LOWELL GREIB MSc ND CISSN

Ahhhhh, the sweet smell of freshly brewed java in the morning!

Not only a morning ritual for some but can be a highly effective (and researched) natural ergogenic aid. 1,2,7 trimethylxanthine, or caffeine, is not only extracted from the berry of the coffee plant, but is also available in tea, kola nut, yerba mate and guarana.

Caffeine is quickly absorbed by the gastrointestinal tract and generally can

be identified in the circulating blood within 15-45 minutes post consumption. Peak concentrations may be identified after an hour.

It is suggested that the mechanism of action of caffeine is multi-fold. In fact, there are at least six different neurologic and metabolic functions that caffeine may influence.

1) Because of its high lipid solubility it readily crosses the blood brain barrier, which ultimately is important for it to elicit some of its

effects. The most significant mechanism of action of caffeine in on the central nervous system (CNS) is its ability to compete with adenosine at its receptor sites. It is important to note that adenosine concentrations can quickly increase due to cellular damage. A chain reaction of cytoprotective responses occur during instances of hypoxia and ischemia (which is exactly what we are doing during prolonged bouts of exercise). By blocking the response we are able to somewhat modulate the CNS response.

2) Caffeine can also modulate the use of substrate during exercise. Research indicates that caffeine may increase the reliance on free fatty acid (FFA) use versus glycogen utilization. This effect allows for energy production from a substrate pool (FFA) that is generally massive in most athletes where glycogen exists in a finite amount.

beta-endorphin. This endogenous opioid peptide neurotransmitter is influential in eliciting analgesic effects. In fact, beta-endorphin has about 80 times the analgesic effect of morphine! Evidence suggests that by increasing these compounds during exercise one may have decreased pain perception. By decreasing pain, perceived exertion may be increased. A secondary psychotropic effect.

4) There are demonstrated effects that caffeine has on neuromuscular and/or skeletal muscular contraction. Preliminary studies suggest that increased strength and time to fatigue may be elicited by caffeine.

5) Methylxanthine can induce significant thermogenesis. The effect is recognized even in those that have habitual caffeine intake.

6) Caffeine may increase the rate of recovery. By using caffeine in conjunction with carbohydrate post exercise, it may be possible to increase the rate at which glycogen is being stored. It is hypothesized, that the effect may be as a result of increased glycogen synthase production and/or activity.

With all of this said, we need to ask ourselves whether our morning cup of black juice is doing us any favors? First off, we need to consider the method in which we are ingesting the compound...

From a pure scientific standpoint, anhydrous caffeine seems to elicit better

ergogenic effects when compared to our morning ground bean extraction. It is also important to note that those that did not have habituation to caffeine use, responded better to the compound. Non coffee drinkers may want to consider this form of supplementation.

For those of us who do drink coffee, we need to consider dose response. Virtually all data suggests that an appropriate dose of caffeine for ergogenic effects is between 3-6 mg/kg. So, for the "average" 154 pound athlete, this is a 350 mg dose (at 5 mg/kg). The caffeine content, however, in coffee varies widely depending on the type of coffee bean and its method of preparation. In general, one can expect to have 100 milligrams in a single shot of espresso or 115-175 milligrams in a cup of drip coffee. Thus, to meet the pre-competition suggested dose, one needs to drink a lot of java!!!

One common concern that is prevalent in clinical practice is the question as to whether an athlete is going to have to make a "pit stop" due to the consumption. Rest assured, this is a well researched area as well. Although there is evidence that diuresis is augmented at rest by caffeine consumption, the literature does not indicate any negative effects of sweat loss of fluid balance during exercise.

But what about doping?

Currently, the World Anti-Doping Agency does NOT consider caffeine as a prohibited substance but has it listed in its monitoring program. Be sure to check with your sport governing body before the use of ANY substance, since they may have slightly different policies (i.e. the NCAA)

Previously, WADA set a tolerance limit of 12 micrograms per milliliter urine. In order for an athlete to reach this level they would need to ingest 9-13 mg/kg caffeine approximately 1 hour before testing. Thus, in order to test positive (under the old criteria), an athlete would be utilizing almost double what the data suggests!

All in all, caffeine seems to hold merit when reviewing it as an endurance ergogenic substance. Albeit, there may be more efficient ways to increase performance, but definitely not a reason to stop enjoying my morning cup of java! **HN**



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Joe Bacal: Second At The Baja 1000

Cancer survivor goes solo in punishing race



The Tecate SCORE Baja 1000 is a big deal for the teams that run it—some teams seem to spend half of October south of the border prepping for the long race. My navigator and I pre-ran the starting section of Ensenada since the first 50 miles is complete chaos. I evaluated the surfaces and my navigator marked the danger spots on the GPS. We noted some very narrow gates and steep crests that weren't going to be much fun at speed in the big LX. We spotted a number of booby-traps being prepared by residents to maximize race-day entertainment. This is what will take you out of the race in an instance!

Early on I had committed to “Ironman” every race to show people that I had the endurance after beating cancer that anything is possible. This refers to the technique that elevated Ivan Stewart from Baja winner in buggies to worldwide off-road legend in Toyota trucks. For me, it meant that there would be no back-up driver, no relief and no getting out of the truck for the entire race.

After taking first earlier in the year at the BAJA 500 in the stock full class and being in the truck for 16 hours straight, I wanted to be better prepared on my nutrition and stamina. I have been training hard in the gym and worked closely with Penske pro driver and triathlete Carlos Velez. Since he was also a driver he knew what I would need to keep my body charged and my mind focused.

I had two intake tubes mounted in my race car. One for fresh water and the second would contain Perpetuem. I really like the taste of the Caffé Latte flavor and it fit nicely racing a Lexus. I had also several Hammer Bars and Hammer Gel when I had a moment during my pit stops. I managed to label and mark each packet for every stop in the 1000

mile race. Planning was essential and although, it may have cost me additional time to fill my camel backs I think the energy and stamina paid off. I could not believe the difference from racing the 500 vs the 1000. I was alert and focused for the entire 27 hour race. I only stepped out of the truck a few times due to some mechanical and getting hung up on a rock.

We reached speeds over 100mph at times and the dust was so thick in some areas around San Felipe that you can pretty much close your eyes and it wouldn't make a difference. My Navigator Gerald King who normally races in the Trophy Truck class knows Baja better than anyone. This is essential to get to the finish. Only half of the 300+ starters even actually finish the race. I can remember drifting the large SUV sideways through the canyons at high speeds on the Pacific side heading up the coast. This is an amazing thing to experience and you never know what you are going to face around the next bend. SCORE cannot close the 1000 mile course and this is why this race is held in Mexico. You see people in the roads, cars going the wrong way and livestock all of a sudden in your way. This is why once you do it you look at life a little bit differently afterwards.

When we finally headed down the last stretch I didn't want it to end. I still had more left! NBC Sports had mounted 2 cameras on my Lexus and when I pulled into the finish line it was crazy! We placed 2nd just behind Chad Hall and Team Hummer. We missed winning the championship for the year by under 20 points.

When it comes to endurance and focus this is considered one of the toughest off-road races in the world, dangerous definitely, exciting absolutely . . . a must do if you are a driver! **HN**

Team Hammer CMG

An up-and-coming junior development team

BY DUSTIN PHILLIPS

Last year I had the opportunity to introduce to you a junior development program that myself and Hammer were very proud to be a major supporter of. As most of you know, in the world of cycling, nothing stays static for too long. Our entire roster from last year graduated (so to speak) to the senior ranks after winning two national championships. Each of those riders were talented enough to land themselves on very strong teams ranging from Garmin Slipstream Development to Waste Mangement U-23 Race Lab.

After losing all of our riders during the off-season, there was a lot of work to be done to bring on the next group of talented junior riders for 2010. I think that Butch Martin, the director and coach, was successful in doing that! He was able to amass another pool of young talent that he can mentor and achieve the same success with as last year! Hammer again has the opportunity to team up and support the future of cycling with the best nutrition products available. **HN**



Kristo Jorgenson, Shannon Maris, Scott Caryle, Angelo Roman, Willy Zellmer, Coach Butch Martin

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Any Bike, Anywhere

The Rough Rider's way of life

BY CHRIS KOSTMAN



In the February 1993 issue of *Bicycle Guide*, I published an article called “Mountain Bikes: Who Needs Them?” which began with this hackle-raising opener:

“I routinely dust every mountain biker I encounter on the trail. And I ride a road bike.”

Speaking the truth more fully, I then hooked the readers a little more deeply by continuing thusly:

“Furthermore, I think, no, I know, the mountain bike is the most over-rated, most improperly used, most over-built, and most greedily promoted piece of hardware to hit the sport and fitness industry in modern history. Ninety-nine percent of the miles ridden by 99% of the mountain bikes could, and should, be ridden on the first and only real all terrain bike, the 'road bike.' More bluntly, a road bike is equal to or better than a mountain bike if ridden with skill like I have.”

At first, the hate mail poured in, more than for any article ever published in that magazine, with readers calling me “the most arrogant, elitist bastard I’ve ever read” and similar gems. One reader was at such a loss for words that he just sent in a fax of his hand with the middle finger raised.

But then a neat thing happened: Some readers went out and tried my premise. More letters ensued from readers who claimed they had used their road bike to set a new course record at a “mountain bike” hill climb event; others made

bigger claims, stating that their lives had been changed, for the better, forever.

Here we are eighteen years later and “Rough Riding,” as it has come to be known, is beginning to come into its own as a particular sub-category of cycling. The motto from my article - “Technique beats technology any time, anywhere.” - has been adopted by innumerable cyclists the world round who have embraced the “any bike, anywhere” ethos. The current bicycle industry, from major manufacturers to boutique frame builders, is beginning to address this niche market, creating bicycles, or even lines of bicycles, under such monikers as “All Road Bikes,” “All-Rounders,” and “Adventure Bikes.” There’s even a Wikipedia page about Rough Riding.

Rough Riding is nothing new, however: Before “mountain bikes,” cyclists routinely rode all manner of bicycles on all manner of riding surfaces. They just didn’t know any better, you might say. The oldest known mixed-surface cycling club is the Rough Stuff Fellowship, formed in the United Kingdom in 1955.

That’s not to say Rough Riding is mainstream, of course. In fact, it’s a common misconception that without the “right bike,” one simply cannot partake in the wonderful landscape of cycling opportunities. It’s time to set the record straight, though, for any bike can be taken anywhere!

This really isn’t some secret conspiracy that I am blowing

the whistle on here, for cyclists the world round take "the wrong bike into the wrong place." Just ride any century ride and you'll see innumerable mountain bikes and cross bikes being comfortably and happily put to good use in grinding out the 100 miler. (Heck, mountain bikes have even been ridden successfully in 500 mile road races like Furnace Creek 508!)

How does all this work, you ask? It's simply a case of the rider riding the bike, not the reverse. In other words, let technology work for you or just don't use the technology in the first place. Think about it: turning cranks in circles is turning cranks in circles. Whether that translates into covering terrain efficiently is entirely up to the skill and strength of the rider. With time, any rider can learn to ride any bike anywhere. The trick is just getting out there and going for it!

Bikes are the ultimate freedom tools: they let you go to more places, more easily, and more simply than any other human invention. But in today's era of high technology and equipment specialization, they can also seem incredibly limiting.

The Rough Riding philosophy can mean different things to different people. First of all, it can mean that you may not really have to shell out the bucks for a new bike because you only have a "road bike" or a "mountain bike." So this

can save you a lot of money. But if you already have both types of bikes, then you can hone your skills for either bike by using the "wrong bike" on various rides.

For example, riding skinny tyres off-pavement will hone your attentiveness, balance, coordination, handling skills, and nerve. Likewise, riding fat tyres on-road will build strength, hill climbing ability, and provide a comfy and largely bullet-proof ride. Rides that combine both environments will become a real treat, allowing you to immediately experience the cross-over benefits firsthand.

Regardless of bicycle choice, the goal of Rough Riding is to tackle any and all possible combinations of trails, fire roads, gravel roads, paved roads, singletrack, and any other possible riding surface - all within one ride, on just one bike. Perhaps the greatest beauty of Rough Riding is that any possible ride route can be created and enjoyed: Rough Riders do not choose between "road biking" and "mountain biking" and subsequently let the bicycle determine the route and terrain of any given ride. Instead, creative, "first ascent-style" rides can be strung together in one epic route which involves all manner of riding surfaces, sights, sounds, and scenes. The Rough Riding goal, perhaps? To see it all and do it all, to truly have an adventure. Try it: your life might be changed forever! **HN**



The author in 1993, from the photo shoot for his Bicycle Guide article (nothing's changed except what's in his water bottle). Photo by Bob Schenker

Chris and 99 other Rough Riders will gather in Marin County for the first ever Rough Riders Rally on July 23-25. You're invited! Info at www.XO-1.org.

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*Working hard at the Cyclocross National Championships.
Photo: Brad Lamson*

Endurance Racing

Strategies for "shorter" events - Part 1

BY RANDY PROFETA

Call me crazy, but I have an attraction to endurance events that last for 24-hours or more. No, contrary to what my close friends and family may think, this is not some masochistic tendency or some innate need to repent for past sins. Longer events allow me to race at my own pace instead of having to hammer out the laps or churn out fast miles. I also love the preparation, strategic planning, and the need to adapt quickly to changing conditions. These are all elements of any overnight event. Further, there is something mystical, even spiritual, about being alone with your thoughts on the bike at 3 AM. One of my most cherished memories was crossing Death Valley just after midnight during the Furnace Creek 508 in pure blackness and in total silence. Not a bird, frog, or bug stirred. It was an eerie yet beautiful experience. Another was racing at my first 24-Hour World Solo Championship at Whistler BC where it rained for 22 of the 24 race hours. As I trudged up a slippery, muddy slope filled with roots and rocks during the pre-dawn hours, I came across a set of bear tracks larger than my head. I was not scared although maybe I should have been. Rather, I realized at that point in my life that if I could do this, there was nothing that I could not accomplish. As mountain bike legend Chris Eatough once said about solo racing, "During a 24-hour race there is no place to hide...you come face to face with your own soul."

For me, the real suffer-fests are the shorter events: 6-, 8-, and 12-hour solo races, 100-mile off-road events like the Leadville 100, or shorter events with timed controls like Vision Quest in southern California, where riders traverse the Santa Ana Mountains and will log over 55 miles and 13,000 feet of climbing before they can earn their "Coup" feathers. Even more difficult, for me at least, are the 24-Hour team events. While it sounds counter-intuitive since racers have some down time between laps and can kick back in the pit area and relax or snooze, a 24-hour team relay is akin to doing four to six cross-country sprint races in a one-day period. If you want to be competitive, you are pinning the needle on every lap.

While the fundamentals of hydration, nutrition, supplementation, and preparation remain the same, pit strategies, caloric intake, recovery between laps, and sleep time need to be considered since there are obvious differences when compared to the all-night solo events.

As a great starting point, please refer to the Endurance Athlete's Guide to Success found in the "Free Information" section of the Hammer website as well as my previous articles on 24-Hour racing. So, unlike a 24-hour race, I will try not to cover the same ground twice. This series of articles will just focus on the differences.

Solo races from 4 to 12 hours

Yep, I hate them. Being successful doing these shorter races typically means going out a bit faster and maintaining a harder pace than when I do 24-hour gigs. It also means zero stops; I generally cruise through the pit and grab the essentials and keep on churning. Admittedly, there is not a lot of difference in my overall pace since I usually do the 12-hour events to help me prepare for my 24-hour target races, but I want to finish the race with the tank empty. Let's look at 8 to 12 hour events first, working backwards to the shorter events.

Many of the 12-hour races I have done started at either 8 or 9 AM. This means no pre race meal for me since I want to sleep in as late as I can. If I arise at 6, I am right at or even within the three-hour time limit for a pre-race meal, so I usually forego breakfast and simply continue my hydration. If I feel as though I must get something in me to satisfy my hunger, one serving of Hammer Gel about 5 to 10 minutes before start time holds me over until I am on course.

My choice for nutrition is still a mix of Perpetuem and Hammer Gel. The difference, however, is that I may take a multi-hour bottle which will last me two laps instead of doing a bottle handoff after every lap. While it does not sound like a big deal, this can save enough time to make a real difference

in the standings. My mantra has always been “keep moving”. Remember, any forward progress, regardless of how slow, is always better than none.

If my lap times are one hour, I will mix my 24-ounce Hammer Insulated bottles with three scoops of unflavored Perpetuem (390 calories) and two servings of Hammer Gel (200c) for a total of 590 calories. For a change, I will sometimes go with four scoops of the new Café Latte Perpetuem (540 calories). These two mixes will put me right in the sweet spot since, based on my weight and past experience, I need to consume about 260 calories an hour. Both of these bottles will get me around the course twice. As a backup, I always carry a 5-serving flask filled either with Hammer Gel (HG) or a paste made from Perpetuem, HG and some water.

Supplements will typically include Endurolytes, Race Caps Supreme, and Endurance Amino. About 15 minutes before the start, I will consume my typical dosage of Endurolytes (two capsules, but your dosage may vary), and add one Race Cap Supreme, and two Endurance Amino. While I may increase or decrease the Endurolyte dosage based on conditions and how I am feeling, I will repeat this dosage every hour.

Since I will sometimes continue through and not stop in the pit area, I will carry a 70-ounce hydration pack filled with enough clear water to complete two laps and allowing me to consume from 20 to 28 ounces each hour. To this, I usually add a 10-20% cushion just in case I have a mechanical, or need to stop for some other reason. So, assuming one hour lap times, I will take almost a full hydration bladder in my 70-ounce pack and either swap or refill it after every other lap. The obvious alternative is to swap packs after each lap, but I have done the math and find that I can improve my times by eliminating a pit stop altogether and coming in for a refill or a pack swap on alternating laps.

The strategy does not change much for timed events lasting from 4 to 6 hours. Here, I typically do not stop at all in the pits and carry all of my supplements in a jersey pocket or tucked inside my bike short legs just above the elastic cuff.

A coin purse or a flip-top bottle provides adequate storage for all but the most extreme conditions. I may take a larger hydration pack filled with 100 ounces of water. Another option is to have two smaller 50-ounce packs and change them, out at the half-way point. Again, this depends on average lap times.

Multi-hour bottles are typically the way I go for races lasting less than six hours. So, my Perpetuem mix for a six-hour race (a 1,500 calorie requirement) will contain 9 scoops of unflavored Perpetuem (130 x 9 = 1170 calories) and three servings of HG (300 calories) for a total of 1,470 calories. I'll stash a 5 serving flask in my jersey pocket or in my hydration pack for insurance. I will usually mix it at home with a hand mixer, a whisk, or in a blender or food processor and chill it overnight. Considering that I will be taking much smaller swigs from the bottle, it is not calculated into my hydration needs at all.

Can your bottles be frozen? No issues here, except multi-hour bottles seem to take longer to thaw. I can offer no quantitative data to support this, but I have competed in a few events when I was trying to coax a slushy mix of Perpetuem and HG out of a still-frozen bottle for a few hours. Luckily my backup flask of HG was not in a solid state.

While it is always nice to have a cheering section, four and six hour events can be done unsupported as well. Granted, I have done 12 hour solo events literally “solo” as well, but the planning changes again. Preparing and mixing all of your nutritional water bottles well in advance is not just a luxury, it is essential. The beauty of Hammer products is that the products can be mixed to virtually any caloric yield point you require so the products can handle all of your nutritional needs. Simply mix several multi-hour bottles in advance and stash them in an ice chest (also known as a “freezer” chest in the northeast). I will calculate my needs and prepare enough bottles and hydration packs for the event and tuck them away in a well chilled ice (freezer) chest.

Next issue: 50 and 100-mile events and competing on a 24-hour relay team. **HN**

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Totally Immersed In Life

The enduring approach

BY SHANE EVERSFIELD

For many of us, the endurance athlete lifestyle extends well beyond our workouts. Over the months and years, we discover ways that training enhances other areas of our lives. This “carryover process” begins as we realize how much impact the approach we use has on the quality of our workouts: With a carefully constructed approach, we can enjoy a more fulfilling experience during our training sessions and feel the residual of that fulfillment for sometime afterward. We discover that a brilliant approach empowers the capacity to produce breakthrough performances without the risk of injury, burnout and illness often associated with such efforts.

So, what is this thing called approach? Most obviously, approach includes the process of preparing for a training session. One of the most vital preparations is nutrition. Hammer Nutrition has the very best range of fuels and supplements, and can provide the most extensive body of knowledge on nutrition - available in this fine publication, on our website, and through our customer service reps by phone and e-mail.

Preparation also includes designing and sequencing workouts that address your abilities and goals and respond to the given weather conditions, as well as intelligent equipment and clothing choices.

All of the preparations we have examined so far are tangible and measurable, but our approach goes well beyond even the most meticulous attention to these preparations. How about our mental and emotional preparation? The process of “constructing” a mindful approach to training that addresses our physical, mental and emotional state is a key element in the ancient practices of yoga, meditation, and T'ai Chi; and it is a central theme in contemporary branded approaches to endurance sports like Total Immersion Swimming and Chi Running. The process of constructing a mindful approach can transform your endurance training sessions into a life practice - an ongoing form of training that enhances not only your athletic fitness, but your life fitness or spiritual fitness as well.

What constitutes this mindful approach? Your state of mind, heart and body together determine the quality of your mindful approach to any specific task or relationship. This body/heart/mind state just prior to and throughout a training session is perhaps the most significant factor determining the quality of your experience. A relaxed, supple and sensitive body that is adequately rested and fueled is essential for brilliant technique and proficiency. Equally important, a quiet, curious, alert and attentive mind is just as essential for brilliant technique and graceful

movement, as is a grateful and joyous heart. Identify the qualities of body, heart and mind that most enhance your training and racing experiences and strive to enact those each time you train.

As a Total Immersion Swim Coach, here is a bit of advise I offer to all of my clients: Approach each training session as if it is the first time ever that you will engage in this activity. Take nothing for granted. In Buddhism, this is called “beginner’s mind”. It assures a fresh start for each session. At the same time, approach each training session as if it is the very last time you will ever have the opportunity - indeed the privilege - to engage in training.

Privilege? Consider this: Less than one-tenth of one percent of the world’s population has the health, wealth and political and cultural freedom to enjoy the opportunities we have as athletes. It is indeed a privilege to train and study movement as an endurance athlete - to enjoy the physical, mental, emotional and spiritual benefits such a lifestyle affords.

The quality of your movements as you train have a tremendous impact on your brain and your mental state. I discovered this in a striking way: I practice T'ai Chi daily. Using a book briefly in the beginning to “estimate the basics”, I have continued to practice and refine the movements on my own for over 30 years

now. Primary guidance comes from a diligent quest for perfect balance and orientation - a deep challenge, as I move very slowly through the movements, often with my eyes closed. After the first 8 years, I happened to read a book about Taoism, an ancient Chinese way of life inextricably linked to T'ai chi. Not really a religion, or a philosophy, "Tao" translates simply as "the Way". Engaging an inquisitive "beginner's mind", the disciple embarks on a lifelong quest to investigate functional principles of our universe and to diligently train their application. Taoism is a way of perceiving, responding to and moving through the world around us.

As I read this book on Taoism, I realized that I was... well, Taoist. This didn't happen from reading ancient texts or from living in a remote Chinese village with Taoist sages. (Heck, I was a young hippy-artist living in the northeast US.) The Tao transformation of my mind occurred through the movements of T'ai chi. Taoism is intrinsic to the way I think, perceive and respond - to the way I live.

The greatest value I get from my lifestyle as a long course age group triathlete is the daily practice of constructing my approach to each training session. Over the years, this daily familiarity with the practice of constructing my approach towards athletic training sessions has inspired me to use the same practice with every task and every relationship of my life. It is, for me, a form of prayer. When I am successful in my approach, I am completely engaged, totally immersed and empowered with brilliance in every activity. Every day, I am grateful for the privilege to train and to live this way! **HN**

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Sign scenery in Tucson. Photo: Vince Arnone

"Great products and great results! Excellent customer service!" - Shawn H.



A self-portrait on Aconcagua. Photo: Steve Delellis

A Summit Success!

BY STEVE DELELLIS

Here is a quick self-portrait on the approach to the summit of Cerro Aconcagua. Our expedition began 20-strong, but on summit day (January 18th) only 6 of us made the final push. Unfortunately, Acute Mountain Sickness, High Altitude Pulmonary Edema (HAPE), High Altitude Cerebral Edema (HACE), a spontaneous retinal detachment, an acute Gout flare and several cases of pneumonia made it possible for only a handful of us to reach the summit.

I really believe consistency was essential. I attempted to stay as well hydrated and nourished on the mountain as I did in training (My training consisted of lots of endurance training - running, hiking with loads up to 60 lbs, and participating in several local races to keep me honest). I really believe that was key, since loss-of-appetite is common at altitude. I believe it was a matter of discipline; not eating because you don't feel hungry is a recipe for disaster.

Furthermore, I believe that supplementing a consistent diet with the same "fuel" I used in training was essential. Besides the additional calories and carbohydrates recommended by my nutritionist, I maintained my daily "Hammer Ritual". Mornings were fueled with 2 Race Caps Supremes accompanied with the first water bottle filled with a combo of Perpetuem and raspberry Hammer Gel. I took Mito Caps with each meal, ate an occasional Hammer Bar (which never became too hard to eat, despite 27 degree-below-zero temps) and downed a packet of Hammer Gel

whenever it seemed like a good idea.

Finally, I tried to remain as vigilant to recovery as I did to the day's events. There were days when the low temperatures or blowing snow made it difficult to get in a good stretch of my legs after a day of hiking or climbing. Nevertheless, I always finished the days hike or climb with a full water bottle of Recoverite before eating any solid food. There were several nights that I rubbed down my thighs and calves with Hammer Balm before crawling into my sleeping bag. I never woke to sore muscles and never felt like I needed more rest, despite the fitful sleep that is common at higher altitudes.



Summit day began very early and very cold. We woke at 3:30am to prepare for a 5:30 start up the nearly 4000 vertical feet to the summit. Again, prior planning helped me use my time wisely. I had prepped my first water bottle with the usual Perpetuem and Hammer Gel mixture so all I would have to do was add warm water as soon as I arose. Both pockets of my parka were loaded with Hammer Bars and Hammer Gel for the summit push. I added HEED to my thermos for a little extra boost at the summit. After a bowl of hot oatmeal and a large cup of coffee, it was time to head up.

While the weather was miserably cold and the wind blowing in excess of 35 knots, we managed to summit in 9 hours...a full day by any account. The summit push should've only taken 6 hours, and we allotted an additional 2-3 hours for the descent. Unfortunately, the delay caused us to be on the worst part of the mountain as the afternoon storms rolled in. We were faced with near white-out conditions with visibility less than 20 meters and well over a foot of fresh snow on the ground as we descended to high camp. My day's nutrition consisted of 4 Hammer Bars, 6 Hammer Gel packets, a water bottle of Perpetuem with Hammer Gel and a warm thermos of HEED. Suffice it to say that the complex carbohydrates gleaned from Hammer Nutrition supplements alone were adequate to get the job done!

The benefits I've gleaned from Hammer supplements in training are obvious. The remarkable part was how well they sustained me, nearly exclusively, during the extremes of a grueling endurance event.

Thanks for a great assortment of products!

NOTE FROM STEVE BORN: One of our Endurance List members wrote in reply to Steve D's original post saying, "Congratulations on your achievement, Steve. Reaching the highest point on this continent is remarkable and is a major goal for the ones of us that love the mountains. I experienced a similar feeling when I summited Pico de Orizaba twice." Another Endurance List member wrote in and said, "Way to go! Three of us got to 13,000' on our mountain bikes some years ago before an early storm forced us down . . . but it was still an amazing experience. Anyone who gets to spend time on that mountain is fortunate to be alive." Another list member added, "Congratulations on summiting that mountain. That is a very big deal!!"

*All of us at Hammer Nutrition couldn't agree more. Congratulations on your awe-inspiring accomplishment, Steve, and for the great feedback on how the Hammer products helped you achieve this incredible feat! **HN***

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Standing on the summit! Photo: courtesy of Steve Delellis



Loaded up to head up. Photo: courtesy of Steve Delellis



"I cannot believe the difference in how I recover, how I ride, and most importantly, how I feel!" - David C.

Hammerbuck\$

More opportunities in 2010 to turn race day into **payday!**

BY STEVE BORN



As mentioned in the previous edition of *Endurance News*, due to the overwhelming success of the Hammerbuck\$ program in 2008 and 2009, we're increasing the number of Hammerbuck\$-eligible events in 2010. That means more opportunities for you to earn cash or credit! What we've done is create three separate tiers of events, each with their own specific payouts. You can see how it breaks down in the column to the right and on the facing page.

One thing we want to clarify is in regards to the age group breakdowns in some of the races. You may notice that athletes competing in divisions up to and including the 45-49 age group are in a higher tier than athletes competing in the 50+ and older age groups, and thus eligible for higher payouts. We must emphasize that this does not, in any way, reflect nor diminish the quality of the performance of the older age group athletes. The reason for the higher payouts for athletes competing in the divisions up to and including the 45-49 age group is simply because, in general, the depth of the field in these younger age groups is deeper (i.e. more participants) than the older age groups.

As you can see, the number of Hammerbuck\$-eligible events has increased dramatically! The original program had 30 eligible events, while the 2010 program contains well over three times that many! With this many opportunities available, your chances of earning a good chunk of cash or Hammer credit is better than ever. So what are you waiting for? Check out all of the details and requirements at www.hammernutrition.com/deals/hammer-bucks/.

Tier 1 Events

Check box for asterisk(s) explanation.

Select Ultra Cycling Events

- Race Across America - SOLO
- Race Across America - TEAMS***
- Furnace Creek 508 - SOLO DIVISION ONLY

Select Ironman™ Triathlons*

- Ford Ironman USA Coeur d'Alene
- Ford Ironman Lake Placid
- Ford Ironman Wisconsin
- Ford Ironman St. George
- Subaru Ironman Canada
- Ford Ironman Louisville
- Ford Ironman Florida
- Ford Ironman Arizona
- Ford Ironman World Championship

Select USA Triathlon National Championship Events*

- Long Course Duathlon National Championship
- USAT Age Group Triathlon National Championship
- USAT Long Course Triathlon Halfmax National Championship
- USAT Elite and U23 National Championship

Select USA Cycling National Championship Events

- USA Cycling Junior, U23 & Elite Road National Championships
- USA Cycling Masters Road National Championships
- USA Cycling 24-Hour Mountain Bike National Championships*
- USA Cycling Marathon MTB National Championships - Firecracker 50*
- USA Cycling Mountain Bike National Championships*
- USA Cycling Cyclo-cross National Championships*

Select 100-Mile Trail Running Events

- Western States 100
- Leadville Trail 100
- USA 100-Mile Championships

Select 100-Mile MTB Events

- Leadville Trail 100

Select 24-Hour MTB Events – SOLO DIVISION ONLY

- World Solo 24-Hour Championships
- 24 Hours of Moab

Miscellaneous

- XTERRA World Championship

* Age group divisions up to and including 45-49

** Age group divisions 50+ and older

***2 person and 4 person teams divide prize money equally. All members must wear Hammer kits.

Tier 2 Events Check box for asterisk(s) explanation.

Select Ultra Cycling Events***

- Race Across Oregon - Solo and Team Divisions
- Hoodoo 500 - Solo and Team Division
- Furnace Creek 508 - Team Division

Select Ironman™ Triathlons**

- Ford Ironman USA Coeur d'Alene
- Ford Ironman Lake Placid
- Ford Ironman Wisconsin
- Ford Ironman St. George
- Subaru Ironman Canada
- Ford Ironman Louisville
- Ford Ironman Florida
- Ford Ironman Arizona
- Ford Ironman World Championship

Select Ironman™ 70.3 Series Events*

- Ironman 70.3 California
- Ironman 70.3 New Orleans
- Ironman 70.3 Texas
- Ironman 70.3 Florida
- Ironman 70.3 Hawaii
- Ironman 70.3 Kansas
- Ironman 70.3 Mooseman
- Ironman 70.3 Boise
- Ironman 70.3 Eagleman
- Ironman 70.3 Buffalo Springs Lake
- Ironman 70.3 Rhode Island

- Ironman 70.3 Racine
- Ironman 70.3 Vineman
- Ironman 70.3 Steelhead
- Ironman 70.3 Boulder
- Ironman 70.3 Lake Stevens
- Ironman 70.3 Timberman
- Ironman 70.3 Branson
- Ironman 70.3 Syracuse
- Ironman 70.3 Augusta
- Ironman 70.3 Austin
- Ironman 70.3 Miami
- Ironman World Championship 70.3

Other Triathlons*

- USAT Collegiate National Championship
- Full Vineman Triathlon
- Revolution3 Iron Distance Triathlon
- The Grand Columbian Iron Distance Triathlon
- Chesapeake Ultra Triathlon
- Great Floridian Iron Distance Triathlon
- Silverman Iron Distance Triathlon

Select USA Cycling National Championship Events

- USA Cycling Masters Track National Championships
- USA Cycling 24-Hour Mountain Bike National Championships**
- USA Cycling Marathon MTB

- National Championships - Firecracker 50**
- USA Cycling Mountain Bike National Championships**
- USA Cycling Cyclo-cross National Championships*

Select 100-Mile MTB Events – SOLO DIVISION ONLY

- Cohutta 100
- Mohican 100
- Lumberjack 100
- Cascade Cream Puff
- Breckenridge 100
- Wilderness 101 Pennsylvania
- High Cascades 100
- Fool's Gold 100
- Shenandoah 100

Select 24-Hour MTB Events – SOLO DIVISION ONLY

- 24 Hours of Adrenalin™ (multiple US locations)
- 24 Hours Round the Clock
- 24 Hours of Big Bear
- 24 Hours of Leadville
- 24 Hours of 9 Mile

Select 24-Hour MTB Events – 2 & 4 Person Teams***

- 24 Hours of Moab

Select 100-Mile+ Trail Running Events

- Umstead 100-Mile Endurance Run
- Massanutten Mountain Trails 100-Mile Run
- Kettle Moraine 100 Endurance Runs
- Bighorn Trail 100
- Hardrock Hundred Endurance Run
- Badwater Ultramarathon
- Vermont 100-Mile Endurance Run
- 24 Hours of Leadville
- Wasatch Front 100-Mile Run
- Bear 100
- Arkansas Traveller 100

* Age group divisions up to and including 45-49

** Age group divisions 50+ and older

***2 person and 4 person teams divide prize money equally. All members must wear Hammer kits.

Tier 3 Events Check box for asterisk(s) explanation.

Select Ironman™ 70.3 Series Events*

- Ironman 70.3 California
- Ironman 70.3 New Orleans
- Ironman 70.3 Texas
- Ironman 70.3 Florida
- Ironman 70.3 Hawaii
- Ironman 70.3 Kansas
- Ironman 70.3 Mooseman
- Ironman 70.3 Boise
- Ironman 70.3 Eagleman
- Ironman 70.3 Buffalo Springs Lake
- Ironman 70.3 Rhode Island
- Ironman 70.3 Racine
- Ironman 70.3 Vineman

- Ironman 70.3 Steelhead
- Ironman 70.3 Boulder
- Ironman 70.3 Lake Stevens
- Ironman 70.3 Timberman
- Ironman 70.3 Branson
- Ironman 70.3 Syracuse
- Ironman 70.3 Augusta
- Ironman 70.3 Austin
- Ironman 70.3 Miami
- Ironman World Championship 70.3

Other Triathlons*

- Full Vineman Triathlon
- Revolution3 Iron Distance Triathlon
- The Grand Columbian Iron

- Distance Triathlon
- Chesapeake Ultra Triathlon
- Great Floridian Iron Distance Triathlon
- Silverman Iron Distance Triathlon

Select USA Cycling National Championship Events

- USA Cycling Masters Track National Championships

Select 24-Hour MTB Events – 2 & 4 Person Teams**

- 24 Hours of Adrenalin™ (multiple US locations)

- 24 Hours Round the Clock
- 24 Hours of Big Bear
- 24 Hours of Leadville
- 24 Hours of 9 Mile

* Age group divisions 50+ and older

**2 person and 4 person teams divide prize money equally. All members must wear Hammer kits.

Tier 1 Event Payouts

- 1st place = \$1,000 in cash or \$1,500 in credit
- 2nd place = \$750 in cash or \$1,000 in credit
- 3rd place = \$250 in cash or \$375 in credit
- 4th place = \$150 in cash or \$225 in credit
- 5th place = \$100 in cash or \$150 in credit

Tier 2 Event Payouts

- 1st place = \$750 in cash or \$1,000 in credit
- 2nd place = \$500 in cash or \$750 in credit
- 3rd place = \$200 in cash or \$300 in credit
- 4th place = \$100 in cash or \$150 in credit
- 5th place = \$50 in cash or \$100 in credit

Tier 3 Event Payouts

- 1st place = \$500 in cash or \$750 in credit
- 2nd place = \$250 in cash or \$500 in credit
- 3rd place = \$125 in cash or \$225 in credit
- 4th place = \$75 in cash or \$100 in credit
- 5th place = \$25 in cash or \$75 in credit



EVENT CALENDAR

During March and April we're still pretty much mired in winter and/or "the mud season" here in Montana. However, that doesn't mean that we're not hugely involved in the sponsorship of many events that take place in the northern parts of the country, and for sure we're heavily involved in event sponsorships in those areas of the country that are enjoying warmer weather. Our event sponsorship program rarely seems to have a slow period, and with the beginning of March we're kicking it into high gear in terms of sponsored events.

With that in mind, here's but a sampling of the events that we're sponsoring in March and April.

The next issue of Endurance News will reach you in early May so we'll give you another "sponsored events update" then. In the meantime, keep checking the "Upcoming Events" link on the newly revised Hammer Nutrition website. It's right there on the home page and we're constantly updating it.

RUNNING/ULTRA RUNNING

MAR 6 – Nueces Endurance Trail Run
(Texas) – www.tejatrails.com

MAR 6 – Champoege 30k
(Oregon) – www.orrc.net/races/champoege

MAR 6 – Red Rock Canyon Marathon & Half
(Nevada) – www.calicoracing.squarespace.com

MAR 6 – Green Jewel 50k
(Ohio) – www.greenjewel.org

MAR 6 – Carl Touchstone Mississippi Trail 50
(Mississippi) – www.ms50.com

MAR 7 – Little Rock Marathon
(Arkansas) – www.littlerockmarathon.com

MAR 13 – Prickly Pear 50k
(Texas) – www.pp1050.com

MAR 13 – Bandit Trail Run
(California) – www.bandittrailrun.com

MAR 13 – Land Between the Lakes Trail Runs
(Kentucky) – www.wkrc.org

MAR 20 – Rucky Chucky Roundabout
(California) – www.ultrarunner.net

MAR 27 – Paulinskill Sussex 100 Mile Run
(New Jersey) – sites.google.com/site/wwultras/paul100

APR 3 – Hells Hills 50mi/50k/25k Trail Runs
(Texas) – www.tejatrails.com

APR 3 – Fools Day 12/24 Hour Runs & Relay (California) – www.trailrunevents.com

APR 10 – McNaughton Park Trail Runs
(Illinois) – www.mcnaughtonparktrailruns.com

APR 10 – Labor of Love 100mi, 50mi, 50k, Marathon, 1/2, & 10k
(Nevada) – www.calicoracing.squarespace.com

APR 17 – Ouachita Trail 50 Mile and 50k
(Arkansas) – www.runarkansas.com

APR 17 – Lynch's Woods 24 Hour Run
(South Carolina) – www.ultrasontrails.com

APR 18 – River City Marathon & Half
(California) – www.ultrarunner.net

APR 24 – Red Mountain 50k
(Utah) – www.redmountain50k.com

WINTER SPORTS

MAR 7 – Ski to the Clouds
(New Hampshire) – www.skitotheclouds.com

MAR 10 – North Routt Coureur des Bois
(Colorado) – www.steamboatxcski.org

MAR 13 – Great Bear Chase
(Michigan) – www.bearchase.org

MAR 18 – US Telemark National Championships
(Montana) – www.ustsa.org/new-site

MAR 20 – Baldy Snowshoe & Ski Challenge Up Baldy
(Idaho) – www.visitsunvalley.com

MAR 20 – Steamboat Springs Pentathlon
(Colorado) – www.steamboatsprings.net

MAR 28 – California Gold Rush
(California) – www.farwestnordic.org

APR 3 – Desert Orthopedics Great Nordeen
(Oregon) – www.mbsef.org

TRIATHLONS/DUATHLONS

MAR 14 – Miami International Triathlon
(Florida) – www.mitriathlon.com

MAR 14 – Southwest Valley Regional YMCA

Olympic & Sprint Triathlon/Duathlon
(Arizona) – www.trifamilyracing.com

MAR 20 – Cary Long Course Duathlon
(North Carolina) – www.fsseries.com

MAR 20 – GO! Off-Road Duathlon
(Arizona) – www.go-ar.com

MAR 20 – Prospect Park Spring Duathlon
(New York) – www.citytri.com

MAR 27 – Great Clermont Triathlon Festival
(Florida) – www.sommersports.com

MAR 28 – Lavaman Waikoloa Triathlon
(Hawaii) – www.lavamantriathlon.com

APR 3 – Egg Hunt Triathlon/Duathlon
(Florida) – www.multirace.com

APR 3 – Beaver Freezer Triathlon
(Oregon) – people.oregonstate.edu/studentgroups/triclub/

APR 10 – Escape from Ft. Desoto Triathlon
(Florida) – www.trievent.com/escape

APR 10 – Oxbow Triathlon
(Louisiana) – www.active.com

APR 11 – Superfrog & Superseal Triathlon
(California) – www.kozenterprises.com/Triathlons/FROG_SEAL.htm

APR 16 – Snake River Triathlon
(Idaho) – www.lcsc.edu/crosscountry/2010snakeivertriathlon.html

APR 17 – USA Triathlon Collegiate National Championship
(Texas) – www.usatriathlon.org

APR 24 – Washington Half Iron Triathlon
(North Carolina) – www.fsseries.com

APR 24 – USA Triathlon Duathlon Festival National Championship
(Virginia) – www.duathlonnationals.com

ADVENTURE RACES

MAR 6 – BOAR 3 Hour and ELITE 6 Hour Adventure Race
(Florida) – www.pangeaadventureracing.com

MAR 13 – Pain in the Pines Adventure Race
(Texas) – www.steelsports.net

MAR 14 – Squiggy Classic 6 Hour & Squiggy Dash 2-3 Hour Adventure Race
(Florida) – www.wecefar.com/squiggy

MAR 20 – The Palmetto Swamp Fox Adventure Race
(South Carolina) – www.kandoadventures.com

MAR 25 – Odyssey Endorphin Fix
(West Virginia) – www.oarevents.com

MAR 27 – Gnarly Naduah 6/12 Hour Adventure Race
(Texas) – www.toocoolracing.com

APR 3 – Alexandria Adventure Race
(Louisiana) – www.gulfcoastadventure.com

APR 10 – Ladies Only Adventure Race
(Texas) – www.houstonadventureracing.com

APR 10 – Desert Winds Beginner 6 Hour Adventure Race
(Nevada) – www.desertwindsadventureseries.com

APR 17 – SONAR Season Opener Nemaquin Adventure Race
(Pennsylvania) – www.rootsrace.com

APR 17 – Atlantic Coast Conquest AR
(Florida) – www.pangeaadventureracing.com

APR 24 – Mighty San Gabriel 6/12 Hour Adventure Race
(Texas) – www.toocoolracing.com

MOUNTAIN BIKING

MAR 13 – Curse at the Crab Endurance Race
(North Carolina) – www.sorba.org

MAR 14 – Panama MTB Enduro
(Nebraska) – www.angrycowadventures.com

MAR 14 – Fiorucci Fat Tri Fury
(Virginia) – www.virginiaoffroadseries.com

MAR 14 – Cool Mountain Bike Race
(California) – www.auburnbikeworks.com

MAR 19 – O.M.B.A Spring Break Fat Tire Festival
(Florida) – www.omba.org

APR 10 – Prescott Punisher
(Arizona) – www.mbaa.net

APR 17 – Tiger Rag XC Race
(South Carolina) – www.sorba.org

APR 18 – The Rock Epic MTB 50
(Arkansas) – www.dltnmultisport.com

APR 24 – Whiskey Off-Road
(Arizona) – www.epicrides.com/events.htm

APR 24 – Beezley Burn
(Washington) – www.beezleyburn.com

APR 24 – Cohutta 100 and Big Frog 65
(Georgia) – www.newleafadventures.com

ROAD CYCLING/ULTRA CYCLING

MAR 7 – Chain of Lakes Cycling Classic Time Trial and Criterium
(Florida) – sites.google.com/site/cyclingclassicscorp/

MAR 7 – Rouge Roubaix XII
(Louisiana) – www.rougeroubaix.com

MAR 19 – San Dimas Stage Race
(California) – www.scvelo.com

MAR 27 – Union Grove Road Race
(Pennsylvania) – www.proamcycling.com

APR 3 – Morgantown Road Race
(West Virginia) – www.abraracing.com

APR 9 – Heart of the South 500
(Alabama) – www.heartofthesouth500.com

APR 10 – Mount Joy Road Race
(Pennsylvania) – www.proamcycling.com

APR 10 – Hillsboro-Roubaix Road Race
(Missouri) – web.me.com/iccc_stl/Hillsboro/Welcome.html

APR 24 – Farmersville Road Race
(Pennsylvania) – www.proamcycling.com



**LEGISLATIVE
ALERT**

**Your Health
Freedom At Risk**

PAGE 13

Teal Bulthuis

We here in Okinawa, Japan appreciate your passionate support of the military. Here is an update on the 20th Annual Marine Corps Camp Kinser Half Marathon race we ran this past weekend:

Tropical Cyclone Lupit passed to the east of Okinawa on race day and winds at the start of the event were 28 mph, gusting at 40mph, with light-medium rain whipping practically sideways with the wind. Hammer Fuels kept me going throughout it! I used HEED, Hammer Gel, Sustained Energy, and then Recoverite. During training, Hammer fuels and Hammer Nutrition's recommendations got me prepared for whatever I faced on race day. I place 6th in my age group and TSgt Elizabeth Branham (in the red top) placed 5th in her's.



Colin Anderson

Hi Steve & crew, I just returned from the Alpine Classic Extreme 250km. Just a thanks, again I fueled solely on Hammer product, plus utilized a Camelbak freezie bottle to keep my Perpetuem cool for the duration of the almost 11-hour ride. This was a new Australian event, and I trained for it by attending a six ride series of approx 100 km-130 km each day for the week prior - again fueling solely with Hammer and promoting the use to many new cycling Australians.

What a ride the 250km extreme was! Mountain climbs of 25-30 km followed with steep 9% to 17-19% rises tossed in; a real challenge for an older New Zealand cyclist. Our N.Z. hills are mainly short/sharp, not seemingly never ending like this Australian route. An AWESOME event to be repeated again in January 2011 using the ride-proven, AWESOME Hammer product.

Colin Anderson
New Zealand

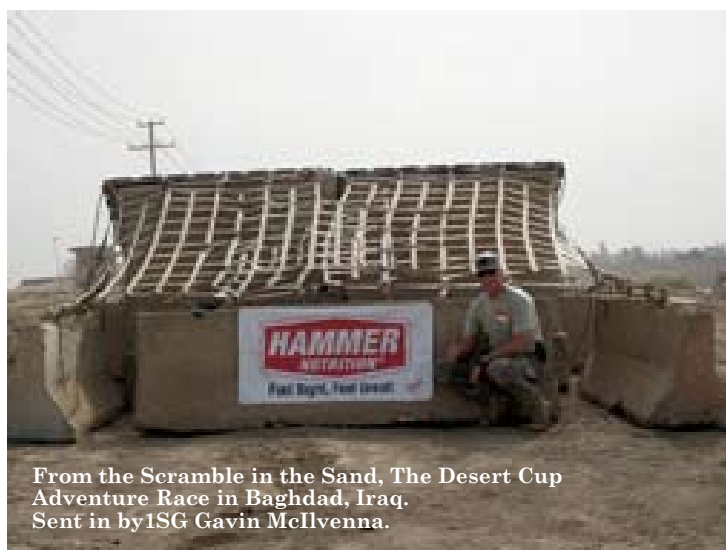
Kevin Boucher

The runner's name is Kevin Boucher and my husband Randy Whorton took the photo. The event was our Annual Chattanooga Fat Ass held the first Saturday in December. Kevin was running down the Guild Trail after completing about 18 miles of the 31 mile event. It is indeed Hammer Banana gel and I have no idea why he isn't using a flask, except Kevin is not much of a rule follower.

Kristine Whorton



Scramble in the Sand



From the Scramble in the Sand, The Desert Cup Adventure Race in Baghdad, Iraq. Sent in by ISG Gavin McIlvenna.

ATHLETES...do you want the Hammer Nutrition community to know what you're up to? Have a great, copyright-free photo you want to share? Send a short email to athleteupdates@hammernutrition.com (please put Race Report in the subject line) about your recent accomplishments and we'll try to include it in our Race Report. *Photo note: please ensure that all photos submitted are high resolution at 300 dpi or at least 500 kb in size.*

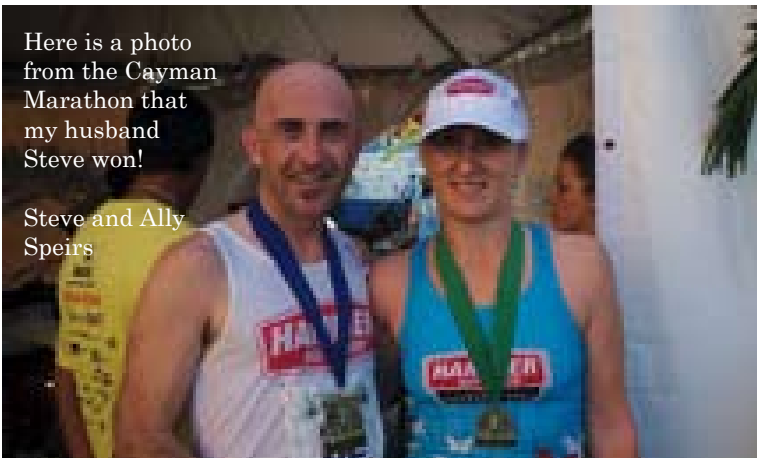
Jamie Donaldson



I am fresh back from the Rocky Raccoon 100 in Huntsville, TX. I got 2nd female in 16:56 which was right around my exact time from last year. I am happy with my performance coming off a hamstring issue for the better part of December. By the way, I fueled with Hammer Gel and loved the new Huckleberry flavor!

Jamie Donaldson

Steve & Ally Speirs



Here is a photo from the Cayman Marathon that my husband Steve won!

Steve and Ally Speirs



Look for us at select events in the western US!

What : Hammer event support vehicle.

Specs : 44' long, Freightliner Columbia cab and chassis, Show Hauler coach, Mercedes turbo 450 hp motor, 13 speed air shift transmission, 11 foot garage in rear, and a lift gate.

License plate : HMMRHLR

Scott Swaney



After a long season of playing and racing, I finally had a chance to say thanks for all of your great products. I finished the season on a high note with a pretty epic 8-day journey.

On the weekend of September 26th, I won the 24 Hours of Triathlon here in the Denver, Colorado area. HEED and Sustained Energy were always in my water bottles while there was at least one Hammer Gel (usually Espresso) in my tri jersey. I finished with 1.8 full Ironman distances in just over 23 hours.

Five days later I was ready to race in the Furnace Creek 508. With the help of Recoverite, I was ready to start for our 2 man team on Oct. 3rd. Once again, HEED helped us finish 2nd in the 2-man category of the race – pretty good for two rookies.

In 2010, I am looking forward to pushing it even further. With your fine supplements and race day products, I think I can only continue on my 2009 success.

Regards,
Scott A. Swaney



Devon Troop

My friend and I were joking that Hammer should include snow shoveling as part of the list of endurance sports your products are great for! I live in Maryland and we just got 24 inches of snow with another foot on the way. YIKES! Without HEED and Recoverite don't know if we would ever have been able to make it out!

Thank you!
Devon Troop

ENDURANCE NEWS

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