



Welcome 4 From the Saddle 6 The power of post-exercise protein 8 **Product Spotlight: Mito Caps** 10 Just say 'No!' to chemicals 14 Head to the basement 16 Talking training and technology 18 Compex coaching for the win 20 Help with altitude training 24 Off-season fun = race season fitness Top 10 reasons to quit drinking soda 27 Keeping it fresh 28 32 Vitamin E for muscle health Back on board 33 Ask Dr. Bill 34 From the kitchen of Laura Labelle 35 36 Nate's Corner 37 Striding toward another winning year 38 Pit Row Prostate cancer and soy protein 40 Coffee corner 43

Letters

Drinking distilled water	
Athleta Iron Girl sponsorship	
Back at Sea Otter	
Who are you racing for?	
Where are they now?	
A can-do attitude	
What's in the bag?	
We've got you covered	
The future of cycling	
A helping hand	

DNF - Knowing our limits

44	Cycling skills with Mike Freeman	66
46	Electrolyte replenishment	68
48	Sponsored events	72
48	Destination Montana	74
54	International News : Israel	78
56	International News : Antarctica	79
58	2013 Hammer Camps	80
60	Athlete Spotlight : Keith Rieger	82
62	Getting his glide back	84
63	From our junior athletes	85
64	From our athletes	92

"Hammer Nutrition, you guys rule! Great products and outstanding service, an unbeatable combination. Looking forward to 25 more years of performance—enhancing nutrition. Hammer on!" - Jim A.

ON THE COVER

Team Senior Gel spends a day training in Napa Valley. Photo : Nellie Freeman

2 Apr/May: Issue 79 "I LOVE your products!" - Dave S.

ENDURANCE NEWS

The informed athlete's advantage since 1992

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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 and 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 shortcuts and that success can only come from hard work.

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4952 Whitefish Stage Road Whitefish, Montana 59937 1.800.336.1977 www.hammernutrition.com Send your letters to letters@hammernutrition.com for possible inclusion in a future issue of Endurance News.



My wife. Di McHenry. 55, and I would like to share our race season. (I'm 60 years old). We won the Gas 60, a 60-mile kayak ultra. Di and her tandem partner won female tandem in the Karnivore and Missouri 340 (yep, a 340-mile ultramarathon), and set course records. We both won solo in the Race to the Dome (26 miles), and we won the Dam to Dam race, Lake of the Ozarks, 90+ miles.

Di and I also have records in the Missouri 340 (established in 2010) and in the Gritty Fitty, a 50-miler on the Kansas River.

We use and promote Mito Caps, Anti-Fatigue Caps, and Endurance Amino, and we both LOVE Perpetuem Solids. This is the best food supplement to come our way in a long time. In the Mo 340 it is hard to hold anything down, but Perpetuem Solids do the trick. My wife also uses Endurolytes and HEED.

Anyway, just thought I'd drop you a line and let you know how much we appreciate your product!

Loren McHenry

I was just flipping through the last issue of Endurance News and came across the story that Laura Labelle wrote about the Los Angeles Ballet Company, While I-very selfishly-would prefer that all Hammer Nutrition support went only to trail running, for some reason I don't quite understand, I

I had surgery to remove a cancerous tumor from my hip area. When I was switched from acute care at Mass General to Spaulding Rehab, I had you overnight some Recoverite. It really helped, especially when I could not eat the hospital food. Now that I am home, I am still using Recoverite to help heal. I had a 6-hour operation with blood transfusions, two bone grafts, and a rebuilt ball and socket-similar to recovery from a marathon or ultra, but longer. I am now able to walk outside on my crutches and am beginning to feel that I will be in the pool soon.

Thank you, Jon Gang

About a year ago I found myself weighing in at 350 pounds. I needed to get the weight off so I began cycling. I had a hard time riding as often as I wanted to due to fatigue. That's when I found Hammer Nutrition online. I ordered some Recoverite and went from cycling 2-3 days a week to 5-7 days a week. In less than a year I have dropped nearly 100 pounds. This past January I finished my first organized century. I have several more on the schedule for 2012 and will be using Recoverite, HEED, Hammer Gel, Endurolytes, Perpetuem, and Endurolytes Fizz, just to name a few. Hammer Nutrition products simply work: no gimmicks, no flashy advertising, just great customer service and results when it counts. Cycling has saved my life and I couldn't have done it without Hammer Nutrition products. Thank you so much and keep up the great work!

Gregg Robinson

thought this was a cool thing that you did. Even though there's no way I could dance, let alone dance ballet, I can appreciate what a physically demanding activity it is. Keep it up!

Dale Hammond



Welcome to the 79th issue of Endurance News.

hether you are perusing your first issue or the latest in your collection, I think you are really going to enjoy it. Once again, we've got 100 pages chock-full of goodness. As usual, we've got tons of awesome submissions from valued non-staff writers—clients, sponsored athletes, and friends and family. Steve has also written a couple of great articles that are a must-read, and there's even a gem or two from our own Energizer®

bunny, Dr. Bill Misner. You'll also find plenty of updates on new and existing products, as well as an article or two to make you think about the bigger picture. So, as we continue our year-long 25th anniversary celebration, it's just "business as usual" and it's all good.

Speaking of 25th anniversary celebrations, I decided to do something special for our clients on the 25th of each month, all year long. It may be a

free item or accessory added to your order, or some other "perk" to further acknowledge our appreciation of your support.

We'll announce the day's special on our Facebook wall on or before the 25th, or you can just be surprised when you receive an order placed on that day! We're not hoping to get more people to order on these days or for you to wait until the 25th to place your next order—it's just something that I thought would be fun.

Progress Reports & Updates

Recovery Bars - The wait is finally over! They are in stock, flying out the door, and generally a huge hit. If you have not gotten ahold of one of these yet, you really, really need to give them a try. Thank you to everyone who waited patiently for their arrival and are now consuming them voraciously! We are already working on a second version that is peanutfree, so look for it toward the end of this year.

Manufacturing Date vs. Expiration Date - Believe me, this is a nightmare. It's not our idea and we are not in favor of this change, but it's being mandated by the FDA and we play by the rules. So, all of our products, except

for Hammer Bars and Endurolytes
Fizz will now come with a "MFG date"
instead of an "EXP date." The silver
lining in this cloud is that you will now
know exactly how old the item is that
you are consuming, and that's a good
thing. Rest assured that our products
are recently manufactured and are good
for four years or more from that date.
We are continuing to examine the new
regulations and evaluate the viability
of the new, long-term stability testing
requirements that would be necessary to
return to the "EXP date." However, that
would be 2-4 years away at this point.

Big Bags - I know these continue to be problematic and have been a source of frustration for many of you. This is a tough one for me to swallow because I want this problem fixed yesterday. All I can say is that we are doing everything we can on our end to get to a large

- continued from page 4

bag that opens easily, does not tear or puncture in transit or afterward, and is recyclable. We have a new generation of bags in the pipeline as I type, and I have high hopes for them. One way or another, we will get there and greatly appreciate your patience in the meantime. One thing is for sure—this type of packaging is the wave of the future and several big players in the industry have already made the move in this direction.

Feedback

Your feedback counts, so please share. Because we value your input tremendously and use it as our primary guide, we go to great lengths to gather all of the feedback that we receive—both positive and negative—whether submitted via email, our website, or on the phone each week. All of the feedback is compiled and distributed to everyone in our organization, including me. While we enjoy the positive feedback and need that reinforcement to continue providing you with the best possible products and service, we really key on the "critical" feedback and use it to improve your

experience when you do business with us or use our products. So, you can be pretty certain that if you pass something along to one of my staff, it will be seen by me and everyone else. If you want an even more direct and intimate means of communicating your feedback to me, I have a special email address that I check daily just for such occasions suggestions@hammernutrition.com. There's no auto-responder or an intern banging out "cut and paste" replies-just me reading your suggestions, replying personally, and using it to refine our model and improve your interaction with our brand. Win-win!

That's my story for this issue. I hope that you enjoy the read as much as I did. Savor the spring weather, train hard, do what you love to do, and know that we've got your back.

Cheers!

Proprietor

Brin Frak

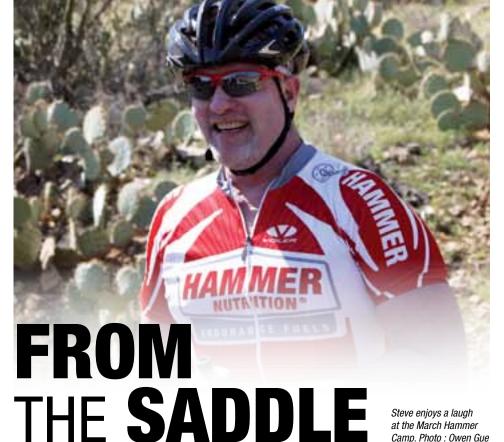
Congratulations on your 25th anniversary! You

and your staff have made a great company. The memories from back in those early days are priceless. It's also been great to reconnect these past several years and to maintain our friendship as I continue to get out there and compete. You and your staff make me feel like family. To me, that is the best signal that you are doing it right!

Thanks again, Mike M.







BY STEVE BORN

Although it is my least favorite season of the year, I want to wish everyone a very happy spring. The reason why I prefer summer, autumn, and winter significantly more than spring is because here in Northwest Montana, spring is usually best described by me—unflatteringly so—as "the mud season." That means no more Nordic skiing and mostly indoor workouts. Riding outdoors can be done some of the time during spring; however, it's either bitterly cold, miserably wet, mega-windy, or all three combined. Maybe I've gotten soft (softer?), but after so many years of competitive ultra marathon cycling—training and racing in every kind of condition imaginable, as well as countless off-season hours on an indoor trainer—I have to say that I'm kind of over these inclement weather conditions for the most part. As such, I'm anxiously hoping for a shorter "mud season" than normal this year, and a sooner-than-expected sunny, warm Montana summer. (When we have an "on" summer here in the Flathead Valley, there is no other place I'd rather be; that's how awesome they are). Anyway, I hope that if you are in the unpleasant throes of your state's "mud season," it passes quickly and that warmer, sunnier weather arrives soon.

My annual "silver lining" during the mud season is being able to attend a Hammer Camp in Arizona. By the time this Endurance News reaches you, I'll have completed the March edition (our third of the year), hopefully in one piece! Although I've yet to arrive at a Hammer Camp anywhere near "race shape," I still have a great time . . . suffering fairly significantly up the steep climbs, but still a good time nonetheless. How could I not? It's sunny and warm in Tucson, the riding is spectacular, and the hospitality of The Cycling House crew is second to none. It's always an awesome way to kickstart my season, especially after a winter of minimal snow (meaning no Nordic skiing) and when, in my world, the mud season has already long overstayed its welcome. Anyway, if you've never been to a Hammer Camp, by all means put it on your sooner-than-later "bucket list." You'll have a blast.

Hammer Camp is when I get to put two of my favorite Hammer Nutrition products—Anti-Fatigue Caps and Endurance Amino—to their first major test of the season. These are two products that I don't take all year long; I really only use them when my workouts are three hours or longer (which they rarely if ever are in the winter). When I do use them, however, the results are most definitely and positively noticeable.

Anti-Fatigue Caps supplies three nutrients (potassium/magnesium aspartate, OKG, and l-citrulline) that will help neutralize the negative effects of excess ammonia accumulation, which I personally consider to be a primary culprit—perhaps the primary culprit—in premature fatigue, especially during longduration bouts of exercise or races. I have tested each of these nutrients alone and in combination for so many years that I've lost track. After all that time, and after consuming literally hundreds of doses of Anti-Fatigue Caps (I estimate that I consumed at least 150 of them during the Double Furnace Creek 508 record), I can honestly say that this product is nothing short of amazing in how well it works. That's probably why it's my favorite product in the entire Hammer Nutrition line.

Endurance Amino provides the primary amino acids—the three branched chain amino acids (BCAAs), l-leucine, l-isoleucine, and l-valine—that are used in the energy cycle during exercise. The

FROM THE SADDLE cont'd.

- continued from page 6

BCAAs assist in replenishing depleted glutamine stores while also aiding in the prevention of muscle tissue breakdown. The latter helps to prevent production and accumulation of excess fatiguecausing ammonia (and Anti-Fatigue Caps helps take care of whatever is produced and accumulates). Additionally, research has shown that the intake of BCAAs prior to and during exercise may delay exercise-induced or central nervous system-induced fatigue, something that I'm sure we all would enjoy experiencing. Endurance Amino also supplies the body with the amino acid l-alanine, which can be converted to glucose on an as-needed basis for the production of energy. (I like to think of l-alanine as an "emergency" energy supply.) L-alanine also aids in the synthesis of pantothenic acid (vitamin B5), needed for protein, fat, and carbohydrate metabolism. Last, but certainly not least (not by a long shot), the glutathione component in Endurance Amino provides a number of benefits, primarily powerful antioxidant support.

Now, I don't have any research to back up my experiences with the combination

of these two products. However, I will say that there is something about using them in tandem that yields even better results than using one of the products on its own. The saying "The whole is greater than the sum of its parts" comes to mind. Normally, I'd write that off as a placebo-type of experience; however, I've received an ever-increasing number of emails from athletes who have said that the combination of Anti-Fatigue Caps and Endurance Amino has done exactly the same thing: yield better results than when using one of them on its own. If you've yet to try the Anti-Fatigue Caps/ Endurance Amino combination, by all means do not put it off any longer; you're missing out on what is continually proving to be an amazing enduranceenhancing combination.

For your longer workouts or races I suggest the following doses.

30+ MINUTES PRIOR:

2-4 Anti-Fatigue Caps + 2-4 Endurance Amino

EVERY HOUR DURING:

1-4 Anti-Fatigue Caps + 1-4

Endurance Amino

AFTER. WITH RECOVERITE:

2-4 Endurance Amino

The amount you should consider taking is based on a few variables, primarily your body weight (if you're a lighter weight athlete you won't really need to take as many capsules as a larger athlete) and the duration of the workout (my general rule of thumb is "the longer the workout, the higher the dose").

Once again, we've put together an Endurance News covering a wide range of topics that I believe will be of interest to everyone. Every issue is definitely a "labor of love" and we believe that the end product is worth all of the work that goes into it. I hope that, after reading this issue, you'll agree.

On behalf of everyone here at Hammer Nutrition, I hope that your training is going well and that you'll experience nothing but success in your upcoming races. Remember that we're only a phone call or email away (or online via the Endurance Forum) if we can be of assistance to you. **HN**



The power of post-exercise protein

BY BILL MISNER, Ph.D.

Steve's Note: Although this research, as well as Dr. Misner's comments, dates back to 2004, the results of this study—and the benefits derived from this study (as commented on by Dr. Misner)—are unquestionably still applicable.

levated post-exercise amino acid availability has been demonstrated to enhance muscle protein synthesis acutely, but the long-term impact of post exercise protein supplementation on variables such as health, muscle soreness, and function are unclear. In a 2004 study, 387 healthy male U.S. Marine recruits from six platoons (U.S. Marine Corps Base, Parris Island) . . .

- 18.9 years old \pm 0.1 year
- 74.7 kg body weight \pm 1.1 kg body weight
- 13.8% body fat $\pm 0.4\%$ body fat

. . . were randomly assigned to three treatments within each platoon.

They consumed 1 of 3 solutions immediately following exercise during a 54-day basic training period:

- Placebo
- (0 g carbohydrate, 0 g protein, 0 g fat)
- Control
- (8 g carbohydrate, 0 g protein, 3 g fat)
- Protein

(8 g carbohydrate, 10 g protein, 3 g fat)

Subjects and observers making measurements and data analysis were blinded to subject groupings.

Compared with Placebo and Control groups, the Protein group had:

- · 33% fewer total medical visits
- 28% fewer visits due to bacterial/viral infections
- 37% fewer visits due to muscle/joint problems
- · 83% fewer visits due to heat exhaustion

Recruits experiencing heat exhaustion had greater body mass, lean, fat, and water losses. Muscle soreness immediately after exercise was reduced by protein supplementation vs. placebo and control groups on both days 34 and 54. Post-exercise protein supplementation may not only enhance muscle protein deposition but it also has significant potential to positively impact health, muscle soreness, and tissue hydration during prolonged intense exercise training, suggesting a potential therapeutic approach for the prevention of health problems in severely stressed exercising populations [1].

Dr. Bill's Comment: Protein consumed after exercise significantly enhances immune system for advanced recovery. Take note that these subjects consumed only a small amount of protein at a 1:1 ratio of protein to carbohydrate. I recommend a 3:1 ratio of 30-90 grams of carbohydrates and 10-30 grams of protein to maximize muscle synthesis and recovery after exercise. An attractive intervention for consuming protein after exercise is that this helps prevent immune system breakdown, viral disorders, and excess exercise-induced muscle aches and pains.

[1] Paul Flakoll, Tom Judy, Kim Flinn, Christopher Carr, and Scott Flinn. Post -exercise protein supplementation improves health and muscle soreness during basic military training in marine recruits. J Appl Physiol 96: 951-956, 2004.



The eagle has landed*

*Translation: The Hammer Recovery Bar is here!

Whether on its own as a solid-food recovery fuel, a second meal after your immediate post-workout/race bottle of Recoverite, or as an occasional snack to bolster your daily protein intake, the Hammer Recovery Bar fits the bill perfectly.

- . High-quality whey protein
- 70% organic ingredients
- . Gluten-free, GMO-free, certified dairy kosher

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Product Spotlight

Mito Caps

Turn back the clock

BY STEVE BORN

hile all of the products in the Hammer Nutrition line are highly effective, providing specific benefits and fulfilling specific needs, I personally believe that Mito Caps is the most important supplement that Hammer Nutrition has ever produced for promoting enhanced athletic performance and overall health. I can honestly say that in all the time I've studied supplementation, nothing has ever gotten me as excited as the remarkable discoveries that resulted from the studies of Dr. Bruce Ames and his scientific associates regarding the issue of mitochondrial aging and regeneration.

The whole amazing story of mitochondrial function could go on for pages, but let's simplify the matter to a few relevant points:

- Mitochondria, the energy-producing organelles, make ATP from food molecules (sugar, fatty acids, and amino acids) and oxygen.
- Energy production also creates free radicals, which damage mitochondrial DNA.
- Mitochondrial function decreases and free radical production increases with age. This "double whammy" contributes to the aging process, an ongoing cycle of decreased mitochondrial functioning, increased free radical production, and damaged mitochondrial DNA.

- The resulting decay in mitochondrial functioning, along with increased production and accumulation of free radicals, has obvious negative effects on athletic performance. The body's ability to make energy decreases while free radicals increase.
- Even more importantly, mitochondrial aging and decreased function results in health decline and disease processes affecting the heart and brain. To quote Dr. Ames, "Oxidative mitochondrial decay is a major contributor to aging."

That's why athletes should be particularly interested in maintaining the optimal functionality of the mitochondria. We want high-quality, consistent energy production, while

also protecting against the deterioration of mitochondrial function and its negative health consequences.

As is the case with most supplements, the key to accruing maximal benefits from Mito Caps is consistent daily use, even on non-training days.

The key question is, "what can we do to make this a reality?" Dr. Ames and the other researchers found that two nutrients—acetyl l-carnitine (ALC) and r-alpha lipoic acid (R-ALA) significantly and positively influenced mitochondrial function in mice. In fact, when Ames and his researchers fed older rats these two nutrients, the results surprised even them. Not only did the older rats perform better on memory tests, they had more vigor and the mitochondria in the cells worked better. Dr. Ames is even quoted as saying, "With the two supplements together, these old rats got up and did the Macarena." He went on to say, "The brain looks better, they are full of energy - everything

> we looked at looks more like a young animal." Another researcher commented, "The animals seem to have much more vigor than animals not on this diet, signaling

> > massive improvement to these animals' health and well being."

> > > The crux of these studies (and yes, this is in very basic terms) is that the combination of these two nutrients "tunes up" the mitochondria. Tuning up human metabolism is likely a major way to minimize DNA damage, improve health (not to mention athletic performance), and prolong a healthy lifespan. Ames' studies



The unique & potent **Mito Caps formula**

Acetyl I-carnitine (ALC) - L-Carnitine is a derivative of the amino acid lysine and is synthesized in the body by five different enzymes involving the amino acids lysine and methione, iron, vitamin C, vitamin B6, and the reduced form of niacin (NAD). Small amounts—roughly 10-50 mg—of I-carnitine are synthesized daily, which is adequate for preventing deficiency problems. However, these amounts are most likely insufficient for athletes. One nutritional scientist writes. "Although the body makes I-carnitine, it may not make an optimum amount for athletes, because muscle carnitine levels are rapidly depleted even during moderate exercise."

This would make supplemental I-carnitine essential for endurance athletes. Acetyl I-carnitine (ALC) is arguably the premier form of this nutrient for two reasons:

- 1. It provides I-carnitine, which is the key nutrient involved in the shuttling of fatty acids into the mitochondria for energy production.
- 2. It also provides acetyl groups, which may be used in the formation of acetylcholine, a neurotransmitter involved in cognitive function.

There is a lot more to acetyl I-carnitine, and I would encourage you to read the articles "What Makes Mito Caps so Essential" (www.hammernutrition. com/knowledge/what-makes-mito-caps-soessential.2239.html) and "Synergistic Supplement Benefits" (http://www.hammernutrition.com/ knowledge/synergistic-supplement-benefits.2240.

R-alpha lipoic acid - Often referred to as R-ALA, this nutrient is intimately involved in the complex process of energy production. It is an essential cofactor for several multi-enzyme complexes that catalyze (increase the speed of a chemical reaction) critical energy metabolism reactions inside the mitochondria. It's safe to say that the combination of R-ALA and acetyl I-carnitine dynamically influences energy production.

However, energy production, especially increased energy production, comes at a cost: more free radical production. Fortunately the body has a variety of antioxidant mechanisms that counteract and neutralize the negative effects of free radicals. Increased energy production, as well as longerterm, high-level energy production (such as what

endurance athletes do), increases the volume of free radicals that are produced, which can easily overwhelm the body's built-in antioxidant defenses. This is the reason why the consumption of a variety of antioxidants is recommended, and perhaps none are stronger or provide a wider range of benefits than R-alpha lipoic acid. R-ALA is commonly known as the "universal antioxidant" because it functions as both a water- and fat-soluble antioxidant, with the ability to neutralize several different types of free radicals, perhaps more than any other antioxidant known to man.

It's important to note that many alpha lipoic acid supplements available today are a 50/50 mixture of two forms: the "R" form, which is the natural form, and the "S" form, which is synthetic. It was once thought that synthetic alpha lipoic acid, which contains both s- and r-isomers, would work within human cellular straits, but research showed that at mitochondria cell level only the r-isomer form made it through... IF the s-isomer form was not present to inhibit its transition. Bottom line: The synthetic form of alpha-lipoic acid has NO effects inside mitochondria cells (it may actually have inhibiting effects), in spite of half of it being composed of r-alpha lipoic acid.

As is the case with ALC, there's a lot more to R-ALA than we have room to print here. R-ALA is an extraordinary nutrient, and you can read more about it in the two earlier-mentioned articles.

Dimethylaminoethanol (DMAE) - is a naturallyoccurring nutrient found in fish. It stimulates the production of choline, which in turn allows the brain to optimize production of acetylcholine, a neurotransmitter involved in learning and memory. DMAE has been reported to inhibit the formation of the pigment lipofuscin, which is formed by the inefficient metabolism of fatty acids. Lipofuscin accumulates with age in all body tissues; in the skin it appears as liver spots. DMAE not only prevents the formation of lipofuscin, but has also been observed to remove liver spots completely.

Para-amino benzoic acid (PABA) - acts in a structural role with folic acid and also functions in the formation of red blood cells. It is also a potent neutralizer of singlet molecular oxygen, a free radical that is a common by-product of metabolism. PABA's free radical neutralization is a most powerful effect because it retards collagen cross-linking, promotes flexibility, and promotes

healthy cell structures and membranes.

Now, taking nothing away from the benefits that both DMAE and PABA provide, the primary reason why they exist in Mito Caps is to amplify and potentiate the ALC and R-ALA components. The amounts of ACL and R-ALA used in Ames' studies are extremely high and supplementation with those amounts is not only impractical, but would be unbelievably expensive. DMAE and PABA are nutrient substitutes for the anti-aging "drug" GH-3 and mimic its effects, while providing substantial benefits of their own. Dr. Misner writes, "By adding essentially what is a GH-3 formula, the resulting effects of ALC and R-ALA are remarkably multiplied." Thanks to the combined effects of DMAE and PABA, less ALC and R-ALA are required to achieve noticeable benefits.

Vitamin E and vitamin B6 - Vitamin E is a wellknown fat-soluble antioxidant, which is one of the reasons for its inclusion in the Mito Caps formula. However, the primary reason that both vitamin E and vitamin B6 are in the product is because, in the words of Dr. Misner, "in order for the GH-3-like effect to be secure (i.e. yield its best benefits), these two nutrients must be present and available."

Ascorbyl palmitate - This is a non-acidic form of vitamin C that, due to its lipid (fat)-soluble nature, has the ability to reach specific areas of tissue that ascorbic acid—an acidic, water-soluble form of the vitamin—cannot. Additionally, like all forms of vitamin C, ascorbyl palmitate enhances the bioavailability of I-carnitine, which results in greater fat utilization capabilities.

Enzyme Enhancement System™ (a proprietary blend of Amylase, Lipase, and Protease) -

The saving "It's not what you eat, it's what you absorb" is the rationale behind the inclusion of this trademarked blend of digestive enzymes. Having these enzymes in Mito Caps helps maximize absorption of the nutrients in the product.

Real Athletes, Real Results!

What you're saying about Mito Caps

"Just wanted to take a minute before I close 2011 to send a THANK YOU for the great products and service this year. Using Race Caps Supreme, Anti-Fatigue Caps, **Mito Caps**, HEED, and Perpetuem, I managed to place top ten in every race, won Rev 3 Knoxville and Dickson Endurance Tri in AG 55-59, placed 3rd in AG at Chattanooga Waterfront Tri, and placed 8th for Team USA 55-59 at Worlds Long Course in Henderson, NV. I am looking forward to 2012 and even better results with Hammer! Hammer ON!" - Butch W.

"I don't know what the heavy hitter(s) are in **Mito Caps**, but I started loading up on those before Big Sur and wow, they seemed to work!"

- Hagan B.

"Just wanted to let you know that I used the **Mito Caps** this morning before a half marathon and I placed 3rd in my age group. Thank you Hammer Nutrition!" - Amy G.

"I just went ahead and got another supply of **Mito Caps** because they have been amazing in the last week! My recovery and daily energy levels have shown great improvement since starting them."

- Brian B.

"I used Endurolytes Fizz for the first time in a race at Myrtle Beach Mini Marathon. I also took Hammer Gel during the race, and Race Caps Supreme and Endurance Amino before and during. Afterward I had **Mito Caps**, Recoverite, and Super Antioxidant. Once again, Hammer is getting me to PRs at age 36!"

- Alice K.

- continued from page 10

found that ALC and R-ALA did this "tune up" by improving mitochondria activity and cellular metabolism.

Dr. Bill Misner emphasizes the importance of this by stating, "So few substrate molecules function biochemically inside mitochondria cells. Endurance athletes should realize how incredibly important it is to effect mitochondria... the longer you can stimulate the lifespan or health of the mitochondria, the longer you will live and the better you will perform in endurance events. The athlete who has the most healthy/efficient active mitochondria is the athlete who performs at his/her best." That's why Mito Caps was produced and why I consider it to arguably be the most important product in the Hammer Nutrition line. You'll find information about each of the nutrients in Mito Caps elsewhere.

Once you read about these nutrients, I'm sure you will agree that it would be hard, if not impossible, to find another product that contains such a variety of nutrients that have so many benefits, both singularly and synergistically. I firmly believe that no other product has as many benefits that apply to both enhanced athletic performance and overall health. I believe you'll think so as well.

As is the case with most supplements, the key to accruing maximum benefits from Mito Caps is consistent daily use, even on non-training days. The benefits achieved are cumulative, meaning that the more consistently you use the product, the better your results will be. Additionally, your body won't "build up a tolerance" to these nutrients (because it'll be using them!).

I consider Mito Caps to be such an important product that every person—athlete and non-athlete—should take it every day for life. I've taken to heart the words of Dr. Bill Misner, and I hope you do as well: "Mito Caps is a plausible and safe supplemental intervention that may reduce mitochondria substrate depletion imposed by age and endurance exercise stress. I have taken these substrates without any known side effects . . . except less fatigue, better endurance performance, and less required sleep. Very few substrate molecules function biochemically inside mitochondria cells.

Endurance athletes should realize how incredibly important it is to effect mitochondria and that everything formulated in this compound influences mitochondria cell biochemistry function synergistically and remarkably. Mito Caps is a product that I recommend to be taken year-round."

If you've never tried Mito Caps, or if you haven't been using the product on a daily basis, don't put it off any longer, especially now that training season is upon us. The benefits that you'll receive from consistent use of Mito Caps—for enhanced athletic performance and even more so for enhanced overall health—are significant and profoundly positive . . . it may very well be the most important supplement you ever take! <code>HN</code>



Suggested Usage:

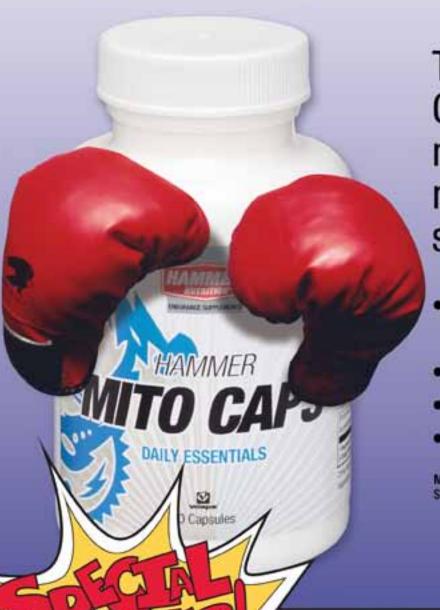
Take 1-2 capsules 3 times a day with food.

Questions on this or other products?

Join in the discussion on the Hammer Forums.

Click 'Endurance Forum' under the 'Community' link on www. hammernutrition.com for info!

Help your mito put up a fight-o!



The unique Mito Caps formula helps mitochondria work more efficiently and stay healthier.

- Improve energy production capabilities
- · Superior antioxidant support
- Potential increase in longevity
- · Better fat metabolism

MSRP

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Purchase a bottle of Mito Caps and receive a FREE Hammer Wrap Pack (sweatproof/waterproof bag for carrying your ID, keys, and cash)! Ad code EN79M. Offer expires 5/25/12.

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Are you sure you want to put THAT in your body?

Just say 'No!' to chemicals in your electrolytes

BY STEVE BORN

Serving Size 1 tablet (4.4g) Servings Per Container 13			
	Amount Per Serving	%Daily Value	
Calories	10		
Total Carbohydrate	<1g	<1%	
Vitamin B6 (se Desidenine Methodoleside)	13mg	850%	

Sunnlement Facts

	Serving	Value
Calories	10	
Total Carbohydrate	<1g	<1%
Vitamin B6 (as Pyridoxine Hydrochloride)	13mg	650%
Calcium (as Cassum Carbonata, Cassum Chloride)	100mg	10%
Magnesium (as Magnesium Oxide)	50mg	13%
Manganese (as Manganese Gluconate)	3mg	150%
Chloride (as Calcium Chloride)	60mg	2%
Sodium (ss Sodium Bicarbonate)	200mg	8%
Potassium (as Potassium (licarbonate)	100mg	3%
Tyrosine (as L-Tyrosine)	100mg	†

Other ingredients (Grapefruit flavor shown) Citric Acid, Sorbitol, Natural Flavor, Stevia, Wheat Germ Oil. hen it comes to what you're consuming, be it in your diet or in your workout/race fuel, you need to be aware of just what it is that you're putting in your body. At Hammer Nutrition, we have always advocated against ingesting anything that isn't going to benefit your health or your exercise performance.

Three ingredients that are found in some effervescent electrolyte products, but not in Endurolytes Fizz, are a prime example of this: polyethylene glycol (PEG), Acesulfame K (the "K" is the chemical symbol for potassium), and sucralose. Take a look at what this stuff is, and then decide if you really want to be ingesting it. To borrow a cliché, we're pretty sure you'll want to "avoid them like the plague."

PEG – This is a petroleum-derivative compound that is made from ethylene glycol (ethane-1,2-diol), the main ingredient in antifreeze. PEG can be found in a number of other products, including skin creams and personal lubricants, and as a food additive for anti-foaming purposes. Additionally, PEG is the active ingredient in a number of medications prescribed for treating constipation. In the case of an effervescent electrolyte product, it is used as a lubricating agent.

Although the toxicity of PEG is considered to be low, the questions you should ask yourself are:

- 1. "Do I really want to ingest a compound that is the same thing found in antifreeze?"
- 2. "Do I really want to ingest something that is used in treating constipation and could potentially cause some unpleasant stomach issues during my workout or race?"

Your answer to both questions should be a resounding "No!" Why put something in your body that will not benefit your health or your athletic performance, especially when a healthier, safer alternative exists? In Endurolytes Fizz, you won't find PEG. Instead, we use wheat germ oil as a lubricating agent, which is undoubtedly a better choice. And though the word "wheat" is in



- continued from page 14

the name, the wheat germ oil we use contains less than 5 ppm (parts per million) gluten. This is significantly less than the FDA requirement for "gluten free" labeling-that a food contains less than 20 ppm gluten.

For more information about the wheat germ oil component in Endurolytes Fizz, see the FAQ "Why do you include wheat germ oil in Endurolytes Fizz, and is it gluten-free?" in the KNOWLEDGE section on the Hammer Nutrition website.

Acesulfame K – Up to 200 times sweeter than table sugar, this artificial sweetener has been around a long time; it has been an FDA-approved sweetener since 1988. Like other artificial sweeteners, the debate rages on as to whether or not it is safe to consume. While the FDA has set an acceptable daily intake (ADI) of up to 15 mg/kg of body weight per day—for a 165-lb athlete that would translate into a little over a gram per day-we at Hammer Nutrition take a "zero tolerance stand" regarding the consumption of

artificial sweeteners. As it is with PEG, if it's not going to benefit your health or athletic performance, and in fact may hurt both of them, why would you ever want to ingest it?

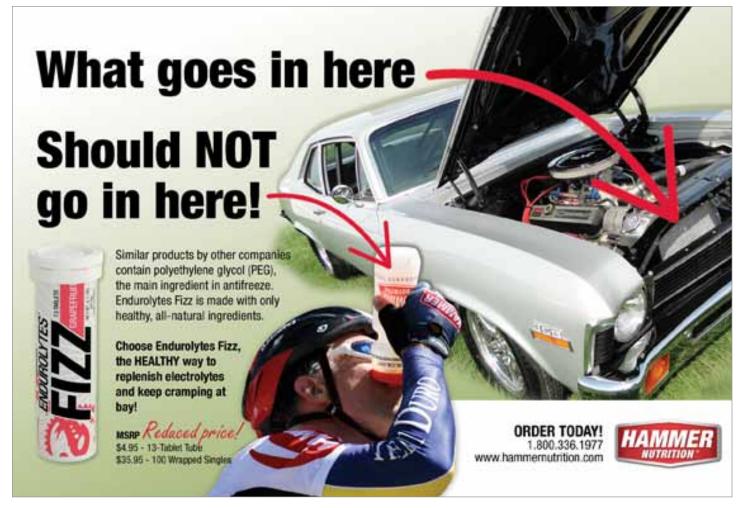
What do we know about Acesulfame K? Well, we know that the few safety tests done on this artificial sweetener were done in the '70s (quite a long time ago) and that many organizations, including The Center for Science in the Public Interest (CSPI), consider those studies to be too brief and their quality mediocre. The need for further testing of Acesulfame K seems to be abundantly clear; however, at this time the FDA has not required it.

We also know that Acesulfame K contains a carcinogen-methylene chloride (aka dichloromethane). This chemical is the propellant used in many aerosol products, and it's also used in the manufacture of paint stripping products, paint removal products, adhesives, and more. Long-term exposure to methylene chloride is believed to be linked to several health disorders including headaches, depression, nausea, mental

confusion, and others. This carcinogen can negatively affect the liver and kidneys, as well as cause cancer.

Thanks to the lack of testing, we don't know with 100% assuredness what the toxicity of Acesulfame K is. Why take chances, though, especially given the fact that it contains a known carcinogen, and that there's a very distinct possibility that this artificial sweetener has a number of potentially negative health effects? For sweetening a product, there are much safer alternatives, such as sorbitol and stevia, which are what we use in Endurolytes Fizz.

Sucralose – Don't be fooled by this seemingly benign substance. While sucralose may begin as a sugar molecule, the end product is a synthetic chemical with a chlorinated core. Making sucralose involves a five-step process in which three chlorine molecules are added to a sugar molecule. This chemical process alters and converts the chemical composition of the sugar so much that it ends up being a type of molecule that





Head to the basement!

Fueling seminars at Sports Basement

BY STEVE BORN

ourtesy of one of our favorite retailers, Sports Basement, I'll be presenting two fueling seminars in early May, held a few days before the Hammer Nutritionsponsored Sonoma/Napa Echelon Gran Fondo. I'll share lots of valuable information regarding how to properly fuel prior to, during, and after workouts and races. If you're in the Bay Area, you'll want to make room in your schedule to attend one of the seminars listed to the right!

On Friday, May 11 and Saturday, May 12, Hammer Ambassador Mike Freeman and I plan to offer fueling advice and

free samples at the Hammer Nutrition booth at the aforementioned Sonoma/ Napa Echelon Gran Fondo (www. echelongranfondo.org/napa/). We're still working out the details, so keep checking our Facebook page and other social networks for the latest news.

I want to thank Coleen Coleman of Sports Basement for helping put this all together, and I hope to see you at one of my two seminars!



SEMINAR #1

DATE: Wednesday – May 9 LOCATION: Sports Basement San Francisco – Presidio 610 Old Mason St San Francisco, CA 94129

(415) 437-0100 **TIME:** 6:30 p.m. – 8:00 p.m.

SEMINAR #2

DATE: Thursday – May 10 LOCATION: Sports Basement Walnut Creek 1881 Ygnacio Valley Road Walnut Creek, CA 94598 (925) 941-6100

TIME: 6:30 p.m. – 8:00 p.m.

- continued from page 15

does not occur in nature.

One disturbing thing about this "unique" molecule is whether or not the human body can or can't metabolize it; no one seems to have a definitive answer about this aspect of sucralose, though it is suggested (via extrapolation from animal studies) that some people will absorb and metabolize this chemical. Additionally, there have been no long-term human studies on the safety of sucralose, which is troubling because many people interpret that to mean "this is safe until proven toxic." However, as the studies on this artificial sweetener increase, so do the number of potential health-related issues.

Are you willing to take a chance on the safety of sucralose and the distinct possibility that your body can absorb and

metabolize this chemical? A comment from Dr. Bill Misner should make answering that question a lot easier: "This artificial sweetening ingredient is possibly worse than the processed simple sugars it replaces. It is difficult to imagine that a synthetic chlorinated disaccharide is an improvement."

Always remember that what you put into your body plays a monumental role in determining your athletic performance and, more importantly, your health. For 25 years and counting, we have never deviated from this position . . . you shouldn't either! PEG? Acesulfame K? Sucralose? We are convinced that these substances have absolutely no business in your body, which is why you'll NEVER find them in any Hammer Nutrition product. HN





Talking training and technology

With pro triathlete Brendan Halpin

BY BRENDAN HALPIN



s endurance athletes we enjoy personal challenge. We test our capacity to withstand the wear and tear of training to better our performances in races. In my sport, triathlon, the first step in bettering our fitness is to swim, bike, and run as much as possible. Nearly every training article in triathlon-specific magazines focuses on the specifics of workouts and training programs. Occasionally an article focuses on stretching, recovery, or strength, but these topics are few and far between. Maintaining our bodies should always be a priority in helping to withstand the stress that training loads pose.

As competitive athletes we are typically quick to jump on every trend, new piece of equipment, or new training plan to gain a precious advantage over our competition. Endurance athletes often spend money on aerodynamic gear to increase speed, but in most of my observations, nutrition and taking care of their bodies typically is a last ditch effort. Nutrition is an entirely different can of worms, but the focus here will be taking care of our bodies, and I'm here to share my recent experiences in that regard.

To do my story justice, I need to give you a little background about myself. I'm a fourth year professional triathlete from Missoula, MT, who has been racing triathlon for eight years. In that time, I have made considerable progress through hard work and determination, with little natural talent. Like the

majority of triathletes I had no idea how to swim freestyle laps until I was 18 years old, and that has continued to be one of my obstacles in professional racing.

For the past five years I have been a snowbird, splitting my time between Montana and Arizona. My winters are spent working at The Cycling House in Tucson, AZ, assisting with training camps for cyclists and triathletes. I was introduced to Hammer Nutrition at The Cycling House. The beauty of their cycling training camps is that clients are able to put normal life on hold and focus on training for a week; they receive the same support as a pro-tour rider. Another benefit is that clients are able to use all the Hammer Nutrition products including supplements, fuels, coffee, and electrical stimulation.

Five years ago if you asked me to hook myself up to a Compex unit, I would have thought you were crazy! At the time, my only frame of reference for this type technology was Ivan Drago in Rocky IV. Rocky Balboa took the mountain man approach to training while Ivan Drago used technology to get stronger. After watching the movie I knew that Drago looked like a machine and his numbers were much higher than Balboa's, but Rocky could take a serious hit and was the victor. The point is that Drago was using technology to his advantage, and this is something that we can all do! Over the past five

- continued from page 18

years I dabbled in electrostimulation briefly, but it wasn't until this past fall that I fully embraced the technology.

In September I raced Ironman Wisconsin and finished in 6th place. While I ended up having a great race, my swim was extremely disappointing to me. I completed the swim in 1:03, which was much, much slower than I should have gone. I called my coach, Jim Bruskewitz of Endurance Performance, who also is the Hammer Nutrition expert on Compex. Jim set up a NMES strength program for me to use on my latissimus dorsi and triceps, and I was very consistent in using the Compex for several weeks before my next big race at Ironman Cozumel. I continued my normal swim routine, but the added Compex sessions seemed to be helping.

At Ironman Cozumel I swam six minutes faster, posting 57 minutes for the 2.4mile ocean swim. (I have to note that it was a non-wetsuit swim, unlike the wetsuit swim at Ironman Wisconsin. The swim at Ironman Cozumel is typically fast, but not six minutes faster, especially because it is non-wetsuit.) The most significant difference that I noticed while completing the swim was that my lats did not get tired like they typically do. I was able to utilize the larger muscle group and power my way through the swim, staying with a group for awhile

but solo for the majority of the time.

The advantage of using Compex seemed very clear to me and I have continued to use the strength, resistance, and endurance programs on a regular basis. Occasionally I also use the massage and active recovery plus programs-and I intend to incorporate those more and more into my regimen—but for now I focus on strength. After Cozumel, I continue to train with the Compex and recently set a new PR in a 100-yard freestyle. The benefits of Compex seem obvious to me. The key, like in all forms of training, is consistency.

Compex has become a part of my regular routine. I recommend that all endurance athletes consider adding electrical stimulation to their regular routines. I place the same importance on Compex as I would place on a swim, bike, or run session. Jim adds Compex sessions to my Training Peaks program and I treat it just like any other training session. I look forward to using the Compex consistently throughout the 2012 season and implementing strength sessions on my quadriceps, hamstrings, calves, and glutes. I suggest having your coach add the Compex sessions onto your training calendar and really giving it a full trial period. Good luck to you all in 2012! HN



Real Compex Athletes, Real Compex Results!

Once again, Hammer Nutrition products saved me! I'm an elite-level cyclist, and for years I've used nothing but Hammer Nutrition fuels and supplements to help me train and race. At the end of my road cycling season last summer I did a little running to cross-train and get ready for cyclocross. After having not run for several years, my calves did not like changing out of my carbon-soled cycling shoes! I ended up tearing one of my calf muscles. Massage and physical therapy were somewhat helpful . . . but what really fixed the problem was the Compex. Dustin is so good at staying in touch with me that he understood my calf was messed up, and he suggested trying the Compex. I'll admit that I was skeptical, but when I tried it - wow! My PT told me to expect several weeks to recover. But when I used the Compex daily, the prognosis of several weeks turned into several days. My PT and I were amazed at how quickly my calf healed. I was able to resume my cross-training without pain far more quickly than I'd expected. Because of the Compex I was able to complete my offseason training and participate in cyclocross without my calves causing me any trouble. If I had to recommend one piece of training equipment for a multisport athlete, the Compex would be it. Thanks for taking care of me, Hammer!





Performance U.S.

5 programs with 5 levels of progression. Perfect for the fitness enthusiast and/or athlete who engages in frequent competition.



Sport Elite

9 programs with 5 levels of progression. Perfect for the competitive/high-performance athlete who has a rigorous training and exercise regimen.

Compex coaching for the win

BY JIM BRUSKEWITZ



rendan Halpin is a very talented athlete with a big capacity for absorbing a training load, and his results have improved steadily. He had a very good 2011 campaign, and I have a feeling that 2012 will be a breakout year for him. I've known Brendan for the past five years and have had the pleasure of riding and swimming with him in the winter months in Tucson. I now also have the pleasure of coaching him. If you want to be a good coach, train a good athlete like Brendan. It will make your job a lot easier!

My contact with him has given me some insight into Brendan the athlete—both his strengths and weaknesses. Brendan can run a "three hour and small change" marathon in an Ironman consistently. He often is in the top three overall run splits at Ironman competitions, and I'm confident he'll break three hours this year. He's very solid on the bike and split a 4:50 this past season in an Ironman.

Brendan's swim is his weakest discipline, as he did not grow up as a high school and college swimmer; in fact, he has taught himself to swim. I waited on shore at Ironman WI for Brendan to come out of the water and thought perhaps I had missed him in the fray; he was over an hour and in the mix with a lot of other athletes. Brendan finished 6th that day, but he obviously could have done better if he hadn't given up so much time on the swim. After a recovery from the race, we needed a plan to get his swim time down.

When we swim together, I sneak peeks at his stroke under the water. More often than not, triathletes don't get over their stroke . . . that is to say they can't keep their elbows up and out, and therefore can't brace themselves in the water with their arms while moving their bodies over the brace. Brendan is long and lean, and while his slight upper body is great for the running and cycling legs of an

Ironman, he doesn't have the upper body strength to swim efficiently. I correct myself—he didn't have the strength he needed. The quickest, most efficient way to lower his swim split was to increase his strength with the Compex.

I come from a swimming background, and I can tell you from personal experience that I swim faster when I am using the Compex on my upper body. Like most of the rest of us, I don't have time to train six muscle groups a day with the Compex as well as work, train. and be a family man (even in an empty nest). Like Brendan, I prioritize which muscle groups I train to enhance my swim, bike, and run. Three days a week it's the quads and gluteals, and three alternate days a week it's the lattissimus dorsi, triceps, and abdominals. I wish I had time for more because of the improved performance I enjoy. Unlike the aerobic adaptations that come from months and years of endurance training, I can feel a difference in two weeks with the Compex. I measure the improvements in watts while on the bike and the pace clock while in the pool. I merely feel the difference, particularly on the hills, while running.

Since Ironmans WI and Cozumel (between which Brendan saw a very significant drop in his swim splits), I've been back to Tucson to swim and ride with him. What is very noticeable to me now when I sneak that peek under the water at his swimming stroke is how he is finally able to get over his stroke. He's not just pulling his arms through the water anymore; now he is bracing himself on the water and moving his body over that brace. He has the strength to do it. He has the times to prove it. I can't tell you how good it is to see it.

Brendan continues to train with his Compex and is going to have a breakout year. Go Brendan, go! **HN**

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NMES consultations with our experts!

The Primer - \$49.95

30-minute consultation

Discover the benefits of Compex

To gain the best possible benefits and value from this powerful device, you'll need to become familiar with the basic functions of your NMES, including charging the device, and proper cable and : pad connection.

In addition you will learn:

- Navigation through the various programs stored within your unit
- · Placement of the electrodes over the muscles you plan to stimulate
- Proper starting level of stimulation for the programs you use daily

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This extended consultation includes everything covered in the 30-minute consultation, plus you'll learn how to:

- Use all of the programs on your device
- Time weekly program use to benefit your
- · Schedule your training utilizing an array of Compex programs to reach your peak at the right time
- · Stack NMES workouts on top of conventional workouts to extend training efforts

60-minute consultation *Per hour

Become an advanced NMES user

After completing both the 30-minute and 60-minute initial consultations, additional consultation time can be purchased. You'll quickly become an advanced user and get the most out of your Compex device! With our advanced consultation, you'll learn how to:

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- · Evaluate your progress and adapt your program
- · Understand how the science and technology of NMES makes the Compex a very powerful tool





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"I just wanted to let you know that the Compex Snap-On Conversion Cable kit is the best!

Lwas sold on the convenience of snap. leads, but I think the biggest benefit is that snap leads connect in the middle of the pad and don't pull the pad away from the skin like pin leads. With pin leads, I could never effectively use the Spectra conductivity gel because the pad would get pulled away from the skin too easily. With snap leads, I don't have that problem. The improved performance and convenience are more than worth the extra money!" - Carrie C.



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- Dramatically increase muscular endurance
- Optimize muscle recovery (minutes instead of days!)

Over the past 20 years, Compex has become the leader in electrotherapy through extensive research and innovation. Compex's flagship

electrostimulation devices are an essential ally to health care professionals and the most demanding athletes in the world. For the past 24 years, Hammer Nutrition has been the leader in educating athletes to fuel properly and since 2006 has been the leader in NMES education in the US. Together, Compex and Hammer Nutrition are your best choice for all things NMES.

NMES technology is universally accepted and widely used in Europe for physical preparation, muscular recovery, injury prevention, rehabilitation, pain relief, muscular reinforcement, physical beauty, and more.

Whether you are a professional athlete, weekend warrior, or somewhere in between, Compex electrostimulation devices provide a potent tool to enable you to achieve, and even exceed, your highest athletic goals.

More benefits!

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- Accelerate rehabilitation & injury recovery
- Avoid loss of muscle fitness during periods of inactivity
- Get a massage anytime you want

Compex is FDA-cleared

Compex NMES is ideal for all athletes



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Programs include:

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- Resistance
- Strenath
- · Explosive Strength
- Potentiation
- **Active Recovery**
- Recovery Plus Pre-Warmup
- Massage

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2 free sets of electrode pads - FREE A \$29.90 value!

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Real Athletes, Real Results!

"The Compex has been a huge part of my training and recovery this year. I've had hip surgery in recent years and never fully regained the strength I lost in my glutes and hamstrings. Adding the Compex to my training and recovery regimens has helped me make great strides in getting these muscles to function properly again. I'm biking and running better/faster than I have since before my injuries. I couldn't be happier. Also, I recently turned 40 and my body doesn't recover like it used to. Adding the Compex to my recovery regimen has made a noticeable difference in my ability to train at a high level daily, many days being two-a-days." - Deb M.

"I can't put into words how this has helped me. The removal of pain is priceless. Being able to get out of bed and move without pain is GREAT! This unit helped me as soon as I received it and used it the same day. So I say to Compex and Hammer Nutrition. THANKS BIG TIME!!! I am on the way to getting my life back. This is PRICELESS!!!" - Grea Q.

Help with altitude training

A question from the Hammer Forum

BY STEVE BORN

Are there Hammer Nutrition products or certain foods that help increase blood oxygen levels to assist with altitude training/racing?

ANSWER

There's a pretty good article about this topic on the Livestrong website at http://www.livestrong.com/article/344130-foods-to-increase-the-oxygen-in-the-blood/. Keep in mind that some of these suggestions are to help resolve iron-deficiency anemia, which only a blood test can reveal. We do not advocate the use of iron supplements, and our explanation for this can be found in the short article "Iron - Yes or No?" at http://www.hammernutrition.com/knowledge/iron-yes-or-no.5574.html.

As you'll read in the article, iron most definitely plays an important role in healthy red blood cell production, though too much iron has negative effects. Eating iron-rich food is not problematic (unless you go way overboard), but unless iron-deficiency anemia is diagnosed via a blood test, there is no need to take iron supplements.

Another good link from the Livestrong site is http://www.livestrong.com/article/110669-natural-raise-oxygen-level-blood/, where you'll notice the suggestion of vitamin A, vitamin C, vitamin E, and Coenzyme Q10. You'll get plenty of vitamin A (in the form of beta-carotene) in **Premium Insurance Caps**. Vitamin E can also be found

in this product, though for the best vitamin E "coverage" I think that **AO Booster** is a phenomenal product. More info about AO Booster can be found in Endurance News #61 at http://www.hammernutrition.com/downloads/ENews/ENissue61.pdf.

Coenzyme Q10 and its analogue, idebenone, are found in Race Caps Supreme. While very similar in molecular structure, idebenone has a unique characteristic that CoQ10 does not—its unique ability to operate under hypoxic (low oxygen) conditions, helping to produce energy and maintain high energy levels without creating free radicals. Under the same cellular low oxygen conditions that can cause CoQ10 to act as a pro-oxidant, idebenone helps prevent free radical damage while still supporting ATP production.

This article on the Livestrong website also recommends Essential Fatty Acids (EFA) and provides a couple of food suggestions that are EFA-rich. And while the consumption of these types of foods is certainly something I believe to be beneficial, it's important to keep in mind that they all contain Omega 6 EFA. That, in and of itself, is neither wrong nor harmful because these are healthy Omega 6 foods (and we need Omega

6s for optimal health). The problem is that the average diet contains far too much Omega 6 EFA (oftentimes from lessthan-desirable choices, such as saturated fat foods) and not enough Omega 3 EFA. We need to get more Omega 3s in our diet and arguably the best way to do that is via fish, such as salmon, and/or via fish oil supplements, such as Carlson Norwegian Salmon Oil.

It is my opinion that we need to cut back severely on Omega 6s from saturated fat foods and opt for better choices, such as those mentioned in the article. Also, I do not believe it is necessary to supplement with a combined Omega 3/6 supplement (such as flaxseed oil); I think that an "Omega 3 only" product (fish oil) is definitely preferable.

The B vitamins—in particular folic acid and B12—are intimately involved in healthy red blood cell production. You'll receive a very good dose of all the B vitamins in Premium Insurance Caps, but I'd suggest taking a tablet of **Xobaline**, our sublingual (under the tongue) folic acid/B12 product, once a day.

Vitamin C plays a huge role in red blood cell production, and though you'll get some in Premium Insurance Caps, I believe additional amounts are beneficial for a number of reasons. I personally take, in addition to what I receive from Premium Insurance Caps, 1,000 mg of vitamin C three times daily. I use a neutral pH/buffered form of vitamin C called Ester C (aka calcium ascorbate). I prefer this form of C because it's less irritating on my stomach than "regular" vitamin C (ascorbic acid).

Lastly, for your key races, you might want to consider doing a 4-day loading dose of **Race Day Boost**. This is a pretty amazing product; one of its attributes is that it increases/ maximizes a compound found in red blood cells known as 2,3 diphosphoglycerate (2,3-DPG). This molecule helps release oxygen from hemoglobin into the muscle cells. An increase in 2,3-DPG will improve the availability of oxygen to working muscles for the process of creating ATP. HN









Off-season fun = race season fitness BY PHIL GROVE

ith each winter that I spend in Montana, I find more and more enjoyment in the outdoor activities available right outside our door, and believe it or not, fall less and less off the wagon in preparation for spring cycling season. Until recently, however, staying fit during a six-month period without much sun (or temperatures above freezing) didn't come easy for me. Having spent my college years in Missoula, MT, I had to say goodbye to many of my athlete friends every year; after the leaves fell and the snow hit the ground, they would fly south to Tucson after Christmas for warm, sunny miles on their bike, beautiful trail runs, and lavish poolside lifestyles after working out all day. (Check out one of our Hammer Camps if this sounds right up your alley!) I was left to a grey, deserted town where my biggest athletic challenge was navigating the dangerous ice ruts of the Garden City without going "over tea kettle." Needless to say, I would spend the entire spring and well into summer trying to catch up to my snowbird friends.

Missoula does have some great Nordic and backcountry skiing opportunities, and I probably could have given fitness more of a chance down there, but I never really got into it until spending a few winters here in the Flathead Valley of Northwest Montana. Our close proximity to world-class ski resorts and backcountry skiing has changed me from someone who grumbles about cold weather to a powder hound who is likely more excited about powder snow than a great day on the mountain bike. A big "plus" of spending a full winter on skis

is the fairly seamless transition to bike racing season in the spring. Last year I fully embraced winter sports and was pleasantly surprised with the outcome. Sure, I didn't have the acceleration to make the front group in the spring road races, but I made the podium in the first Montana mountain bike race of the year and eventually won the series. This is something I am very proud of after pedaling exactly zero miles on an indoor trainer and not riding outside until mid-March.

My skiing adventures here in Whitefish consist of skinning up our local hill (a 2,000'+ elevation gain on skis up Whitefish Mountain Resort) on Wednesday nights with my buddies, hitting it hard on the ski resort from bell to bell on weekends, and the occasional backcountry weekend to mix things up. We are lucky enough to have thousands of acres of amazing terrain just outside the confines of the ski hill. So if the lift lines are chock full of vacationers, all we have to do is switch on our beacons and head out of bounds. Backcountry skiing is great cross training for mountain biking because it not only requires cardio to get up a mountain, but legs of steel to get down. I'm fairly certain there's no feeling quite like floating down an untouched slope of powder. It's so much fun that it's hard to believe you just got in an amazing workout. The icing on the cake each spring is being able to ride at the same level as someone who spent their whole winter on a bike! Finding your passion in winter (or whatever weather is typical for your off-season) is the trick to surviving the season, in shape and ready to hit race season in full swing. HN

The top 10 reasons to stop drinking soda

BY NANCY APPLETON, Ph.D. and G.N. Jacobs

(Source: http://nancyappleton.com - Reprinted with permission from the authors of Killer Colas: The Hard Truth About Soft Drinks)

- Sugar-sweetened drinks can cause pancreatic cancer^[i]
- Soft drink consumption may lead to ■ hyperactivity and other mental problems.[ii]
- Sugar-sweetened drinks can lead to obesity, heart disease, and other aspects of the metabolic syndrome.
- Cola consumption has been linked to osteoporosis in women.^[iv]
- Soft drinks have been linked to liver ■ disease.[v]
- Many types of soft drinks have been linked to headaches. [vi]
- Many types of soft drinks have been linked to asthma [vii]
- Energy drinks with similar ingredients to soft ■ drinks may cause epilepsy.[viii]
- Soft drinks can cause development of kidney stones.[ix]
- Soft drinks can lead to low potassium levels.[X]

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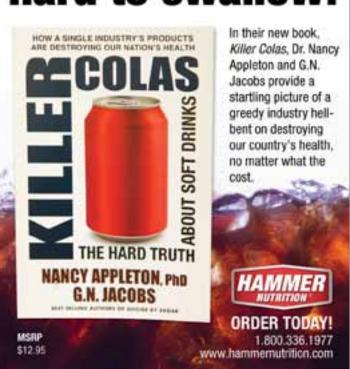
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BY SCOTT GAISER

Scott Gaiser heads out for the run portion of the 2011 Whitefish Lake Triathlon. Photo : Heidi Gaiser s I write this, it is a typical Northwest Montana day. The sky is gray, and a few snowflakes are in the air.

The ground is covered with snow, the roads marked with snow and patches of ice. To say the least, it is not the most inviting climate for triathlon training. Even for the most dedicated and committed triathletes, motivation can wane in the dark, cold days of winter. But as with the mailman, "neither snow nor rain nor heat nor gloom of night stays this courier from the swift completion of his appointed rounds." As the quote might imply, I admit to being somewhat obsessive about my triathlon training. I am sure many of you reading this are the same way. As age-group triathletes, we are often anxious when it comes to getting in our daily workout. We know that dedication and consistency in January, February, and March can lead to success in June, July, and August. This can be a good thing if we keep our training in perspective and balance it with family, work, and

other important commitments.

One should proceed with caution if routine takes over, however, as this can lead to complacency, where intensity may wane and the act of completing a workout becomes the goal in itself, rather than the workout being a means to achieving a goal. I wanted to make sure I knew the purpose behind each workout in my training this year, and I needed to make sure my workouts varied each week. Though not essential, having a qualified coach is extremely helpful in helping you create a long-term training regimen that offers variety and periodizes your training so that you can be at your peak fitness at the right time.

While reflecting upon my previous midwinter and late-spring training, there are a few elements that seem to point to either my summer racing successes or failures. After turning 40, signing up for my first Ironman seemed like the proper midlife crisis thing to do. Having only competed in Olympic-distance races, I didn't have a clue how to train for an Ironman. My plan was simple: A longer race meant a longer time training in all three disciplines, so I would gradually increase my running, biking, and swimming. For the most part my plan worked out and I qualified for Kona at the inaugural Ironman Coeur d'Alene in 2003.

Another great help in my first Ironman was Gale Bernhardt's book Training Plans for Multisport Athletes, which I highly recommend to those starting out in the sport. The book provided me with specific weekly plans, giving me the structure I needed and offered variety within each workout that I had been missing.

In the summer before my next Ironman I was fortunate to obtain the coaching services of a young, talented triathlon coach. Craig Howie was just getting his endurance coaching business off the ground when he offered to coach me pro bono. Working with Craig was a great opportunity as he is an extremely talented, caring, hard-working individual whose business, Howie Endurance Project, has now become very successful, serving a large number of athletes in

the Denver-Boulder area.

Through Craig's tutelage I learned the importance of heart rate training zones and was able to keep things fresh by incorporating various training sets, drills, and more into each one of my swim/bike/run workouts. No longer was I just increasing volume, I was using a proven scientific method of periodization in order to reach my fitness potential. Under Craig's direction I improved my Ironman Coeur d'Alene time by nearly 30 minutes in 2005, achieving my goal of a sub 10-hour time and qualifying for Kona once again.

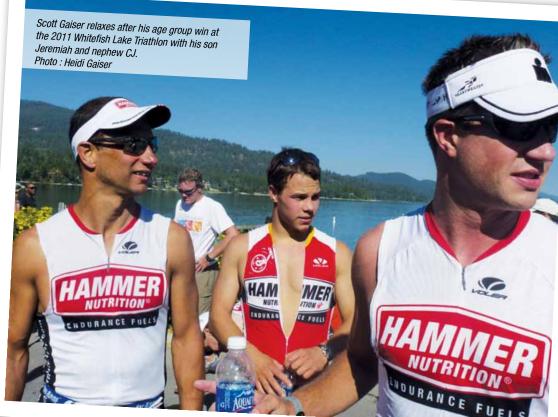
When I was young, I briefly sold insurance as a second income. One of the only things I remember (besides how bad I was at selling insurance) was a sales pitch recited to prospective clients: "Failing to plan is like planning to fail." Having a plan is an obvious benefit to having a coach. Having a plan helps you to be consistent in your training and hopefully provides you with the needed variety throughout the entire training cycle and within each individual workout. I found out that a solid training plan is not always enough. I signed up to do Ironman Coeur d'Alene again in 2007.

Given my success in

2005, I pulled Craig's training plans off the shelf and started training in November, following each daily and weekly plan as prescribed two years earlier. Tweaking workout placements and order only slightly, I qualified for Kona once again. I would say consistency was key, and the variety kept me engaged in all my workouts.

Feeling rejuvenated to compete in an Ironman, after four years removed from Ironman distance races, I began to prepare for another Ironman Coeur d'Alene in 2011, once again following the 2004-2005 training plan from Craig. Yet I had a disappointing outcome and did not feel I competed to the best of my ability. I feel the main reason I did not race well was that my training had become stale. I had a good plan with variety and consistently, and religiously completed each prescribed workout. However, I was so familiar with my workouts I achieved far less from each workout than I had the previous years. The lesson: You may be consistent in your training but to achieve and maintain the best focus and intensity, keep your training plans fresh.

This year my new direction is being



- continued from page 29

guided by Jim Bruskewitz, whose expertise is in exercise physiology; he also has an extensive back ground in triathlon training. Jim is the Hammer Nutrition go-to guy for the Compex muscle stimulator. His philosophy is not much different than Craig's, but learning new terminology and exercises sharpens my interest and focus. Jim sends me plans separated into four-week segments that he refers to as Macro sessions. After building a solid aerobic base I am now beginning to increase the number of my higher-intensity workouts while gradually increasing volume. My current Micro (weekly) workouts generally consist of three runs (tempo intervals, hill intervals and a long weekend run), three bike sessions that follow the same basic pattern of the run with a mixture of tempo intervals, single-leg drills, spin sets, and high-intensity reps. I only swim twice a week, but each session is long and includes various degrees of intensities and set lengths with a lot of pull recovery sets.

When looking back on my previous year's training leading up to a late June Ironman, it is interesting to note the similarities and differences. Essentially my lifestyle, workout schedule, amount of sleep, amount of time devoted to training, and general nutrition are the same as they were back in 2002/03 when I decided to do my first Ironman. What I will find interesting is to what extent the differences in my training make in my summer racing results and perceived fitness. I am swimming more and running less, and have a greater number and

higher level of intensity sets built in to my running and biking. With my previous plan I had a "stabilizer" week (less volume and less intensity) every third week. So far we have not included easier weeks, though I do have a rest

Failing to

fail.

plan is like

planning to

day, and alternating hard and easy days allows me enough recovery time to remain rested and ready. In previous years I used the Compex only on occasion, primarily as a post-exercise massage. This year, however, I have consistently used the Compex three times per week as prescribed by Jim.

I am also running less and feel better for it. In the past, I often have suffered a variety of "overuse" type leg or foot injuries at this time of year. I think keeping my runs to three "quality" workouts-instead of doing runs just to add more total mileage at the end of the week—has been a benefit. Including hill intervals as one of my run workouts allows for high-intensity speed work with less stress on the body. As in the past I try to get two days of lifting in, but this is the first to go if time constraints get in the way. On my day off or on a morning that I do not have a scheduled workout, I try to do a quick yoga session, usually led by Rodney Yee on DVD. This, along with increased and dedicated stretching after runs, has also helped to keep injuries at bay. Although I spend the majority of my days at a bacteria/virus warehouse (a high school) I have remained healthy.

Consistent exercise and my daily

supplement intake of Race Caps Supreme, Premium Insurance Caps, Mito Caps, Tissue Rejuvenator, and Boron has helped me to quickly recover from each workout and ward off sickness. I am also blessed with a wife who is an exceptional

> cook and enjoys cooking. We have always eaten well; this year, however, I am trying to be even more conscious of eating right, moderating my intake of cookies and doughnuts and trying to eat a more Paleo diet (meat, vegetables, fruit, and nuts) and less bread, cereal, and

sweets. One easy change has been in what I eat for breakfast. I have become addicted to my morning smoothie, which I recommend to everyone. It basically consists of a banana, spinach, orange juice or water, carrots, frozen berries, and a scoop of Hammer Whey Vanilla. I often put all the raw ingredients in my Hammer Blender Bottle the night before and then in the morning dump it into a blender with juice and ice. I can then drink it on the way to the gym, saving me minutes and allowing for more precious pillow time.

Staying consistent is not so difficult, given my religious zeal for daily exercise. As the days get longer and the weather improves, there will be more opportunities for variety in my training, a good thing when it comes to keeping your eyes on the prize. So hopefully we can all keep our training fresh and continue to enjoy it, because ultimately isn't that why we do this? HN

"I discovered a great recipe by accident vesterday involving Espresso Hammer Gel. Since all I had for lunch was a banana and a handful of mixed nuts, I chopped the banana

Hammer Client Advisor

delicious!"

Levi Hoch

into slices, threw the nuts on top, and drizzled (generously) Espresso Gel over everything. It was

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Vitamin E for muscle health

t seems as though vitamin E, more than any other vitamin or mineral, gets the most negative press. In the last edition of Endurance News, I discussed one such study's negative results, the flaws behind the study, and the sensationalistic headlines it generated. We have articles on our website defending vitamin E, including "Can a high dose of vitamin E decrease lifespan?" in the FAQs link of the KNOWLEDGE section. It's a must-read on vitamin E that contains a number of links for additional informative articles regarding vitamin E's benefits and safety.

Despite being the victim of some bad press, vitamin E has been proven time and time again to be beneficially vital for human health. New research on vitamin E from Georgia Health Sciences University helps explain one of its primary roles—to maintain and repair the cell membrane. This membrane is the penetrable barrier that surrounds a cell, separating and protecting its contents from its often-hostile exterior environment, while allowing the transport of important nutrients into the cell.

In their article regarding the study, published in the journal Nature Communications, the researchers state: "Considerable evidence, dating from early studies, shows that muscle health is dependent on an adequate supply of dietary vitamin E . . . Vitamin E deficiency secondary to disease in humans is associated with muscle weakness, elevated creatine kinase levels, and myopathy, and low blood levels of vitamin E are associated with a loss of muscle strength in the elderly. Why vitamin E, at the cellular and molecular level, is crucial to muscle health has remained an unanswered question."

In the series of experiments, the researchers, headed by Dr. Paul McNeil, a cell biologist at Georgia Health Sciences University, showed that the use of the alpha-tocopherol fraction of vitamin E on

cultured myocytes (muscle cells) resulted in repair to the membrane of injured cells. The studies confirmed vitamin E's antioxidant properties and the role they play in promoting membrane repair, while also noting that vitamin E, due to its lipid solubility, has the ability to enter into the cell membrane.

When we exercise, the mitochondria of our muscle cells utilize more oxygen (for energy-producing purposes) than usual. One of the unavoidable consequences of increased oxygen utilization is the production and accumulation of Reactive Oxygen Species (free radicals).

In the study, some of the test subject mice were exposed to an oxidant (to intentionally create free radicals), treated with Vitamin E, and then underwent a laser-produced injury. Another group of mice just underwent the laser procedure. The results showed that the mice exposed to an oxidant and then given Vitamin E had the same ability to repair muscle membranes as the mice not treated with the oxidant compound. The research confirms that Vitamin E helps neutralize the damaging effects of free radicals while improving muscle cell membrane repair.

The researchers concluded, "Diets lacking in vitamin E deprive muscle myocyte membranes of a constituent that, we show here, promotes repair as a membrane-based antioxidant. Loss of muscle, characteristic of advanced vitamin E deficiency, ultimately occurs as continuing myocyte death overwhelms regenerative capacity."

A diet comprised of vitamin E-rich foods, as well as supplementation with vitamin E-containing supplements (Premium Insurance Caps, Race Caps Supreme, Mito Caps, AO Booster), is a wise strategy that provides significant benefits for both athletic performance (especially recovery) and overall health. **HN**

REFERENCE/ABSTRACT
Promotion of plasma membrane repair by vitamin E
Amber C. Howard, Anna K. McNeil & Paul L. McNeil

BY STEVE BORN

Reactive Oxygen Species & Free Radicals – One and the same?

Reactive Oxygen Species (ROS) is a common textbook term for free radical, an "unpaired" molecule that has lost or is missing an electron. The "unpaired" molecule "steals" the missing electron from a molecule nearby, leading to more free radicals and initiating a subsequent chain reaction. It takes only two free radicals to terminate their own chain reaction by combining. Although originally called Reactive Oxygen Toxic Species (ROTS), somewhere along the line someone took out the "Toxic" and a called it ROS, the term commonly used for free radicals in general.

There are 12 variations of specific types of free radicals:

- 1. Alkoxyl Free Radicals
- 2. Hydrogen Peroxide
- 3. Hydroxyl Free Radicals
- 4. Peroxyl Free Radicals
- 5. Peroxynitrite Free Radicals
- 6. Phenoxyl Free Radicals
- 7. Polyunsaturated Fatty Acid Free Radicals
- 8. Semiguinone Free Radicals
- 9. Singlet Oxygen Free Radicals
- 10. Sulfoxide Free Radicals
- 11. Superoxide Free Radicals
- 12. Tocopheroxyl Free Radicals

Free radicals are not actually free in the sense of giving; rather they are impaired molecules that always act in the sense of taking, most often not to our benefit.



BY CASEY BECKER, Hammer Nutrition Client Advisor

ike so many of us do from time to time, I "fell off the wagon." For most of 2011 my training suffered, my supplementation suffered, and my diet, well, you get the idea. I didn't do a complete "180" and ignore these aspects entirely, but I veered off course with a lot more regularity than I'd like to admit. Fatigue and illness showed up more frequently.

A quick background on me: I am the self-proclaimed "black sheep" here at Hammer Nutrition as I'm not an endurance athlete. I'm a "gym rat" who loves to lift weights. This has been a very enjoyable sport for me for almost 12 years now, but for the past couple of years, I felt like I was just showing up and going through the motions. Plus, I had nagging injuries in both shoulders from playing football, which really restricted certain exercises. Burned out and discouraged to a degree, by the end of 2011 I didn't even set foot in the gym for three solid months. Excuses? You bet. You name it, I probably used it.

I finally grew tired of my lack of strength, energy, and what I was physically becoming. I made a promise to myself and decided, "This year, 2012, is my 'comeback' year." Now my desire to train is stronger than it's been in a long time. With supplementation back on track, guess what? Illness and fatigue have packed up and departed.

I have some great friends and coworkers who are very encouraging and support me in my efforts, and I am well on my way to

accomplishing my goals. I'll get right to the numbers with some of my big lifts:

Barbell Shrugs: (500 lb shrugs shown above) Week 1-315 lb for 10. Week 5-500 lb for 10, doing a drop set on the last set.

Barbell Dead Lifts:

Week 1 - 315 lb for 3. Week 4 - 405 lb for 3.

Barbell Rack Pulls:

Week 2 - 405 lb for 3. Week 4 - 435 lb for 3.

Barbell Squats:

Week 1 - 255 lb for 8. Week 5 - 375 lb for 3!

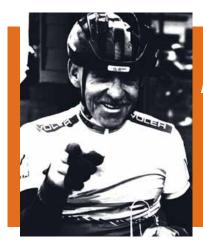
Barbell Bench Press:

Week 3 – 205 lb for 3. Week 5 – 225 lb for 4. (Previously mentioned shoulder injuries contribute to the slower progress here.)

Goes to show, muscles don't forget! I have no plans on slowing down. Of course, I'm now contending with weight ranges where progress will be slowed, but I'm going to keep pushing. For this renewed desire, you can bet that I've got a whole arsenal of Hammer Nutrition products on my side! A special shout out to Recoverite, Hammer Whey, Endurance Amino, and Tissue Rejuvenator!

Additionally, I should give props to the Compex NMES unit. If you want to break through some training walls you've hit and recover faster, I suggest checking these out. **HN**





ASK DR. BILL

From the archives of Bill Misner, Ph.D.

QUESTION:

What healthy whole food is the best appetite suppressant?

ANSWER: Whole raw fruit. Fruits offer us not only an abundance of fiber, water, vitamins, and minerals, but also bioflavonoids that protect our blood vessels and offer antioxidant benefits. Most people do not eat enough fruit. Even people with diabetes may eat 3-5 servings of fruit a day. The sugar content of plain sugar, honey, candy, sweets, sodas, etc. is calorically empty calories (poor in nutritional value). These items should be replaced by whole raw fruit.

Natural, raw fruit fructose sugar is sparse, not dense, making its caloric impact limited. It is metabolized through the liver, and there it is generally converted into liver glycogen stores. Because raw fruits present fiber, fluids, vitamins, and minerals that start on the acidic side but degenerate within digestive straits toward alkaline-ash metabolites, they are regarded as a healthy, appetite-suppressing whole food snack.

Fructose is a sugar also known as fruit sugar. It is the sweetest sugar in nature at 1.8 times sweeter than sucrose with the same number of calories. Sugar occurs naturally in fruit as fructose, or glucose (monosaccharides) and sucrose (disaccharides). In fresh fruits, the sugar content may range from about 6-25%; bananas contain nearly 20% sugar, and cantaloupes and watermelons contain 3-7%. The degree of ripeness influences the sugar content of fruits. The riper the fruit, the sweeter it is and the higher its sugar content is. Dried fruits such as figs, raisins, and apricots are much higher in sugar content (approximately 50-90%), due to their low water content. The calories in a given fruit largely determine the sugar content, as fruits are mostly carbohydrate and water. HN



Sugar content of some raw fruits

FRUIT (100g)	SUGAR %	FRUIT (100g)	SUGA
Banana	19.6	Peach	7.5
Raisin	14.2	Cantaloupe	6.5
Apple	11.0	Grapefruit	5.2
Pineapple	10.6	Strawberry	4.5
Grapes	9.3	Watermelon	3.2



Gluten-Free Blueberry Cobbler

Batter Ingredients:

1 cup Gluten-free Master Baking Mix (www.gingerlemongirl.blogspot. com/2011/05/gluten-free-master-bakingmix-homemade.html) or gluten-free **Bisquick**

1/3 cup almond milk 2 tablespoons Sucanat

Filling Ingredients:

3/4 cup water

1/2 cup agave

2 tablespoons cornstarch (or arrowroot starch)

3 cups fresh or frozen blueberries

Topping:

1/2 teaspoon cinnamon

2 teaspoons agave

2 tablespoons non-stick cooking spray, coconut oil, or butter

Directions:

Preheat oven to 425°. Lightly coat a small casserole dish with non-stick cooking spray or coconut oil, and set aside.

In a small bowl, mix baking mix, almond milk, and Sucanat.

In a small saucepan, mix or whisk water,

agave, and cornstarch. Cook over high heat, stirring constantly until boiling. Allow to boil for 1 minute. The cornstarch/ water mixture will turn translucent and thicken. Remove from heat and add blueberries. Pour blueberry filling into the greased baking dish. Drop the batter by tablespoons on top of the blueberry filling and use a fork to spread evenly. (It doesn't have to be perfectly covered.)

Mix cinnamon and agave in a small bowl and sprinkle over the top of the casserole. Dot with butter or coconut oil, or spritz the top of the casserole with non-stick cooking spray. (This will help the casserole to brown). Bake for 25-30 minutes until the top of the casserole is golden brown and the blueberry filling is bubbling around the edges. If your casserole dish is small, you may want to place a cookie sheet underneath the dish to keep it from bubbling over into your oven. Allow to cool for about 30 minutes before serving. Serve with ice cream, frozen vogurt, sorbet, or my favorite-iust plain the way it is!

Enjoy!

Berry Salad

1-2 small heads butter lettuce, cleaned

1 ripe avocado

3 sprigs green onions, sliced

1/4 cup raspberries

1/4 cup blackberries

1/4 cup sliced strawberries

1/2 cup slivered toasted almonds

Wash and dry lettuce, onions, and berries, and put in a salad bowl. Halve avocado, remove the pit, cut into squares, and scoop out meat into salad. Add almond slivers.

Mix dressing, and toss into salad just before serving: 1/4 cup olive oil 3 Tbsp rice vinegar Salt and pepper

*This is a super light dressing, as the ingredients of this salad are so flavorful. You may use any favorite dressing as a substitute.



NATE'S CORNER

BY NATE I I FRAND

Overtrained?

Steve's Note: The information from this "Tip of the Week" by Nate is eight years old, almost to the day! Is it still relevant? You betcha, which is why I've chosen it for this issue of EN.

s we train, there are going to be days when we feel strong and others when we feel weak and fatigued. Some days we'll feel irritated and edgy. This is all part of the game. So, how do we know when we might be falling into the realm of overtraining, or if we might be fully entrenched in it already?

One surefire way to test whether or not you are overtrained is with a quick blood pressure (BP) and heart rate (HR) test. This test is best performed at a doctor's office.

First, lie down and relax for several moments. This gives your body the opportunity to quiet down and reach some sort of baseline. At this point, measure your resting HR and BP. Then, quickly stand up and immediately remeasure your BP. Measuring HR is optional.

Under normal circumstances, when you are healthy and not overtrained, your BP will rise anywhere from 10-20 points when you shift from a prone to standing position. This is due to the fact that the heart has to work harder in order to keep the blood pumping to your head when you are standing up . . . hence, a rise in BP. If you have ever stood and become light-headed, it is because of a lack of blood flow to the head.

However, if you are overtrained or flirting with being overtrained, your BP will either barely rise, not rise at all, or most commonly, dip. In this case, your adrenals are so shot that they cannot kick in and jack your BP up to properly support the body's normal functions.

Conduct the BP test several times for

accuracy. If you fail this simple BP test, there is only one remedy—back off the volume and intensity of your training for at least 6-8 weeks. During the downtime, your goal should simply be to break a sweat but, more importantly, let your body lick its wounds and get healthy. Keep your HR below 70% and limit the duration of your workouts to a maximum of 60 minutes . . . basic, recovery-level stuff for the complete 6-8 weeks. Period! No exceptions!

At the end of this downtime, retest your BP. If it spikes as it should when you stand up, then you've got a clean bill of health and you can gradually start to increase your volume and intensity once again. If you fail the BP test again, take it easy for another four weeks and then retest again.

Only when your adrenals are recovered and your body is properly rested will you be able to reach your full potential. Only then will your body be firing on all cylinders.

So, if you are wondering whether or not you may be overtrained, schedule an appointment with the doctor and tell him/her the test protocol you want to do. If a general practitioner won't do this for you, then a kinesiologist surely will. And keep an open mind about the results if they are not favorable. Realize that your preventive maintenance is a good thing, and that backing off on your training is absolutely necessary for your long-term health and success as an athlete. **HN**

Energy Surge: A change in color, but no change in formula or effectiveness!

The next time you put an Energy Surge under your tongue for instant energy, you may notice that the color of the tablets has changed slightly, from a light pink with speckles to a solid white color. As with all Hammer Nutrition fuels and supplements, these do not contain artificial colors. The color is determined by the natural ingredients.

The color change is due to a simple switch from using a powdered natural cherry flavor to a liquid natural cherry flavor. Aside from the change in color, the formula is exactly the same in regard to potency, efficacy, and taste.



36 Apr/May: Issue 79



Blackberry Banana Smoothie

1/2 cup blackberries (frozen or fresh)1 ripe banana, peeled1/2 cup rice milk1 scoop Hammer Whey Protein (Vanilla or Unflavored)

Blend and enjoy!

Extra! Extra!

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www.hammernutrition.com/AES

Great strides toward another winning year

BY VANESSA GAILEY

r. Bill Misner's extensive collection of race medals and awards are just as much an indication of his mental strength as they are of his physical abilities and endurance. At 72, Dr. Bill is one tough competitor and only continues to get tougher, as evidenced on March 3 at the Treadmill 1-Mile World Championships, where he pushed himself to a PR, over 3% above his best-ever performance. His efforts earned him 1st place in his age group and 3rd place overall in this age-graded event.

"This was one of the most difficult events I have ever done. It required so much focus and intensity. I caught a flu bug the week before and also had "emergency" surgery the day before the event on my foot (so I could get my shoe on). This added a distraction of unimaginable proportion. I give all credit to the Lord for completing this!" Dr. Bill said.

All 150 participants were timed by an assigned referee, and times were ranked according to the World Masters Age-Grading system. This allows men and women of all ages to compete against one another. Paul Giannobile of St. Paul, MN, 52 and a world-class miler, won the event with an age-graded 4:12.3 performance. Dr. Bill claimed the bronze podium position with an age-graded time of 4:39.7, a mere tenth of a second behind the 2nd place overall finisher.



Coming off a "triple crown" of national championships in 2011, Dr. Bill Misner will be defending some of his championship titles later this year. "I am blessed and fortunate to race once again in 2012," Dr. Bill reported in January. "Being able to continue to compete is so wonderful, for many of my former competitors are not. The Lord is good! Here are the primary races where I hope to 'leave it all on the field!"

- USA National Half Marathon Trail Championships, Bend, Oregon, in June.
- USA National 50K Trail Championships, Bend, Oregon, in September. **HN**

2012 TREADMILL 1-MILE WORLD CHAMPIONSHIP TOP 5 BY AGE GRADED RESULTS*

Name	State	Age	Gender	Official Time	Age Graded Time
Paul Giannobile	MN	52	M	4:53:21	4:12.3
Brian Maas	MN	50	M	5:19.7	4:39.6
Bill Misner	WA	72	M	6:32.0	4:39.7
John Shelp	MN	39	M	5:02.4	4:47.9
Brian Peterson	MN	27	M	4:50.9	4:50.9

*World Masters Association Age-Grading Calculator: http://www.howardgrubb.co.uk/athletics/wmalookup06.html

Pit Row



John Wright

The Hammer/Northwest Race
Karts Racing Team sweeps the
podium again at the Pacific Grand
Prix Raceway kart race Sunday,
January 8, 2012. First, second,
and third place finishers of the
Unlimited/Open Class were
Brian Nixon, John Wright, and
Christian Carlson, respectively.
Brian passed John mid-race for

1st place while John fought off the third place finisher for the remainder of the battle. John's second place position would have been lost early in the race if not for the performance advantage of Hammer Nutrition products in this grueling 16-lap race.

Taylor RobertOn the fast track for the win in 2012

The gate has dropped in 2012 for Hammer Nutrition rider Taylor Robert. This 20 year old was making waves last year, but this year he has come out full throttle. The WORCS Series consists of a mix of moto- and enduro-racing, with race times lasting over an hour in a two-day, back-to-back format. In the first two rounds of the WORCS Series, which kicked off in Glenn Helen (famous outdoor track) and made a second stop in Primm, NV, Taylor earned the reputation of not just a rider to watch but one of the riders to beat!

In round one, it seemed to be a twoman race from the start, and once Taylor established himself out front, it was his race to lose on both days, a great start to his season.

Round two had started to a very similar tune with a heated battle up front. While Taylor battled some early traffic, he made his way to the leaders. It didn't



take too long for him to gain control at the front, and it was business as usual from there with Taylor going 3-for-3 in the win bracket of the opening rounds. Unfortunately luck has two sides, and on day two luck was not on Taylor's side. Six laps in, the clutch on his bike was done, but Taylor and his crew weren't. A quick motor change (not quite NASCAR) and the #33 bike was back out on the track, with Taylor salvaging his day and getting all

the points he could.

At the end of the weekend and with round two behind him, Taylor was in 2nd place, eight points behind 1st. It is still a long season, but with a great crew, coach, and nutritional fuel, you are looking at the beginnings of a great season for Taylor and his Kawasaki team!

38 Apr/May: Issue 79







For Immediate Release

Joe Bacal Takes New Lexus to Victory in SCORE Laughlin Desert Challenge

LAUGHLIN, Nevada, January 16, 2012 – Having endured a challenging 2011 off-road racing season, Joe Bacal brought his oven-fresh, factory-backed Lexus LX 570 to the 18th Annual SCORE Laughlin Desert Challenge looking for a bit of redemption. After narrowly missing victory on Saturday "by one corner," Bacal set a marker on Sunday with an emphatic win in the Stock Full class against a feisty 2011 class

Just Misses Sweep of Twin Weekend Races to Kick Off 2012 Campaign

champion. "We did a lot of work on the new LX to address issues we uncovered in our first two seasons," said

Bacal. "It paid off big in Laughlin--the truck really flies! A lot of the new speed comes from an improved suspension, courtesy of King Shocks."

Bacal had just completed the new LX 570, a badly needed replacement for his battle-scarred first generation racer. It had virtually zero test time before the Laughlin races and Bacal faced a problem early on. But once the big LX cleared its throat, Bacal realized he had a very quick racer.

"We had teething electrical problems that slowed the new rig at the start of the first race," said the 2010 Stock Full class champion. "It caused the engine to run in limp mode intermittently, but it cleared up long enough that I was able to reel in the leader and nearly got him at the end."

Although the new Lexus was quick out of the box, Bacal's rivals in the Stock Full class weren't making life easy for him, and the race format of multiple laps around a short course made for a lot of wheel-towheel racing.

"We diced with the leaders and had to race guys in other classes that we normally wouldn't run into," said Bacal. "The racing was close and we also had some pretty big jumps that kept things interesting." In addition to the suspension changes, Bacal's JT Grey Racing team and his vehicle builder, Geiser Brothers Racing, made further improvements to the big LX 570 in the off season with an eye toward weight reduction and more favorable weight distribution. The results were encouraging to the team as they look forward to a highly competitive 2012 racing season.

"Not only when I'm training hard using Hammer **Nutrition** but at the race track on race days, taking Race Caps Supreme gives me my sustained energy and endurance to keep my talent at the front of the pack! And of course after my long race I consume my Recoverite to properly recover for my next grind!"

Thanks Hammer Nutrition, Michael Beck



believe, for a number of reasons that soy protein is a very healthy protein source for men, especially in regard to being a potentially powerful aid for prostate health. The primary credit for that goes to soy's naturally occurring isoflavones, which have weak estrogenic properties. Now, some men might look at the word "estrogen" and wonder how a protein that contains plant-based estrogens can be beneficial to them, specifically to the health of their prostate. Some have even come to the conclusion that soy is actually bad for prostate health.

The opposite is true, however, as Dr. Bill explains: "If a soy protein is consumed, the weak estrogen isoflavonoids in soy find and occupy numerous target organ cells, effectually blocking stronger bodily produced estrogens in the circulation. In other words, soy's mild estrogenlike compound blocks the more potent hormonal estrogen compound from compromising health or regenerating mutagen effects in the DNA."

Bottom line: As an outstanding ally for helping to protect against prostate cancer, make sure that your daily diet contains some soy protein, from powders and/or foods that contain this nutritious legume. It really is an excellent protein source for men as well as women.

Prostate Specific Antigen (PSA)

Prostate health—before cancer

possibilities become a factor, as well as the efficacy of a certain treatment if prostate cancer exists—is evaluated via tests that measure a protein called serum prostate specific antigen, or PSA. According to the National Cancer Institute, "The higher a man's PSA level, the more likely it is that cancer is present, but there are other possible reasons for an elevated PSA level." Among those "other possible reasons" are benign prostate enlargement (BPH), inflammation, infection, and age.

For those men with prostate cancer, an increase in PSA levels following radiation or surgery indicates that the treatment has failed. One available option in this situation is a type of hormone therapy called androgen deprivation therapy. This treatment is designed to decrease the production and/or the effect of androgen hormones, such as testosterone, which are culprits in the increase in the growth of prostate cancer. However, with potential side effects such as osteoporosis and cardiovascular disease, this particular treatment is not an option for many men.

Soy protein: Beneficial after prostate cancer? Maybe!

Ten men with treatment-resistant prostate cancer that had not been metastasized were enrolled in this Pennsylvania State University study. For two years these men consumed three servings of soy protein a day.

- continued on page 41

- continued from page 40

(Note: Commercially available soy protein powders were used; however, the dosage is not listed in the research.) PSA levels were measured on a regular basis.

After the two-year period, half of the men were shown to have either temporarily declining, permanently declining, or stable PSA levels. Three of the ten subjects were still being treated with androgen deprivation therapy and continued to have rising PSA levels. One responded favorably to soy. Of the seven remaining men, four had positive results in terms of lowering PSA levels. The researchers concluded that soy may decrease the expression of the androgen receptor, which in turn reduced PSA levels. According to the study authors, "Our clinical experience suggests that soy supplementation using commercially available soy products can have durable beneficial effects on PSA levels and PSA kinetics in some men with prostate cancer."

Dr. Omer Kucuk, a highly regarded cancer expert, states: "The results from [this study] appear consistent with a considerable amount of published research showing that soy may help to prevent prostate cancer and may be useful in its treatment. For men unresponsive to surgery and radiation for prostate cancer, it is critically important to find androgen deprivation therapy alternatives, such as soy as a dietary intervention. While this study is small, it's important because it takes place in real-life conditions in a clinical setting."

Summary

We men surely hope that none of us will ever have to face the specter of prostate cancer. The good news is that it appears that soy protein consumption is not only an effective preventive measure for helping to diminish the possibility of prostate cancer from occurring, but also may have benefits for men who unfortunately already have prostate cancer. Hammer Soy, with a sizeable 23 grams of GMO-free protein per scoop, is a super convenient way to bolster your daily soy protein intake. **HN**

REFERENCE/ABSTRACT

Joshi, Monika MD; Agostino, Nicole M. MD; Gingrich, Rebecca MSN; Drabick, Joseph J. MD, FACP—"Effects of Commercially Available Soy Products on PSA in Androgen-Deprivation-Naïve and Castration-Resistant Prostate Cancer"

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- Promote positive muscle growth and recovery

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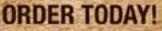






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Coffee Corner

Great coffee isn't really great unless it's organic!

BY RY WATKINS

Virtually everyone starts the day off with a cup of coffee at home or at the local coffee shop, but many consumers are unaware that they may be poisoning themselves, one toxic sip at a time! Mindful shoppers often spend a wealth of time selecting high-quality, certified organic, raw, sprouted, and/or glutenfree products while being completely unaware that the non-organic coffee beans they are drinking each morning are the one of the most chemically treated agricultural products on the

Although most fertilizers, pesticides, and chemicals are banned or heavily regulated in the United States, harmful petroleum-based products are legal and widely used in almost every coffeeproducing country! These heavily sprayed pesticides and chemicals are designed to kill agricultural pests and bacteria; if the process is extremely harmful to these living organisms, how

> can it not be harmful to humans? Non-organic coffee not only affects you and the quality of your morning cup, it also harms the workers

that tend to these polluted crops, slowly destroys the soil's natural fertility and sustainability, distresses native animals. and leeches damaging chemicals into local water supplies.

In today's marketplace we are left to make countless decisions on each item that we come across in the grocery store—do we select higher priced organic products, or pesticide- and chemicaltreated products? These decisions might seem difficult, but doing your small part can make a huge difference. At 53x11 Coffee we recommend eating healthy, living happily, practicing a sustainable lifestyle, being your best both on and off your bike, and drinking only 100% Fair Trade, organic coffees!

Friends don't let friends drink nonorganic coffee! HN





Dear 53x11 Coffee/Hammer Nutrition Crew:

Over here in New Jersey, I became an early convert to your amazing coffee. So I pestered Evan (former proprietor) to get on the 53x11 team. It's been great ever since. I've done loads of TTs, tri's, du's, and centuries—all while proudly sporting the 53x11 Coffee gear!

But there's one race that no one can beat: the Warren Balloon/Bicycle Race. It's a one-of-a-kind concept: a rider and a balloonist get paired up, and a balloon launch starts the timer. You need to fly past a pre-set boundary. Once you do, the balloonist lands, the cyclist hops out, and rides like hell back to the start point. Lowest elapsed time for flight + ride wins. Attached is a pic of me at the 2011 race. Enjoy!

John Quirke





DNFKnowing our limits

BY SUZY DEGAZON

ell, what can I say those three dreaded letters appeared after my name, and the worst part was that it was my "A" race of the season, Hawaii Ultraman World Championships. And the DNF was my own call! No, I was not injured; no, I hadn't bitten off more than I could chew in signing up. Quite simply, the realization that mentally I could not ride my bike in 55 mph side winds without some sort of consequence—despite only 12 miles to go and mostly downhill—led to my decision to get into the crew car and drive to the finish line.

It had been a long two days. On Day 1 I started the 6.2-mile swim never thinking I would possibly DNF on Day 2! I had a decent swim despite being sick one mile into it; I coped with the unpleasantness by focusing on the fish and singing to myself! After exiting the ocean to begin the 90-mile bike journey to the volcano, I felt nauseated, which is very rare for me, but I quickly changed and began the ride. I had a few issues with numbness in my toes and fingers, but was elated to eventually make it to Day 1 finish line.

Day 2 was a 171.4-mile bike ride. It began with a few flat tires in the pouring rain and downhill, which meant I ended up playing chase to find the other athletes. It was pretty lonely out there, but eventually I had company. The Red Road always offers spectacular scenery, and the Hamakua Coastline is amazing, but the fun began on the climb up the Kohalas. I was so close to the finish vet so far away, less than 20 miles. Due to the high winds, I was walking in my running shoes. My husband and crew chief. Al. came over to walk with me, and my bike was like a kite as it went airborne!

I looked at my monitor and thought, "I can do this. I have time." I would try to get on my bike and would be blown across the road, so I'd walk again. My toes were going numb and I was sad; I knew deep down inside that I would need to run pretty fast with the bike to be inside the cutoff.

Initially, getting into the car was devastating but I knew I made the correct choice as I rarely ride in winds that bad. I quite like living, so Al and I

- continued on page 45

made the joint decision to DNF!

I am quite an accomplished athlete with well over 380 multisport events to my name. Yes, if you race enough, one or two DNFs will appear on your résumé, but what exactly does that mean? Does it mean you are a failure? A bad athlete? Under trained? You should choose another hobby? The list of self-doubts goes on, and it affects different athletes in different ways.

I personally think a bad race—be it Mother Nature performing her wrath of the elements or getting injured—is exactly that. A DNF is a bad race gone south! Yet it should not define who you are as an athlete. In fact, I find I can reflect on the race and see what I might have done differently, and it will deepen my resolve to train smarter and bounce back stronger.

As an athlete I really want to finish the races I begin, so I visualize the event ahead of time, never thinking I may DNF (which thankfully is quite a rarity). I cannot lie . . . a DNF does feel awful. After Ultraman Hawaii I felt sad and extremely disappointed in myself. I felt as if I had let everyone down who believed in me. What would I say to sponsors, friends, and family after getting into the crew van that late afternoon and crossing Day 2 on four wheels instead of two! I knew I made the correct choice as the van was tossed around by the wind and daylight was waning, but that didn't help much at

the time; my resolve was to wake up the next day and finish the 52.4-mile run, keeping a smile fresh across my face!

Day 3 began at 6 a.m.; ironically I had a good run! I was happy and upbeat, kept to my nutrition plan of Hammer Gel and Perpetuem plus Hammer Bars, had no stomach issues, and had the most amazing, friendly pacers come out to support my efforts. There was a lot of time for reflection while running this double marathon. First, I was happy to be in Hawaii; that was the reason I signed up for my 14th consecutive Ultraman, because I love the Ohana of Ultraman, love the island, and really enjoy the Ultraman Hawaii event. I enjoy the challenge of pushing the mind and body through three days of doing what I love, and finding my limits. I concentrate on the things I could control and forget about the rest!

Day 3 finish line was bitter sweet for me, as an unofficial finisher but a happy participant nevertheless!

Competing in Ultra events really requires a mixture of mental and psychological toughness, as well as training. While a DNF is most difficult to process by the athlete, life goes on. The event or race is the goal, but the journey to the start line can be as amazing as you allow. I've had some great training rides, swims, and runs; I've met some great athletes, made new friends, and reconnected with old friends. In Hawaii, I swam with dolphins, drank 100% Kona coffee, enjoyed a few scuba dives . . . DNF'd . . . mmmm, Ultraman Hawaii 2012 in November is unfinished





Drinking distilled water

Are the effects positive or negative? - An opinion

BY BILL MISNER, Ph.D.



Steve's Note: We've only included a portion of this article. You can find Dr. Misner's article in its entirety, along with all of the research references, at http://www.webmedcentral.com/article_view/2554.

Introduction

The rule of 3's states that humans can live 3 minutes without oxygen, 3 days without water, and 3 weeks without food. Because adequate hydration is so important to both quality and quantity of life, what we drink is important. The human body is 60-70% water, requiring fluids continuously to maintain optimum health. Humans require approximately half an ounce of water for every pound of body weight daily to prevent compromised health. Twenty percent of our fluid needs come from food. What water we drink provides the remaining 80%.

It is commonly observed that distilled water is the fluid of choice when only pure, substance-free H2O solutions are required, such as for flushing surgical wounds, a solvent for medications, for vaccines, or intravenous solutions. Why therefore do we use only distilled water for delicate, refined research solutions, but for our own health we drink water from unknown origins, including tap water and man-made bottled solutions? For 56 years, I drank largely tap water, but for the last 15 years I drank only distilled pure water. Drinking distilled pure water, in my opinion, is less toxic, absorbs rapidly, prevents dehydration, and supports optimum health better than tap water.

Tap Water Toxins

Tap water has been reported to deliver several harmful substances. Tap water in the U.S. has been shown to contain 19 "inorganic metals of concern" (1994 Safe Water Drinking Act), for which maximum contaminant levels have been set. Most U.S. tap water tested falls between the ranges of 350 parts per million (ppm) to over 1,000 ppm total contaminants. Ralph Nader reported that over 2,110 different contaminants have been detected in tap water. Some were lead, asbestos, trihalomethanes, nitrates, nitrites, calcium, magnesium, sodium, potassium, chlorine, fluoride, lithium, and sulphates. Tap water may also carry and incubate harmful microbes, resulting in infection. Microbial plate counts of seven tap water specimens (controls) ranged from 4 Colony-Forming Units (CFU)/mL to 95 CFU/mL. Even using tap water alone or tap water with bleach fails to improve water quality in dental unit waterlines. The American Dental Association (ADA) standard for reduced microbial contamination of dental unit waterlines was met using Bio2000 and distilled water treated with Bio2000. These results were well below both the 500 CFU/mL standard for public drinking water. In other words, tap water is good for drinking, but it still introduces microbes into our body's internal system, whereas distilled water reduces microbial contamination. The less microbial contamination introduced by air, fluids, or foods, the less toxic load on an alreadytaxed immune system.

How does tap water provide a breeding ground for bacteria? Bacteria prefer mineral-rich water for growth. The

- continued on page 47

- continued from page 46

behavior of 12 strains of gram-negative bacteria was analyzed in media having a low content of nutrients. Sterile tap water, de-ionized water, aqua bidestillata, and

mineral salt solution were used in this analysis. Serratia marcescens, Pseudomonasaeruginosa, Enterobacter, Klebsiella, and Citrobacter were the most frequently observed growths. Providencia, E. coli, Erwinia, Hafnia, and Alkaligenes reached maximal colony numbers of some 100,000/ml survived in mineral salt solutions.

Since adequate hydration is so important to both quality and quantity of life, what we drink is important.

When the salts were added stepwise, both potassium phosphate and especially magnesium sulfate demonstrated a growth-promoting effect. This is not to suggest that organisms do not grow in distilled water, but in the absence of growth-promoting mineral compounds, they appear to grow less vigorously, if at all.

Tap Water Minerals

Do we need to drink tap water for our minerals? Tap water does indeed deliver a variety of minerals, which our body may have difficulty absorbing without the specific amino acids required for transition across intestinal walls. Minerals without amino acid carriers in drinking water are suspects mentioned in hardening of the arteries, arthritis, kidney stones, gallstones, glaucoma, cataracts, hearing loss, emphysema, diabetes, and obesity. What minerals are available in "hard" tap water are poorly absorbed or rejected by cellular levels, and, if not evacuated, their presence may contribute to arterial obstruction, or internal deposit. If (for example) the mineral content from tap water from Reno, Nevada were modified so that it would convert the daily calcium requirement (RDA) from its calcium content, it would require drinking 7.4 gallons of tap water a day.

Distilled water: rapidly absorbed and proven effective for preventing

exercise-induced dehydration

Five trained men were studied during 2 hours of cycling exercise at 67% peak oxygen uptake at 20-22 degrees C to examine the effect of fluid ingestion on muscle metabolism. On one occasion, the

subjects completed this exercise without fluid ingestion (NF), while on the other they ingested a volume of distilled deionized water that prevented loss of body mass (FR). No differences in oxygen uptake during exercise were observed between the two trials. Heart rate was lower throughout exercise when distilled deionized fluid was ingested, and

rectal temperature after two hours of exercise was lower (38.0 and 38.6 degrees C for FR and NF, respectively), as was muscle (vastus lateralis) temperature (38.5 and 39.1 degrees C for FR and NF, respectively). Resting muscle ATP, creatine phosphate, creatine, glycogen,

and lactate levels were similar in the two trials, as were the post-exercise ATP, creatine phosphate, and creatine levels. In contrast, muscle glycogen was higher and muscle lactate was lower after two hours of exercise in distilled water hydration that prevented loss of body compared with exercise without fluid intake. Net muscle glycogen utilization during exercise was reduced by 16% when fluid was ingested (318 and 380 mmol/kg dry weight for FR and NF, respectively). These results indicate that fluid ingestion reduces muscle glycogen use during prolonged

exercise, which may account, in part, for the improved performance previously observed with fluid ingestion.

Conclusion

Distilled water is clean, microbe-free, and mineral-free, and is rapidly absorbed even during exercise-induced fluid loss. Tap water is not always clean, seldom microbe-free, and contains minerals without their amino acid carriers for rapid absorption. Science chooses distilled water for refined, research protocols where substance-free pure H2O is required. Perhaps humans should do likewise. **HN**

Steve's Note: I've been drinking distilled water almost exclusively for over a decade (I own a distilling unit), and I can tell you that due to its pristineness, as well as the taste (which I find to be superior to any other source), given the choice I'll never drink anything but distilled water.

You'll find another excellent article about distilled water by Dr. Misner, "What is Removed (by distilling) From Our Drinking Water," in Endurance News #36, beginning on page 8 (http://www.hammernutrition.com/downloads/ENews/ENissue36.pdf).





We're back at the Sea Otter Classic!



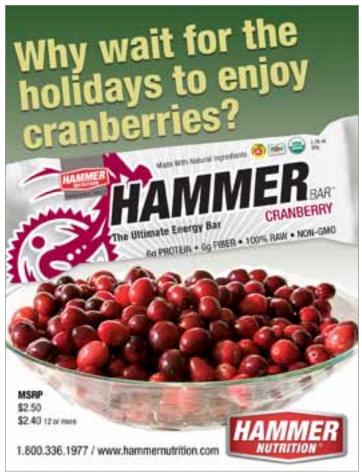
After last year's great time at the Sea Otter Classic, we're definitely looking forward to being in beautiful Monterey, CA again this year for this epic event. HEED is once again the official sports drink of what is oftentimes considered to be the "grand kickoff" of North America's cycling season.

Nearly 10,000 athletes (wow!) are expected to compete in the 22nd Annual Sea Otter Classic on April 19-22.

Hammer Nutrition will be there in force as well, with many of us—including some of our sponsored athletes and teams—attending the race and manning the sizeable Hammer Nutrition expo area. We'll be there all four days, sampling various Hammer Nutrition fuels and offering Compex demos. We'll most likely have a variety of giveaway items as well.

Keep checking our Facebook page and other social media networks for at-the-race updates and photos. If you are attending this year's Sea Otter Classic as a spectator or competitor, make sure you come visit us.

We're honored to once again be a part of this celebration of cycling, and we look forward to seeing you in Monterey!





2012 Price List

Endurance Fuels	
Endurolytes - 4 Capsule Sample	\$1.05
Endurolytes - 120 Capsules	\$19.95
	3 @ \$17.95
Endurolytes Powder - 150 Servings	\$19.95
	3 @ \$17.95
Endurolytes Fizz - 13 Tablet Tube	\$4.95
,	3 @ \$4.75
Endurolytes Fizz - 100 Wrapped Singles	\$35.95
Fizz Flavors : Grape, Grapefruit, Lemon-Lime, Mango,	
Unflavored (13-tablet tube only)	
Hammer Bar	\$2.50
	12 @ \$2.40
Hammer Bar Flavors : Almond-Raisin, Cashew Coconut	Chocolate Chip,
Chocolate Chip, Cranberry, Oatmeal Apple	ሰ ባ ፓር
Hammer Recovery Bar	\$3.50
	12 @ \$3.25
Hammer Recovery Bar Flavor : Peanut Butter-Chocolate	
Hammer Gel - Single Serving	\$1.40
	12 @ \$1.30
Hammer Gel - 26 Servings	\$19.95
	3 @ \$17.95
Hammer Gel Flavors : Apple-Cinnamon, Banana, Choc	olate, Espresso,
Montana Huckleberry, Orange, Raspberry, Tropical, Unflavored (26-serving only), Vanilla	
HEED - Single Serving	\$1.95
	6 @ \$1.80
HEED - 32 Servings	\$27.95
HEED - 80 Servings	\$52.95
HEED Flavors : Lemon-Lime, Mandarin Orange, Melon,	Strawberry,
Unflavored (32-serving only)	40.05
Perpetuem - Single Serving	\$3.25
	6 @ \$2.95
Perpetuem - 16 Servings	\$27.95
Perpetuem Unflavored - 16 Servings	\$25.95
Perpetuem - 32 Servings	\$47.95
Perpetuem Solids - 6 Tablet Tube	\$3.95
	3 @ \$3.50
Perpetuem Solids - 90 Tablets	\$37.95
Perpetuem Flavors : Caffé Latte, Orange-Vanilla, Straw	vberry-Vanilla
Recoverite - Single Serving	\$3.25
	6 @ \$2.95
Recoverite - 32 Servings	\$54.95
Recoverite Flavors : Chocolate, Citrus, Strawberry	
Soy - Single Serving	\$2.95
Soy - 24 Servings	\$31.95
, -	3 @ \$29.95
Hammer Soy Flavor : Vanilla	υ ψευ.υυ
Sustained Energy - Single Serving	\$3.25
oustained Elietyy - Siligic Set Villy	6 @ \$2.95
Custoined Energy 15 Convince	
Sustained Energy - 15 Servings	\$32.95
Sustained Energy - 30 Servings	\$54.95
Williams Charle Count	3 @ \$51.50
Whey - Single Serving	\$3.25
	6 @ \$2.95
Whey - 24 Servings	\$39.95
	3 @ \$37.95
Hammer Whey Flavors : Chai (24-serving only), Choco	1210
Unflavored (24-serving only), Vanilla	iaic,

When ordering multiple single-serving sizes of a product, you may mix and match flavors.

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Anti-Fatigue Caps - 90 Capsules	\$18.95
	3 @ \$16.95
AO Booster - 60 Capsules	\$32.95
	3 @ \$28.95
Appestat - 90 Capsules	\$27.95
Boron - 90 Capsules	\$14.95
Chromemate - 100 Capsules	\$13.95
Digest Caps - 60 Capsules	\$16.95
Endurance Amino - 120 Capsules	\$29.95
Endurance Amino - 240 Capsules	\$52.95
Energy Surge (ATP 100) - 30 Tablets	\$16.95
	3 @ \$14.95
Mito Caps - 90 Capsules	\$24.95
Phytomax - 90 Capsules	\$22.95
	3 @ \$19.95
Premium Insurance Caps - 120 Capsules	\$19.95
Premium Insurance Caps - 210 Capsules	\$33.95
PSA Caps - 60 Capsules	\$24.95
	3 @ \$22.95
Race Caps Supreme - 90 Capsules	\$47.95
	3 @ \$44.95
Race Day Boost - 64 Capsules	\$17.95
Race Day Boost - 32 Servings	\$19.95
REM Caps - 60 Capsules	\$19.95
	3 @ \$17.95
Super Antioxidant - 60 Capsules	\$32.95
	3 @ \$27.95
Tissue Rejuvenator - 120 Capsules	\$28.95
	3 @ \$26.50
Xobaline - 30 Tablets	\$9.95
	3 @ \$7.95
Carlson's Salmon Oil - 60 Capsules	\$7.95
Carlson's Salmon Oil - 180 Capsules	\$19.95
i-Flora - 60 Capsules	\$25.95

Kits

Complete Powder Kit	\$ 29.95 Save \$10.0
1 packet of each flavor of Reco	overite, Sustained Energy, Perpetuem
(excluding unflavored), HEED (e	excluding unflavored), Whey (excluding
unflavored and chai) and Sov	

Hammer Gel Sampler Kit \$7.95 Save \$4.65 1 pouch of each flavor, 9 total.

New Product Kit \$21.65 Save \$2.65

1 tube of Grape Endurolytes Fizz, 1 tube of Unflavored Endurolytes Fizz, 1 Cranberry Hammer Bar, 1 Oatmeal Apple Hammer Bar, 1 Peanut Butter-Chocolate Recovery Bar, 1 tube of Wildberry Hammer Lips, 1 tube of Wintermint Hammer Lips.

Long Fueling Starter Kit \$84.95 Save \$21.30 1 jug of Huckleberry Hammer Gel, 8 pouches of Hammer Gel, 6

1 jug of Huckleberry Hammer Gel, 8 pouches of Hammer Gel, 6 packets of Sustained Energy, 6 packets of Perpetuem, 3 packets of Recoverite, 1 bottle of Endurolytes, 1 Capsule Dispenser, 1 Flask, 1 Water Bottle, and a Product Usage Manual.

Short Fueling Starter Kit \$74.95 Save \$15.70 1 jug of Huckleberry Hammer Gel, 8 pouches of Hammer Gel, 12 packets of HEED, 3 packets of Recoverite, 1 bottle of Endurolytes, 1 Capsule Dispenser, 1 Flask, 1 Water Bottle, and a Product Usage

1-Month Daily Essentials Kit \$94.95 Save \$11.90 *1 PIC (210), 1 Race Caps Supreme, and 1 Mito Caps.*

3-Month Daily Essentials Kit \$269.95 Save \$41.60 *3 each of PIC (210), Race Caps Supreme, and Mito Caps.*

"Recently I made two purchases, both of them on a Thursday, and the orders were processed, filled, and shipped very quickly. Both orders were due to be delivered by FedEx on Tuesday deliveries and both of them came on Friday deliveries. Less than 24 hours from time of placing the order to the time it was delivered to me. WOW!" - Mitch B.

Body Care

Cool Feet 0.1 oz.	\$1.50
Cool Feet 2.7 oz.	\$15.95
Hammer Balm 0.3 oz.	\$4.95
Hammer Balm 1.5 oz.	\$21.95
Hammer Balm 4.0 oz.	\$34.95
Hammer Lips 0.15 oz.	\$2.95
	6 @ \$2.75
Hammer Lips Flavors : Wildberry, Wintermint	
Pelle Eccellente 0.3 oz.	\$3.95
Pelle Eccellente 2.0 oz.	\$19.95
Pelle Eccellente 4.0 oz.	\$32.95
Seat Saver 0.3 oz.	\$2.95
Seat Saver 2.0 oz.	\$12.95
Seat Saver 4.0 oz.	\$19.95
Soni-Pure 2.0 oz.	\$9.95

53x11 Coffee

Compex Sport Elite

The Big Ring - 12 oz.	\$13.95
The Chain Breaker - 12 oz.	\$13.95
The Down Shift - 12 oz.	\$13.95
The Early Break - 12 oz.	\$13.95

Compex Units & Accessories

Compex Performance U.S.	\$579.00
SPORT ELITE & PERFORMANCE ACC	CESSORIES
Charger	\$44.99
Battery Pack	\$49.99
Snap Cables (4)	\$59.99
Snap Electrode Pads (4X - 2"x 2")	\$14.95
6 @ \$13	.50 12 @ \$12.50
Snap Electrode Pads (2X - 2"x 4")	\$14.95
6 @ \$13	.50 12 @ \$12.50

\$849.00

SPORT & FITNESS ACCESSORIES

SPORT & FITNESS ACCESSORIES	
Charger	\$19.99
Battery Pack	\$39.99
Pin Cables (4)	\$39.99
Snap-On Conversion Cables (4)	\$44.99
Pin Electrode Pads (4X - 2"x 2")	\$9.99
6 @ \$8.95	12 @ \$7.95
Pin Electrode Pads (2X - 2"x 4")	\$9.99
6 @ \$8.95	12 @ \$7.95

GENERAL ACCESSORIES

Electrode Placement Guide	\$9.99
Quick Start Guide for Sport Elite	\$14.99
Quick Start Guide for Performance U.S	. \$14.99
Multimedia for Sport Elite	\$14.99
Multimedia for Performance U.S.	\$14.99
Spectra Conductivity Gel (8.5 oz.)	\$7.95
Spectra Conductivity Gel (2.0 oz.)	\$4.95
Belt Clip	\$9.99
Carrying Pouch	\$19.99
30-Minute Consultation	\$49.95
60-Minute Consultation	\$79.95
Advanced Consultation	\$60.00/hou

2012 Price List continued

Voler Men's Cycling /	Tri Cloth	nina
Sleeveless Jersey	\$39.95	s-xl
Short Sleeve Jersey	\$39.95	s-xl
Long Sleeve Jersey Wind Vest	\$59.95 \$43.95	s-xl s-xl
Wind Jacket	\$69.95	s-xl
Thermal Vest	\$72.75	s-xl
Thermal Jacket	\$99.95	s-xl
Cycling Shorts	\$68.95	S-XI
Cycling Bibs Cycling Skinsuit	\$72.95 \$99.95	s-xl s-xl
Arm Warmers	\$29.95	s-xl
Giordana Cycling Gloves	\$23.95	s-xl
Giordana Winter Cycling Gloves	\$33.50	s-xl
Aero Shoe Covers Thermal Booties	\$19.95 \$29.95	s-l s-l
Downhill/BMX Jersey	\$45.95	s-xl
Cyclocross Skinsuit	\$124.95	s-xl
Tri Top	\$42.95	s-xl
Tri Shorts Tri Skinsuit	\$42.95 \$98.50	s-xl s-xl
Bergamo Men's Cycli	ng Cloth	
Hot Weather Short Sleeve Jersey Hot Weather Long Sleeve Jersey	\$49.95 \$59.95	s-xl
Premium Cycling Bibs	\$83.95	s-xl s-xl
Knee Warmers	\$18.95	s/m, l/xl
Leg Warmers	\$21.95	s/m, l/xl
Voler Women's Cyclin	a / Tri C	lothina
Short Sleeve Jersey	\$39.95	s-xl
Long Sleeve Jersey	\$59.95	s-xl
Wind Jacket	\$69.95	s-xl
Cycling Shorts Cycling Bibs	\$62.75 \$66.95	S-XI
Arm Warmers	\$29.95	s-xl s-l
Tri Top	\$42.95	s-xl
Tri Shorts	\$42.95	s-xl
Voler Kid's Cycling / 1	ri Clothi	na
Cycling Jersey	\$27.95	s-xxl
Cycling Shorts	\$27.95	s-xxl
Tri Top	\$27.95	s-xxl
Tri Shorts	\$24.95	s-xxl
Socks		
Men's Cycling Socks	\$5.95	m-xl
Men's Cycling Socks Women's Cycling Socks	\$5.95	s-I
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks	\$5.95 \$13.95	
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks Unisex 12" Compression Socks	\$5.95 \$13.95	s-I s-xl
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks Unisex 12" Compression Socks Running Gear	\$5.95 \$13.95 \$24.95	s-I s-xl s-xl
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks Unisex 12" Compression Socks Running Gear Cool-Tee	\$5.95 \$13.95 \$24.95 \$27.95	s-I s-xI s-xI
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks Unisex 12" Compression Socks Running Gear Cool-Tee Long Sleeve T-shirt Singlet	\$5.95 \$13.95 \$24.95	s-I s-xl s-xl
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks Unisex 12" Compression Socks Running Gear Cool-Tee Long Sleeve T-shirt Singlet Trail Shirt	\$5.95 \$13.95 \$24.95 \$27.95 \$29.95 \$24.95 \$24.95	s-I s-xI s-xI s-xI s-xI s-xI s-xI
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks Unisex 12" Compression Socks Running Gear Cool-Tee Long Sleeve T-shirt Singlet Trail Shirt Dryline Zip Shirt	\$5.95 \$13.95 \$24.95 \$27.95 \$29.95 \$24.95 \$24.95 \$49.95	S-I S-xl S-xl S-xl S-xl S-xl S-xl S-xl
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks Unisex 12" Compression Socks Running Gear Cool-Tee Long Sleeve T-shirt Singlet Trail Shirt Dryline Zip Shirt Men's Running Shorts	\$5.95 \$13.95 \$24.95 \$27.95 \$29.95 \$24.95 \$24.95 \$49.95 \$34.95	S-I S-xl S-xl S-xl S-xl S-xl S-xl S-xl S-xl
Men's Cycling Socks Women's Cycling Socks Unisex 4" Compression Socks Unisex 12" Compression Socks Running Gear Cool-Tee Long Sleeve T-shirt Singlet Trail Shirt Dryline Zip Shirt Men's Running Shorts Women's T-shirt	\$5.95 \$13.95 \$24.95 \$27.95 \$29.95 \$24.95 \$24.95 \$49.95 \$34.95 \$34.95 \$27.95	S-I S-xl S-xl S-xl S-xl S-xl S-xl S-xl
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Headwear			
Pace® European Cycling Cap	\$12.95	os	
Pace® Mesh Helmet Liner	\$12.95	0S	
Race Ready® Mesh Cap	\$12.75	0S	
SweatVac® Ventilator Cap	\$13.95	0S	
SweatVac®Winter Beanie	\$19.95	0S	
Halo Headband	\$12.95	0S	
Halo Headband II	\$12.95	0S	
Halo Protex	\$21.95	0S	
Halo Antifreeze	\$16.95	0S	
Baseball Cap	\$19.95	0S	
Headsweats® Visor	\$14.95	0S	
Reversible Knit Beanie	\$12.95	0S	
Latex Swim Cap	\$3.95	0S	
Silicone Swim Cap	\$9.95	0S	

Casual Wear		
Men's Anniversary Hooded Sweatshirt	\$39.95	s-xl
Men's Anniversary Long Sleeve	\$19.95	s-xl
Men's Anniversary Short Sleeve	\$14.95	s-xl
Men's Fuel Short Sleeve	\$14.95	s-xl
Women's Anniversary Hooded		
Sweatshirt	\$35.95	s-xl
Women's Anniversary Long Sleeve	\$19.95	s-xl
Women's Anniversary Short Sleeve	\$14.95	s-xl
Women's Dandy Short Sleeve	\$14.95	s-xl
Women's Yoga Pants	\$24.95	s-xl
Kid's Casual Tee	\$12.95	2-12 eve

Accessories	
Hammer Gear Bag	\$64.95
Bike Mount Flask Holder	\$12.35
Double Clip Flask Holder	\$10.75
Blender Bottle	\$7.95
Fizz Water Bottle	\$2.95
Hammer Water Bottle	\$3.50
Nalgene Bottle	\$8.95
Polar Water Bottle	\$10.95
Small Duriet Water Bottle	\$2.05

Blender Bottle	\$7.95	
Fizz Water Bottle	\$2.95	21 oz
Hammer Water Bottle	\$3.50	24 oz
Nalgene Bottle	\$8.95	
Polar Water Bottle	\$10.95	
Small Purist Water Bottle	\$8.95	22 oz
Large Purist Water Bottle	\$10.95	26 oz
Hammer Flask	\$1.95	
Gel-Bot Soft Flask	\$9.95	
Tattoos	\$0.35	
Wrap Pack	\$8.35	
Hammer Patch	\$1.45	
Sticker Pack	\$0.50	
HEED Cooler	\$39.95	5 gal.
Pint Glass	\$3.75	
Sport Towel	\$2.95	
Beach Towel	\$29.95	
Hammer Sack	\$8.95	
Hammer Banner	\$25.95	
Bike Mount Tri Box	\$14.95	
Bike Mount Seat Bag	\$13.95	
Gel Pump	\$5.95	
Capsule Dispenser	\$0.50	
Quick Coin	\$0.95	
Large Capsule Organizer	\$4.35	
Small Capsule Organizer	\$2.95	
Zip-Lock Capsule Bag	\$0.10	

\$2.95
\$7.95
\$7.95
\$4.95
\$11.95
\$11.95
\$12.95
\$1.00
\$12.95
\$9.95
\$9.95
\$11.95



Apparel Sizing Charts

VOLER / Men's Cycling and Tri Clothing						
Height	Waist	Inseam	Chest	Weight	Size	
5'4" to 5'8"	29-31	9	35-37	120-145	Small	
5'7" to 5'11"	32-34	9.5	38-40	145-170	Medium	
5'10" to 6'2"	35-37	10	40-42	170-190	Large	
6'1" to 6'5"	38-41	10.5	42-44	190-220	XL	
6'3" and up	42-45	11	44-46	220-250	XXL	

VOLER / Women's Cycling and Tri Clothing						
Height	Waist	Hips	Bust	Weight	Size	
5'2" and under	22-24	31-32	30-32	95-115	XS (0-2)	
5'1" to 5'5"	25-27	34-36	32-34	110-120	Small (4-6)	
5'4" to 5'8"	27-29	36-38	34-36	120-145	Medium (8-10)	
5'7" to 5'11"	30-32	39-41	36-38	140-165	Large (12-14)	
5'10 and up	33-35	42-44	39-41	160-185	XL (16)	

Voler Team Apparel offers "European" sizing, which is smaller than U.S. sizing. When choosing Voler racewear, you should go up one size if you are unfamiliar with the smaller European sizing. Likewise, if you are between two sizes, choose the larger size.

VOLER /Kid's Cycling and Tri Clothing							
	Small	Medium	Large	X-Large	2X-Large		
Age	6-8	8-10	10-12	12-13	13-14		
Waist	18-20	20-22	22-24	24-26	26-29		
Weight	Weight 55-65		75-85	85-100	100-120		
Height 40-45"		45-50"	50-55"	55-60"	60-65"		
Chest	25-27	27-29	29-31	31-33	33-35		
Inseam	7	7.5	8	8.5	9		

Size Measurement		
Small 7-7.5"		
Med.	8-8.5"	
Large	9-9.5"	
XL 10-10.5"		

DEFEET / Cycling Socks						
Sock Size	Women's Shoe					
Small NA		6-8				
Medium	7-9	8 1/2 - 10 1/2				
Large	9 1/2 - 11 1/2	11 - 13				
XLarge	12+	NA				

SWIFTWIC	SWIFTWICK / Compression Socks					
Sock Size	Men's Shoe	Women's Shoe				
Small	3-5 1/2	5-7 1/2				
Medium 6-9 1/2		8-10				
Large 10-13		10 1/2-14				
XLarge 13 1/2-16		14 1/2-16 1/2				

RACE READY / Men's (Unisex)					
Waist	Chest	Size			
26-29	34-36	S			
30-33	37-39	M			
33-35	40-42	L			
35-37	43-45	XL			

RACE READY / Women's						
Waist	Size	Unisex				
24-27	S	XS				
27-29	M	XS or S				
29-31	L	S or M				
32-34	XL	M or L				
	Waist 24-27 27-29 29-31	Waist Size 24-27 S 27-29 M 29-31 L				

BERGAMO / Premium Bibs and Jerseys						
Height	Chest	Waist	Hips	Size		
67.5-69.5	34.5-36	30-31.5	34-35.5	Small		
69-70.5	36-38	31.5-33	35.5-37	Medium		
70-71.5	38-40	33-34.5	37-38.5	Large		
71.5-73	40-41	34.5-36	38.5-40	X-Large		

Bergamo garments fit a little snug. If you're not sure what size to get or if you're between sizes, please order the next size larger.

TRUWEST / Women's Swimsuit					
	28	30	32	34	36
Size	3-4	5-6	7-8	9-10	11-12
Bust	30	32	34	36	38
Waist	23	24	26	28	30
Hips	32	34	36	38	40

AMERICAN APPAREL / Women's Yoga Pants						
S M L				XL		
Size	0-2	4-6	8-10	12-14		
Waist	25-26	27-28	30-32	33-35		
Inseam	30	32	33	34		

American Apparel garments fit snug to flatter almost any body type. If you're not sure what size to get or if you're between sizes, please order the next size larger.

DISTRICT THREADS / Women's Sweatshirt					
	S	M L XL			
Size	3-5	7-9	11-13	15-17	
Bust	30-32	33-35	36-37	38-39	

BELLA / Women's Tee Shirts					
	S M		L	XL	
Size	0-4	4-8	8-10	10-12	
Bust	31-33	34-36	37-39	39-41	

BELLA / Men's Tee Shirts					
	S M		L	XL	
Chest	39-41	41-43	43-45	45-47	
Pant	30-31	31-32	33-34	34.5-35	

LOUIS GARNEAU / Nordic						
Size	S	М	L	XL		
Chest	38	40	42	44		
Waist	32	34	36	38		
Hips	38	40	42	44		
Lea	30	31	32	32		

Clothing return policy

Aside from trying on an item for fit (with protective undergarments), all clothing returns must be in new and enclosed in the original packaging. Clothing items do not qualify for a return or exchange if they have been used, washed, or had the original tags removed. Special Note: Swimwear will be fully inspected upon receipt and a return/exchange may or may not be granted, at the discretion of management.

We're here... Waterish, Montana 2-4 Days 3-5 Days 4-6 Days 6-9 Days

Order total Ground FedEx \$0 to \$39.99 \$4.95

\$40 to \$99.99 \$7.95 \$100+ **FREE!**

Shipping Information

Time in transit for packages shipped via ground delivery will range from 2-9 business days, depending on the carrier and distance in transit. If you must have your package by a certain date, call or email to determine whether ground shipping or one of the air delivery options will work best for your needs.

Special Shipping Notes

All orders to Alaska and Hawaii ship via USPS Priority Mail. 2-day and next day air are also available to some locations in these states. Published rates will be charged based on weight and zone of delivery address.

Military Addresses

APO, AE, AP, etc. are sent via USPS mail service. USPS Priority Mail rates will be charged for these shipments.

In a Hurry?

3-day, 2-day, and overnight delivery are available, calculated based on package weight and zone of delivery address, and will be billed at published rates.

International Orders

We ship orders to over 25 foreign countries on a regular basis. Call or email us for a quote on shipping.

Get the VIP treatment Join the HAMMER AUTOSHIP Program today!

What is it?

The HAMMER AUTOSHIP Program offers the ultimate in convenience and VIP treatment with scheduled shipments and discounted pricing.



How does it work?

Call our 800# to have one of our friendly Client Advisors help you select the correct Hammer Nutrition fuels and supplements to meet your needs and goals. We'll then ship your products every 90 days (free ground shipping!) without you ever having to pick up the phone again.

An advisor will also call or email you approximately ten days before your scheduled ship date to see if you'd like to add anything to your order to take further advantage of free shipping and discounted pricing.

What do you get?

- **1** A special team of advisors assigned to your account and special access to our experts.
- **2** Automatic resupply of products every 90 days.
- **3** On your first AUTOSHIP order, we'll send you a clothing kit (top and bottom) for FREE*.
- **4** On your second AUTOSHIP order, you'll receive a FREE softgoods item of your choice, up to \$20 in retail value.
- **5** FREE goodies on every future shipment as well.
- **6** Discounted pricing, exclusive offers, and much, much more!
- **7** FREE ground shipping on all automatic shipments and one fill-in order per quarter.

FREE clothing!

Receive a free Hammer Nutrition clothing kit with your first order! Select one of our sport-specific kits: cycling jersey and shorts, tri jersey and shorts, running top and shorts, or swimwear with a swimcap and a large towel. Ask a Client Advisor for more information.

* If you cancel the autoship program before taking delivery of four consecutive quarterly shipments, we will bill your credit card for the retail cost of the free clothing kit. If you discontinue the program and rejoin within one year, you are not eligible for more free clothing until your fourth consecutive shipment after resuming. Aside from these stipulations, you are free to cancel your participation in this program at any time. Quarterly shipments must total at least \$150 each. Cannot be combined with other offers.

Call Katey to sign up for the Autoship Program and start saving

Don't wait any longer, become a VIP today! Call 1.800.336.1977

Get Rewarded

with our Athlete Referral Program

Write your name and client number on the cards, and give them to your endurance athlete friends or acquaintances. When a friend you refer to us places his or her first order and mentions your name or client number, everybody wins! Tell enough friends and you may never have to pay for your product . . . how great is that?

It's a win-win-win situation!

- They receive a 15% discount on their first order!
- You get 25% of their order subtotal credited to your account!
- · We get another satisfied client!

Start earning free product today!

A Few Restrictions

Shipping charges are not included in discounts or rewards. • We cannot offer retroactive rewards. Your friend must mention your name or client number at the time of ordering. • The person being referred must not have ordered anything from us before. • Do not refer your spouse or have a friend be the new client and place an order for you. • Not applicable to members of the same household. • Cannot be used with another offer. • We reserve the right to end this program or refuse any individual at any time without notice. • Referral rewards will expire after one year. • Valid referral cards are always available free of charge. • This rewards program does not apply to EMS unit purchases. Visit www.hammenutrition.com/deals/ems-referral-program/ for EMS-specific referral program.

Your friend wants you to save 15% off your first order with us!

Name

Client Number



Order today! 1.800.336.1977 www.hammernutrition.com

Your friend wants you to save 15% off your first order with us!

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Client Number



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BY TONY SCHILLER

Question: When was the last time you went through an entire season in a fired up, truly inspired state for racing? Whether you answered 2011 and want to start 2012 in the same way, or you had to start counting back the years on several fingers (or both hands), then this article is for you.

Let's start by recalling what it even felt like to have such a season. It would have started long before the racing season approached, with an off-season laser-like focus on the key event or events you were targeting. That led to a base-building season full of machine-like consistency and high energy, and anticipation

growing daily. Your personal habits became about as good as they can get. By rising earlier and excelling in time management, things began to click in all aspects of your life. You moved with more purpose, a sense of urgency, and higher expectations that great things would fall in place. And people noticed too as you led by example, always embracing challenges and facing problems head-on with a can-do spirit.

What truly stands out about your most inspired seasons though is how powerful your imagination became and that's something you just can't fake. Unlike ordinary years where you never got your mind locked-in, inspired years took off, thanks to an acute ability to visualize in vivid detail the exact race outcome you expected to realize. When your mind, body, and spirit were this locked in, your confidence oozed because you'd already experienced countless times a virtual reality of the race state that was to come

thousands of times in the weeks and months leading up to the race. Put another way, their performances came at the conclusion of profoundly inspired periods in their lives.

Getting Real for You

The point of all of this isn't to channel your past or the past of great champions. It's just a sobering look at all that goes into what it takes to have a particularly inspired year. As wonderful as it is, it's exhausting to create for a season and absurd to think it can be sustained year-after-year. And so, inevitably, the few inspired years we accomplish are sandwiched by stretches that in comparison look, well, uninspired. That's not a bad thing. An occasional year of unfocused training and racing can be what's needed to rejuvenate us for the next year. Still, it's always a challenge to turn it back on, especially if your span of uninspired racing has stretched over successive seasons.

That brings me back to the title of this piece: Who are you racing for? It's a

- continued on page 55



pretty good bet that the person behind your most inspired racing was . . . yourself. Personal glory can be a huge motivator. It kept me going for decades and it still motivates me today. I still race too much for personal glory - old habits die hard.

Hoping to get kids started on a more meaningful track in competition is what motivated me to launch the MiracleKids Triathlon. Rather than just another event that times and recognizes a few of the most highly trained kids, we went another route. Our inspiration is summed up in our theme: Kids Racing for Kids Who Can't, as each kid races in honor of another who's battling cancer and too sick to race. They also raise pledges to support our charity, the Miracles of Mitch Foundation, which provide grants to families treating a child with cancer. In 2011, our non-competitive format sold out, attracting 1,500 kids who raised a remarkable \$353,000. Watching these kids compete with such ferocity and spirit with nothing at stake testifies that a completely different notion of what it means to race from an inspired place is possible.

Learning from Kids

If it's been a while since you've felt your spark of inspiration, maybe the approach these kids are taking can also work for you. There's no shortage of ways to dedicate your 2012 season to a worthy cause, and no shortage of charities who need your help. If you're anything like the kids in our event, you'll find it easier than you think to raise pledges and you'll get swallowed up by the whole experience.

Keep in mind that you can easily turn the events you already do into personal fundraisers rather than participating in official fundraising events. Let me know if you'd like discuss ideas on how to do that and make it successful. You'll be a hero to a charity you care about, and I bet you will do some of your most inspired racing in a long time. **HN**

Tony Schiller, a 6-time ITU age group world champion, is a 23-year Hammer Nutrition customer and 2012 Hammer-sponsored athlete, and is the creator and leader of the MiracleKids Triathlon. Since 2004, 8,500 kids have raced for kids who can't race, while raising over \$1,100,000 for the Miracles of Mitch Foundation. To learn more, www.mkidsti.com or email tony@mkidstri.com.



Where are they now?

BY VANESSA GAILEY

TOP: Debbie and Bill Riley gear test their new 2012 Hammer Nutrition cycling clothing.

BOTTOM: From paceline to laundry line, at the Riley home.

Photos courtesy of Debbie Riley

Catching up with Bill and Debbie Riley #2203

What better way to celebrate our 25th Anniversary than to recognize our longtime clients and friends. Since 1987, we've worked with an amazing group of people dedicated to the endurance athlete lifestyle.

They remember the days when Brian answered calls and shipped orders, first from his home in the Bay Area, and then from what is now the garage at Hammer Nutrition headquarters.

Where would Hammer
Nutrition be without our
devoted community of
endurance athletes, who
have guided our success
with feedback, testimonials,
and constant field-testing
over the years? We're
touching base with several
of these longtime clients
in the coming issues of
EN, "catching up" to see
where they are now. From
client #1 to our current
new customers with #s in

the 197000s, we appreciate every one of you, one completely satisfied client at a time.

Meet Bill and Debbie Riley

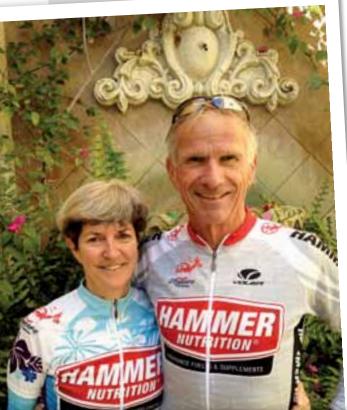
To title this article "Catching Up with Bill and Debbie Riley" is a bit of a misnomer, as catching up—or keeping up—with either of them is no easy feat. In fact, at age 74, Bill clocks a faster 5K than about 90% of Americans. What we admire Bill for the most, however, is not his "super human" athletic performances, but his easygoing good nature and his commitment to a healthy, hard-training lifestyle for more than 30 years.

Hammer Nutrition has been a part of Bill's training and nutrition regimen for the last 24 years; in fact, he has been supplementing with Race Caps Supreme for that long. With six USAT National Triathlon Championships, two National Duathlon Championships, four age group Ironman World Championships, and a long list of other triathlon and marathon titles on his race résumé, Bill is a testament to the benefits of nutrition, supplementation, and fueling right.

He and his wife Debbie are true Hammer Nutrition ambassadors. We "caught up" with them in mid-February, just after they finished a morning road ride, to see how their winter training is going and what challenges Bill has on his race calendar for this year.

At the end of 2011, you won an age group national championship, setting a new course record, and then two weeks later ran 21.04 in a 5K for another age group win. What have you been up to since then, and what events do you have on your 2012 calendar?

Bill: I usually take a month off for the holidays, and then Debbie and I head to St. Petersburg, FL where we are





blessed to be able to train during the winter months. I do most of my long runs and long races (longer than 10K) from January through April. In fact, about half of my yearly mileage is done in those four months. The same holds true with my biking mileage. (Biking on Cape Cod during the summer is not idea!!)

So far this year I have competed in two half marathons, including the Rock 'n Roll St. Petersburg on Feb. 12, where I ran 1:38:16, won my age group, and placed 372 out of 7,200. Three weeks before that I ran 1:38:52 at the St. Pete Beach Half Marathon, winning my age group. I have the Gasparilla Distance Classic 15K on my calendar for March, and beginning in May/June the New England races start is earnest. I have entered Race Up Mt. Washington, 7.6 miles up! Then I'm off to Beach to Beacon 10K in Cape Elizabeth, ME where I have won all of my previous five starts. And there are many others, but the year's finale might perhaps be in Syracuse in October for the USATF 5K Championships. This was one of my last races in 2011, and I won my age group national championship.

Would you be willing to share your fueling and recovery strategy for a fast 5K?

Bill: Other than two Race Caps Supreme an hour before the race, I take nothing, unless it is a late morning start, in which case I take one Hammer Gel. I believe this keeps my blood sugar at a decent level. Post race for a 5K, I drink HEED. For longer races I utilize Recoverite.

I understand that you had knee surgery last year and that you used Compex as part of your recovery. Was this your first time incorporating this technology into your training, and what was your experience with it?

Bill: Yes, I am convinced that the use of the Compex Strength and Recovery programs played a huge role in getting me back up to speed. I had very little quad strength following surgery. Using the Compex was faster, more convenient, and less dangerous than weights. I found it to be the best way to rehab, and I still use it 3-4 times per week, with no set schedule. (It depends on races, the weather, etc.) As an aside, when my confidence was pretty low post-surgery last spring, for my first race I ran up

Mt. Washington and set a course record. This was my first "knee test," probably not what my M.D. had in mind, but my recovery plans had worked! Thanks to Hammer Nutrition and to Compex. I feel like I'm whole again!

Oftentimes it's difficult to regain your energy and drive when coming off an injury or an off-season. How do you both stay motivated for the next training season?

Bill: Motivation has never been a problem for me. I enjoy training, and I love to race with the best. Health benefits are obvious and I would like to be the last old runner standing.

Debbie: As aging and older athletes, our problem is not motivation but rest and recovery. (That's Hammer Nutrition's job!) And we don't like taking time off. St. Pete is a Mecca for runners, cyclists, and triathletes. When we get here each winter, we are always so happy to see the sun and all of our friends that we literally hit the ground running. We wake up every morning and cannot wait to get out the door! So, in answer to your question, "How do we stay motivated?" the energy created from the group of athletes down here is amazing! We couldn't do it alone.

You are both very active, and are ambassadors for Hammer Nutrition. What athletic passions do you share, and how does having a partner to share those pursuits with contribute to your continued success?

Debbie: Bill and I both came into our relationship with athletic backgrounds. He had been a swimmer in prep school and college, started running at age 40, and was an accomplished triathlete before 50 (which was his age when we met). I skied downhill from age three, and in college I skied five days a week. That was my passion! So much so, I knew I would marry a skier! Ha! We bought a home in Stowe, VT six months after meeting, and then six months later I was a triathlete! Now, 25 years later, here we are in Florida . . . I'm the cyclist, Bill is the runner. Times change, we change, but our love for sports remains the same!

These days I'm not able to run. Often, I seem like a coach, encouraging and reminding Bill. I'm very proud of my husband and his accomplishments. I think we build each other up—he brags

about my cycling and I toot his horn about his accomplishments, because he doesn't. On some level it is just as important to me that my husband succeeds.

We know the rules we must follow for Bill to have a successful race. There is a fair amount of "structure" to our lives. We are on the same page regarding that, and it makes for a successful relationship as well.

It's our 25th Anniversary here at Hammer Nutrition, and we are celebrating two and a half decades of working with athletes like you as you succeed, year after year. What Hammer Nutrition products do you consider to be essential to your training and overall health? Which supplements have you been taking the longest?

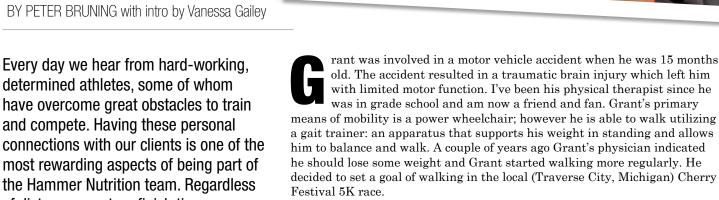
Bill: I have been taking Race Caps Supreme since day one. And many, many years ago, Brian sent me a box of "secret" gel packs to hand out. I don't believe they even had labels, but they were a great success for me and many others. I'm still using Hammer Gel today! Another early and longtime favorite is Energy Surge, and I use Vanilla Whey daily like it's going out of style, primarily after workouts.

Debbie: Bill and I met Brian Frank and his family for lunch in California in 1989. Since that time, being a part of the original E-Caps family and being along to see the growth and success of Brian and his company has been an amazing ride! In the early days of Hammer Nutrition, when you were on the opposite coast on Cape Cod working a race with a banner and product, no one knew what Race Caps Supreme was! You had to educate every athlete, one at a time.

Now everyone knows Hammer Nutrition and wears the clothing as well. It's such a thrill to see all of these cyclists, runners, and triathletes dressed in Hammer Nutrition outfits! Every day is Hammer Day!

Bill and I want to wish Hammer Nutrition a wonderful 25th Anniversary, and make a toast to the next 25! (Bill Riley will be 100 then.) Brian has been a partner to us with his friendship and support all of these years, and we must credit him with Bill's success as well. Nice job, and thank you Brian! HN

A can-do attitude



Grant with friend, and training partner, Erin Crowell. Photo: Peter Bruning

Grant asked me just weeks prior to the race to join him. At the time I had no idea of his training schedule or how he was going to fuel during the event. The day of the 5K I filled a few bottles with my supply of HEED, Sustained Energy, and Hammer Gel. This was fortuitous as all his family had was water. Grant, his parents, and I are convinced that the Hammer Nutrition products helped him complete the walk. He finished the 5K is 3:57 (3 hours, 57 minutes). His goal for next summer is sub-three hours. His 5K walk is nothing short of a marathon.

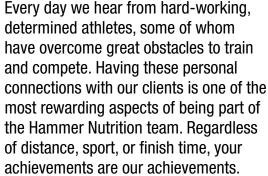
Grant has become a local celebrity not only for his 5K walk but for his perseverance, positive attitude, and humility. He is an ambassador for people with physical challenges.

Thanks! Peter Bruning

The staff at Hammer Nutrition headquarters wanted to assist Grant in his 2012 training, so we sent him a shipment of HEED, Hammer Bars, and Hammer Gel, plus a Hammer Nutrition shirt to train in style! A few days later, we received the following response from Peter:

I just wanted to thank you for sending Grant a shipment of product and clothing. He called me to let me know he'd received it. He wore his new Hammer Nutrition shirt during his workout in the mall and smashed his previous personal best by seven minutes. He was stoked!

Thanks again, Peter Bruning



When we heard from Hammer Nutrition client Peter Bruning, we knew we wanted to share his friend Grant's recent athletic accomplishments with our readers.



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RECOVERITE IMMEDIATELY AFT UNUSUALL

E SOME MORE MOUNTAINS AND DID 10.5 MILES AND 3.147 FEET OF GAIN. EGS FELT AS IF I WAS COMING OFF A RECOVERY DAY.

- MARCUS E.

OVE RECOVERIO HOW IT TAS **DOES TO AID MY RECOV**

AND HOW EASY IT IS TO TRANSPORT WITH ME FOR AFTER-RACE CONSUMPTION!" - RON G.



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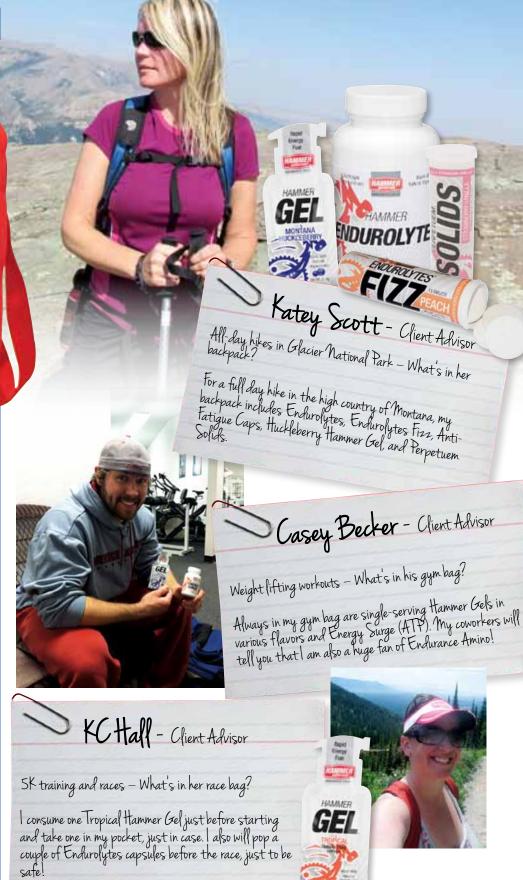
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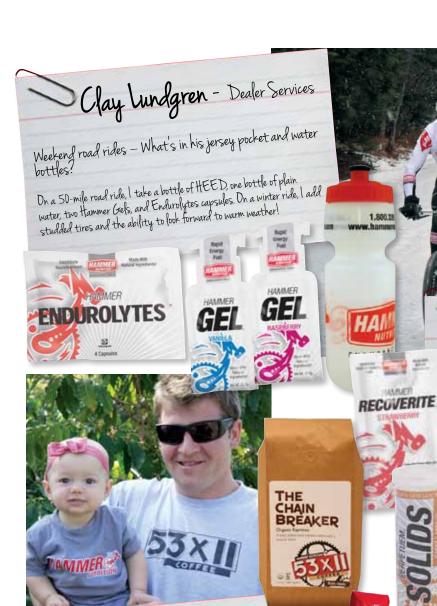
the bag?

The staff at Hammer Nutrition works hard during business hours, but as soon as the clock hits 5 p.m., it's a mad dash out the door for wellfueled fun and training. Hopefully their fueling tactics will assist you in making sure that you are well prepared! If you have questions about any of their fueling choices, call our team of Client Advisors at 1.800.336.1977. (Many of them are included on these pages!)



How do you H

Email vgailey@hammernutrition.com and tell us what's in your bag!





Mary Fleming - Events Coordinator

Camping adventures - What's in her camp box?

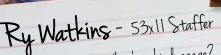
For me, camping is creating a beautiful base camp for launching hikes, bike trips, and kayaking. I always bring Hammer Gel (for quick energy and easy storage, especially paddling), Hammer Bars, HEED, and Recoverite (after a particularly hard hike).



Levi Hoch - Client Advisor

After-work rides - What's in his jersey pockets and water bottles?

HEED in my bottle. Gel as a backup or in case l'encounter another cyclist in need of a boost, and extra Endurolytes capsules if it's a hot ride. For almost every ride in Montana, I pack a Hammer Mutrition wind jacket (gotta have the bang for the buck for warmth/lightweight/size.



Family vacation to Hawaii – What's in his luggage?

A lot of The Chain Breaker Espresso, which I always prepare with a splash of vanilla coconut milk.

Above: Noelani and Ry in a coffee field, Honaunau, HI. Photo: Carling Watkins



When I'm trying to stay ahead of my husband Chuck, I take 3 Endurolytes and 2 Anti-Fatigue Caps 30 minutes before the ride, and Espresso Hammer Celjust before hitting the trail. My water bottles have a light concentration of HEED with an Endurolytes Fizz added in.



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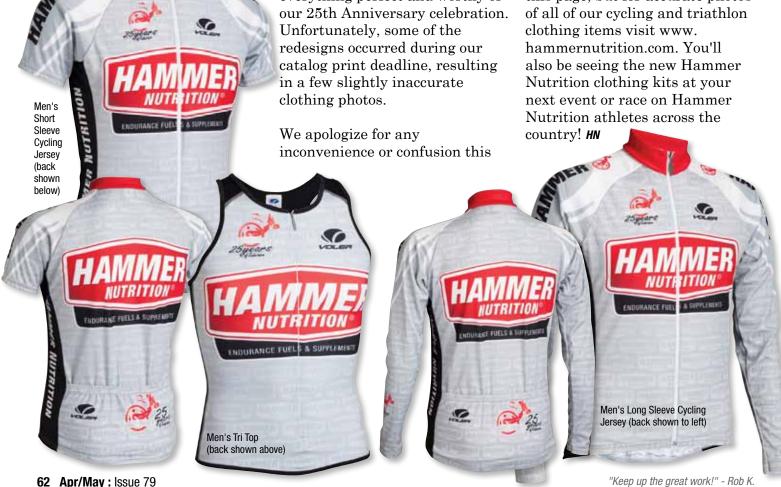


BY VANESSA GAILEY

are in stock, and we are starting to see the new 25th Anniversary "silver" (gray) design on podiums across the country! While we are more than pleased with the designs, it took a few last-minute revisions to get everything perfect and worthy of Unfortunately, some of the redesigns occurred during our catalog print deadline, resulting in a few slightly inaccurate clothing photos.

than worth this correction. Note that all technical, fabric, sizing, and pricing information in the 2012 catalog is correct; it is only the color that is slightly different.

Some of the items are pictured on this page, but for accurate photos



HAMMER NUTRITION JUNIOR ATHLETES

Hammer Nutritionsponsored AZ Devo:

The future of cycling is now!

Hammer Nutrition-sponsored AZ Devo Junior/U23 Cycling Team has an extremely promising roster of young riders for 2012, and just came off a very successful inaugural season in 2011. AZ Devo brought together 10 of Arizona's top young mountain bikers last year and ended the season with team members competing in the 24 Hour National Championships and the MTB World Championships.

AZ Devo started their 2012 year of racing with clinics, camps, and the MBAA race series. Rider Clayton Stone (pictured) sported their new team kit at the third MBAA race in the

series, Estrella Hedgehog Hustle at Avondale, AZ, in February. Clayton claimed a 1st place at Estrella, which secured his 4th place series standing overall Cat 2 Men 15-18.

In the MBAA series team standings, after a day of battling it out on the Estrella course, AZ Devo was in a solid 2nd place, 40 points

ahead of the 3rd place team. Best wishes to AZ Devo as they continue to develop young riders and travel the country and the world in search of podiums.





A helping hand

Hammering in Central America

BY MIKE BALDIGARA

n the past four years my use of Hammer Nutrition products has proven to be a great benefit to the triathlon training and racing that I love to do. I recently had an interesting experience where, at a "non-sporting" event, Hammer Nutrition products were a great help to our group. On December 3, 2011, fifteen of us flew from the cold depths of the Canadian winter into Central America. Our destination was the western coast of Nicaragua where we were working with Habitat for Humanity, building home additions for poor local families.

For those not familiar, Habitat is a large charitable organization that has built homes for the needy in numerous locations across the globe, for over 20 years. Our group had people ranging from coast to coast with an age spread from 15 to 66. I was with my wife and my two teenage sons. I thought this would be a great way for my children to experience a total culture change and serve others less fortunate.

Our group was led by a great outdoor enthusiast couple, Lori and Alan Rendall from Canmore,

Alberta. They live in the heart of the Rocky Mountains. They have extensive adventure travel experience, and this was their fourth trip for Habitat for Humanity.

Before Alan accepted us for the trip, he warned us that we were going to be working eight-hour days in temperatures over 80 degrees in very humid conditions. Alan emphasized the importance of taking in enough fluids, and ensured we had a constant supply of purified water. As soon as I heard this I realized that I needed to leave room in my suitcase for some Hammer Nutrition products to assist our team. I equated our work day to a solid, hot day of training for the Half Iron distance that I enjoy doing.

Our first work day was at an area where the adobe bricks that we would use for our buildings were manufactured. It was hot, physical work to screen the large piles of rough, raw dirt into a sand fine enough to use for the adobe mix. We piled the dirt in carefully measured amounts and added the proper amounts of cement, lime, and water. The mixture was hand-turned by shovel until it was thoroughly mixed, then fed into a basic machine that would create the bricks. Within minutes of our start the sweat was flowing. By lunchtime of the first day I saw the flushed faces of people suffering from the hot, humid conditions. As our group sat for lunch I took the opportunity to speak about how, in those conditions, water alone would not be enough to enable us to perform effectively. We needed electrolyte supplementation. I had brought Endurolytes, Endurolytes Fizz, and a large container of HEED to do the trick. For some of the group this was unfamiliar territory, though most welcomed the products right away. We got into the habit of starting the workday with an Endurolytes capsule, and a scoop of HEED in our water bottles.

One of the tougher jobs was to deliver the loads of adobe blocks to the homesites. We would make a line of people and hand-to-hand pass the 110, 32-pound bricks from the truck to pile beside each new foundation. It was common to



- continued on page 65

"This is my first order, but definitely not my last, especially with such wonderful customer service." - Grant



Photo : Clint Cawsey

This photo is what it is all about. It is a picture of Marco, his wife, and two daughters. This is the family that I worked the most for. They live in Masachapa, Nicaragua, a coastal fishing community. Marco worked as a fisherman until one night he was out and a storm blew up, swamping his 26-foot boat. He admitted he feared for his life and was lucky to have made it back home. Afterward, he could not live with the possibility of leaving his wife and daughter alone so he gave up fishing. He has since earned a living by working as a pedicab driver. He supplements his income by also working part-time for a small local manufacturing company and working casual labor for a hotel during its busy season. He makes around \$300 a month. He was very happy about the work on his home, which will eventually include a concrete floor in the new addition. Their home has no running water and they cook over an open fire. They are a supernice, hardworking family with a lot of pride.

- continued from page 64

deliver three loads each day. I was extremely proud of the group in terms of the effort level, and how quickly people volunteered for each new task no matter how tough. During the week we did not have any cases of heat-related problems like cramping, dizziness, or nausea. Thank you Hammer Nutrition! The only thing I wished for was that I had brought along a container of Recoverite to share as each work day ended. I will make sure to do that on my next Habitat for Humanity trip. **HN**







Cycling skills with Mike Freeman

Group etiquette in pelotons and pacelines

e all must agree that cycling is a dangerous sport. When you add testosterone, ego, and outside forces into the mix, group rides can sometimes be lifethreatening.

Be kind to your fellow cyclist. You could be the difference between someone having a safe ride vs., at the very least, caring for road rash.

Peloton

There are far too many crashes that cause severe injury. Some of these are caused by inattention, poor bike handling, and failure of the peloton to point out obstacles and changing conditions in the roadway.

Point out potential hazards. Potholes, debris, cracks in the asphalt, and other hazards that can grab a wheel and cause a crash. Remember that it's not just the first rider that goes down, it's the collateral damage gathered up behind the crash that usually causes the most injuries, especially if the speed is high.

Whose responsibility is it in the peloton to point out these potential hazards? Everyone! Well, initially it's the rider(s) on the front. Secondly it's the responsibility of everyone behind them to point it out as well. Point it out down the line and then move around it with no sudden moves to the side just in case someone is overlapped, so no front

- continued on page 67

- continued from page 66

wheels are taken out. Move over slowly and smoothly around the hazard.

Some cyclists advise not calling out the obstacle or changing conditions (situations). I don't agree; I say point it out and call it out, but pointing it out is a must. Calling it out alone is not sufficient.

Ride with your head up! Be alert. Watch what's going on in front of you. Use your peripheral vision to see side to side. Turning your head will cause you to drift in that direction. If you're in a two-up line and want to talk with your neighbor, don't look at them while you converse. Speak while looking forward. Many overlapping and rear-end crashes are caused by oversocializing and not paying attention to the front.

Group rides are not races. Attacking the group is a no-no. Group rides are a perfect opportunity to work on paceline skills: riding close side-by-side, getting comfortable riding close to the wheel in front of you, and moving around without crashing or causing a crash.

Most group rides follow a predetermined route, and yes, there are points where accelerations will take place, like over rollers or on a particular stretch of ascending road to the top.

Have regroup points. Stop for flats or mechanicals, or a least have someone stay with the problem until it is resolved. If the group agrees that it's a no-drop ride, stick to it. On the other hand, if it's a drop ride, make sure everyone understands that. On older established rides, these rules are already in place. If you are new to the ride, ask the question.

Paceline

If you're going to ride and participate in a rotating paceline, be prepared to pull through and off, even if it's just a token pull. If you think you are not strong enough or are too tired to pull through, stay on the back out of the line and enjoy the ride. Don't go to the front of the line and not pull through. Always

leave enough room for those riders rotating to move over and rotate in front of you. Tell the last person rotating back that you're sitting in. This will allow them to move over and not have to fill a gap that will occur when he/she thinks you are pulling through.

Be alert for gaps in the line. Fill into the gap immediately whether it's alongside or in front of you. Adjust your speed to the line's speed and move in slowly. Make sure you're not cutting someone off. You can look for a front wheel that may be coming up by looking down between your arm and body, not turning your head.

While we are talking about not turning your head, we might as well talk about spitting and blowing your nose. Some people don't get it, but it's just common sense. Being spit or snotted on by some idiot is not my favorite thing—have some respect please! If you need to spit, you don't have to pull out of the line. Do it to the side and down. How do I do that? Well, spit between your arm and body straight at the ground away from the cyclist next to you. That will keep the person behind you dry also. What did Jim say? "Don't spit into the wind!"

Blowing your nose is a different game. You must move safely to the side or to the back of the group to accomplish this task. You can tell an experienced or savvy cyclist by the way he or she handles this situation. Don't hesitate to educate those who fail to do any of this incorrectly.

Just a note

Most roads or highways are maintained by state, county, or city maintenance departments. Do not hesitate to contact them by phone, website or in person. You can request road repair or debris removal to eliminate dangerous or potentially dangerous conditions for us cyclists.

Happy and safe cycling! **HN**



Electrolyte Replenishment

Why it's so important and how to do it right

(As copied from the 9th Edition of *The Endurance Athlete's GUIDE to SUCCESS*. Complete article on pages 38-50.)

BY STEVE BORN

Sodium imbalance may lead to poor performance

What we found

We've repeatedly observed the following characteristics in endurance athletes who reported symptoms of severe sodium imbalance during or immediately following races or workouts:

- **1.** Dietary sodium intake above 6,000 mg/day.
- **2.** Fluid consumption in excess of 30 oz/hour (approx 890 ml/hr).
- **3.** Food consumption in excess of 300 cal/hour.
- **4.** Failure to acclimatize to hyperthermic (hot weather) conditions, including at least one workout of 60% or greater of the event distance.

What to do

You can diminish performanceinhibiting problems of excess sodium consumption by:

- 1. Reducing your dietary intake of sodium to 2,300 mg/day or lower. This not only aids performance, it's a substantially healthier dietary procedure.
- **2.** Limit your fluid intake during exercise to 20-25 oz/hour (590-740 ml/hr).
- **3.** Consume an appropriate amount of calories during exercise. For most athletes this is an intake of 240-280/hour, though it is oftentimes even less.
- **4.** Train two to three weeks in the same heat or humidity as the event.

ow the body controls serum sodium

Aldosterone is a hormone that controls the rate of sodium circulated in the human body.

When sodium levels dip too low, via loss in perspiration or urine, aldosterone is released, stimulating the kidney tubule cells to increase reabsorption of sodium back into the blood. In basic terms, the body has a very complex and effective way of monitoring, recirculating, and thus conserving its stores of sodium.

High sodium intake will suppress serum aldosterone, whereas low sodium intake will elevate serum aldosterone. In other words, too much sodium—be it via diet and/or during exercise—will suppress and neutralize aldosterone's sodium recirculation (and thus sparing) effects, causing more sodium to be lost. Conversely, a low-sodium diet and a more conservative sodium intake—in tandem with other depleting electrolytes—during a workout or race creates an environment where lower amounts of sodium are lost in sweat and urine.

This is also why "sweat rate" figures can be deceiving. You'll find many a coach or researcher stating something to the effect of "I've seen athletes lose up to several grams of sodium during a one-hour training session." That may very well be true for some athletes during such a short-duration bout of exercise,

- continued on page 69

Bottom line

Salty foods and/or salt tablets will not cut it when it comes to electrolyte replenishment. Instead, adopt a low-sodium approach that emphasizes a balance of essential minerals that cooperatively enhance the body's natural hormone and enzyme actions. You want a product that will provide comprehensive electrolyte support without compromising internal regulation.



Pick up The Endurance Athlete's GUIDE to SUCCESS today to find this and many other articles with in-depth fueling information to help you train and race to your highest potential. Available in hardcopy for \$7.95 and as a FREE download at www.hammernutrition.com.

- continued from page 68

especially if it's under a controlled environment (such as riding a stationary bike in a warm room with no circulating air). However, that doesn't mean that those losses are sustainable hour after hour; again, the body's built-in chemical messengers and hormones (namely aldosterone) help prevent those losses from continuing down the same path. Yes, the body does need sodium replenishment but it has to be an amount that works in cooperation with aldosterone's "sodium recirculation/ conservation" effects. A high-sodium diet and/or too-high sodium intake during a workout or race effectively negates aldosterone's desired effects, which means greater sodium losses.

Bottom line: Instead of adopting a recommendation that more and more sodium be added to the already too-high and unhealthy amounts in the diet, athletes should focus more on lowering their daily sodium intake. It is almost virtually guaranteed that each and every one of us consumes far more sodium than we need on a daily basis, and the harmful effects of oversupplying the body with sodium above its daily needs

is a real and present danger which will compromise optimal health. Lowering your sodium intake in the diet—keeping it in the range of 2,300 mg or less is not only a more appropriate recommendation/protocol for general health purposes, it will also benefit athletic performance as well. Definitely do not preload sodium in the days leading up to a race.

So what is the answer? How should I replenish electrolytes?

Proper electrolyte replenishment during endurance exercise requires a gradual, consistent approach that incorporates all of the electrolytes in amounts that do not override normal body mechanisms. Remember, electrolyte intake needs to be below systemic detection, yet help alleviate systemic depression. This means that you need to consume enough to support body functions and prevent heat-related issues such as cramping without overwhelming your body; electrolyte intake must slip under the

body's "radar detection system" while still providing optimal support.

Endurolytes, Endurolytes Fizz, and Endurolytes Powder are full-spectrum electrolyte products designed to fulfill the body's electrolyte requirements, countering the effects of hyperthermia, optimizing specific bodily functions, and enhancing endurance performance, especially beyond the two-hour mark. The electrolyte profile of the Endurolytes formula balances cations (positively charged ions) and anions (negatively charged ions) responsibly without emphasizing one electrolyte over others. This is a key note to remember: When a balance of electrolytes of cations to anions are managed in the energy producing cell—assuming the cell has adequate fuel and fluid—such a cell will produce energy at a higher rate than one overdosed by a single cation mixed with an irrational list of anions. That's a darn good reason to avoid going "salt only" or to use products—be they fuels or supplements—that contain high levels of sodium, especially at the expense of toolow amounts of other electrolytic minerals. Additionally, we do not formulate Endurolytes, Endurolytes Fizz, and Endurolytes Powder to reflect the amounts of electrolyte loss in sweat because each person has a unique biological predisposition in terms of minerals lost via perspiration. Furthermore, the differences in an athlete's size and fitness, as well as the pace of exercise, and of course the humidity and heat, can mean up to a 1000% difference when one athlete's sweat rate is compared to another's. A "one size fits all" formula based merely on sweat rates cannot, and will not, adequately support your specific electrolyte requirements. HN





I am a decade into triathlon and have used your products to win a Canadian Age Group Championship, plus compete at three World Championships (China, New Zealand, and Australia). I'm currently training for Ironman Coeur D'Alene and you guessed it—will be using your product! The working part of my life is blessed as the Head Men's Basketball Coach at the University of Lethbridge. Your products have found their way into our

locker room with the same outstanding results with our basketball athletes. I look forward to keeping my athletes rolling with your amazing products! The Horns had their highest league finish in 12 years this year and are off to playoffs!

Dave Adams Head Coach-University of Lethbridge Pronghorns Men's Basketball

An iron-man in Panama

Just checking in after my first race of 2012, Ironman Panama 70.3. Unfortunately, with a mile left to transition, I blew a tire and had to carry my bike into the run. I lost 5-7 minutes and fell back to finish 7th in AG. Still, I managed to qualify for the 70.3 World Championships in Las Vegas in September. I should have had podium, but it's a long season, and I'll have a handful of more shots.

I could not be happier with the Hammer Nutrition products that I'm using. I take Premium Insurance Caps, Race Caps Supreme, and Mito Caps every day, Race Day Boost leading up to races, Recoverite every day, Whey every night (sometimes with REM caps, Perpetuem on long days and during races, and Hammer Gel often mixed with Endurolytes and water on race day. I trust and rely on your products constantly, and am grateful for the support. They are absolutely making me a better athlete.

Reilly Smith 8th 30-34 4:41:24 Overall #37



Plop, pop, or scoop

your way to a cramp-free race or workout!



- Full-spectrum electrolytes in a well-balanced formula
- . Versatile dosing for a variety of conditions



SPECIAL OFFER!

Purchase three tubes of Endurolytes Fizz, or a bottle of Endurolytes (powder or capsules), and receive a FREE 22 oz. Purist Bottle. Valid while supplies last. Ad code EN79E. Offer expires 5/25/12. A \$8.95 value!

ORDER TODAY!

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Upcoming Hammer Nutrition- Sponsored Events

The race season is definitely getting into full swing, as evidenced by the huge increase in Hammer Nutrition-sponsored events in the months of April and May, as compared to earlier this year. Below is a portion of the events we're proudly supporting over the next two months. Again, this is just a fraction of the events we're sponsoring, so remember to check our website frequently (www. hammernutrition.com/calendar/events/index.php) for an up-to-date calendar of all endurance events that Hammer Nutrition supports.

ROAD CYCLING/ULTRA CYCLING

4/7 – Rocky Mountain Roubaix

Montana – www.montanacycling.net/schedule

4/7 - Gran Fondo Las Vegas

Nevada - www.granfondolasvegas.com

4/14 - Bessies Creek 24

Texas - www.bessiescreek24.com

4/14 - Mulholland Double Century

California – www.planetultra.com

Camornia – www.pianetuitia.co

4/19-22 - Sea Otter Classic

California - http://www.seaotterclassic.com

4/21 – Farmersville Road Race

Pennsylvania – www.proamcycling.com

4/29 – Don King Cycling Classic "Only in

Florida – www.worldwidecyclingsport.com/shopping/RaceSchedule.html

5/5 - Fast Freddie Gran Fondo

California - www.ffgranfondo.com

5/6 – Cone-Azalia Classic Road Race

 ${\bf Michigan-www.coneazalia.blogspot.com}$

5/12 – Sonoma/Napa Gran Fondo

California - www.echelongranfondo.org/napa

5/19 - Heartbreak Century/Double Century

California – www.planetultra.com

5/26 - Iron Horse Bicycle Classic

Colorado - www.ironhorsebicycleclassic.com

5/26 - Lewis & Clark Ultra 12/24

Washington - www.lacultra.com

5/27 – Cycling Double Header/Mountains of Misery & Wilderness Road Ride

Virginia – www.cyclingdoubleheader.com/ mountains-of-misery

MOUNTAIN BIKING

4/15 - Bone Bender 3/6 Hour MTB Odvssev

Kansas – www.bonebendermtb.com

4/21 - Slobber Knocker Marathon MTB Race

Arkansas – www.arkansascycling.com/event_detail.asp?eid=235

4/27 - The Whiskey Off-Road

Arizona – www.epicrides.com/index.php?contentCat=6

4/29 - Bear Springs Trap

Oregon – www.mudslingerevents.com

5/5 – 12 Hours of Lodi Farm MTB Race

Virginia - www.fredevents.org/12_hours_of_lodi

5/5 - The Battle at Burlingame

Rhode Island – www.trimomprod.com/The_Battle_ at_Burlingame.html

5/12 - Hammerhead 100

Florida – www.goneriding.com

5/13 – Cascade Chainbreaker – presented by Webcvclery

Oregon – www.mudslingerevents.com

5/19 - 12 Hours of Tsali

North Carolina - www.goneriding.com

5/20 - Spring Thaw

Oregon – www.mudslingerevents.com

5/26-27 – 24 Hours Round the Clock

Washington – www.roundandround.com/ RoundTheClock/RoundTheClock.php

5/27 - Sisters Stampede

Oregon – www.mudslingerevents.com

5/27 - BURN 24 Hour Challenge

North Carolina – www.burn24hour.com

ULTRA RUNNING

4/7 - Hells Hills Endurance Trail Runs

Texas - www.tejastrails.com/HellsHills.html

4/13-15 - Potawatomi Trail Runs

Illinois – www.potawatomitrailruns.com

4/15 - Forget the PR, Mohican 50K & 25K

Ohio - www.mohican50k.com

4/21 - Full Bloom 50K

Virginia – www.finalmileevents.com/full-bloom. html

4/21 - Ouachita 50 Mile and 50K

Arkansas – www.runarkansas.com/0T50.htm

4/21-22 - Labor of Love at Lovell Canyon

Nevada - www.calicoracing.com

4/27-28 - Salt Flats 100 Mile Endurance Run

Utah - www.saltflats100.com

4/28 - Capitol Peak 50 Mile and 55K

Washington – www.capitolpeakultras.com/ cp50mile.html

4/28 – Collegiate Peaks Trail Run

Colorado - www.collegiatepeakstrailrun.org

5/6 - Long Cane 55M/50K Ultra Trail Run

 $South\ Carolina-www.ultrasontrails.com/long cane. \\ html$

5/10-13 - 3 Days at the Fair

New Jersey - www.njtrailseries.com/fair

5/11-12 - Zion 100/50 Mile Trail Run

Utah - www.zion100.wordpress.com

5/12 - Ice Age Trail 50

Wisconsin - www.iceagetrail50.com

5/12 - 50s' For Yo Momma

Ohio - www.50sforyomomma.com

5/19 - Keys 100

Florida – www.keys100.com

5/19 - Bishop High Sierra Ultramarathons

California - www.bhs50.com/index.html

5/19 – Watershed Preserve 12 Hour Trail Race

Washington – www.cascaderunningclub.com/wps. html

5/27 - California Run Festival and Relay

California - www.supportoursociety.org

TRIATHLONS/DUATHLONS

4/7 - Cary Duathlon

North Carolina -

www.fsseries.com/index.php?action=event&event_id=49

4/13-14 - Snake River Triathlon

Idaho - www.lcsc.edu/

crosscountry/2012snaketriathlon.html

4/14 - Rage in the Sage Duathlon

Washington – www.3rrr.org

4/14 - Telos Timp Triathlon

Utah - www.t3triathlon.com

4/14 - Escape from Ft. De Soto

Florida - www.trievent.com/escape

4/21 – Millerton Lake Triathlon

California – http://www.sierramultisport.com/events.htm

4/21 - Coyote Carrera Triathlon

New Mexico – www.chasing3.com/coyote-carrera-tri

4/28 - The No Label Triathlon

Texas - www.itrievents.net/Nolabeltriathlon.html

4/28 - New Jersey Devilman Triathlon

New Jersey – www.piranha-sports.com/Race122.

5/5 - Rockin R Toobin Triathlon

Texas - www.redemptionrp.com/2012/RockinRTri

5/6 - Monticelloman Triathlon

Virginia – www.charlottesvillemultisports.com

5/6 - Athleta Iron Girl Lake Las Vegas Women's Triathlon

Nevada - http://www.irongirl.com/Events.htm

5/12 - Muncie May Triathlon

Indiana - www.munciemultisport.com/events/ muncie-may-triathlon 5/12 - Folsom Lake International Triathlon

California – www.tbfracing.com/events/folsomlakeintl.html

5/12 - Fly by Night Duathlon

New York - www.flybynightdu.com

5/13 - Tomoka Triathlon

Florida - www.tomokatriathlon.com

5/19 - Cross Creek Ranch Kid's Tri

Texas – www.itrievents.net/Cross_Creek_Ranch_ Kids T.html

5/19 – Whiskeytown Duathlon

California – www.sweatrc.com/Duathlon/Duathlon. html

5/20 - Auburn Triathlon

California - www.auburntriathlon.com

5/20 – Athleta Iron Girl Atlanta Women's Triathlon

Georgia - http://www.irongirl.com/Events.htm

5/20 - Gear West Duathlon

Minnesota - www.gearwestduathlon.com

5/26 - Tri For Our Veterans V

New Jersey – www.piranha-sports.com/Race193. aspx



Brian Corliss sprints to the finish at the 20K backcountry Snowy Range Snowshoe race. Photo : Alec Muthig



January 25, 2012

Dear Hammer Nutrition:

Your support of the 2012 Snowy Range Snowshoe Races, which acted as the United States Snowshoe Association's Wyoming State Championship and National Championship Qualifier, greatly helped this inaugural event succeed.

Nearly 60 participants, from 17 to 76 years old, traveled to the Snowy Range Ski and Recreation Area for what turned out to be a fun and snowy day in the mountains. There were plenty of big grins as participants crossed the festive finish line and met their myriad goals. Some racers are going to the national championships! My thanks to you for helping this happen!

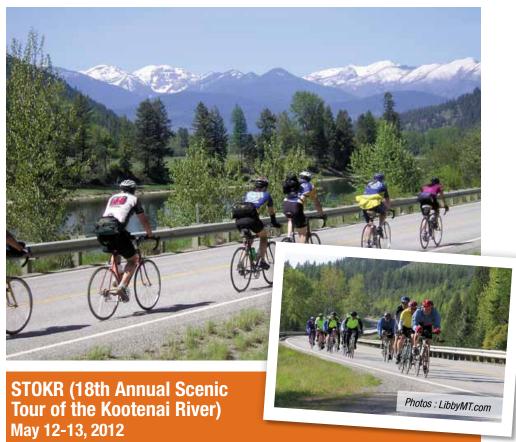
Again, your support is greatly appreciated by both the race organizers and participants. Thank you!

Sincerely, Alec Muthig Director



Check out the Hammer Nutritionsponsored events! Hammer Nutrition is proud to call Montana "Home Sweet Home" and we are always willing to share our favorite trails, rides, and runs to those visiting our area. (If you have ever stopped by Hammer Nutrition headquarters, you know this to be true!) It is with the same enthusiasm that we share a few of our favorite Montana endurance events. So if you thought your busy training and racing schedule might preclude a summer or autumn vacation, think again! Sign up for one of the following races or events, train hard, and challenge yourself in the Big Sky state.





In the fairly unpopulated northwestern corner of Montana, just 30 miles as the crow flies from the Canadian border, lies some of the most spectacular fly fishing rivers in the U.S. Day 1 of the STOKER (98 miles) takes cyclists along the Yaak River and into remote countryside, with one-room schoolhouses and bars with names like The Dirty Shame and The Golden Nugget. Day 2 is 37 miles along the Kootenai River. In May, spring has definitely sprung in Montana, but the weather can be hit-ormiss; plan to dress for any kind of weather when you gear up for the STOKER! The STOKR bike ride benefits the Kootenai Valley Partners Habitat for Humanity.

Registration: Closed for 2012, but put it on your calendar for 2013 as a great kick-off to the summer cycling season. Registration opens at http://www.libbymt.com/events/stokr.htm in mid-February, and 400 participants are selected by lottery.

Turn the page for more amazing Montana events!

TOSRV West (42nd Annual Tour of the Swan River Valley) May 19-20, 2012

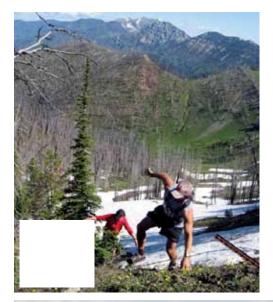
Let's see . . . Montana is known for its mountain ranges, wide scenic valleys, stunning vistas, abundant wildlife, and large lakes. If you want to see all of that on one bike event, join Missoulians on Bicycles (MOBI) for a two-day, 226-mile, challenging tour through western Montana. The route follows a section of one of the Highline Hammer routes, along Flathead Lake. MOBI provides food stops, baggage shuttle, and overnight arrangements so that you can concentrate on enjoying the cycling. TOSRV West is modeled after the original TOSRV (Tour of the Scioto River Valley) in Ohio.

Registration: Register before Saturday, May 11 to avoid late fees. Limited to 200. http://www.missoulabike.org/tosrv-registration/

24 Hours of Rapelje June 22, 2012

For a true taste of Montana, leave the big city behind and sign up for the 24 Hours of Rapalje, an incredible weekend of camping under the big sky near the small farming and ranching town community of Rapalje, which only a few hundred residents call home. This USA Cycling sanctioned endurance mountain bike race is held on a course known for its washboards, rolling terrain, and occasional interference from cattle that wander too close to the course. A pancake feed accompanied by live music is held at midnight.

Registration: Limited to 180 participants. For registration info, visit www.usacycling.org.



Old Gabe 50K/25K June 23, 2012

With over 11,000 feet of climbing on rough mountain trails, this 100% singletrack trail ultra run spans alpine and sub-alpine terrain of the Bridger Mountain Range near Bozeman, Montana. With four significant climbs and a 12-hour time limit, this is considered to be one of the toughest 50Ks in the world. The OG ends next to a mountain stream where athletes traditionally test themselves in the freezing water after completing the race. Mike Wolfe and Scott Creel, both national champions in the 50K, 50-mile, and 100-mile distances, have competed in this event.

Registration: This is a tough one, so the race directors require that participants be at least 18 years old. Visit www.math.montana.edu/~thayes/Runs/Gabe/OGRaceinfo.html for complete information.



Ranchers watch the runners during

the 2011 Missoula Marathon. Photo : Tom Robertson

RATPOD (Ride Around The Pioneers in One Day) June 23, 2012

This 130-mile road ride takes cyclists into the heart of the scenic Big Hole Valley, a 60-mile swath of high plains, with its valley floor at 6,500 feet, surrounded by snow-capped peaks ranging up to 10,000 feet. This is bicycle nirvana, the former stomping grounds of Levi Leipheimer. The valley is sparsely populated and therefore lightly traveled by automobile. With a bit of effort—a cumulative elevation gain of about 5,300' and the highest pass at 8,000'—participants are rewarded with endless vistas, wildlife sightings, and a celebration at the end of the ride, complete with barbeque and live music.

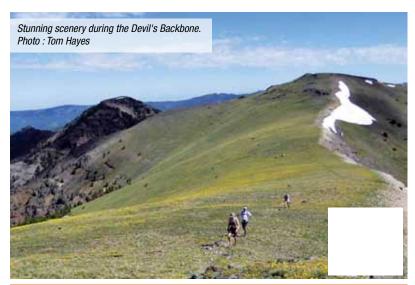
Registration: Around March 1 every year, with a rider limit of 650. Put this one on your 2013 calendar!



Missoula Marathon and Half Marathon July 8, 2012

The race was voted by Runner's World magazine Overall Best Marathon in the country in 2010, and by the 2011 edition, word had spread; there were 1,040 finishers (a large field for a state that boasts only 1,000,000 residents). The Missoula Marathon and Half Marathon courses are flat, fast, USATF-certified, and the full marathon is a Boston Qualifier! The course begins with a scenic route through the countryside and finishes in historic downtown Missoula.

Registration: Online registration is available from mid-October through the first week of July each year at www.runwildmissoula.org.



Devil's Backbone 50 Miler & 25-Mile Relay **July 14, 2012**

The Devil's Backbone should NOT be your first 50-miler, for many reasons. It's 50 miles on rocky singletrack; you are almost always above 9,500 feet with one significant climb from 7,200 feet to 10,300 feet and multiple short steep climbs totaling 10,400 feet; and evacuation is possible only by helicopter. But the reward for this challenging ultra run is an experience of a lifetime, with possible sightings of elk, goats, mountain lions, and bears (runners carry bear spray), and the most beautiful mountain vistas imaginable.

Registration: One of the few supported races (complete with race shirt) with no entry fee, but donations are appreciated. To register, visit www.math.montana.edu/~thayes/Runs/Devil/DB50Info.html. Because this course traverses a Wilderness Study Area, entry is limited to 26 solo participants and 14 relay 2-person teams.



Two Bear Marathon **September 16, 2012**

Mix and mingle with Hammer Nutrition employees; we are there as participants, course marshals, and bike patrol at this full and half marathon, and the start line is just a few miles from Hammer Nutrition headquarters. The half marathon follows a local paved road overlooking Whitefish Lake, and the full marathon begins with 6 miles of singletrack, followed by about 8.5 miles of dirt road/singletrack mix—if you run the marathon course any day other than race day, you would be smart to carry bear spray. The last 11+ miles follow the half marathon course on paved road back to town.

Registration: By Sept. 4 at http://twobearmarathon.org. Limited to 200 marathon runners and 250 half marathon runners.



HURLS's Elkhorn Ultramarathons – 50 Miler, 50K, and 23K August 4, 2012

When the race poster and website reads, "Run 'til you HURL, then run some more!" you know it's going to be a challenging race, organized by some fun folks! You'll get a true taste of Montana's spectacular scenery during 40 miles on technical single track trails, 2 miles of jeep road, and 8 miles of dirt Forest Service road . . . no pavement, just dirt, rocks, forest, and remote meadows in the Elkhorn Mountains.

Registration: Limited to 200 participants total for all three events. As of mid-February there was still space available. Visit www.vigilanterunning.org/elkhorn/ home.shtml.

Le Grizz Ultramarathon October 13, 2012

When the race brochure states, "If you drive in from a motel or elsewhere in the outside world," note that it takes 1 1/2 hours to drive to the starting point from the town of Hungry Horse" (about 13 miles east of Hammer headquarters), you know this is a Montana ultra run that's definitely "off the grid." This 50-mile ultramarathon, Montana's first, has been taking place since 1982, on the second Saturday in October. If you're interested in a challenging, scenic race, and if you don't mind the possibility of encountering wildlife (the brochure mentions deer, elk, moose, black bear, mountain lion, bobcat, and covote), the Le Grizz Ultramarathon may be just what you're looking for!

Registration: The 2012 race brochure and registration form will not be available until June. You can access the previous year's brochure and registration form, as well as a wealth of other information and stories about the Le Grizz Ultramarathon and its history, at www. cheetahherders.com/LeGrizz.html.

Hammer Israel

Introducing the newest member of Hammer Nutrition's international family

BY YAIR J. ELMAKIAS

hree years ago, as an athlete in Israel, I was looking for solutions for repairing, maintaining, building, and improving my body. I found Hammer Nutrition and ordered a few products including Hammer Gel, Perpetuem, and Premium Insurance Caps, and then tested them. I was so impressed and satisfied with the benefits these products provided that I decided to tailor a complete solution based on Hammer Nutrition products only.

After a long period of trial and error (about six months), I'd managed to find the right combination of products as well as the most suitable doses for my needs. Since then I continuously feel/see the benefits in all areas:

- Reached my desired body composition as well as weight goals (4.5% fat, 123 lb), while maintaining the required muscles mass
- Improved my cycling performance in all aspects
- Increased my Power Profile in both short- and long-term durations
- Increased my endurance ability for long distances, mostly due to a welldefined fueling strategy
- Improved my performance in all top priority events
- Improved my recovery (shorter recovery duration)
- Great daily energetic feeling as well as general health
- No more injuries due to training stress

Hammer Nutrition customer support/ service was something I've never experienced before. Each one of the representatives was kind, supportive, responsive, and highly professional. (I worked with Angela, Mary, Ry, and others).

After two years as Hammer Nutrition's loyal customer, I decided to come and meet the team operating behind the scenes, so I registered for the 10th Annual Highline Hammer (thanks to Angela for the suggestion). Prior to my visit to Montana, I had in mind the idea of importing Hammer Nutrition's entire concept to Israel and sharing it with the Israeli athletes. I shared my idea with Angela who scheduled a meeting with Brian toward the end of the Highline weekend.

The 2011 Highline was something I can't describe in words—fantastic from each and every aspect. I was so amazed by the Hammer Nutrition team; each and every person I met was dedicated and motivated as if they were the company owner. Their endless care and support during the Highline made me conclude that Hammer Nutrition's success is based on the team that runs it. After the Highline, with Angela's and Shelley's help, I met Brian and presented my idea. Brian was positive concerning my idea, while suggesting a few operative steps.

Since then, the Hammer Nutrition Israel idea is becoming a reality from day to day. There is a dedicated team supporting me, in such an outstanding way, in bringing this idea to life: Brad and Megan in Dealer Services, Angela and Kelly in the Marketing/Graphics department, and Walt in IT.



Now, less than one year after the Highline Hammer, the Hammer Nutrition Israel ramp-up process is accelerating and we are expected to start sales by April. As a cyclist, I'm proudly representing Hammer Nutrition in local and international cycling events, and have several races on my calendar:

May 5: Bazelet race — Point-to-point race in the Galilee Israel May 26: Time Trial race in Israel June 9: Time Trial race in Israel June 16: Israel Road Championship June 19: Israel Time Trial Championship July 14: Etape De Tour 2012 in France

For updates you can visit our temporary website (www.hammernutrition.co.il) as well as our social media channels (Facebook/YouTube/Twitter/Flickr). **HN**



78 Apr/May: Issue 79 "I swear by Hammer Nutrition." - Sam W.



Taking it to the next level of endurance

Racing to the South Pole

BY VANESSA GAILEY



On the centenary of Sir Robert Falcon Scott's iconic trek to the South Pole, Hammer Nutrition South Africa client, James Raaff, along with teammates Gavin Moran and Frank Runge, embarked on the race of a lifetime.

They threw their names into the hat, as Team Keep a Child Alive, to race against 48 other competitors over 778 km in The Race to the South Pole. one of the toughest endurance races on the planet. We first heard about James' rigorous training for this event through our friends at Hammer Nutrition South Africa, James distributes Hammer Nutrition products through his pilates gym in South Africa, and was

sponsored with some free Hammer Nutrition fuels for his training.

In a snapshot, The Race to the South Pole is set in one of the coldest, driest, and highest deserts on earth with a starting line at a Russian scientific outpost in Antarctica, and the finish line at the geographical South Pole. The race began Christmas Eve, and racers were fortunate to have fairly good weather—an average temperature of -13°F was reported. Just as they did 100 years ago, Norwegians were the first to reach the pole; Team Framdrift celebrated at the pole on day 28 and smashed the previous race record by almost two days. HN





Hammer Camps 2013

Join us for a week of winter training

in sunny Tucson!

Kick-start your 2013 cycling season by joining us for one of our exciting, educational camps in sunny Tucson, Arizona. Start making plans now—space is limited to 15 campers per Hammer Camp, and we expect available spots to fill quickly.

2013 Camps

January 21-27 February 18-24 March 4-10

Space is limited, sign up today!

1.800.336.1977

www.hammernutrition.com/events/camps



"Hammer Camp was good fun and a great place to hang out with people of same interests." - Donna P.

"The camp experience was well thought out." - Barney S.

"Both Brian and Jim's informal talks were great (so were those of the Cycling House staff)!"

Photos: Owen Gue



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- Increase cognitive function
- Help build, maintain,
 & repair lean muscles
- Powerful immune system support



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MSRP

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Keith Rieger

Athlete Spotlight



ere at Hammer Nutrition we have continued to stand by our principles of community and local support. While we value the accomplishments of our elite athletes, each and every day we are awe-inspired at what our working, everyday athletes achieve. They dedicate their free time to training while balancing careers, and often family.

A couple of years ago I became Hammer Nutrition's sponsorship coordinator, a position that I enjoy immensely because I get to hear directly from our athletes about their experiences and challenges. I remember a particular sponsorship submission that I received in my first year in this position, from Keith Rieger sharing his history and explaining his role in his local community. Since then I have heard from Keith about his continued success with his running and training, but what stands out the most are his annual photo submissions from his community project. Keith was kind enough to take some time out of his busy schedule recently to answer some questions about his future challenges and current community efforts.

Keith, you have been a sponsored athlete for about four years now. How long have you been using Hammer Nutrition and what motivated you to choose them?

I have been using Hammer Nutrition products since 2007. I chose Hammer Nutrition for the following reasons . . .

- 1. The quality and variety of products help me to achieve my goals.
- 2. Products and shipping are reasonably priced and a good value.
- 3. Hammer Nutrition's customer service, nutrition experts, and community are extremely helpful and supportive.

What have been your major goals in a lifetime of sports? What is your background in athletics, and what is next on your list of big accomplishments?

I had two lifetime athletic goals: to do the Western States 100 Mile Endurance Run and to do Ironman Hawaii. After running NCAA Division One cross-country and steeplechase for the University of New Mexico, I focused on the WS100. I have since been fortunate enough to complete it three times. I am now focused on qualifying for Ironman Hawaii, and therefore I am planning to do several qualifiers in the upcoming year. Hopefully I can learn how to swim and bike!

You competed in your third WS100 last year. You finished in under 24 hours, in less than ideal conditions with all of the snow that was still on route, so your race must have went well. Would you share your race strategy with us?

After completing the WS100 three times, I believe these are my five keys to success:

- 1. Train by primarily doing very long walk/runs on hilly terrain.
- 2. Practice your race-day nutrition and do not take in more calories than you can absorb.*
- 3. Pre-tape your feet to avoid blisters when they inevitably get wet running through the snow and water during the race.
- 4. Pace yourself by doing a very easy walk/run for the first two-thirds of the race; you can always pick it up if you "feel good" for the last third.
- 5. Do not overwhelm yourself by focusing on the BIG goal of running 100 miles. Keep motivated by focusing on SMALL goals of running five miles at a time from aid station to aid station.
- *I used and greatly benefitted from Hammer Gel, HEED, Endurolytes, and Recoverite.

At the 2011 XTERRA World Trail Championships, you finished 9th overall and won your age category. How does that rank amongst your athletic achievements and what would you consider to be your greatest achievement?

I am fortunate to be the 2011 XTERRA Trail Running World Champion (M40-44), the 2009 World Duathlon Bronze Medalist (M40-44), and to be a three-time Western States 100 Mile finisher. However, I think my greatest achievement is giving back to my community by volunteering, and by starting and coaching the Surprise Running Club and the Surprise Special Olympics Track & Field Club.

The Surprise Running Club is a local club in Surprise, Arizona that caters to runners and walkers of all ages and abilities. Our "F3" goals are to bring "Fitness, Friends, and Fun" to the community. The Surprise Special Olympics Track & Field Club encourages our members to have fun, do their best, and to play sportsmanlike. The members of both clubs are very inspirational to me and to each other. Hammer Nutrition has been very generous in donating samples to our members each season, and we greatly appreciate it! Many of our members have since become Hammer Nutrition devotees.

Lastly, what is your favorite Hammer Nutrition product?

I love Hammer Gels—especially Espresso and Tropical since they contain caffeine!!

Thanks for taking the time to chat with me, and best wishes for continued success from all of us at Hammer Nutrition! HN



Getting his glide back The 2012 Boulder Mountain Tour

BY MARSHALL OPEL

Photo : Nils Rlbi

cold, "bluebird" February morning and perfect corduroy skate lanes freshly set in the heart of Idaho's Sawtooth National Forest . . . it doesn't get better. Add nearly a thousand happy, healthy Nordic ski racers, fast skis, some Steve Miller band, and yes, it does get better!

Hi, it's me again, Marshall Opel. It's been awhile since my last post about bike racing in Europe; some things have changed, and some have not. I've moved on from my mobile home in France, and my road bike collects dust in the basement. No, I have not lost the passion; rather, I've simply rechanneled it for the season to Nordic skiing. It's a surprise to some that I ski raced longer than bike raced. Skiing is in my blood; on this particular day in February, the temperature was below zero, but my blood was running hot.

The Boulder Mountain Tour is my ab<mark>solute</mark> favorite ski race. Its 32-kilometer distance is almost all slightly downhill. Gliding and tactics are key—it feels like a bike race without the consequences of road rash. This year, like years past, Hammer Nutrition was the official drink sponsor of the event with HEED stations strategically set up along the race course. I was excited to be sporting the new 2012 Hammer Nordic race top and bottom made by Louis Garneau-very comfortable. The race was not flawless on my part, but nonetheless I was happy with my effort. I had to dig deep to

stay with the group I was in and at times felt the ill effects of few ski race starts. This year's BMT marked two years for me without ski racing. Needless to say, it was great to put a Nordic bib on. I used the one and only Montana Huckleberry Hammer Gel before the start and took HEED at the feed stations. As always, my fueling was dialed and helped me feel great throughout the race. I skied into the finish area with two other guys and lost the boot dive for 9th, ending up

11th-not bad for my first race back.

I'd like to say a special thank you to my family and friends for their unending support, to the staff at Hammer Nutrition for their support and belief in me, and to the organizers and volunteers of the BMT, you once again put on a perfect race. To the readers, enjoy the rest of winter. For those of us in the north country, we'll be back out on the roads and trails soon enough! Thanks for reading. **HN**

HAMMER NUTRITION JUNIOR ATHLETES

Glacier High Wolfpack and Shane St. Onge

Congratulations to the Glacier High Wolfpack wrestling team for winning their first State Championship and to Shane St. Onge for winning an individual title!

"I appreciate everything that Hammer Nutrition has done for me in my athletic career. Throughout my wrestling career I have been able to count on products like HEED and Recoverite to keep me ready for competition. Outside of the season I use it for running. Hammer Nutrition products have fueled my body to excel and help me reach my goals."

Thank You, Shane St.Onge Glacier High Wolfpack Wrestling State AA Champion 160 lbs



Don't get left out in the sun! Custom Hammer Nutrition tents for all of your events



This tent has an alternating crank and badge logo top with "Racing Team" printed on all four sides of the valance. We'll have a half-dozen or so of these premade, so they'll be available to ship to you shortly after ordering.

\$675.00 + shipping*



Semi-custom

This tent features the alternating crank and badge logo top, with a "your name here" area for custom printing on all four sides of the valance. Each semi-custom canopy will be made-to-order and requires approximately four weeks for production and shipping.

\$795.00 + shipping*

*Shipping charges will apply to all tent orders, determined by weight and destination.

From our athletes

Catching up with the stars of tomorrow

Sport Systems Mountain Top Cycling Team



Photo : Charlotte Disney

Hammer Nutrition client, has competed in triathlons since he was 12 years old, competing alongside his older brother, Brandon, and his dad, Roy. His first triathlon was at Discovery Park in Sacramento, CA in 2008, where he placed 3rd in

Connor Disney (above at right),

in 12 triathlons since, placing 1st in both the 2009 Ukiah Triathlon and the 2009 Granite Bay Duathlon. Most recently,

his age group. He has competed

Disney

Connor

he placed 3rd in the 2011 70.3 Ironman Vineman, which would have qualified him for the Las Vegas World Championship if he was 18, but he is only 16.

He also competes in many 5K and 10K runs and frequently comes in first or in the top three. He uses Hammer Gel, Perpetuem Solids, HEED, and Recoverite. Thanks Hammer Nutrition!

For the past two years our team has promoted and organized the Desert Ridge MTB Club to get middle school aged kids (12-15) riding their mountain bikes. We've had 15 kids per year learn the basics and enjoy some good local singletrack riding over. Each sixweek session sparked the interest of some kids to join our team and get into racing. The juniors pictured in this photo all got in at least two races last year. My two boys, Mason and Myles, are looking to race the NM Off-Road Series this year.

Hammer Gel and Perpetuem Solids make the rides more enjoyable for our juniors! We try to get them enjoying the sport first, with bike skill drills that build confidence and camaraderie. Then we take them out for their first singletrack experience, and they naturally appreciate the suffering. Knowing the fun section is coming up and so is the downhill makes the climbing palatable. Of course, some kids actually like to climb and they always lead the

We are glad to be representing Hammer Nutrition again this season!

Damian Founder & Director, Sport Systems Mountain Top Cycling Team

Ashley Stilwell

Ashley catches air on the course at the MBAA White Tanks Whirlwind while racing for Hammer Nutrition-sponsored Team AZ Devo.



Pierson Cracraft (right)

Greetings from Texas! We wanted to share this photo of our son, Pierson Cracraft (11 years old), who finished 1st in his age division at the Big Bend Ultra 15K. This was his FIRST trailrace and he hammered it!

Pierson's pre-race fuel consisted of a bottle of HEED, and he celebrated his victory with an ice cold bottle of Recoverite! Pierson and his brother, Tate, (8 years old) religiously rely on HEED for all of their sports including hockey, lacrosse, soccer, basketball, and mountain biking.

Thank you so much for sponsoring the endurance race community and the little guys!!

Hammer On, Eric and Christy Cracraft

We want to know what your juniors are up to! Send your latest news to:

athleteupdates@hammernutrition.com



Ethan Vawdrey (left)

I started training January 1 with my 10-year-old son Ethan. His goal is a half marathon this year. He has made tremendous leaps of progress in the last five weeks, especially considering that he started from zero. Today Ethan ran four miles in 40:49. He's been using Hammer Gel for our shorter runs, but today was the first time I gave him an Endurolytes as well. His comment? "Do these come from Heaven?!?" He did fantastic on his run today, steady energy and no cramps.

Ethan is right on target for his half marathon; he's started hoarding my *Runner's World* magazines when I'm not looking, and I caught him looking through the most recent *Endurance News* that came a couple of weeks ago—a real chip off the ol' block.

I've been sold on your products for a long time, and I'm raising part of the next generation of Hammer Nutrition fans. Keep it up!

Heidi Spencer Vawdrey

HAMMER NUTRITION JUNIOR ATHLETES





Hear them roar

North Allegheny Tigers

BY CORKY SEMLER

Photos : Shujun Du

he North Allegheny Girls Swim Team, from just north of Pittsburgh, PA, completed their third-consecutive undefeated dual meet season in February, capping a 10year record of 86-7-3. The girls have won three straight District Championships and (as of press-time) are heavily favored to win their fourth title in March. The Tiger women have recorded some of the best relay times in Pennsylvania so far this year and believe their team will be one of the best in the state by season's end. Many of the girls attribute their use of Hammer Nutrition products as central to their ability to train at the highest levels in pursuit of another championship. Senior captain and threeyear All-American Allie Pennetti stated that the rigorous Christmas training was much easier this season when

> fueling properly with Hammer Gel and taking Daily Essentials.

Not to be outdone. the Tiger boys just completed their fourth consecutive undefeated season, capping a 10-year dual meet record of 93-3. During this time, they have won five District titles, two Pennsylvania State titles, and have amassed 25 National Interscholastic All-Americans.

Many of these swimmers use Hammer Nutrition products to supplement their rigorous training, which often exceeds 25 hours per week, training twice per day in the water and dryland weight training three days per week. Tiger distance swimmer Jonny Songer said that using Perpetuem has made all the difference in his ability to maintain stamina during four-hour training sessions.

Head Coach Corky Semler is not at all surprised by his swimmers' experiences with Hammer Nutrition products. As an experienced triathlete with over 20 years of racing, he has personally seen the difference training and racing with Hammer Nutrition products can make. He raced to a lifetime best time last summer in a Pittsburgh area competition, qualifying for the National Age Group Championships for the first time in his racing career. "It is amazing, yet perfectly logical, that supplying the body with quality nutrients will have such a significant effect on one's ability to train and race," Coach Semler shared with Hammer Nutrition headquarters. "Several members of my training group have started on Hammer Nutrition products after seeing the beneficial effects on my and their own performances after trying the products." HN



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HAMMERBUCK\$ Turn race day into payday!

Over \$28,000 in cash and credit awarded to 35 winners in 2011 . . . you could be next!

"I just wanted to give a big thanks for the Hammerbuck\$ program; I couldn't be more proud to represent Hammer Nutrition! The program helps me continue to be able to afford to compete now that I am retired." - Steve S.

Above Left to Right: Just a few of the 2011 Hammerbuck\$ winners: Kayleen Uibel, Steve Gerbig, Joel Sothern, Rhonda Claridge, and Matt Galluzzo.

What it is:

Hammerbuck\$ is a cash and credit contigency program that we began in 2008 as a way of rewarding athletes finishing in the top echelon in specific races who use Hammer Nutrition fuels and supplements and wear Hammer Nutrition logo clothing during the event and while on the podium.

Start winning today:

If you're ready to be a Hammerbuck\$ winner, go to . . . www.hammernutrition.com/deals/hammer-bucks/ for complete details, including requirements, a listing of eligible events, prize payouts, and more.



At the age of 19, I am relatively new to the sport of surfing, but for the past few years my passion for it has grown exponentially. Surfing has become an integral part of my life; it's not just a hobby.

I was surfing 26+ hours a week, putting in long sessions in the water, sometimes two a day, and suffering from cramps, hunger, and poor recovery during consecutive days of training. A good friend and faithful Hammer Nutrition customer educated me on the benefits of using Hammer products. Knowing this could only help my surfing, I was more than willing to give it a try. Unable to eat a big meal before early morning training sessions, I started drinking Endurolytes Grapefruit Fizz en route to the beach and taking 1-2 Espresso Hammer Gels before a session. On long days, I use Caffé Latte Perpetuem to keep my energy levels up and stave off hunger until I can eat a bigger meal. I also use Recoverite after each session and supplement with Tissue Rejuvenator, Anti-Fatigue Caps, and Hammer Whey. The result? Increased energy, no more cramps, improved recovery, and a stronger surfer!

Now I proudly display the Hammer logo on all my surfboards. Thank you, Hammer Nutrition, for helping me become a better surfer.

Eli Cooperstein

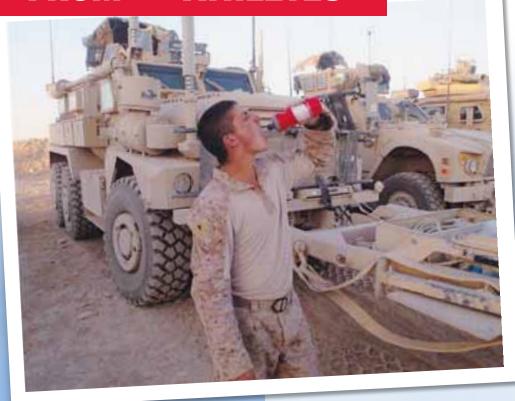
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Tissue Rejuvenator is a powerful, dual-purpose product, supplying your body with a variety of nutrients that provide the raw materials needed to promote rapid tissue repair.



FROM OUR ATHLETES



Your product was some of the best fluid these soldiers had ever received from back home, and I made it a point to send them some every chance we got.

hen my cousin joined the Marines right out of high school, along with ten of his friends, I was so proud of what these brave young men were doing for our country. When he went off to basic training and then was deployed to Afghanistan, I had no idea what the conditions of the fighting were like there or what it was that these young men are asked to do given their environment. I realized that our military wasn't giving our soldiers all that they could to help them stay in top physical shape like so many of the athletes that use your products daily. The photo is of my cousin, LCpl Brock Marcotte, taken in an area of Afghanistan that is called "the sand box." It is an area where, during the heat of the summer, the temperatures rise to above 130 degrees and at night can drop down to freezing. They are in some of the toughest conditions in the world and yet our brave soldiers walk the line daily to fight our enemies there.

After talking with my wife Vanessa, a competitive cyclist and long distance runner who uses your products daily, I made it a point to purchase some HEED in the small packets along with some of your water bottles from my friend Mike Freeman; we then packaged it up and made sure that my cousin and his platoon had enough to help keep them hydrated daily while fighting on the front line. Your product was some of the best fluid these soldiers had ever received from back home, and I made it a point to send them some every chance we got.

My cousin is a great American and it was my honor to do something to help him and his fellow Marines. Our family is very proud of Brock, but there isn't a day that goes by that we all aren't saying a little prayer and doing all that we can to help him and his fellow Marines. Your products are extremely helpful and I look forward to sending more to Brock in the near future. Currently Brock is at 29 Palms training his new team, and then he will return to Afghanistan with next year at this time. I plan to once again send him more of your products to continue to support our troops.

Chuck Baumann

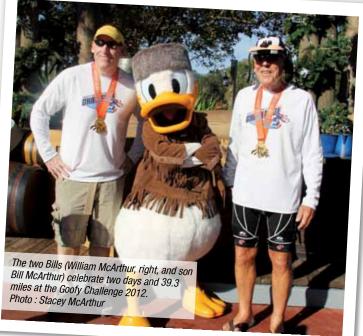
FROM OUR ATHLETES



Russell DeBarbieris

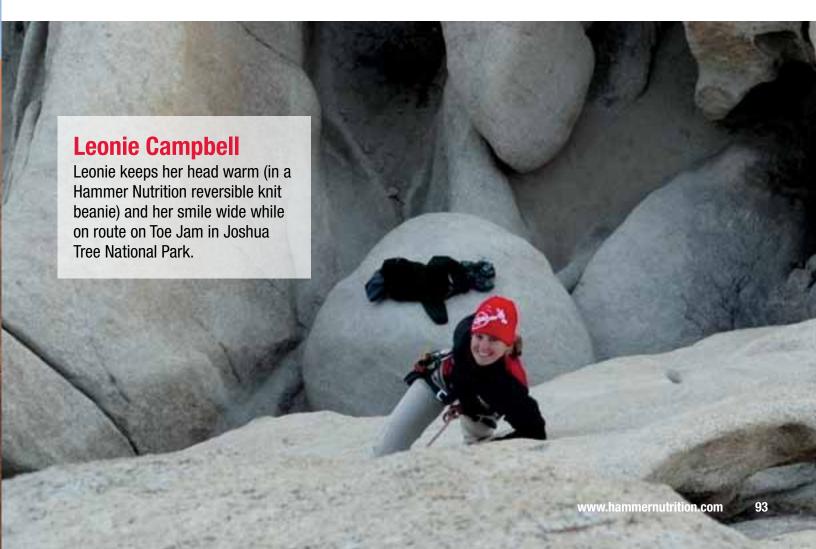
2012 Texas Cyclocross State Masters Championship 60+

I always want to give thanks to Hammer Nutrition for your support. While I have been a sponsored athlete of yours for years, I have always been a road racer. Just to spice things up I started racing both CX and MTB and have been loving it! Your products work! I finished 6th overall in a combined field of 50+ and 60+. Go Hammer Nutrition!



William "Bill" McArthur

I'm very happy with my Hammer Nutrition products. I was able to complete the Goofy Race and a Half Challenge in early January using all of the products to help me through. I finished 2nd in my age group in the Goofy half marathon and 3rd in my age group in the marathon. For the half marathon, I preloaded with five Endurolytes, and then I carried HEED, Montana Huckleberry Hammer Gel, and several Endurolytes. I drank a bottle of Recoverite immediately afterward. For the marathon, I preloaded with five Endurolytes and two Espresso Hammer Gels, and carried HEED, Perpetuem, Endurolytes, and Hammer Gel.



FROM OUR ATHLETES **Tara Geraghty-Moats** I've been having some great results in the biathlon Nor-Am circuit! I've had five wins in my class and six overall podiums out of seven races. And a second update: I just got back from junior World Trials in Anchorage, AK today. I was the 1st place youth woman qualifier for the junior World Championship biathlon team

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headed to Kontiolahti, Finland on February 15. During our three straight days of races I was using HEED, Recoverite, and Premium Insurance Caps. Because the temps were hovering around five degrees the whole week I was in Alaska, mixing HEED and Recoverite with almost-boiling water was a good trick to stay warm and keep it from freezing! Thanks for all of your support. Your products definitely make a difference in my training and racing.



Casey McKinney

My first race of the year is done! This was from the Carlsbad Marathon held Jan. 22 in Carlsbad, CA, My official time was 2:58:58, which put me in at 18th overall, 2nd in my age group (male 40-44), and 1st in the Special Division Military Male 40+.

It was a great race-my first sub-three-hour marathon! I pre-fueled with two scoops of Perpetuem two and a half hours before the race, and two servings of Espresso Hammer Gel 30 minutes before the race. During the race I took a gel every 40 minutes (Banana, Huckleberry, Raspberry, or Orange).

Thanks Hammer Nutrition!



James Hart

I'm in the Army Tri club and completed the first running of the Charlotte Ultra 50K on February 4. Perpetuem, Endurolytes, and Hammer Gel kept me going!

I was nowhere near the top finishers, but it felt great to run the whole thing and just finish!



Kelly VanderMaiden

Greetings,

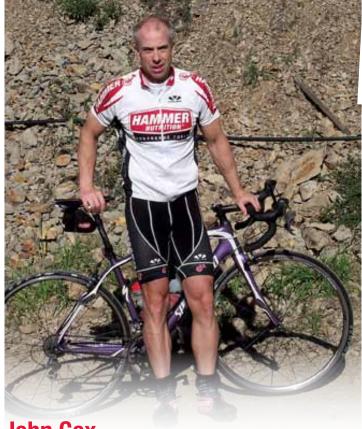
I wanted to let you know that I ran the 4K community race at the USA XC Championships in St. Louis, MO on February 11. I placed 3rd overall for the women and 1st in my age group. It was a very cold and windy day, but it was a blast! Even though this was a short race, Recoverite helped me after my hard workouts leading up to this race . . .

> now looking forward to marathon training!

I am also attaching a picture of my son, Andrew. I have to hide my Hammer Gel now because he loves the stuff too!!

Photos: Doug VanderMaiden





John Cox

I was sick the last half of December but knew I needed to get back on the bike right before the new year. I did a nice two-hour ride on Dec. 30, and then headed out for a ride on Dec. 31 only to find the wind blowing about 25 miles an hour. I fought the wind for about 2.5 hours out of my five-hour ride, including the "Grade" out of San Luis Obispo. I had to take a nap after the ride, which is something I NEVER have to do. Of course, I used my post-race supplements and Recoverite. On Jan. 1, I did a 130-mile ride from Avila Beach to Ragged Point and back, and felt better after the 8.5 hours than I did the day before. There's absolutely no way I could have ridden at all on Sunday, much less over a century, without the use of Sustained Energy and HEED.



FROM OUR ATHLETES



I had a great 2011 season racing for FCA Endurance (Fellowship of Christian Athletes) thanks to Hammer Nutrition. I competed in four sprint triathlons, placing 2nd place and 3rd place twice in my age group. Training with Hammer Nutrition products certainly helped me place 1st in my age group while competing in my first olympic triathlon that included a crash on my bike! To top it off, I qualified for the Boston Marathon with a personal best of 3:35:37. In a five-race 5k winter running series I placed 2nd overall in my age group (40-44). Thanks Hammer! I look forward to the 2012 racing season, fueling and feeling great with Hammer Nutrition! (Cindi is pictured here at the Oshkosh Olympic Triathlon with her race support and husband Tim Docter.)



This picture was taken after I finished mile 10,000 (road and trainer) for the year on December 23, 2011. During my ride near Railroad Pass just south of Henderson, NV I hit 10,000 for the year and 30,000 over the past three years. Thanks, Hammer Nutrition, for providing the fuels (Hammer Gel, Perpetuem, and Endurolytes) that kept me going! Photo: Jake Austin

96 Apr/May: Issue 79



Greg Mueller

Great place, safe roads, 16,000 ft. of climbing in 3 days, pool nearby, trails to run on . . . I bring all Hammer Nutrition products to my Team IE camps in Tennessee every year. Nicole Kelleher and Kaleb VanOrt, far right, are Team IE elite team members.



Will Murphy

Photo of my first race of the year—accepting 1st place in the Expedition (60 mile) paddling race in the inaugural Miami Winter Nationals. Perpetuem was the source of about 85-90% of my calories, flavored with a hint of Hammer Gel. I needed a fuel that I could consume with one hand while still steering our 6-paddler outrigger canoe. A concentrated flask of Perpetuem fit the bill.



Pedal Power

Thank you again for sponsoring Pedal Power camps. Everyone here is enjoying the products this week.

- Sara Bresnick

ATHLETES . . .

Send your latest news to: athleteupdates@hammernutrition.com.

Todd Hine

Hello Hammer Nutrition!

How goes the wintry, frigid cold up in the Northwest? Down here, for the Death Valley Borax Marathon we had a high of near 80 degrees at race completion . . . nothing to be overly excited about, but it did make for a great race day.

This was a training run in preparation for the upcoming Hammer-sponsored Salt Flats 100 in April. My training plan consisted of a hydration pack for a self-sustaining race, complete with water and all the Hammer Gel, Perpetuem, and Hammer Bars one could carry. It worked well as I felt great after the run! Woot! Even had a chance to say "Hammer On!" to a biker out riding the course in Hammer Nutrition gear. It's always nice to see a fellow Hammer-lete.

Photo: Debbie Hine





Art Lopez, Heather Pawinski, John Pawinski

Art Lopez, Heather Pawinski, and John Pawinski get an early start to their 2012 miles in January with the Stagecoach Century in Ocotillo, CA.

We love your products! They got us through The Stagecoach Century this past weekend. Everyone thought we were riding for Hammer Nutrition. Sad to tell them we were not . . . just devoted clients who happened to buy the same kit! We've been using your products for years, but only recently discovered your Autoship program. Anyone on the fence, go for it! Hammer ROCKS!!! They will take care of you.



FROM OUR ATHLETES

Nick Narvaez III SSG, USA

I just wanted to let you know how awesome your products are. I have decided for 2012 to complete at least a half marathon every month this year, and have already registered with multiple months, including two fulls or a half and a full. I am also littering the month with multiple endurance races or bike races as well. I am currently stationed in Europe with the United States Army and I couldn't think of a better way to travel. This feat will not be able to become an accomplishment without the outstanding products from Hammer Nutrition. It started with a midnight marathon in Zurich to welcome in the New Year.

Below is a picture from the Mörfelden Halbmarathon in February with an average temperature of 9 degrees. Hindsight being 20/20, I should have opted for the long sleeve that day.





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to help find Joey a Cure for his Type 1! It was an awesome and humbling experience to see all those little kids get behind Joey and the Cure. They made a race track in the parking lot of the school and rode their bike and scooters around like total mad men. It was a great event!

The second photo shows me and two of my teammates. While 9,000 people at the Tour of Tucson was a bit overwhelming, it was an awesome and very well done event. Our JDRF Team had over 150 people, with 5 of us from NC. The NC Crew is planning on going back again this year in November. We rode the entire 111 miles together!

Butch Wabby

Just wanted to take a minute before I close 2011 to send a THANK YOU for the great products and service this year. Using Race Caps Supreme, Anti-Fatigue Caps, Mito Caps, HEED, and Perpetuem, I managed to place top 10 in every race, win Rev 3 Knoxville and Dickson Endurance Tri in AG 55-59, place 3rd in AG at Chattanooga Waterfront Tri, and place 8th for Team USA 55-59 at Worlds Long Course in Henderson, NV. I am looking forward to 2012 and even better results with Hammer Nutrition!

Photo: Karen Wabby





Paul Monaco

My friend Tim and I arrived at Mt. Washington early Saturday morning, and it was snowing like crazy and the wind was blowing. The guides were advising not to go to the summit due to bad weather, and we agreed that we would go only as far as we could. We were the only two climbers with just regular snow boots; everyone else had crampons, ropes, ice axes, etc. (When we do things, we push the limit!)

We used many Hammer Nutrition products throughout the day, and once again succeeded in summiting. It was almost 9 miles roundtrip with 4,300 feet of climbing, and the temperatures were 19 degrees at the bottom and -1 degrees at the summit with a -33 wind chill.

The next day I went skiing for five hours straight . . . now that's a weekend! Thank you Hammer Nutrition for keeping me going. I can tell such a difference now that I am back on Hammer products. No cramps, no soreness. My success rate with Hammer Nutrition is amazing!

Paul Monaco 2012 Hammer Nutrition-sponsored athlete



