Does diet influence performance?

RAAM recap

International athletes:
Meet Manu!

Cramping
How to avoid the ultimate pain

Adios Ammonia!
Anti-Fatigue Caps

Hydration
How to do it right!

Race reports from around the world!
IN THIS ISSUE
#76

Contents

Letters 3
Welcome 4
Tinker wins big at Big Bear 5
From the saddle 6
Product spotlight: Anti-Fatigue Caps 8
Hydration 12
Protein in endurance fuels. Necessary? 14
The Endurance Forum 16
BPA? Another reason to say “No way!” 17
Does diet influence performance? 18
Cumin carrots 19
Cramping! What a pain 20
USMS Spring Nationals 23
Training leads and muscle follows 24
Creative corner 28
Staying on top 29
Where are they now? 30
Cover girl cleans up! 31
Ask Dr. Bill 32
No Idle Tour 33
Dr. Bill - National Champion 33
Athlete spotlight: Jenn Halladay 34
Nate’s corner 37
Little Rippers to National Champions 38
Rim 2 River 2 Rim 40
A Montanan in Brittany: Part three 42
From sea to shining sea 44
Taking the nation by storm 45
Cycling skills with Mike Freeman 46
The O’Neal legacy 48
’Tandem’onium! 51
Sticking with the plan 53
International news: Philippines 54
International news: Brazil 54-55
International news: Switzerland 56-57
International news: South Africa 58
International news: Canada 59
Finishing 2nd in Spain 60
A grand adventure 60
A junior sensation 62
A perfect ‘match’ 63
From ‘crashing and burning’ to ‘placing and winning’ 64
A Little Chicked 66
How do you Hammer? 68
Back in the saddle again 68
Recipes from Laura 69
From our athletes 70
Have it made in the shade 71
Coast to Coast 72
From our junior athletes 73
Hammerbuck$ 78
Event calendar 80
From our athletes 82

ON THE COVER
Hammer Nutrition-sponsored, nationally ranked Brazilian athlete Manu Vilascu rides on Pedra do Arpoador, between Copacabana and Ipanema beaches in Rio. Photo: Bernardo Rodrigues

“Great customer service, that’s one reason I keep coming back, besides the great products!” - John D.
Dear Editor,

Thanks for the story on Marathon Canoe Racing. As the article notes, there are not high numbers of marathon paddlers, but many are outstanding athletes. Consider 70 paddle strokes a minute for 7-17 hours (29,000 strokes for the Clinton 70 Miler and 71,000 for the AuSable Marathon). The introduction of Hammer Nutrition has REALLY made these events "doable" for mere mortals. In the 2010 Clinton my partner cramped up at the 27-mile mark. He continued on as best he could for another ten miles until another team gave him your Endurolytes capsules. In approximately 20 minutes he was back "HAMMERing" again. I was drinking HEED and using Hammer Gel, and never had a problem.

Marathon Canoe racing is a great sport; you can do it all your life as the paddle stroke is all hydraulic action. I am 75 and still paddling quite well with the help of Hammer.

Sincerely,

Ken Gerg

Available at amazon.com®

The 9th edition of The Endurance Athlete's GUIDE to SUCCESS is now available through our friends at Amazon.com, as well as on www.hammernutrition.com. The GUIDE, which sells for $7.95 at both online locations, qualifies for FREE Super Saver shipping on Amazon when orders total $25. Amazon offers an unbelievable selection of available items—more than any big-box store can possibly provide—so finding products to add to your cart to qualify for FREE Super Saver shipping is more than easy: running shoes, bike tires, blender for your protein smoothies . . . if you've been looking for it, Amazon most likely has it.

On your next trip to Amazon.com, add The GUIDE to your cart and learn how to Fuel Right, Feel Great!
nce again, we've put together a knockout issue of the magazine, if I do say so myself. As always, your contributions are my favorite, but in this issue it's the young athletes in green that really warm my heart.

It's been an amazing summer for me so far and one I know I will not soon forget. I hope that you've been successful with your goals and racing so far this year as well. There's still a couple more good months in the season and the big "A" races looming on the horizon, so if you need to get your fueling and supplement routine dialed or tweaked, there's still time; give us a call or shoot us an email to support@hammernutrition.com.

Besides all of the usual busyness of summer, we've been in the lab and have some exciting new goodies coming this fall—both for putting in your body as well as on it. In the midst of all that is going on, I am reminded constantly by clients and even by my staff just how nebulous and downright confusing the whole fueling and nutrition component can be and continues to be, even after the introduction of Hammer Nutrition products and protocols.

The second is a different formulation that contains oats and apples; it's pretty darn good. The third is the one I'm most excited about— it's a larger bar at 75 grams and is a purpose-designed recovery bar with 20 grams of pure grass-fed whey protein. It's a peanut-based bar that is free of tree nuts, so those people who are not allergic to peanuts but are allergic to tree nuts (yes, such people do exist) will love this bar. The majority of you who have neither type of allergy will also appreciate this bar. I know I'm waiting for it with baited breath—think peanut-y goodness covered in chocolate . . . yum! All of these new variations of the Hammer Bar should be in our warehouses and shipping by September, and reach distribution channels and retail shelves shortly thereafter.

We also have more flavors of the increasingly popular Endurolytes Fizz in the pipeline. Grape will be our fifth flavor, complementing grapefruit, lemon-lime, mango, and peach. Unflavored Fizz will be our sixth flavor, although it's not really a flavor. However, it will be perfect for those of you who want to add Fizz to your favorite flavor of HEED or Perpetuem without altering the flavor profile significantly. In the meantime, I'd encourage you to do some experimenting by mixing current flavors of Fizz into your bottles. For instance, I found that four scoops of Strawberry-Vanilla Perpetuem along with two Lemon-Lime FIZZ tastes delicious and makes the perfect three-hour fuel/electrolyte bottle for me. I would never have guessed that, but there you go. Try some other combos; you might be surprised to find other winners as well. If you do, be sure to let us know so we can share them with everyone else.

Now on to the fueling mystery. Despite our considerable efforts to demystify the process over the past two decades with our extensive print and electronic collateral, the ideal amount and timing of intake of calories before and during exercise remains a challenge for a large percentage of athletes, even those who "know Hammer." I was reminded of this recently on a big ride I did with several staff members. One staff member in particular was highly illustrative of my point. Despite having worked at Hammer Nutrition for several years and being quite adept at helping clients resolve fueling issues, certain subtleties of the process escaped him. His application of "the pre-exercise meal" and "protein beyond two hours" became dueling issues that threatened to make his day in the saddle a lot harder than it needed to be. I happened to be riding alongside him for the first three hours and was able to work through the issues as they developed, while helping him better understand what was happening. Bear in mind that I am relaying these events not to criticize a staff member, but with the hopes that it will help you better understand these issues and prevent you from experiencing the same.

Welcome to the 76th issue of Endurance News.

"Thanks again for an amazing product and support. You guys are awesome!" - Jeremiah O.
So, we’re riding along the west shores of Lake Koocanusa on a beautiful July morning—no cars, perfect day. About two hours in, he starts to slow his pace. This continues with him lamenting about not feeling strong today, not knowing why he doesn’t feel better, etc. I check his caloric, electrolyte, and fluid intake and all seem about right: almost 200 calories of HEED/Hammer Gel, 20 ounces of fluid, and 200-300 mg of sodium (via HEED and Endurolytes) per hour so far. At about 2 hours and 40 minutes, he says he’s feeling nauseous and light-headed, and might throw up or pass out—classic bonk. I give him a Hammer Bar and insist that he eat half of it immediately. Within ten minutes, he’s riding a decent pace again and feeling fine. What just happened here? I ask if he had breakfast before we started the ride. No, not enough time for the three-hour window... got up at 7 a.m., started pedaling at 9 a.m.

His plan would have been fine had the “event” only lasted for 60-90 minutes. However, because we were planning on spending five hours in the saddle that day, he made one critical error: no protein. With no protein from a recently digested meal, or from the calories being consumed, he was limiting his body to relying on however much muscle glycogen was available (I’m guessing it was a very minimal amount), using carbs for fulfilling energy requirements, and not allowing the access of stored fat. I am certain that had he started fueling during the first hour with Perpetuem, Sustained Energy, or bites of Hammer Bars, this bonk would not have happened. That’s why the introduction of even a small amount of calories containing protein (and a little fat as well) totally changed the game. This leads to the second big “aha” of the day. Like so many of you, his interpretation from reading our literature is that when doing a long event, you should use only carbs for the first two-or-so hours and then switch to a protein-enriched fuel—the duration of the exercise period. I think this comes from us always telling you to “use Hammer Gel and HEED for exercise lasting up to two hours, and Perpetuem or Sustained Energy for exercise lasting more than two hours.” This is not really the case, and I’m sorry that we have not been more clear regarding this topic; we’ll strive to clarify it more thoroughly on our blog and in future issues of Endurance News.

The “lesson learned, takeaway message” here is that if you are going to do a long event and start it on an empty stomach, consuming a protein-enriched fuel—Perpetuem, Sustained Energy, or Hammer Bars—during that first hour will most likely yield noticeably better results than going “carbs only” for the first hour or two and then switching to a protein-enriched fuel. It certainly worked for this rider on this occasion, and I’m convinced it will work for you as well. Give it a try and see if you don’t notice a positive difference in your performance.

Enjoy the read, be safe, and have some fun before summer is over!

Brian Frank
Proprietor
After many, many weeks of less-than-ideal outdoor cycling weather—it’s been a very long, wet spring—the weather here in Northwest Montana has certainly changed for the better. (Welcome back sun and warm temperatures!) Once again I am reminded of just how fortunate I am to live here. Yes, sometimes our cold, rainy springs can go on far longer than I’d prefer, but even so, the Flathead Valley—home to Hammer Nutrition headquarters—is so darn beautiful.

Now that the weather is much more “cycling friendly,” it’s an even more beautiful place to call home. Increasingly with each passing day, I am truly appreciating the simple joy that is riding my bike. We have so many great rides available to us in this particular area of the state—even my daily commute to and from work is quite scenic—and I’ve really been enjoying all of it immensely. There’s just nothing like being on the bike regularly; I just feel so much better physically, mentally, and emotionally when I’m able to ride consistently. Here’s to a long summer!

By the time you read this, I will have completed a number of trips to various events, working the Hammer Nutrition booth and having the opportunity to talk with lots of athletes, which is always the best part of these trips. My first trip was out to Spokane, WA, for the annual 24 Hours Round the Clock mountain bike race, held over the Memorial Day weekend, and put on by longtime friends of Hammer Nutrition, Gino Lisecki and Wendy Zupan Bailey. It was quite different this year because we didn’t have a team competing in the race. As a result of not having a contingent of four riders, as well as more Hammer staff along to help support them, it wasn’t necessary to bring the Hammer “Big Rig.” Instead, I was solo in one of the Hammer vans, setting up a couple of 10' x 10' booths, sampling a variety of Hammer Nutrition fuels, giving out a plethora of samples, with my full focus on helping out riders and their crews, answering any questions they had.

In addition, since Gino and Wendy always give us a choice spot right near the start/finish line, which the riders go through every time they complete a lap, the Hammer Nutrition area this year very much became “The Hammer Fueling Station,” meaning riders could fill up their bottles with HEED or pick up some additional Endurolytes in the event they were running low on their supply and/or if they needed a “quick fix” for cramping. In fact, some of the solo riders would stop at the booth where I’d make a fresh bottle of Perpetuem for them just before they went through the start/finish line. Riders on 4-person teams would occasionally come by for a freshly-made-by-Steve bottle of Recoverite after they had completed their lap. Obviously, this kind of service isn’t possible at every race, and most riders and their support crews are usually well stocked with sufficient amounts of fuel. Still, it’s kind of cool to be able to provide the “little extra” in the way of athlete support; this year’s 24 Hours Round the Clock allowed me to do just that, and it sure was a lot of fun.

The second trip I’ve completed prior to finishing this article was the first of “Steve and Phil’s Excellent Adventures.” Making the long drive in the Big Rig down to Boise, ID, we set up in the parking lot of George’s Cycles. We both got to meet some really great athletes during our time there, including all of the members of the Boise-based BYRDS cycling team. These young athletes were a blast to hang out with, and I know they gave Phil (a darn good road cyclist and mountain biker) a really good workout on a trail ride they did after we shut down operations for the evening. The trip home was long, thanks to the narrow, twisty roads that made up our route to and from Boise, but a good chunk of it was on Highway 95, which is the highway I rode on for the majority of my Idaho North-to-South record, which I set way back in July 1997. I rode the 640.8-mile distance from the Canada/Idaho border to the Idaho/Nevada border nonstop (and mainly on Hwy 95) in 39 hours, 29 minutes, which averages out to a 16.22 mph average. I have to admit that I’m psyched to still have that record, as obscure as it is, and it was nice to reminisce about it during the long drive back.
FROM THE SADDLE cont'd.

The Endurance Athlete's GUIDE to SUCCESS

As most of you know, the 9th edition of this knowledge resource is here, with both hard copies available as well as free downloadable copies as well. There was so much additional information, charts, and photos that we added to “The Guide” that it actually ended up being two booklets. The first booklet, The Endurance Athlete’s GUIDE to SUCCESS, contains all of the information you need in regards to how to fuel properly prior to, during, and after exercise. The complementary booklet, The Hammer Nutrition Fuels & Supplements – Everything You Need to Know, contains three articles providing information about all of the fuels and supplements we produce and how to use them for optimal results. Armed with these two knowledge resources, as well as our client support staff ready to help answer your questions, it can really be a cinch to get your fueling and supplement program dialed in easily and for maximum effectiveness.

Of the many reasons I am so excited about having these knowledge resources available to athletes, one of them is that when I’m in the Hammer booth at a race, many an athlete will come up to me the day before the race and ask something to the effect of, “I’ll be competing tomorrow and I have no idea what to use for fuel or how much. What do I do?” Without sounding condescending, this always startles me. Really? You’ve spent a lot of time, money, and energy to train and get to the starting line on this race, and you don’t have any kind of game plan in terms of fueling? You’re going to wing it and hope things work out? Of course, I don’t say any of this to the athlete; I simply talk with them, get some specifics, and then try to help formulate a fueling protocol that will be fairly easy to follow. I finish our conversation by encouraging them to:

1. Place as much emphasis on their training/racing fueling plan as they do on their training and equipment.

2. Visit the Hammer Nutrition website, download these knowledge resources, read the articles, and apply the information and principles contained within them.

I tell them that, in doing these two things, they will be able to get the full value out of all the time they put in their training and from their equipment, they’ll certainly have a better opportunity for a more successful race, and they’ll have a lot more fun doing both.

So if you haven’t purchased a hard copy of these two knowledge resources, or downloaded a free copy from our website, I would encourage you to do so right away to dial in your fueling, far BEFORE your next race. The information contained in these two booklets is science-based and time-proven… literally tens of thousands of athletes have benefited from them. You should as well!

I hope that you are all having fun, training hard, and racing well, and that you will enjoy this issue of Endurance News!

HN

- continued from page 6

“Steve and Phil’s Excellent Adventures” continued at Ironman Coeur d’Alene from June 22-25. I’m heading back to the same city for the Coeur d’Alene triathlon on August 13. This is an Olympic distance triathlon/duathlon that Hammer Nutrition has sponsored for many years, and this year’s race has the honor of being the USAT Pacific Northwest Regional Championship. I’ll be doing a fueling seminar at Pilgrim’s Natural Foods Market in Coeur d’Alene (1316 N 4th Street) from 6:30 pm – 8 pm on Thursday, August 11. We also plan to have the Big Rig set up near the finish line from then until after the races have been completed on Saturday afternoon. As always, we’ll have lots of Hammer Nutrition products available to sample, as well as some giveaways and free Compex demonstrations. Regarding the latter, if you’ve never experienced Electrical Muscle Stimulation (EMS) you simply must; it really is phenomenal! If you’re going to be at the Coeur d’Alene triathlon/duathlon, please do come see us, enjoy some free samples, and let us “hook you up” (literally) to one of the recovery programs available on the various Compex models . . . you’ll love it!

I’m not yet sure where we’ll be throughout the rest of race season, but we’ll keep you posted via our Facebook page and other social networks. And if you happen to be at a race and see the Big Rig or Hammer Nutrition tents, by all means come by. We’d love to see you!

HN

Steve and a Hammer athlete stand in front of Big Rig #1 in Boise. Photo : Phil Grove
A long, long time ago, as the desire to improve my athletic performance naturally via the use of nutritional supplements intrigued me more and more, I came upon a section in a book by Dr. Michael Colgan that discussed ammonia and its detrimental effects on performance. Dr. Colgan wrote:

“...a second inhibitor of exercise, happening simultaneously with the accumulation of acidity, is accumulation of ammonia. All anaerobic and endurance exercise produces oodles of the stuff. Bad news! Ammonia is toxic to all cells, reduces the formation of glycogen, and inhibits the energy cycle. It has devastating effects on brain function. We still don’t know how much it contributes to fatigue, but we do know that the higher your blood ammonia, the poorer your performance. So the second thing that a successful ergogenic supplement has to do is reduce ammonia accumulation.” (pp. 377-78)

I found a source for OKG supplements and immediately began taking OKG in my longer workouts and races. If it weren’t for the real difference in regard to less fatigue in the overwhelming majority of my workouts, I probably would have written it off as merely the placebo effect. But the results were too noticeable and consistent to be coincidental. OKG was now a part of my supplement arsenal. Then, as a result of experiencing such noticeable improvements in my workouts, I wondered if there were other ammonia-scavenging nutrients I could consider testing. After quite a bit of research, I located two more likely substances in a book by James Balch, M.D., the amino acids aspartic acid and citrulline. Balch had this to say about these two amino acids:

“Because aspartic acid increases stamina, it is good for fatigue and plays a vital role in metabolism. Chronic fatigue may result from low levels of aspartic acid, because this leads to lower cellular energy. It is good for athletes, and helps to protect the liver by aiding in the removal of excess ammonia...”

Bingo! I now had what appeared to be the three best nutrients available for helping reduce ammonia and, hopefully, improving my endurance. While I was still able to procure OKG in capsule form (though that source dried up eventually), I was unable to find encapsulated forms of aspartic acid or citrulline; I had to purchase them in powdered form and make my own capsules. After buying an encapsulating kit, a scale, and several hundred “00” size capsules, I started making capsules in my kitchen. It was crude and far from scientific (no lab coats were worn), and now that I think back on the whole thing it does seem rather laughable and very much a “mad scientist” type of activity. Still, I was undeterred in efforts to produce an anti-ammonia product; I just had a feeling it was going to be worth it.

I have to admit that the process of making up a bunch of capsules was a bit of a pain, but I was right, it was worth...
PRODUCT SPOTLIGHT - ANTI-FATIGUE CAPS

The Anti-Fatigue Caps formula

Potassium/ Magnesium Aspartate – I think what Dr. Balch says about aspartic acid is about as good as it gets regarding the benefits of this amino acid: “Because aspartic acid increases stamina, it is good for fatigue and plays a vital role in metabolism. It is good for athletes and helps to protect the liver by aiding in the removal of excess ammonia.”

Studies (Agersborg and Shaw 1962, Hicks 1964, Gaby 1982) have shown that a magnesium + potassium + aspartic acid combination provides substantial benefits in the prevention of fatigue. Aspartic acid also combines with other amino acids to form molecules that absorb toxins and remove them from the bloodstream, aids the function of RNA and DNA, and helps to protect the liver. Additionally, the potassium/magnesium aspartate compound increases production of a key substrate, oxaloacetic, which is involved in energy production.

L-Citrulline – Citrulline is an amino acid found in plant foods such as onions, garlic, and watermelon. Citrulline detoxifies ammonia and, like aspartic acid, is used to treat fatigue. It promotes energy and stimulates the immune system.

OKG – Both ornithine and alpha-ketoglutarate (OKG) provide a readily available, non ammonia-producing source of glutamine in the body. Glutamine is depleted at high rates during exercise but cannot be replaced with regular glutamine, as it creates excess ammonia on its own. OKG increases the amount of glutamine in the muscle and also helps prevent muscle catabolism. To reiterate Dr. Colgan’s statement from earlier in this article, “Both ornithine and alpha-ketoglutarate act in the body as an ammonia scavenger.”

What you are saying about Anti-Fatigue Caps

“I just have to say that the Anti-Fatigue Caps are magic in a bottle!”
-Chris G.

“Mondays are my long swim day, about 3,000 yards after I do my 5-7 mile run. I take two each Endurance Amino and Anti-Fatigue Caps, and one each RCS and Mito Caps two hours before I swim, then take one EA and AF 30 minutes before swimming. I have unbelievable energy while swimming and feel great when I get out of the pool.”
-Tom W.

“Just wanted to say thanks for some great products! I raced my mountain bike in the Georgia State Championship #1 this past weekend. I got my first autoship order two days before the races. I used Anti-Fatigue Caps, Perpetuem, and Endurance Amino and felt great! Great products and great service!”
-Trey B.

“Tested Endurance Amino, Anti-Fatigue Caps, and Perpetuem this past weekend mountaineering the White Mountains in NH. All I can say is…WOW!”
-Nick B.

“I completed back-to-back double centuries with the help of Anti-Fatigue Caps. All I have to say is WOW!! My legs never felt fatigued at all. At the end of the day and the end of the ride, I still had plenty of miles left in my muscles.”
-Anthony P.
all-in-one formula, which sure makes things a lot easier than taking the three different components separately. Brian and Dr. Bill took the product formula one step further by adding the patented Enzyme Enhancement System™ blend of digestive enzymes to ensure maximal absorption.

Needless to say, Anti-Fatigue Caps is an amazing “ammonia-scavenging” product, and there’s nothing like it that I know of in the supplement industry for ammunition against fatigue-causing ammonia.

A major enemy of endurance athletes is the accumulation of excess ammonia, which undeniably compromises athletic performance. Your body produces ammonia during exercise as a natural by-product of protein metabolism. It doesn’t matter what type of exercise you do, aerobic or anaerobic, you will still produce ammonia; it’s unavoidable. Problems arise during longer distance efforts, when ammonia accumulates in the blood, and then ends up in muscle tissue. Repeating Dr. Colgan’s statement from earlier in the article, “Ammonia is toxic to all cells, reduces the formation of glycogen, and inhibits the energy cycle.” A study by Wilkerson, Batterson, and Horvath examined the changes in blood ammonia levels in humans during exercise and determined that the higher the blood ammonia, the poorer performance will be.

One way to help prevent excess ammonia accumulation is to use Perpetuem or Sustained Energy as your primary-to-solo fuels during workouts and races that exceed two or three hours. These supply an adequate amount of protein to prevent the “cannibalization” of your lean muscle tissue, that is, when your body literally feeds upon itself, metabolizing the protein from lean muscle tissue to satisfy energy requirements. This complicated “amino acids-to-glucose” process produces huge amounts of ammonia as a by-product, which again, is a primary culprit in fatigue. So the first step to preventing fatigue is to minimize muscle cannibalization by using a fuel with the right amount of the right (non-ammonia producing) protein. Use Perpetuem or Sustained Energy and you’ve got that covered.

During your longer workouts and races, it’s an excellent strategy to go beyond that first line of defense and provide your system with additional ammonia-removal support. That’s where Anti-Fatigue Caps comes in. It’s a one-of-a-kind product combining a potent arsenal of three known ammonia-scavenging nutrients: aspartate, 1-citrulline, and OKG.

**When and how to use Anti-Fatigue Caps**

Anti-Fatigue Caps is not be one the premier, daily essential supplements in the Hammer Nutrition line (Premium Insurance Caps, Race Caps Supreme, and Mito Caps get the nod there) but oh, does it ever work well under specific conditions and for certain applications. When I was still competing in ultra endurance events, its endurance-enhancing effects were distinctly noticeable, and the longer I went, the more noticeable the benefits seemed to be. Now that I’m not doing nearly as many miles on my bike, I admit that I rely heavily on Anti-Fatigue Caps to help me go the distance on my longer rides, such as the mountainous Highline Hammer loop. For the past few years this product has saved me more times than I care to remember!

You don’t need to take Anti-Fatigue Caps daily, though many of us at Hammer Nutrition regularly take a capsule or two after lunch to help reduce mid-to-late afternoon fatigue. (I give credit to the potassium/magnesium aspartate component for that.) Where this product really shines, however, and when you’ll have no doubt that it’s an invaluable ally, is whenever you’re doing longer (3-4+ hour) workouts or races. That’s when you’ll really notice the ammonia-scavenging, endurance-prolonging effects of this unique product and, as mentioned earlier, I honestly believe that the longer you go, the better this product works.

When you’re doing a longer workout or race, one that goes into hour 3 and beyond, I suggest a pre-workout/race dose of 2-4 capsules 30-60 minutes prior to the start. This provides 500-1,000 mg of magnesium/potassium aspartate, 200-400 mg of citrulline, and 280-560 mg of OKG, which I believe is an excellent amount of each of these nutrients at the onset of an endurance workout or race. After that initial dose, I suggest 1-2 capsules every hour until the workout or race is finished.

Lastly, many athletes are now using Anti-Fatigue Caps and Endurance Amino together during their longer workouts and races and noticing even better results, courtesy of this combination. I theorize that this is because Endurance Amino contains branched chain amino acids (BCAAs), which, along with the BCAAs that naturally occur in the soy protein component in Perpetuem and Sustained Energy, help minimize muscle tissue from being broken down to satisfy 5–15% of the body’s energy requirements. This, I believe, helps prevent higher-than-normal amounts of fatigue-causing ammonia from accumulating. Then, the three ammonia-scavenging nutrients in Anti-Fatigue Caps aid in neutralizing the negative fatigue-causing effects of any remaining ammonia. I don’t have any “science” to back this up but I think it’s a realistic theory; there certainly have been a number of athletes who have emailed us to let us know that these two products “stacked” together have proven to be a remarkable “one-two punch” for enhancing endurance. 

**SUGGESTED USAGE:**

Take 2-4 capsules one hour prior to workouts or races and 1-2 capsules per hour during workouts or races.
Clean up the waste products of metabolic combustion . . .

. . . or you'll feel the burn. To stay strong in multi-hour events, get Anti-Fatigue Caps now.

- Prolong endurance in “ultra” workouts & races
- Scavenge excess ammonia to reduce fatigue
- Increase energy production

ORDER TODAY!
1.800.336.1977
www.hammernutrition.com

SPECIAL OFFER!
Purchase a bottle of Anti-Fatigue Caps and receive a FREE Capsule Organizer.
Ad Code EN76A. Expires 9/30/11.
One of the most frequently asked questions in my fueling seminars is, “What is the right amount of fluid that I need to consume during exercise?” Hydration is usually the first subject I discuss and, especially at this time of the year when the temperatures you’re exercising in are at their highest, I believe it is arguably the most important component of fueling to get dialed in. Of course, all entities of fueling—calorie consumption, electrolyte replenishment, fluid intake—are essential. However, of those three, I believe that committing serious blunders in your fluid intake—especially drinking too much—may result in the most seriously negative health consequences, much more so than overconsumption of calories or salt.

Think about it: If you overdo it on the calories, you’re going to experience stomach distress—perhaps to the point of vomiting. That’s obviously no fun. Overdo it on your salt intake, and you’ll not only experience stomach distress, you’ll most likely end up having edema-like symptoms, which is to say you’ll puff up like a water balloon, courtesy of overriding your body’s built-in hormonal mechanisms that regulate sodium loss, recirculation, and conservation. That’s a big “zero” on the fun-o-meter as well. Blow it on your fluid intake, especially if you overhydrate? That’s a problem that cannot only ruin your workout or race, it may actually kill you. That’s right; there have been incidences of “death by water intoxication,” formally known as dilutional hyponatremia.

Hammer Nutrition’s general recommendation for optimum hydration is 20-25 ounces hourly, plus or minus a few ounces on either end determined by a few variables, which I’ll mention shortly. What’s important to understand is that this “20-25 ounces/hour” is a good starting point, a gauge from which the athlete adjusts according to their body weight, fitness level, the temperatures, and how well or poorly they are acclimated to those temperatures. It is NOT a “one size fits all” or “works under all conditions and circumstances” recommendation. Given the above-mentioned variables, proper fluid intake for each individual can be anywhere from as little as 16 ounces hourly to as high as 28 ounces per hour, perhaps even slightly higher on occasion.

Of all the information and quotes I’ve read on hydration, I am most fond of what Dr. Ian Rogers once wrote: “It is important to realize that longstanding advice about appropriate fluid intake for exercise was formulated on research done on much shorter events when the ‘limit of human endurance’ was much less. The applicability of this to longer events is questionable. The American College of Sports Medicine in its position statement, currently recommends a fluid intake during exercise of 600-1200 mls/hr [approx 20 - 40.5 ounces]. The fluid intake of most of the reported cases of exercise-associated hyponatremia has been at the middle or upper end of this range, challenging this as an appropriate fluid intake. A more realistic intake is likely to be 500-750mls/hr [approx 17.5-25 ounces]. While the old mantra, ‘If you don’t drink you die’ is not yet dead, it has certainly been challenged. We can no longer assume that excess fluid
taken during prolonged exercise will just be passed out in the urine. Like most things in life, balance is the key and the balance is likely to be at a fluid intake not much above 500 mls per hour in most situations, unless predicted losses are very substantial.”

This is a great statement and one that we should all take to heart! Basically, Dr. Rogers is telling us to be cognizant of our fluid intake, understanding that too much can have as many negative consequences, if not more, as too little. Additionally, I believe Dr. Rogers is suggesting that a generally recommended amount may not always be appropriate under certain conditions, such as when you’re exercising in extreme heat . . . when “predicted losses are very substantial.”

As Dr. Rogers so appropriately and eloquently states, “Like most things in life, balance is the key...” and while this is most certainly true with calorie consumption and electrolyte replenishment, I am convinced it’s most vital when it comes to fluid intake. You don’t want to dehydrate, of course, but you don’t have carte blanche to consume as much fluid as possible in order to prevent dehydration. Keep in mind, the sage advice of Dr. Rogers: “We can no longer assume that excess fluid taken during prolonged exercise will just be passed out in the urine,” understanding that serious consequences can result from the consumption of too much fluid.

I would encourage each and every athlete reading this issue of Endurance News to purchase a hard copy of the new edition of The Endurance Athlete’s GUIDE to SUCCESS, or download a free copy from our website, and thoroughly read the article, “Hydration – What You Need to Know.” Start with our general recommendations, then fine tune them under a variety of conditions to find what works best for you. In doing so, you will have successfully dialed in what may be the most important component of fueling. HN

How much fluid should you drink?

Based on the available research, along with the thousands of athletes we have monitored, we have found the following fluid intake amounts to be most beneficial.

<table>
<thead>
<tr>
<th>Average athlete, average temps</th>
<th>Lighter athletes or cooler temps</th>
<th>Heavier athletes or hotter temps</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25 oz/hr (approx 590-740 ml/hr) is an appropriate fluid intake for most athletes under most conditions.</td>
<td>For lighter weight athletes, or those exercising in cooler temperatures, 16-18 oz/hr (approx 473-532 ml) may be perfect.</td>
<td>Heavier athletes or athletes competing in hotter conditions may consider intakes upwards of 28 oz/hr (approx 830 ml/hr).</td>
</tr>
</tbody>
</table>

DON’T DRINK TOO MUCH!

We also suggest that to avoid dilutional hyponatremia, fluid intake should not routinely exceed 28 oz/hr (830 ml/hr). The exceptions are heavier athletes, athletes exercising at extreme levels (prolonged periods at a high percentage of VO2Max), and athletes competing in severe environmental conditions.

20-25 oz (approx 590-740 ml) is the equivalent of the typical regular-to-large size water bottle, an excellent gauge to work within.
Is protein in an endurance fuel necessary or not?

BY STEVE BORN

On occasion we receive an email regarding whether or not carbohydrates alone are satisfactory for long distance fueling, or if some protein added to the mix provides even more benefits. Needless to say, there are many in the “carbs alone cuts it” camp and many in the “carbs + protein are necessary” camp.

Two renowned sport scientists, Louise Burke and Vicki Deakin, have written about this in their book *Clinical Sports Nutrition* [3rd edition, 2006, McGraw Hill] stating, “Given that amino acids can be oxidised as energy during exercise, it is theoretically possible that this may impact on the need for extra dietary protein . . . in contrast (to recreational or moderately trained athletes) there does not appear to be an increase in protein requirements for well-trained endurance athletes . . . assuming that they are meeting their daily recommended protein intake, which is around 1.3 to 1.5 g/kg/d.”

For many athletes this information translates into the belief that if one is consuming adequate protein in their diet, additional protein in a sports drink is unnecessary.

Dr. Bill Misner responds:

I agree with Louise Burke’s numerical estimate for volume protein required to support muscle mass nitrogen balances. However, timing small amounts of dietary protein with large amounts of carbohydrate during lean muscle mass cannibalization for high energy demand exercise sessions accelerates the process of muscle mass recovery and post-exercise stress growth patterns.

In an endurance event lasting as short as two hours to as long as 12 hours, 0.5% separates first place from last place in various age groups or even the top ten overall event winners. So who can give away 5% energy substrates from amino acids recruited from lean muscle mass and expect to place as high as the athlete who puts the fuel into circulation in anticipation of deficiencies?

In the late 1980s we began testing energy drinks during prolonged exercise (6-24 hours), consuming either a 100% carbohydrate solution or a 7:1 ratio of carbohydrate-to-protein solution. These field tests concluded that a protein-enhanced carbohydrate solution produced less muscle soreness and faster recovery following exercise. Many of us also performed significantly better using the protein-enhanced carbohydrate drink. Were our observations simply anecdotal?

Complete dietary protein repletion of exercise-cannibalized lean muscle mass can require from 3-7 days following exhaustive exercise. The maintenance of nitrogen balance depends on both protein and energy intake. Nitrogen balance is very sensitive to energy intake and energy expense (February 1996 EUR J CLIN NUTR).

Several papers show an advantage for protein replacement with carbohydrate both during and after exercise:

1.) Leavenhagen’s hallmark paper (2001) demonstrated the importance of protein in a post workout meal. This published document references support the hypothesis that protein and glycogen resynthesis are synergistic immediately following exercise. Tipton (2001), Roy (1998), and van Loon (2000) also wrote supportive data.

- continued on page 15
2.) Ivy and his colleagues at the University of Texas (2003) further demonstrated that protein potentiates the restorage of carbohydrate to glycogen stores and positively effects performance at various intensity and duration.

3.) Mero (1999) wrote: "Consumption of BCAA (30-35% leucine) before or during endurance exercise may prevent or decrease the net rate of protein degradation, may improve both mental and physical performance and may have a sparing effect on muscle glycogen degradation and depletion of muscle glycogen stores."

4.) MacLean et al. (1996) concluded that: (1) Administration of BCAAs can greatly increase their concentration in plasma and subsequently their uptake by muscle during exercise; (2) Long-term exercise following BCAA administration results in significantly greater muscle NH₃, alanine and glutamine production, as well as lower lactate production, than is observed during exercise without BCAA supplementation.

There are sport scientists who argue against Ivy, Maclean, and Mero’s position and have shown data that demonstrates the limits to adding protein to carbohydrates for consumption during endurance exercise. In my opinion, protein-enhanced carbohydrate solutions are ideal for events lasting three hours or longer. When amino acids are cannibalized into the energy cycle at the rate of 5-15% of the required caloric expense, the athlete who consumes a protein-enhanced carbohydrate solution during exercise may gain some benefit in performance or increased rate of recovery.

If an athlete is competing in an event lasting less than three hours, the need to consume a protein-enhanced carbohydrate solution is far less, assuming that the athlete consumes a protein-enhanced carbohydrate meal immediately after exercise. The answer to this query is best approached by replacing substrates depleted as soon as possible. Typically, an adequate replacement of protein, carbohydrate, and fat calories spent will not impose muscle mass wasting in the most exhausted endurance training subject. It is a case of getting a balance of calories into the system as soon as permissible. HN

References


Is there a downside to using Perpetuem for all my fueling? I have used Hammer Nutrition products for quite a while. In the past, I used Hammer Gel for my cycling that lasted up to two hours. I then switched to Perpetuem for longer activities. I was wondering if I could simplify my fueling methods. Is there a downside to using Perpetuem for all of my cycling activities? Stated another way, is there an advantage to using Hammer Gel first and then switching to Perpetuem if the activity exceeds two hours?

Thanks,
Wayne

Hi Wayne from Wayne (forum member),
To throw in something else, have you tried HEED? On shorter rides it is an outstanding drink and is easier for me than gels while riding. I find it easy to digest, and I like the flavors. They say on longer rides to stick to less than 300 calories in an hour and Perpetuem was created for that. I would not think that would be that essential on shorter rides. Endurolytes Fizz is outstanding also. For shorter rides in hot weather I was told to try mixing HEED and Fizz. Hammer Nutrition always says that it is better to come up with fewer calories than too many calories. You would not want to interfere with speed due to your body trying to digest too many calories at one time.

Hello Wayne from Steve (moderator),
I am pretty much in agreement with the "other" Wayne and the suggestions he's made. That said, I know of a number of athletes who do races shorter than two hours in duration and they swear by Perpetuem. I know a guy who does criterium cycling races (1-2 hour events) and he won't use anything else! The point is that it's not harmful to use Perpetuem for shorter-duration workouts and races, though it really is more fuel than you need. Also, and Wayne alluded to this somewhat, because it contains carbohydrates, protein, and fat, Perpetuem will digest slightly slower than a "carb only" fuel like HEED or Hammer Gel ... that may present a bit of a problem when you're ratcheting up the pace significantly.

I wanted to mention that if you are doing a lengthy workout, you do not necessarily need to start with a "carb only" fuel (Hammer Gel or HEED) for the first two or so hours, then switch to a "carb + protein" fuel (Perpetuem or Sustained Energy) after that. You can (if desired) use Perpetuem or Sustained Energy as your sole fuel from beginning to end. For additional information, check out The "gray area" of fueling section* in the article "Caloric Intake–Proper amounts during endurance exercise," found under Advanced Knowledge on www.hammernutrition.com. HN

---

*For Steve's complete forum answer with excerpts from the referenced article, please visit the Endurance Forum.

---

Welcome to the Endurance Forum

Monitored by Steve Born and other Hammer Nutrition fueling experts, this friendly, online community of endurance athletes discusses everything from fueling for soccer games and 24-mile channel swims, to addressing problem “dead” legs during cycling.

Look for featured forum discussions in future issues of Endurance News, and in the meantime, log on and participate. If you’re not yet a member, it’s easy to join, there’s no cost whatsoever, and there’s no annoying pop-ups or commercials. Click “Community” near the top of the Hammer Nutrition website home page, and then choose “Hammer Forums” for information on how to become a member.

The following is a discussion that occurred recently on the forum. As you can see, both Hammer Nutrition fueling experts and forum members converse and chime in with constructive advice.
BPA?
Another reason to say "No way!"

BY STEVE BORN

Since the 1960s, the industrial chemical BPA (bisphenol A) has been used to make certain plastics (such as water bottles) and epoxy resins; the inside of many food/beverage cans are coated with epoxy resins that contain BPA. While the FDA continues to investigate the issues surrounding the use of BPA and its safety (or lack thereof), a number of studies have provided evidence that exposure to BPA is linked to a variety of health issues, reportedly caused by BPA’s interference with and disruption of the body’s hormonal system.

Another recent study from the University of Missouri - Columbia adds to the growing body of research reinforcing that BPA is a substance we’d be better off avoiding. While the study involved mice, not men, the potential applications to humans is certainly worth notice. In a nutshell, this particular study showed that male mice exposed to BPA in the womb appeared less masculine and less attractive to females upon maturing. The male mice also had difficulty navigating mazes and were less inclined to explore routes, signs of “demasculinization,” according to researchers. This, of course, raises the possibility that exposure to BPA during human development could impact behaviors as well.

There is much more to this study than we have space to print here; links discussing this new and provocative research are below. In the meantime, given what we already know about BPA, we suggest erring on the side of caution and always avoiding BPA. Choose BPA-free bottles for your hydration and fueling this summer. Hammer Nutrition containers—water bottles, blender bottles, Nalgene bottles, Hammer Gel flasks, Gel-Bot Soft Flasks—are all BPA-free.

FURTHER READING:
http://www.pnas.org/content/early/2011/06/20/1107958108.abstract?sid=4e7e5644-0e05-41ae-ada1-c1f876a019c9


http://www.sciencenews.org/view/generic/id/331937/title/BPA_makes_male_mice_less_macho

Ethiopia’s success in running events is noticeably remarkable. Their success in international distance running is second only to the Kenyans. Previous studies of elite Kenyan distance runners suggest the diet of elite distance runners may be a consideration for endurance athletes from industrialized nations, whose performance is less distinguished. Researchers (Beis et al.) recently reported that Ethiopian runners consumed 3,194.5 kcal per day, choosing largely plant foods (88% calories) with only a small portion (12% of all calories) from animal-source foods. Breakfast was milk, porridge, omelet, with bread, while lunch consisted of pasta, rice, and lentils, with dinner consistently a repeat of lunch (pasta, rice, and lentils).

The 88% plant-based calories (from high to low) were:

1. Injera (bread made from teff flour)
2. Breads
3. Vegetable oil
4. Pasta
5. Rice
6. Porridge
7. Sugar
8. Lentils
9. Shiro (made from chick peas)
10. Chick peas

The remaining (12%) animal-sourced calories (from high to low) were:

1. Meats (eaten two times per week)
2. Eggs
3. Milk

Animal-source food calories have been associated with several serious diseases, while plant food calories have associated with the opposite, vigor and health. T. Colin Campbell stated from his research in *The China Study* [2]: “People who eat the most animal-based foods got the most chronic disease . . . People who eat the most plant-based foods were the healthiest and tended to avoid chronic disease.” Since most Americans eat a whopping 14-18% of calories from protein, 70-80% of which comes from animal sources, as compared to the much healthier rural Chinese, who eat only half or slightly more total protein, only 1/10th of that protein comes from animal sources.

Quoting Campbell’s China Study [3] I reported that:

1. Dietary animal-protein volume is associated with increased cancer risk.
4. Dietary animal foods decrease BMR (Basal Metabolic Rate) and increase BMI (Body Mass Index).
5. A plant food diet prevents and reverses heart disease death.
6. A plant food diet prevents and reverses diabetic death.

7. A plant food diet increases metabolism (BMR) and decreases BMI.

**Summary**

It would appear that there are grounds for asking this question: Could it be that whole plant foods are a better choice than too much animal-source calories as a measure in performance gain during intense training? HN

**References**


“After cramping in three straight races, I tried Hammer Nutrition products and set a marathon PR in 4:17!” - Steve B.
Cumin Carrots

FROM THE KITCHEN OF LAURA LABELLE

3 bunches small organic carrots
2 tablespoons chopped cilantro
3 tablespoons virgin olive oil
1/2 teaspoon cumin
Salt and pepper to taste

Wash, peel, and boil carrots until done. Remove and rinse under cold water. Pat dry and slice into rounds. Add cilantro, olive oil, cumin, salt, and pepper.

Download the FREE Hammer Nutrition Cookbook today! www.hammernutrition.com/cookbook

He’s sellin’ the wrong stuff . . .

High-potency, multivitamin/mineral supplement designed specifically for endurance athletes.

Now THAT’S insurance!

Premium Insurance Caps is one of the best, yet remarkably inexpensive, investments you can make in your health.

- More energy all day
- Enjoy superior health
- Fill nutrient gaps in diet

ORDER TODAY!
1.800.336.1977
www.hammernutrition.com
Science has provided a number of theories as to why muscle cramps occur; however, no definitive answer has been given. That’s a real drag because, of the potential performance-inhibiting issues involved in endurance sports, arguably nothing can stop you in your tracks quicker than a full-fledged muscle cramp.

**Potential Causes**

Dr. Bill Misner writes: “The general origin of muscle cramps as defined by sport scientists in human performance laboratories is not well investigated and is therefore not well understood.”

Clinically, Exercise Associated Muscle Cramps, or EAMCs, have several theoretical causes:

- Inherited abnormalities of substrate metabolism (metabolic theory)
- Abnormalities of fluid balance (dehydration theory)
- Abnormalities of serum electrolyte concentrations (electrolyte theory)
- Extreme environmental conditions from heat or cold (environmental theory)
- Or, they simply (and without plausible explanation) “just happened.”

**Personal Observations and Solutions**

In my experience, both as a competitive endurance athlete and in working with thousands of athletes during my tenure here at Hammer Nutrition, I have noticed that of all the possibilities as to why cramping can occur, three main culprits stand out:

1) **Too much, too strenuous, too soon**

Simply put, if the muscles are not ready to take on the workload being asked of them, cramping is oftentimes one of the by-products.

**SOLUTION:** Gradually increase the duration and intensity of your workouts intelligently. If you overload the muscles via too much duration and/or intensity too quickly, not only can cramping occur, so too can injuries. Build up the volume and intensity gradually, and you’ll minimize or eliminate the potential for both cramping and injuries.

2) **Improper fluid intake**

If you don’t drink enough water/fluid throughout your workout and throughout the day, you will find yourself in a state of dehydration, with cramping as one of the potential unpleasant side effects. Conversely, if you overhydrate you will most likely suffer the same fate by overly diluting your blood level of electrolytes (aka dilutional hyponatremia).

**SOLUTION:** During your workouts we suggest a fluid intake of 20-25 ounces/hour, plus or minus 3-4 ounces based on your body weight, the weather conditions, and how well or poorly you’re acclimated to those conditions. Throughout the day, in addition to what you consume during the training session, we suggest a fluid intake that is equivalent to 0.5 to 0.6 of your body weight in pounds. For example, a 160-lb athlete should aim to consume 80-96 ounces of fluids daily, in addition to what he/she is consuming during the workout.

Following this equation is more precise...
Could you please pass the full-spectrum electrolyte formula?

Put down the salt and reach for Endurolytes instead.

With its perfectly balanced, full-spectrum electrolyte formula, Endurolytes is exactly what you need to keep cramping at bay while ensuring that all of your bodily systems—muscular, nervous, digestive, and cardiac—are performing optimally during your training and racing.

SPECIAL OFFER!
Purchase a bottle of Endurolytes (capsule or powder) or three tubes of Fizz, and receive a FREE packet of HEED. Flavor may vary. Ad code EN76E. Offer expires 9/30/11

ORDER TODAY! 1.800.336.1977 / www.hammernutrition.com
and individualized than the generic, one-size-fits-all “drink 8 glasses of water daily” recommendation. It’s the best way to maintain optimal hydration status but without running the risk of dilutional hyponatremia. One caveat: If you have not been consuming this much fluid consistently, don’t start “cold turkey;” instead, increase gradually, similar to your training.

3) Insufficient or improper electrolyte intake

Athletes who don’t bother with electrolyte replenishment, or who think that salt tablets or salty foods resolve the problem, will almost always suffer from cramping. Electrolytes are analogous to the motor oil in your car—they don’t make the engine run, but they’re absolutely necessary to keep everything running smoothly. Proper functioning of the digestive, nervous, cardiac, and muscular systems depends on adequate electrolyte levels. No one wants to cramp, of course, but remember, cramping is a place far down the road of electrolyte depletion; once you’ve started cramping, the performance of those aforementioned bodily systems have already been diminished for a long time. Cramping is your body’s painful way of saying, “Hey! I’m on empty! Resupply me now or I’m going to seize!” It’s like the oil light on the dash of your motor vehicle; you never want it to get that low.

Additionally, salt tablets and salty foods are an unacceptable choice for electrolyte replenishment for two reasons:

1. They provide only two of the electrolytes your body requires: sodium and chloride.

2. They can oversupply sodium, thereby overwhelming the body’s complex mechanism for regulating sodium.

Dr. Bill Misner writes, “When a balance of electrolytes of cations (positively charged ions) to anions (negatively charged ions) 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.” In other words, electrolytes perform numerous functions synergistically, which is why it’s important to use a balanced, full-spectrum blend of electrolytic minerals versus just one or two.

**SOLUTION:** Replenishment of electrolytes—prior to, during, and after your training session—is as important a part of your fueling as hydration or calories for energy production. Make sure you don’t neglect this all-important component of athletic fueling!

Hammer Nutrition has a number of products that will fulfill electrolyte replenishment ideally:

- **Endurolytes** – The original encapsulated product, with a balanced blend of all the necessary electrolytic minerals—sodium, chloride, calcium, magnesium, and potassium—along with beneficial co-factors vitamin B6, manganese, and tyrosine

- **Endurolytes Powder** – The same formula as the encapsulated version of Endurolytes, but in a powdered form. Designed primarily for athletes who have difficulties swallowing capsules, Endurolytes Powder also contains the amino acid glycine, which has a naturally sweet taste to help take the edge off the slightly salty, bitter taste of the mineral content.

- **Endurolytes Fizz** – Hammer Nutrition’s newest form of Endurolytes, an effervescent tablet form in a number of pleasant tasting flavors. Each Endurolytes Fizz tablet is equivalent to two Endurolytes capsules or two scoops of Endurolytes Powder.

- **HEED** – Hammer Nutrition’s sports drink not only provides complex carbohydrates for high-quality energy, but also the same exact electrolyte profile as Endurolytes. Each scoop of HEED contains 100 calories and the equivalent of one Endurolytes capsule or one-half tablet of Endurolytes Fizz.

Because so many variables come into play when determining how much electrolytic mineral support endurance athletes need—biological predisposition in terms of minerals lost via perspiration, the differences in an athlete’s size and fitness, as well as the pace of exercise, the humidity and heat, and how well or poorly the athlete is acclimated to the weather conditions—there is no “set in stone” amount in terms of dosing. That said, we suggest a starting dose of one Endurolytes capsule, one scoop of Endurolytes Powder, or one-half tablet of Endurolytes Fizz per 50 pounds of body weight hourly, with the understanding that regular testing in training under a variety of conditions—adjusting your dose as needed, when needed—is essential for maximum benefits.

**Summary**

Making sure your training is appropriate for your fitness level is vital to help stave off cramping. So too is consuming proper amounts of fluid, both during your workouts and throughout the day.

Taking a dose of one of the various forms of Endurolytes prior to, during, and after your workouts is a great way to not only avoid the royal pain that is cramping, it’ll also help you get the most out of every minute you put into your training sessions. Supplying the body with ample amounts of electrolytes is important all year round, and especially during the hottest months of the year, which, for many states in the U.S., is right now—August and September. 

---

**Three reasons why cramping may occur**

**#1 - TOO MUCH, TOO STRENuous, TOO SOON**

**SOLUTION:** Build up the volume and intensity gradually, and you’ll minimize or eliminate the potential for both cramping and injuries.

**#2 - IMPROPER FLUID INTAKE**

**SOLUTION:** We suggest a fluid intake of 20-25 ounces/hour* during workouts.

*This will vary plus or minus 3-4 ounces based on your body weight, the weather conditions, and how well or poorly you’re acclimated to those conditions.

**#3 - INSUFFICIENT OR IMPROPER ELECTROlyTE INTAKE**

**SOLUTION:** Replenishment of electrolytes—prior to, during, and after your training session—is as important a part of your fueling as hydration or calories for energy production.

---

*I keep coming back to your Sustained Energy and Race Caps Supreme because they work better for me than anything on the market.* - Anthony D.
More than 1,800 master swimmers of all levels of ability, ages, and sizes came from all over the country to compete in Mesa, Arizona, at the 2011 USMS Spring Nationals event April 28-May 1. Kino Aquatic Center, the venue for Nationals, boasts a beautiful new outdoor natatorium that runs side-by-side competition pools, along with an adjacent warm-up pool; this facility made for a lovely swim meet, and we all enjoyed the dry, windy, warm Arizona weather.

Over the course of the weekend, 39 individual world records and ten relay world records were set. I was, as always in awe of my fellow swimmers. While some have been swimming through age group, high school, college, and even for many years as masters, others have just taken up the sport. To me, the most inspiring swimmers are not the Olympi hopefuls, but the 90-year-olds swimming the 400 IM or the 200 fly—may God bless their souls!

Hammer Nutrition was highly visible at this event as an official sponsor; our goody bags were everywhere, as well as red Hammer Nutrition swim caps galore. Several sponsored athletes, including Brian Wadley, Rich Abrahams, Bob Strand, Jenny Cook, Sue Dills, and more, were competing and trying to win Hammerbuck$, our first national Hammerbuck$ swim meet.

Next stop is USMS Long Course Meters in Auburn, Alabama. See you there!

Top: Jenny Cook, 1st place in the 100 and 200 breaststroke.
Middle top: The author (middle) and teammates relax between events.
Middle bottom: Bob Strand, champion in the 100 yard breaststroke and the 100 yard individual.
Bottom: A Hammer athlete watches from poolside.
Photos: Wadley
Training leads and muscle follows

BY JIM BRUSKEWITZ

Athletes searching for training protocols to improve strength using NMES (neuromuscular electrical stimulation) find a variety of plans. Some find a mixed training plan that incorporates the variety of strength training programs week by week. In a mixed training plan, the programs selected account for the demands of a particular sport and whether or not the athlete is in a pre-competitive or competitive phase of their training. Other plans focus on building one kind of strength for a minimum of three weeks and continue it for up to eight weeks. Can you expect similar results from these different approaches to building strength? The answer is no, so pick the kind of plan that helps you meet your goals.

An important consideration when selecting workouts that best meet your needs is “muscle specificity,” a concept that helps accurately predict the outcome of the whole spectrum of training practices. While it’s a simple concept, it can help any athlete make decisions about how best to meet their athletic goals.

Muscle specificity can apply to any and all characteristics of skeletal muscle function. Whether it’s the energy delivery system, (aerobic, anaerobic, or alactate,), the speed at which a muscle contracts (slowly, quickly, and everything in between), the amount of force applied at various points throughout a muscle’s range of motion, or the kind of muscle contraction (concentric, eccentric, or isometric), the muscle can be trained specifically. The flip side is that specific training produces specific results. Just because one is well trained to sprint has little to do with how well that individual can perform if not sprinting. We all have experienced this firsthand.

It’s not only the workouts you do, but also how many times per week and how many weeks you consistently do it that affect the outcome. When it comes to building strength, one time per week will show some improvement initially, but the rate of gain will quickly slow down and plateau. Two times per week is far better for gaining the desired adaptations, and continued improvement will last for many more weeks. Given that you need to recover from NMES strength training, three times per week is often enough to acquire the maximum amount of gain and the proper amount of recovery.

How many weeks the training is extended affects the amount of gain as well. Measured significant improvement takes about three weeks to realize when using the Strength and Resistance programs. Up to six weeks is required to see a significant improvement with the Endurance building program. The inevitable plateau from weeks of training in a specific way occurs in about 8 weeks when using the Strength and Resistance programs, and 10-12 weeks when employing the Endurance program. Once a plateau is reached, change the way in which you train to avoid stale performances.

On the facing page there are two possible approaches to training with a Compex. There are a lot of similarities between Scenarios One and Two; the major difference is in the number of weeks.

"Hammer Nutrition continues to impress me . . . both the products and the customer support/counseling." - Frank A.
that a particular program is applied. The results will be different as well. In Scenario One, the gains will come, but they won't be fully developed in one area. This is a way to touch more bases and spread the gains out over a broader set of adaptations. In Scenario Two, the programs are applied over many weeks and the gains are significantly greater, but the set of adaptations are narrow and focused.

Which way is better? “Better” depends on what kind of outcome you desire. I like to employ both methods. During off-season, Scenario Two makes more sense to me. Once the three specific adaptations that result from applying the Strength, Resistance, and Endurance programs are fully developed and you’re close to the season’s competitions, switching to Scenario One to maintain the gains and focus more on the intensity and volume that comes from practicing your particular sport makes a good deal of sense. Not a new approach and certainly not the only approach, it is a common one used in a majority of sports. Like any approach that works, it doesn’t ignore the principles of muscle specificity, training frequency, and plateau effect.

No matter what approach you take, build strength with a Compex. It works! HN

<table>
<thead>
<tr>
<th>SCENARIO ONE</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEK 1</td>
<td>Abs</td>
<td>Upper Body</td>
<td>Lower Body</td>
<td>Abs</td>
<td>Upper Body</td>
</tr>
<tr>
<td>Strength (Level 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Recovery</td>
<td>Upper Body</td>
<td>Lower Body</td>
<td></td>
<td>Upper Body</td>
<td>Lower Body</td>
</tr>
<tr>
<td>WEEK 2</td>
<td>Abs</td>
<td>Upper Body</td>
<td>Lower Body</td>
<td>Abs</td>
<td>Upper Body</td>
</tr>
<tr>
<td>Resistance (Level 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Recovery</td>
<td>Upper Body</td>
<td>Lower Body</td>
<td></td>
<td>Upper Body</td>
<td>Lower Body</td>
</tr>
</tbody>
</table>

(The training is applied three times per week, but maintained for only one week at a time.)

<table>
<thead>
<tr>
<th>SCENARIO TWO</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEK 1-6</td>
<td>Abs</td>
<td>Upper Body</td>
<td>Lower Body</td>
<td>Abs</td>
<td>Upper Body</td>
</tr>
<tr>
<td>Strength (Level 1-5 spread progressively and evenly through 6 weeks of training)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Recovery</td>
<td>Upper Body</td>
<td>Lower Body</td>
<td></td>
<td>Upper Body</td>
<td>Lower Body</td>
</tr>
<tr>
<td>WEEK 7-12</td>
<td>Abs</td>
<td>Upper Body</td>
<td>Lower Body</td>
<td>Abs</td>
<td>Upper Body</td>
</tr>
<tr>
<td>Resistance (Level 1-5 spread progressively and evenly through 6 weeks of training)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Recovery</td>
<td>Upper Body</td>
<td>Lower Body</td>
<td></td>
<td>Upper Body</td>
<td>Lower Body</td>
</tr>
</tbody>
</table>

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

Programs include:
Endurance, Resistance, Strength, Explosive
Strength, Potentiation, Active Recovery, Recovery
Plus, Pre-Warmup, Massage

Real Compex Athletes, Real Compex Results!

“Let me start by saying I’m a consummate runner, just awarded the USATF Award of the Year when I had necessary knee surgery the beginning of March of this year. Because of my situation, just three months before my racing season, I was faced with, ‘what can I do to speed things up?’ Run-of-the-mill rehab was not the answer. So I want to say that because of knee surgery in early March and racing season upon me, I looked at the choices I had for rebuilding a very weak quad in the shortest time possible. It had to be convenient, but more important, it had to be effective. Based on reviews I selected the Compex Performance. It was the best decision I could have made. I began use in early April, three weeks before I began running, and am back to 80%. The additional feature of having an Active Recovery mode is like having a massage every day. Another important feature was the support that Hammer Nutrition provided. Jim Bruskewitz is extremely knowledgeable, and every question I had was answered in clear and precise detail. I highly recommend this product.”

Thanks,
Bill Riley

www.hammernutrition.com
Incorporating Compex Neuromuscular Electrical Stimulation (NMES) into your training routine will allow you to:

• Dramatically increase muscular endurance
• Optimize muscle recovery (minutes instead of days!)
• Get the ultimate muscle warm-up

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 U.S. 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.

Compex is FDA cleared.

Real Compex Athletes,

“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. 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 2-a-days.”

Thanks, Deb McCoy

Real Compex Results!

A Team Hammer Nutrition/CMG member uses the Compex at the 2011 Sea Otter. Photo: Kristy Bako

NMES consultations with our experts!

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPC30</td>
<td>$49.95</td>
</tr>
<tr>
<td>CPC60</td>
<td>$79.95</td>
</tr>
</tbody>
</table>

30-minute consultation
Consists of unboxing the device and connecting cables, pads, and charger. Proper pad placement discussion, program familiarization, and first use of the Active Recovery program.

60-minute consultation
Includes everything in the 30-minute consultation plus discussion and guidance on use of programs (varies depending on unit purchased), integration into your daily training regimen, stacking NMES workouts on top of conventional workouts, and more.

Advanced consultations
After initial consultation, additional consultation time can be purchased for $60 per hour. Quickly become an “advanced NMES user” and get the most out of your Compex device by working “one on one” with an NMES expert versed in all aspects of this powerful device and technology. Discounts are available for multi-hour packages as well, ask your advisor for details.

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPA60</td>
<td>$60.00*</td>
</tr>
</tbody>
</table>

*Per hour.
Compex NMES is ideal for all athletes

**Sport Elite**
The Sport Elite muscle stimulator is recommended for the competitive/high-performance athlete who has a rigorous training and exercise regimen. It features a total of nine programs and five levels of progression that will keep elite athletes challenged with every training session, resulting in a true competitive advantage!

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
<th>NEW PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSE</td>
<td>$999.99</td>
<td>$849.00</td>
</tr>
</tbody>
</table>

Programs include:
- Endurance
- Resistance
- Strength
- Explosive Strength
- Potentiation
- Active Recovery
- Recovery Plus
- Pre-Warmup
- Massage

**Performance U.S.**
The Performance U.S. muscle stimulator is recommended for the fitness enthusiast and/or the athlete who engages in frequent competition. It features a total of five programs with five levels of progression to help competitive athletes achieve the highest level of performance.

<table>
<thead>
<tr>
<th>SKU</th>
<th>PRICE</th>
<th>NEW PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPP</td>
<td>$699.99</td>
<td>$579.00</td>
</tr>
</tbody>
</table>

Programs include:
- Endurance
- Resistance
- Strength
- Pre-Warmup
- Active Recovery

**NEW! Tell others about Compex & get rewarded!**
After you’ve experienced the amazing benefits of neuromuscular electrical stimulation (NMES) for yourself, be sure to share your enthusiasm with friends and demonstrate the unit’s many capabilities and applications. When you help persuade a friend to purchase an NMES unit from Hammer Nutrition Direct, you get rewarded with FREE product and we gain another satisfied customer.

Program Details:
1. The referring client must have purchased their Compex or Globus NMES unit from Hammer Nutrition Direct.
2. The referring client receives a credit valued at 10% of the friend’s NMES unit purchase cost, which can be used toward the purchase of any Hammer Nutrition products.
3. Your friend, the referred client, receives a 10% discount off of the purchase price of their new NMES unit.

It’s Easy
- We keep track of your rewards for you. Call anytime for an update.
- Whenever you place an order, you can apply your rewards to that order or save them for up to one year.
- If you order online, just add a note asking that we apply any available rewards.

A Few Restrictions:
The EMS referral program and our traditional referral program may be used on the same order, although the discounts do not overlap. EMS referral program discounts do not apply to any other items and traditional referral program discounts do not apply to EMS products, although the programs can be used in conjunction if ordering from both categories for the first time. Shipping charges are not included in discounts or rewards. We can’t offer retroactive rewards. Your friend must mention your name or client number at the time of ordering. Do not refer your spouse or have a friend be the new client and place an order for you. 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.

**Replacement pads and accessories**
Hammer Nutrition is your NMES headquarters for replacement pads, replacement parts, accessories, and more. Check out www.hammernutrition.com/NMES for all of the details.

**NEW! Lower prices on both units**

**Order Today!**
Order your Compex NMES unit from Hammer Nutrition and enjoy these exclusive FREE bonuses:

- 30-minute consultation - FREE
- 1 or 2 free sets of pads, depending on model - FREE
- 90-day money back guarantee - FREE

A $49.95 value! Up to a $29.90 value! Priceless!

**BELOW:** Team AZ Devo visits with Brian Frank in the Compex tent at the 2011 Sea Otter. Photo: Phil Grove
1. How long have you been at Hammer Nutrition?
5 1/2 years

2. Which product is your favorite, and why?
Tissue Rejuvenator. It keeps my 30-year-old joints feeling 20 again!

3. How do you use the products?
I use the Daily Essentials to stay healthy, Hammer Bars if I need a quick snack or meal, and Hammer Gel for my workouts, which are always followed by a tall glass of Recoverite!

4. Hobbies, interests, passions: I love to spend time with my family, and we try to do a little bit of everything: hiking, fishing, biking (mostly just the bike trails these days with our one-year-old in tow). I love to cook, especially for other people, and when I do have a minute or two to myself, I enjoy being creative (drawing, painting, sewing).

5. Name one thing that most people don’t know about you. I still hold my high school record for the discus. Before me, it was held by my middle sister, and before that, by my oldest sister. We must have the discus precursor in our DNA.
I'm a senior competitive cyclist and a member of your VIP autoship program. I've been using Hammer Nutrition fuels and supplements for a number of years now, since becoming a competitive rider in my rather mature years. I am 76, and often compete against riders 10 to 15 years my junior.

Last year I was diagnosed with Type 1 diabetes. Can you imagine the shock and lifestyle impact on my life at age 76? Today, I am fully dependent on insulin and other stuff as well; I've always worked hard not to become a "drug store junkie." Well, that is not the case now. I've always been healthy and physically fit, I have an organic garden, but here I am.

Let the picture with Hammer Nutrition gear talk for itself. This photo was taken at the Bay Area Senior Games/California State Championships held in April, where I earned a gold in 5K TT, silver 10K TT, and silver in 30K road race. I never give up, train hard and self-discipline, and take my diabetic-sensitive Hammer support system seriously. I even have a Sport Elite Compex that is very helpful in keeping my legs churning and blood flowing—a typical problem with diabetics, both Type 1 and Type 2.

I will be riding a couple of Hammer Nutrition-sponsored events this year, so I hope to see you there!

- John Oakes
Where are they now?

BY VANESSA GAILEY

Catching up with Brad Kearns #2067

Quite a few of our original clients are still Hammer Nutrition athletes and friends. From our start in 1987, we’ve worked with an amazing group of people dedicated to the endurance athlete lifestyle.

They remember the days when Hammer Nutrition’s phone was answered by Brian Frank himself, 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 185000s, we appreciate every one of you, one completely satisfied client at a time.

Meet Brad Kearns

After nine years on the professional circuit, Brad Kearns has a lot of podium memories. He has stood on the top spot at two national triathlon championships, and at one point in his career had a seven-victory winning streak. Brad was ranked in the top 6 by USA Triathlon professional ranking for five consecutive years. His win at Desert Princess Duathlon in 1986 is still considered to be one of the greatest upsets in the history of the sport, as he beat both #1 ranked triathlete Scott Molina and #1 ranked duathlete Kenny Souza; it was Brad’s first season as a pro triathlete.


I met Brian Frank at a race expo in 1987 and started trying his E-Caps products. Brian was a pioneer in the performance supplement world, and so were the athletes at that early time. Training methods, technology, and nutrition were all rudimentary in those days. While it was clear that extreme training required more attention to nutrition and targeted supplementation, there were a lot of people pitching this and that. Athletes are always looking for an edge, but it is important to have some healthy skepticism. Brian and his team worked very, very hard to establish Hammer Nutrition in the marketplace, and build trust and credibility in their products. I had long conversations on the phone with

- continued on page 31

“Thanks again for your great products, great service, and continued support to our military!” - Luis E.
Cover girl cleans up!

BY ANYA WECHSLER

I survived the Bighorn 50K last weekend and ended up very pleased with my finish, mainly because I was able to eat and hydrate better. I brought a flask of Hammer Gel and a Hammer Bar, and made sure to drink my water and HEED. I also dosed up on Endurolytes at about half-way and amended my water with Fizz. Consequentially my stomach stayed happy for the last half of the race . . . a big help for a faster time!

I was very stoked to win the women’s overall and shave almost 13 minutes off my time from last year! My time was actually a course record, but because they had to reroute the course on account of the snow, it didn’t count. Anyway, it was good fun as always, and Owen Gue (Cycling House) was the ultimate support!

For the past five years, I have dramatically altered my training program to focus on more diverse fitness goals. I enjoy dominating 7th graders in basketball and soccer, and doing sprint and strength workouts that were so neglected when I pursued endurance goals. I’m especially fond of high jumping. I cleared 5’6” in 2010 at the age of 45. Though I jump for the personal challenge and am content to practice with the middle school and high school kids, this jump would rank 9th in the USA Masters track in the 45-49 age category!

- continued from page 30

Brian about the efficacy of this or that product before I would try it!

After my racing career ended I did a few more ultra endurance feats: a 50-mile run and several mountain bike rides across the Sierras to Lake Tahoe in a single day. Perpeteum seems to be the best product available for easy-to-digest calories for sustained exercise. After 10-13 hours in the saddle, it’s hard to develop an appetite or the energy to digest and assimilate solid food.

For the past five years, I have
QUESTION:
I am training for a half iron distance triathlon and have used many of your products during my training. I’ve done much of my training in significant heat, so have been looking for an electrolyte replacement and found your Endurolytes. I bought some and was excited to try them, but when I read the label more closely, I was concerned (and confused) about the level of manganese in this product.

There is 1.6 mg of manganese (80% of the RDA) per capsule, with instructions to take 1-3 capsules per hour during prolonged exercise in hot weather. Many of my workouts are 4-5 hours, so this could easily be 10 capsules (16 mg) according to directions. I am a toxicologist with some experience with manganese – its essentiality and its toxicity. Manganese deficiency is rare and it is not excreted in any appreciable amount in sweat, so I’m concerned about why the level is so high in each capsule. Do you have some information that will help me understand this?

ANSWER: Manganese is necessary in trace amounts for optimal muscle cell enzyme reactions for the conversion of fatty acids and protein into energy, and as part of superoxide dismutase, one of the endogenous (within the body) antioxidants. Research suggests that manganese deficiency plays a vital role in glucose tolerance factors, free radical build up from intense exercise, and nerve function disorders, especially in older athletes.

Manganese is transported through the blood as protein complexes including transferrin. Typically, P.O. (by mouth) only 3-5% of manganese is absorbed. The Optimal Daily Intake (ODI) of manganese (for adults), as determined by Shari Lieberman, PhD., ranges from 15-30 mg per day. You lose (without exercise) an average of 4 mg of manganese; it is excreted from the body each day in the feces (via bile).

Endurance exercise increases the rate that manganese is lost from the body. Also please note the three inhibiting minerals in Endurolytes—calcium, magnesium, and potassium—that reduce total absorption rate of manganese. The calcium:manganese ratio is 31:1 favoring calcium (which lowers manganese uptake). The magnesium:manganese ratio is 15.6:1 in favor of magnesium (which lowers manganese uptake). The potassium:manganese ratio is 15.6:1 in favor of potassium (which lowers manganese uptake). What this means is that these minerals in the Endurolytes formula complement each other taken as directed during endurance exercise, especially when prolonged exercise in the heat occurs.

Steve’s note: Dr. Michael Colgan writes, “Because of their greater bone and soft tissue turnover and their higher metabolism of glucose, athletes may need more manganese than sedentary folk.” As far as toxicity is concerned, Dr. Shari Lieberman states, “The toxicity for manganese is low when it is ingested in the form of either manganese-rich foods or supplements. Toxicity can occur, however, when manganese is inhaled, as in the case of certain miners who are exposed to high concentrations of manganese oxide in the air. Manganese toxicity may also occur as a result of manganese-contaminated water.” Dr. Colgan elaborates, stating, “Manganese is considered one of the least toxic of the trace elements if taken by mouth.”

REFERENCES:

National Champion

Congratulations to Dr. Bill Misner on his recent accomplishments. He is truly an inspiration to us all!

3 Rides. 7,000 Miles.
1 Goal. Courtesy of Brandon Campisi, Media Contact

On June 26, Jay Petervary became the first person to complete the RAAM ride route self-supported since its inception in 1982, averaging 230 miles per day. He posted a time of 12 days, 23 hours, 30 minutes. For Jay, who qualified for the RAAM event a few years ago, it was a difficult, yet gratifying, decision to ride the route self-supported. Participants generally have vehicles and a support crew that follow them throughout the race providing water, food, mechanical assistance, and shelter.

Opting to do it alone to raise awareness for his 2011 No Idle Tour, Jay carried everything he needed on his bike. Jay’s RAAM route ride was the second leg of his 7,000-mile 2011 No Idle Tour to raise global environmental awareness about reducing carbon emissions. In March, Jay completed the first leg by winning—and setting a new course record for—the 1,100-mile Iditarod Trail Invitational snowbike race in Alaska.

"Thank you for supporting the No Idle Tour and helping in keeping me fueled throughout my challenges," Jay wrote in to Hammer Nutrition headquarters. "I used HEED, Perpetuem, and Recoverite throughout the 1,100-mile race in Alaska. A recent ALL Hammer ride that comes to mind was LOTOJA 2010. With the help of Hammer I won the masters 35+ division as a rookie!"

His final leg of the No Idle Tour will be the 2,745-mile Great Divide Time Trial from Banff, Alberta, to Antelope Wells, N.M. in August. Jay will attack the Great Divide bike route solo and self-supported in hopes of accomplishing a PR. In 2007, during the Great Divide Race, Jay set a course record of 15 days, 4 hours.

For more information or to follow Jay’s Great Divide ride, visit noidletour.org. We’ll also catch up with Jay—allowing time for recovery—afterward and include his complete journey in EN77.

Jay's 2011 Tour

Iditarod Trail Invitational, Anchorage to Nome 1,100 miles – COMPLETED March 16, 2011 • 1st Place

Race Across America (RAAM) route 2989.5 miles – COMPLETED June 26, 2011 • 12 days, 23 hours, 25 minutes

Great Divide Time Trial
The grand finale to Jay’s tour in August.

I hope you do not mind sharing these results. The Lord really blessed me in this one! I chose 2011 to race in two Trail Race Nationals only 28 days apart, the 15K in Spokane and the Trail Half Marathon in Bend, Oregon yesterday. I won the 70-74 Gold Medal (podium pic) with a new 70+ age group time of 2:00:23. The course was exceptionally technical above 3,600’-4,100’ elevation on rough singletrack trails with an admixture of dirt, rocks, tree roots, logs, and other assorted obstacles. I had a pretty nasty fall at an aid station while attempting to drink some HEED in a cup and passing another runner. I hit the ground with such force that it was a question of whether I could continue, but after I hobbled and bled for a while, I managed to get back into a pretty good pace and finished 283 out of 800 runners. I am very pleased with the finish time result. It is very difficult to get and keep fitness at this level. I am pretty banged up after this one . . . time to take a “r-e-s-t,” a 4-letter word I have to apply.

2011 USA NATIONAL 15K TRAIL CHAMPION Masters Age Group 70-74
USA National 15K Trail Championships Riverside State Park Saturday, May 14, 2011

2011 USA NATIONAL 15K TRAIL CHAMPION Masters Age Group 70-74
USA National 15K Trail Championships Riverside State Park Saturday, May 14, 2011
For this issue of Endurance News, we’re psyched to have cyclist Jenn Halladay as our “spotlight” athlete. Living in Kuna, Idaho just southwest of Boise, Jenn has been a client of Hammer Nutrition since 2004 and she is one heck of a cyclist, with a particular fondness for the LOTOJA Classic cycling race, which starts in Logan, Utah and finishes at Jackson Hole, Wyoming. LOTOJA is 206 miles in length, making it the longest one-day USCF-sanctioned bicycle race in the country. It’s also one of the toughest with over 8,000 feet of climbing over three mountain passes in the first 110 miles.

Jenn’s first attempt at LOTOJA was in 2002, prior to knowing about Hammer Nutrition products. She has raced in it four additional times since then—2006, 2007, 2008, and 2010 (didn’t race in 2009 due to injury)—winning all four times, and setting a new course record of 9:44:57 in 2010. We received a wonderful email from Jenn, which in part read, “I could not have achieved this [win] without the use of the Hammer products I use to prepare and to race this race. I follow all your recommendations. It’s amazing! The first year I barely made it, and the last four times I have raced it, nutrition has not been an issue at all. I have always been able to finish strong and usually by myself because the group can’t keep up with me on the first pass—the last two years I have finished solo! The amazing thing is in 2010 I set the record by myself. I felt strong all day. My average speed was just under 22 mph! WOW! I really didn’t think I could break 10 hours without help. Well, I did it and I can thank the Hammer products I use for helping me to the finish line!”

Jenn’s accomplishments go far beyond LOTOJA, however. Here is a portion of what she’s accomplished in the past couple of years:

2009
• Sea Otter Classic
  Pro Criterium – 5th
  Pro Road Race – 6th
  Pro Circuit Race – 12th

• Garden Creek Gap Road Race – 2nd
• Twilight Criterium – 5th

2010
• Jason Broome Memorial ITT – 1st
• Bode TT Festival – 1st
• Lyle Pearson 200-Mile Team Challenge – 4th place team out of 74 teams
• Elkhorn Classic Stage Race
  Oregon Trail Road Race – 1st
  Pleasant Valley TT – 1st
• USA Cycling Masters Road National Championships (35-39 Women’s Category) – National Champion
• Bogus Hillclimb – 1st

The grand finale to her marvelous 2010 season was her record-breaking performance at LOTOJA in September. Without further ado, let’s meet Jenn Halladay!

- continued on page 35
**STEVE:** Jenn, congratulations on your stellar season, capped off with a record-setting win at LOTOJA in 2010. It's really quite the accomplishment, one that you should be very pleased with.

**JENN:** I am very excited about this accomplishment, because it demonstrates what knowledge and the will to succeed and to finish can do for you.

**STEVE:** Going into the 2010 race, did you feel you had a “target on your back” so to speak, since you had won the race three previous times?

**JENN:** No, not at all. In fact I was hoping I would have some company. I try not to think about stuff like that. It's more fun to motivate others to do their very best and make them feel that they can. At the start line I tell all of them exactly what I'm going to do. If they want to finish with me, they need to be with me on Strawberry Pass!

**STEVE:** In 2002 you said that you did not know about Hammer Nutrition products, that the race was super hard, and that you barely made it to the finish. Would it be a fair assessment to say that, along with perhaps some tweaking/improvements in your training and equipment, Hammer Nutrition products had a significant impact in your four wins?

**JENN:** Absolutely! I barely made it that first year! Since then, thanks to Hammer products, nutrition hasn't been an issue whatsoever. Racing successfully is more than just training and natural ability. These two aspects help with outcomes, but to be consistent and truly at the top of your game you have to have a handle on your personal nutrition. Hammer Nutrition has given me this edge and continues to help me be and stay a competitive cyclist. I believe in and will always stand by Hammer products!

**STEVE:** Which of the Hammer Nutrition products have you been using?

**JENN:** In my training, and especially to prepare for a race like LOTOJA, I use the Hammer Whey Protein and Race Day Boost (this one in the four days leading up to the race), along with the other products I regularly use while training: Hammer Gel, Perpetuem, HEED, Recoverite, Endurolytes, Sustained Energy, and Anti-Fatigue Caps. On the day of the race it's all Hammer Gel, Perpetuem, HEED, Endurolytes, and Anti-Fatigue Caps. This is my arsenal, and I would not race without it.

**STEVE:** In 2006 your winning time was 10:26:43. In 2007 you won in a time of 9:59:10. In 2008 you won again in a time of 10:03:20. Now, after taking a year off due to injury, you come back and blast a sub-9:45 time. While there are a number of things that can account for such an improvement, a course record time no less, what are the main things that you attribute this record-breaking effort to?

**JENN:** Pure will! That accident I was in was pretty devastating. It led me to focus more on time trialing. In fact, that year I won every TT race I entered (except Elite Nationals in Bend, Oregon, and I didn't do too shabby, 14th, and that was after dropping my chain twice!). When I got off the front during LOTOJA 2010 (I still had over 110 miles to go), I got into my TT position and drilled it!

**STEVE:** Could you tell us a little bit about the accident, how long you were off the bike, and what you did when you got back into a training regimen after fully recovering?

**JENN:** I was racing in the pro/elite women's field at the Cascade Classic in Bend, Oregon. It was the largest field that year with 123 participants. That is a large field for a women's race here in the U.S. We were in the second stage, an 80-mile road race, and about 45 miles into it a rider came back into the pack and took a group of us out. I was the first in line. I don't even remember going down; this is what I was told. I do remember waking up in the ambulance. My main injury was that the bottom quarter of my lip was ripped away from my jaw, along with other strained muscles in my neck and back. I've recovered pretty well from it but it definitely changed my racing focus. I didn't break any bones (I am so blessed!) so I was back on the bike within a week. This accident cut my racing season short, but I continued training and changed my focus to time trialing.

**STEVE:** How long have you been racing and what first got you thinking that it was something you could excel at?

**JENN:** I have been racing ten years. (Two of those years I couldn't race because I was pregnant, but I still rode.) In 1997 I participated in an Olympic distance triathlon in St. George, Utah. I came in dead last in the swim; the boat followed me in. (I remember my husband standing on the dock with our two-year-old daughter looking really worried.) I caught the main group on the bike, passed more on the bike, held my own in the run, and still came away with 1st place in my age group (25 years old). It was at this point I thought, maybe I better stick with the bike.

**STEVE:** Aside from your LOTOJA wins, what are some of the other highlights of your racing career?

**JENN:** One of my biggest wins was when I won the Boise Twilight Criterium in 2007. It was big because of the caliber of riders who participated (Kristen Armstrong, Olympic gold medalist, and Laura VanGilder, at this time the leading sprinter in the nation). I won this race by getting off the front with 19 laps to go and holding it. Pretty cool! Another highlight would be winning my category (35-39) in the TT race of the US...
Masters National Championships last year. I was four minutes ahead of 2nd place.

**STEVE:** If memory serves me correctly, you have five children. How do you manage that time-consuming responsibility (being a mother) and still fit in ample amounts of training?

**JENN:** My kids are what keep me going! They are my drive and who I am. I want to be the best example I can for them and show them what they can do with hard work. They have seen me participate in a lot of races, and this is what they will remember. I never gave up and I always gave it my all. What I have learned is, as a mom, you have to have one thing you do for yourself. Cycling is what I do. It keeps me balanced. I'm a better mom after I ride!

One of my favorite racing memories happened in LOTOJA 2002. My husband and two of my little girls were my support for this. The last 30 miles were grueling and very hilly. I was beginning to feel the 150 miles I had already gone. Scot, my husband, didn't have to beat me to a feed zone, so he parked the car and waited at the top of a hill to cheer me on. I was in the lead group of 20+ riders and it just happened to be my turn at the front. As I was moving forward, my little girls were excitedly screaming, “Go Mommy, go!” I almost went off the side of the road because of the tears in my eyes. This is why I ride!

In one single moment I had the best of both worlds and it didn’t matter if I won. At the end of the day I have my biking experiences and successes, but I also have my family. This is how life should be. And life is great!

**STEVE:** When you’re at your peak volume training period, what does a “week in the life of Jenn Halladay” look like in terms of your workouts?

**JENN:** This would really depend on what I am preparing for. Because of my responsibilities as a mom, I really have to pick and choose which events and training rides I do. If it is a long event, then I have to incorporate longer rides; if it’s shorter events, I ride to that event. Either way it’s all about balance. If cycling consumes me, it takes me away from my family and is no fun. This shows in my results. I try to ride when it’s most convenient for me to be away from my kids. This has worked so far. Family will always come first.

**STEVE:** There are three climbs that have to be negotiated over the course of LOTOJA: The Strawberry/Emigration Canyon climb (7,424’), the Geneva Summit climb (6,923’), and the climb to the top of Salt River Pass (7,630’). I would imagine all three are pretty tough but is there one climb in particular that you consider the toughest? Also, among the three climbs in the race, is there one that is a particular favorite of yours?

**JENN:** I would say the Salt River Pass is the toughest because it is the steepest and is the “King/Queen of the Mountain” section, so you always go hardest here to try and win that. My favorite climb is Strawberry. This is where I figure out who my competition is. It is long enough and steep enough to determine this, most of the time! It definitely breaks everything up.

**STEVE:** You mentioned that training and nutrition are important factors in achieving athletic success, and I’m sure you’d agree that the use of high-quality equipment should be factored in as well. With that in mind, what additional advice would you give a young, up-and-coming cyclist—a junior cyclist—who wants to excel in the sport of road cycling?

**JENN:** You have to love the sport and have the drive to compete, but along with that you have to have balance. It should not consume your whole life. Appreciate it for what it is. Learn from every race you enter, especially your losses. You learn the most from these. Look up to those more experienced (and faster) than you! Learn from them, what makes them fast. Have a good mentor. Whether that’s a coach, fellow racer, or even a parent, a good mentor will get you through anything.

**STEVE:** Have you ever thought of venturing into the world of ultra marathon cycling? I mean, you’ve proven that you have an awful lot of talent, you’ve got a blazing fast time for a race that’s over 200 miles in length and with a ton of climbing, and I personally think you’d kick butt in even longer races, such as the Furnace Creek 508 or the Race Across Oregon. Do either of those 500+ mile races, or ultra cycling in general, have any attraction for you?

**JENN:** It’s funny you ask this question because I was just reading in the June/July 2011 issue of Endurance News about RAAM, and I got to thinking, hmmm! This looks like something I should try. So these races are definitely on my radar for next year.

---

Jenn Halladay claims the national age group championship at USA Cycling Masters Road Nationals 2010. Photo: courtesy of Jenn Halladay.
What to do the day after a race

o train or not to train the day after a race—that is the question. The answer, in my mind, depends on several factors.

If you’re completing a 5K or 10K run, or anything under an hour in duration, then doing some short recovery work the day after is fine. After an Olympic distance triathlon, cycling race, half-marathon, etc., I recommend taking the next day off. For Ironman races, endurance cycling events, and marathons, the next day(s) off is crucial, as is keeping the next 1-3 weeks complete recovery: short and easy workouts at below 70% HR (even below 65% is fine).

Here’s why. If you could look at your muscles under a microscope after a race, they would look like a battlefield. You’ve dropped your own nuclear bomb—lactic acid, pounding the road, lots of climbing, pushing mental and physical limits—and your muscles are the casualties. You’ve got to allow them time to repair to a certain degree before you stress them again. Just how long you need to back off is dependent on the duration of the race event and how well you recover in general.

Only time will tell you when you’re ready to start pushing hard again. If you feel beat, keep intensity low until you’re feeling energetic again. If you’re feeling good and you start a hard workout only to find you’re punking out, back off. Until your body tells you that you’re ready to push hard again, attempting to will only prolong the recovery process and stall your progress. 

NATE'S CORNER
BY NATE LLERANDI

Steve’s Note: Per usual, I’ve dipped into the archives from Nate’s “Tip of the Week” contributions to select this issue’s edition of “Nate’s Corner.” And though this particular bit of info is roughly ten years old, the advice is timeless, in my opinion.

We’re more than just T-bones, ya know!

Ya, we’ve got some killer whey too!

Hammer Whey fulfills your post-workout protein requirements without any added sugars, fillers, artificial sweeteners, or any other questionable nutrients.

- Minimize post-exercise soreness
- Protect lean muscle tissue
- Immune system support

ORDER TODAY!
WWW.HAMMERNUTRITION.COM
More often it’s about setting incremental goals and figuring out ways to achieve them. Jim Brown, executive director of Revel Consulting-Rad Racing Northwest, knows that his junior development program has its priorities right. “Our mission is to teach kids life lessons using the vehicle of bike racing,” says Brown. “Results will come,” he says, if the individual athlete is willing to set the goals and put in the work, but more importantly, “It’s about learning about life and having fun.”

Revel-Rad, as they are more commonly known, has been around since 1998. What started out as a grassroots effort to teach kids about mountain biking has grown into a nationally recognized program with over 19 individual National Championships and representation on Junior World Championship teams 18 times over the course of 13 years.

While those are some pretty serious credentials, that sort of recognition is just the icing on the cake. Equally if not more important to Brown is watching a brand new rider master clipless pedals or helping a teenager set the training goals necessary to make the jump from junior to senior category racing. “Hard work, setting goals, learning how to refocus after a defeat—these are skills you need in life,” he says.

Teaching his junior riders about proper nutrition is also a priority and helped lead to Revel-Rad’s relationship with Hammer Nutrition. Education is one of those life lessons Brown feels is important. “We’re planning some clinics to educate both parents and riders to use Hammer products properly,” says Brown. “Brian Frank has a big heart for juniors; he wants to support junior programs because he knows it’s the future of the sport. Hammer Nutrition is a good fit for us.”

So far, it’s paying off. Fueled by HEED, Hammer Gel, Hammer Bars, and other Hammer Nutrition products (not to mention an army of parents who stayed up all night keeping water bottles filled and food organized) Revel-Rad’s elite team recently captured the junior division of the 24 Hour Round the Clock in Spokane, Washington. That win was rather fitting as it was at the same race in 2010 when Brown (riding for his local fire department) and Brian Frank first discussed a possible sponsorship. Revel-Rad hadn’t made an appearance at the race for over five years, so it was a happy homecoming.

This spring Revel-Rad was well represented at the USAC Mountain

- continued on page 39
Bike State Championships in Wenatchee, Washington where four riders qualified for the national championships. On the road, Revel-Rad riders were on the podium at the first of the 2011 Seattle Area LAJRS races at Volunteer Park in Seattle; in the Junior 15/16 Boys David O'Brien secured 1st, and Avi Mahan stood on the podium at 2nd. At that same race, Avi and David captured 5th and 7th respectively in the Men's Cat 4 race. Both riders were 15 years old at the time and have since received enough upgrade points to make the jump to Men's Cat 3 racing. They will be joining teammates Conor Klupar and David Kirske, Jr. to form a formidable team presence at that level.

On the track, Cat 2 rider Conor Klupar continues to move up the ranks at the Marymoor Velodrome in Redmond.

Looking forward to cyclocross season, Brown is excited to see how his new crop of “Young Guns” or “Little Rippers,” as he likes to call them, fares at the cycling discipline that tends to be the favorite of most of his riders. Former national champion Andrea Casebolt should have a good season. She took 3rd at nationals last year while at the bottom of the 15/16 age category and is putting in a lot of base miles this summer in order to peak at her specialty sport.

Brown is also having fun watching results from around the country as some of his former riders make their mark. “Sometimes they outgrow us, and that’s okay,” he says. “We’re a development team. If we put our riders in a position where they’re attractive to some of those next tier teams, then we’re doing our job.”

Some of today’s top riders got their start with Revel-Rad. “Tom Peterson of Garmin-Cervelo started as mountain biker. The team gave him a road frame to encourage him to use that as an avenue to train,” says Brown. Morgan Schmitt who rides for United Health Care and 2009 Super D National Champion Aaron Bradford are Revel-Rad alumni as are Luciano Worl and Tela Crane who recently represented the United States in the Pan-Am games in Downhill and Track respectively.

Not every kid wants to be a pro though. Many riders have gone on to successful collegiate cycling careers and have continued to race in their local series. “I’m proud of just about every kid who has come through the program. Some may have been floundering a bit,” says Brown, “but they had the sport, the program, to help keep them focused. Kids who have come through Revel-Rad are now professional coaches. Some are mechanics and own their own bike shops. They’re carrying on and paying it forward.”

At a recent race he took enormous pride watching 19-year-old Benny Swedberg, perhaps the most decorated rider in Revel-Rad history, and now a successful Cat 1 rider with California Giant Strawberry, lead a brand new Revel-Rad kid around his first ever criterium course. Ten-year-old Nate Morrison isn’t big enough to fit on a full-sized bike yet, but you could see the hero worship in his face, and you just know he’s starting to do some goal setting of his own. HN
For those of you who have had the torturous pleasure of running the Grand Canyon, then you will understand what Jason Wolf and Jared Scott just accomplished. For those of you who have never had the chance to run the Canyon, I will tell you that it is a double-edged sword. I often found myself cursing my way up the last three miles out of the canyon with the heat beating down on me, absolutely destroyed. Before you hit that stage of survival, however, comes the majestic beauty of sunrise, the Colorado River crossing, and the most spectacular and unique land in the world.

A Canyon run will never be easy, and I have to say the progress Jason (my former training buddy in Flagstaff) has made is nothing less than stellar. Our early visits to the Canyon left him struggling with the descents (not an easy task) and often coming home with scraped knees and hands, not to mention the ascents that almost guarantee cramps and running out of water and/or fuel when running for speed. I clearly remember reading the sign each time I dropped into the canyon, “Warning! DO NOT attempt a rim to river to rim in one day.” As I would look at the sign on the way up and pass by hikers debating the sign, I would think to myself, “Look at me! This is what happens when you ignore the sign!”

Somehow, the magic of the Canyon calls you back, over and over. It never gets easier . . . maybe even harder when you know what to expect. Below is a recap of the record attempt by two Hammer users and friends of mine; it will give you an idea of how difficult this is, and for those who are familiar with the Canyon, just how tough these guys are. Enjoy!

BY JASON WOLF with intro by Dustin Phillips

Jared Scott and I set out on May 27, attempting to break the Grand Canyon Single Crossing record of 3 hours, 6 minutes, 47 seconds held by Allyn Cureton of Williams, Arizona. He set the record in 1981, so if you do the math, this record was 30 years old!

We camped on the North Rim and got started right at 6:45 a.m. Our plan was to run how we feel; if Jared felt good he would lead, and if I felt good I would lead. Waiting on each other much could slow both of us down and be counterproductive. As planned, Jared and I exchanged the lead numerous times as we steadily pushed our way down the North Rim. As we whipped by hikers and skipped through almost dry waterfalls, we kept the mood light and talked about anything and everything, knowing that the next stretch from Cottonwood Campground to the S. Kaibab Bridge would be a bit more “intense.”

- continued on page 41
After quickly filling up our water bottles at Roaring Springs, we pushed our way past Cottonwood Campground. Jared had to stop and stretch his hamstring and told me not to wait, so instead I slowed the pace and took a bathroom break until I saw that he was running again. Dropping 5,000 feet is tough on your body, and transitioning to flat running reminds me a little bit like transitioning from the bike to run in a triathlon.

When we rolled into Phantom, I eased the pace in preparation for the climb up S. Kaibab as planned. During that stretch Jared passed me and put about 20 seconds on me, and looked really comfortable while doing it. At that point, I was thinking, “This guy is going to break three hours for sure.”

Within minutes of Skeleton, I can see a long mule train ascending the trail. Oh no. I am hoping and praying that I get lucky and am able to get around them with limited impact on my time. When I get to the switchbacks, I hit the train. They finally pulled over after what seemed an eternity . . . six minutes had passed. I looked up the trail and couldn’t even see Jared anymore. He got past the train at the perfect time and didn’t lose any time—just the luck of the draw.

I know that I am not going to hit the 3-hour mark or get close to Jared, but I keep thinking I have a chance to break the original record, which would still be a huge accomplishment. I start to hammer and before I know it, I am trying to make up some lost time and pushing harder than I should.

As I round the turns, I smell the mules and bam, back to walking behind mules. This time the guides let me over more quickly and I lose only one minute. A few minutes later, I see Eric Bohn who is there to cheer me on over the last seven minutes. As we close-out the last section, he gets the text: JARED SCOTT BROKE THE RECORD. THE NEW RECORD IS 3 HOURS, 6 MINUTES, 10 SECONDS. Shortly after, I closed out my run, finishing in 3 hours, 13 minutes, 45 seconds.

As I finished my run, I was REALLY happy that Jared got the record, but also disappointed that my day didn’t go quite the way I wanted. As I said before, that’s just the luck of the draw. I am not the only one who has been held up by mule trains. Had Jared not gotten the record, I think I would have been a little more upset. At this point, I am just happy to know that a really good guy, a great runner, and a friend now holds the GC Single Crossing record.

Jared Scott stands with former Single-Crossing Record Holder, Allyn Cureton. Photos: courtesy of Jared Scott

www.hammernutrition.com
ince the time of my last report, I have fallen in love with France. Its breathtaking scenery, overwhelmingly kind, genuine people, and unbelievable cuisine make it a pretty spectacular place to spend a few months or a lifetime. After my time in Belgium racing with the U23 National Team, I met up with my father, Gordon, for several much-needed days of rest and relaxation. We called it “Mancation.” We rented a car and drove south from Belgium with no particular agenda other than to have the time of our lives.

Driving on small roads through the pastoral landscape of Northeastern France, we stopped to walk through medieval, walled cities and checked out haunting WWI and WWII monuments and battlefields. On we went through the Jura Mountains, camping atop a hill and lulled to sleep by the distant sounds of alpine cows’ bells as they munched on the new summer grass. Our days were simple and consisted of fresh morning croissants and coffee, a bike ride for me, run for my dad, and another spectacular drive to find our next
campsite. We worked our way farther south. The more we saw, the harder it was to pack up and leave each place.

I had my bike with me but I didn’t use it to train. Instead, I would ride when I felt like it and did so for the pure joy of it. I was reminded how much I love being on a bike. When I’m not counting hours or looking at watts, cadence, heart rate, or distance, it’s amazing how much more I can take in, not lost in thought but present with the sights, smells, and sounds of the area.

Southern France was, perhaps not surprisingly, our favorite. With its warm dry air, pungent smells, and stunning views wherever you look, Provence is a special place. We camped out under palm trees, drank wine with our rotisserie chicken salad, and chatted together about life, a favorite topic of ours. I rode around Lake Annecy and through the French version of the Grand Canyon—both of which were near the top of my “coolest rides ever” list. We drove through endless vineyards on small twisty roads with perfect asphalt, stopping when and where we wanted, and checking out whatever caught our eye. After getting our feet wet in Saint-Tropez on the Mediterranean, we headed back north with Paris as our final destination. We stopped and camped at the foot of the infamous Mont Ventoux so I could ascend it and mark a check on my life list. It was a surreal experience, as the names of the present-day legends in cycling still appear painted on the tarmac. The climb is unrelenting. The moon-like landscape near the top made it brutal; there is no protection from the fierce wind and beating sun.

I made it to the top with even more respect for the men who have raced up this in the third week of the Tour for so many years. After a quick look at the entire range of the French Alps, I bombed the descent to return to the warmth of lower elevations.

After a stop in the famous Loir Valley, my dad and I made it to Paris where we split ways. He caught his plane back to Montana, and I jumped on a train to Quimper for the second half of the cycling season. Being back with the team here in Brittany is nice. My body and mind have recovered from the intense springtime of racing in Belgium, Italy, and the Netherlands. After the trip with my dad, I am left with a whole new appreciation for the landscape of France. Also, now that I’m back to hard training, I’ve become more present with my surroundings on the bike as I take in the smell of farmers’ fresh cut hay or the salty air coming off the coast. Beauty can be found everywhere, but it’s up to us to seek it out and slow down to enjoy it.

As the old saying goes, “Life is short. Stop and smell the roses.”

I have a heavy load of racing this month where I will look to put my many miles of hard riding into action. I will train and race to win, while sustaining that simple passion for the bike that I’ve enjoyed since I was a kid. Thanks for reading. I encourage you to get out and enjoy your bike this summer every chance you can. If you want some adventure and the best roads of your life, come to France and take it all in.
As we go to press, this year’s Race Across America (RAAM), an event that Hammer Nutrition has been a major sponsor of for many years, has just recently been completed. On Tuesday, June 14, the Solo Women and Solo Men’s 60+ division began their 2989.5-mile race from Oceanside, Calif. to Annapolis, Maryland. Five women entered the race but only two were able to complete the brutal course. Hammer Nutrition-sponsored entrant, Israel’s Leah Goldstein (currently living in British Columbia, Canada), claimed the coveted title of “RAAM Champion” on June 25 with a time of 11 days, 4 hours, 41 minutes. If memory serves me correctly, Leah led the women’s race from start to finish, and her time and average speed of 11.13 is the fastest since 2001.

Austria’s Christoph Strasser won both the Male Solo Under 50 division, as well as the overall title, in a blazing time of 8 days, 8 hours, 6 minutes, the third fastest time in the history of RAAM. Second place went to Mark Pattinson of the United States, who finished slightly over two hours ahead of Slovenia’s Marko Baloh (9 days, 0 hours, 41 minutes and 9 days, 2 hours, 59 minutes, respectively).

In the Solo Male (50-59) division, Italy’s Alessandro Colo took top honors with a time of 9 days, 11 hours, 2 minutes, which placed him 5th overall.

In the Solo Male (60-69) division, Hammer Nutrition-sponsored David Jones, competing against two other strong riders in his division (including longtime Hammer Nutrition client, Dex Tooke), claimed another RAAM victory, winning his age group division in a time of 12 days, 7 hours, 10 minutes.

All of the various divisions of relay teams (2-, 4- and 8-Person) began their 2989.5-mile race on Saturday, June 18. In the 4-Person Female race, not only did the Hammer Nutrition-sponsored Raw Milk Cats team (Catharina Berge, Lori Cherry, Isabelle Drake, and Jeanine Spence) win the 50-59 division, they did so in record fashion, and beat the other two younger 4-Person Female teams, one of which was the Hammer Nutrition-sponsored Team Ride Red, which posted a most respectable time of 7 days, 6 hours, 51 minutes.

In an email we just received from Raw Milk Cats team member Catharina Berge, she wrote, “Once again, Hammer Nutrition has shown that the best ultra cyclists know what products to fuel themselves with. We did more than we could have dreamed of. Not only did we break the strong 50+ record of 17.1 mph, but we also broke the overall record from 1996 (18.5 mph) going at an average speed of 19.22 mph. We finished in 6 days, 11 hours, 34 minutes. We impressed on everyone we saw, and everyone can see what Hammer Nutrition can do for four fast, smiling ladies. The supplementation and fueling strategy that you proposed, Steve, was great for us. On day three Jeanine was complaining about muscle ache, and she said that it was because she had forgotten her Recoverite coming in from a pull . . . this just shows how important the fuel was for us. On behalf of my team, I just want to thank you again for the wonderful sponsorship that we received from you, and I think that Hammer Nutrition can feel proud of their athletes.”

We expect to receive more photos and RAAM reports from Hammer athletes in the coming weeks, and will share them in the next issue of EN. For now, you can check out all of the results at www.raceacrossamerica.org. Congratulations to all of the finishers of RAAM, considered the “World’s Toughest Bicycle Race.” HN
Hello to all at Hammer Nutrition,

The BYRDS Junior Cycling Team (sponsored by Hammer Nutrition) returned late Monday after attending USA Cycling Junior Nationals in Augusta, GA. It was a great week with the team returning with nine top-10 placings, seven medals, and four national championship titles; both Kristo Jorgenson and Grace Alexander will represent the USA at Junior Worlds this coming September in Copenhagen. Congratulations to all the BYRDS for their hard work . . . and thank you Hammer Nutrition!

Douglas Tobin, BYRDS Junior Cycling Team

Be sure to read EN#77 for a full recap of all national races!
A t a Hammer Camp in Tucson, Arizona earlier this year, one of the attendees I was riding with asked me several fueling and supplement-related questions. Those I had no difficulty answering as that’s my specialty, so to speak, and my primary responsibility at Hammer Nutrition: helping athletes get their fueling and supplement programs dialed in. However, when the conversation turned toward training, race preparation, bike handling skills, and other similar topics, I didn’t feel really equipped to answer his questions with complete confidence. This particular rider specialized in road racing events, while I have always been an ultra marathon cyclist who only dabbled a tiny bit into road racing. Want my take on preparing for and competing in races such as the Furnace Creek 508, RAAM, or other ultra distance cycling competitions? No problem! With nearly two decades of experience under my belt, I can definitely help out and provide useful information. But when asked, “What’s the best way to warm up for my 40K time trial?” I admit that I am not an expert in that particular area.

So I thought to myself, “Who is the one person that I know who would be able to provide road racing and more mainstream cyclists (meaning not the ultra distance cyclist) with solid advice on a number of topics?” The answer came immediately: my good friend and longtime Hammer Nutrition athlete/ambassador, Mike Freeman. I’ve known Mike for over a decade; I’ve had the opportunity to ride with him many times (usually struggling to keep up, if at all possible), and have not only marveled at his cycling skills but also at the amount of knowledge he has. The saying, “He’s forgotten more than I’ll ever know” definitely comes to mind when talking about Mike and his cycling knowledge. In fact, Mike was the second person we interviewed for our “Athlete Spotlight” feature in Endurance News. (Ultra runner Amanda McIntosh was our first “spotlight” athlete.) That interview with Mike was a full decade ago in EN#31, back when Endurance News was a mere 12 pages in length, contained no pictures (just clip art), and was printed on blue paper.

Obviously, lots have changed with Hammer Nutrition since then but, aside from getting a little older, it really doesn’t seem like a whole lot has changed with Mike, at least when it comes to his love for riding and racing his bike, as well as being a real expert on so much of the “minutiae” of the sport: bike maintenance, training, race preparation, bike handling skills and technique, and more. So for this and hopefully many more issues of Endurance News, we’re excited to have Mike impart some of the knowledge he’s garnered over his many years in the sport. I caught up with Mike after (what else?) he had completed his training ride for the day.

(continued on the next page)
STEVE: Mike, it's hard to believe that a full decade has gone by since that first interview for Endurance News. At that time you were 58 years old, you’d been competing in the sport since 1986, and had achieved a number of stellar accomplishments while in the 55-59 age group, including being the 1999 Masters National Criterium Champion, the 1998 Northern California Road and Criterium Champion, and podium finishes in both the road race and criterium in the 1997 Masters National Championships. Here we are ten-or-so years later and it seems as though you're still training and racing as much as ever. What keeps you motivated?

MIKE: Cycling is a life sport for me. Maintaining cycling fitness, both physical and mental, has certainly helped me through some rough spots with my health. Meeting interesting and amazing athletes has definitely been a big plus in keeping me motivated.

STEVE: Obviously, a lot of changes occur over the course of a decade. What have been the biggest changes for you, in terms of your training and racing, in the last ten years?

MIKE: To be honest, I’m much more relaxed about my training these days. I recover more often and race a little less. I try to use the quality vs. quantity theory, but those who know me know I love to ride, so quantity overcomes quality at times. I use group rides to simulate racing. Trying to hang with the younger group certainly gives me enough interval and sprint training. Being 69 years young and racing mostly in the Masters 55+ category is certainly a challenge. It’s fun but a lot of work. It would be nice if more 60+ or 65+ categories were offered by the promoters. Hammer Nutrition sponsored a 65+ category at the Wente Classic RR this year and had 16 racers sign up and start the race.

STEVE: In the EN#31 interview, when I asked you what your “best moment in your career” was, you said it was winning the 1999 National Criterium in the 55-59 age group. Is that still your “best moment” or has something replaced that in the past decade?

MIKE: Yes, the National Championship is still the highlight of my racing experiences, although there are many other races that I still think about often. I think that there are a number of events that had given me the “best moment” experience and of course these always turn into a little race experience.

STEVE: In that same interview, the last question I asked you was, "If you were coaching a group of athletes interested in becoming better cyclists what advice would you give them?" Your response was "Training advice: Make a plan, be consistent and be smart. The old adage of “Being 10% undertrained is better than 2% overtrained" is very true. Recovery is the key to all good results. I also believe that older athletes need to maintain a minimum level of fitness during the off-season or pay a heavy price when starting training for the next season. You can't just stop activity in your sport like a younger person can and come back as quickly as you would like. This causes an overtraining issue for older athletes, as they tend to accelerate their training if they don’t see results as soon as they would like. In some instances I’ve seen people who never attain the same or better fitness by taking off too long."

I think that’s extremely sage and timeless advice; personally I wouldn’t change one word of it. After an additional ten years of racing experience, would you still agree with what you originally said? Would you amend it at all?

MIKE: I really wouldn’t change any of that advice. When I made that statement, most people were using Heart Rate (HR) to aid in the training. Now wattage is being used very successfully. The need for recovery has not changed and the watt meter is an excellent tool to accomplish that. That said, you still need to make a plan, be consistent, and smart. Pay attention to the messages your body sends you. I still stand by the 10% undertrained is better than 2% overtrained adage.

STEVE: Great advice Mike (and Jack!), thank you. Again Mike, we’re really excited to have you as a regular contributor!

MIKE: Thank you, Steve. I’m looking forward to working with you and being part of Endurance News!
Family traditions run deep in the O’Neal family. Call it DNA, breeding, or lifestyle; whatever the reason, this family is heart set on racing, and winning, on two wheels!

- continued on next page
ack in the 1960s Jim O’Neal was passionate about racing motorcycles. Working hard to provide for his family during the week, Jim would often set out on weekends to crush some of the top competitors in the country on his motorcycle. As off-road racing and motocross was developing as a sport in the U.S., O’Neal was there as one of its premiere competitors. Soon enough Jim’s passion for racing became a full-time career. As the sport of motocross grew, the demand for new protective equipment became greater than ever and thus, O’NEAL USA was born. O’NEAL USA has since established itself worldwide as a premiere manufacturer and distributor of fine motorcycle helmets, apparel, parts, and accessories.

Jim O’Neal is a competitor and is one to never leave well enough alone. As a result, Jim shared his passion of racing and winning on two wheels with his family, especially with his two sons, Keith and Jimmy O’Neal. Keith grew to become a respected racer in his own right, and earned his pro motocross racing license at the young age of just 16. Keith went on to earn several top ten 125 Supercross finishes and won two Central and South American Motocross Championships!

Younger son Jimmy O’Neal hit two wheels fast and furious and began racing motorcycles competitively at the age of just five years old! Jimmy earned several Golden State Series Championships as well as a championship title at the infamous Mammoth Mountain race event. He also won the Central and South American Motocross Championships.

As a young teenager, Jimmy raced downhill mountain bikes where he went on to win the NORBA Jr. National Championship. He also won several 1000 Baja motorcycle races, as well as a Baja Overall Championship.

After such racing success, you would think Jim O’Neal (Sr.) would hang up his boots and watch his boys race from the sidelines . . . think again! Having earned a reputation as president of a premier brand in the motorcycle world, Jim O’Neal the racer is also quickly becoming a reputation as president of a premier brand in the motorcycle world, Jim O’Neal the racer is also quickly becoming recognized as a living Baja racing legend. Jim O’Neal is literally riding his way into the history books by competing in the world’s most grueling motocross races in Baja, Mexico. These races cover

- continued on page 50

**A first, a second, and a man down!**

This year’s Tecate SCORE Baja 500 put Hammer Nutrition athletes to the test!

Tecate SCORE Baja 500 race again brought out the finest and fastest on two wheels to hold it wide open across the most rugged terrain along the coast of Mexico.

The treacherous 454.69-mile course was very similar to the last three years. It wound east to Ojos Negros, down to near San Felipe, back west to the Pacific Ocean below San Vicente, and back northeast through Santo Tomas on the way back to Ojos Negros, and then Ensenada.

This year’s Hammer Nutrition team riders once again included Jim O’Neal, who now holds 14 motorcycle Baja 500 class wins, more than any other in Baja racing history. Jim was competing on the 600X bike, the 500X bike, and the 300X bike, racing 3 different classes on teams of riders over 60, riders over 50, riders over 30, respectively. All 3 of these teams are the class Champions of 2010 and thus earned the right to race the championship bike numbers of 00X.

The 600X team consisting of Don Lewis, Sam Dempsey, Bob Gates, Jim Emrick, and Jim O’Neal was fortunate enough to win this event once again.

The 300X team comprised of Francisco Septien, Scott Myers, Jason Trubey, David Fry, and Jim O’Neal had the fastest time in its class, getting to the finish line ahead of all other competitors, running in the top five overall! Unfortunately, a minor mishap caused a race penalty against the team. As a result of the penalty, the team earned a 2nd place finish in the class.

The 500X team of Jim O’Neal, Doug Heil, Andy Kirker, and Lee Scheffers was holding onto a solid lead of over five minutes when tragedy struck. At the bottom of the massive summit, team member Lee Scheffers hit the earth hard after hitting a bowling ball-size rock. Lee’s injury was indeed serious and required emergency medical airlift to UC San Diego Hospital. Fortunately, he is going to recover from the horrific accident.

Nearly 1,500 miles of racing, three months of treacherous training, and some 6,000 miles of pre-run practice! These teams and all of their members proudly depend on Hammer Nutrition to continue racing hard and winning!

“Here’s a podium shot from the Kenda Cup West Round 5–Big Bear Shootout! This was the first race of the year at elevation. It had been over ten years since I had raced up at Big Bear Lake, and the lack of oxygen made the first hour of the race very difficult. I finally got my breathing under control for the last 45 minutes (and the last climb), and was able to make up some major ground on the downhill. I ended up finishing 3rd in the CAT 1 30-34 age group. My equipment, my gear, and of course my fuels were flawless.” - Jimmy O’Neal
up to 1,000 miles per event in which hundreds of riders race across the most treacherous terrain, sometimes resulting in serious injury and even death. Jim has raced in 87 Baja races and competed in multiple events each year since 1981. O’Neal has racked up more wins than any other racer in Baja history, taking home nine Baja 1000 wins, 13 Baja 500 wins, 13 Baja 250 wins, and 16 Baja overall championships!

We asked Jim how he is able to keep up with such a grueling race schedule now that he is in his mid-60s! Of course, we loved Jim’s reply: “I work hard and train nearly every day. I am fortunate enough to benefit from good nutrition, and there is no doubt I would never be able to race at this level without the regular use of Hammer Nutrition products and supplements!”

As Jim Sr. continues to rip through the desert in Mexico, Jimmy Jr. has followed in the footsteps of his father when it comes to epic desert racing and nutritional success. Jimmy Jr. has transferred his focus lately to two wheels, sans the motor. In keeping up the O’Neal legacy, he has utilized Hammer Nutrition products and trimmed himself down to a cycling race-ready, ripped, lean and mean 165 pounds. Jimmy has recently attained his personal trainer license and has been pedaling two wheels more than ever! Jimmy has enjoyed a rapid rise in cycling ranks winning several cyclocross events and moving into Cat 1 MTB racing, all in the past eight months! Jimmy is often featured in Mountain Bike Action magazine in photo shoots and product tests while still remaining a mainstay and a force to be reckoned with in the world of motorcycle racing.

Generation Next

Now on two wheels are Keith’s young sons, Braden and Preston, ages 12 and 9. These two boys are proudly carrying on the tradition of O’Neal living—riding, racing, and winning on two wheels! You can find these youngsters on any given weekend riding and racing bicycles with their uncle, or at the local moto track racing with grandpa. Having each won several events already, there is no doubt these two will proudly carry on the family legacy for decades to come!

The entire O’Neal family uses Hammer Nutrition fuels, supplements, and recovery products to enhance their racing performance and results. They have all been Hammer Nutrition users for several years and wouldn’t race any other way.

“There just isn’t any way possible to race and remain competitive at this level without the help of premium supplements and nutrition. Hammer Nutrition takes us there in providing us the tools to do what is most important, race and win!”

- Jim O’Neal Baja Racing Legend, Founder and President of O’NEAL Distributing Inc. and proud father and grandfather of a racing legacy.

Preston O’Neal at the Kenda Cup #2 in Bonelli Park. Photo: Arielle Baker
Team Hammer Nutrition/NW Race Karts

Team Hammer Nutrition/NW Race Karts was well represented at the second round of the Stars of PGP Karting series in May. Brandon Scheiber claimed the top podium spot and teammate Steve Perdue grabbed 3rd place in the stock moto light class.

“We’re keeping Hammer Nutrition on the top step! I use what I call the Hammer apple pie gel 10 minutes before the start, and Lemon-Lime HEED with Melon Fizz during the day . . . it does the job!” - Brandon Scheiber

ABOVE: John Wright, with the help of daughter Tia, preps for a day of racing at Pat’s Acres in Canby, Oregon.

RIGHT: Steve Perdue, Brandon Scheiber, and John Wright of Hammer Nutrition/NW Race Kart. Photo : Tia Wright
'Tandem'onium!

Thank you for all the years of support and your unequaled products! Here are some pictures from the Southern California/Nevada State Championship Time Trial on May 28 at Lake Los Angeles, CA. I am on the front of the tandem and Lynette Rock is my stoker. We won first place in the Women's 110+ tandem division!

-Julie Kaplan

Birds of a feather . . .

Like to use emptied (and thoroughly cleaned) HEED containers as feeders. They also like to flock together.

Photo sent in by Hammer Nutrition athlete, Brook Henderson
I had the incredible opportunity to participate in the CycloSportif Tour of Flanders and then a week later the Paris-Roubaix Challenge. Wow, talk about exciting . . . I had to keep pinching myself to make sure it was really happening.

I wish I could prattle on about what a smooth and stress-free adventure this was, but alas, not so. About 3 hours into the Tour of Flanders, a 260K ride with more cobbled sections of road than I care to count along with 18 helligen or bergs that ranged from 9% to 22% pitches (the majority of which were narrow roadways covered in pave or cobblestones), I began to feel something that has essentially never happened to me—an upset stomach. I have been using Hammer Nutrition products since 2000 and have had super results including winning, on three occasions, the 24 Hours of Adrenalin Age Group World Solo MTB Championships as well as a 17-day trans-con trip from San Diego, CA to Savannah, GA, averaging 170 miles a day, virtually “living” on Perpetuem while on the road.

Because of the depth of experience I had with Hammer products, I resolved to stick with “the plan” and continue to use my pre-determined strategy of Perpetuem, Hammer Gel, and HEED. I was clear in the realization that the best course of action was to stay true to what I knew worked and not to start “experimenting” with any other product or to radically adjust my intake criteria. Sure I was in a bad way, but I knew that to mess with a tried and true, successful regime was sure to spell disaster. Persevering mentally and patiently waiting for the “blahs” to pass was my best bet and the way I proceeded.

Happily, I can report that I “came good” in the end and finished up the last two hours back on my game with a huge smile on my face as I crossed the finish line in Ninove, Belgium. And there’s even more good news to share as I tell you that on the following weekend, during the Paris-Roubaix challenge, I was TOTALLY on my game and had a marvelous experience, feeling strong, fit and fast even over the 18 cobbled sections we had to endure—and I do mean endure.

Thanks again Hammer for all of your support and for providing us with a superb lineup of nutrition products. I am especially fond of your new Perpetuem Solids. 

Jeff Linder
Sticking with "the plan" in the Tour of Flanders

Live a little!
(longer)

Whether you spend your days jumping off bridges, winning races, or just relaxing at home, Mito Caps might just be your ticket to enjoying it all for a few more years!

• Potential increase in longevity
• Improve energy production
• Antioxidant support

ORDER TODAY!
1.800.336.1977 / www.hammernutrition.com
Philippines

Jonel Mendoza and I were looking for a new 15K-20K race route for runners in the northern part of the Philippines. We started our run at an elevation of 2,000 masl (6,500 feet), descended the first 2.6K to its low point, and ascended another 4K to Mount Kabuyao, the highest point at 2,227 masl (7,300 feet) . . . all powered by Hammer Gel and Endurolytes.

Hammerin’ on,
Rey Jimenez

Brazil

Ironman Brazil, held in Florianopolis, was May 25-30, and our booth this year was inside the EXPO. We believe that inside the EXPO gave us much better visibility and also protected us from rain! We gave out the greatest number of samples yet. Per the Ironman Brazil official website, there were 2,000 participants from 34 countries competing, up from 1,650 in 2010. HN
Hammer Nutrition Brazil is expanding its participation in endurance sports through increased sponsorship of some of the country’s top athletes. The newest addition to their all-star lineup is Manuel “Manu” Vilaseca whose endurance resume, in only seven years of competition, includes winner of two 12 Hour races (Brazil and Temecula, CA), and female champion of Supertravessia Transfootball (1,000K mountain bike race). Her main event in June, which was a strong start to her Hammer-sponsorship, was a 3rd place female overall at Xterra Brazil Manaus triathlon, part of the Xterra global series that takes athletes through the Amazon.

“I'm Brazilian, I'm 32 years old, and I consider myself an endurance athlete. I began practicing sports at 11, when I started horseback riding. This was my sport until the age of 25. Then I started to bike at the gym, and one day my friends invited me to go mountain biking. I didn't have a bike so I borrowed one. I didn't even know how to switch gears but I went anyway. And it was awesome! From then on, I became interested in racing. I started to do a little bit of everything: a 5K run, then a 10K run, a half marathon, and even a marathon. Then I wanted to do a triathlon but I didn't know how to swim very well. I began swimming one October, did a half Ironman that November, and did an Ironman in May of the following year. Then I started adventure racing the same way; I did a short race and then went to longer races. The ones I like the most are the expedition races, about 500K nonstop. The best thing about adventure races is that you get to travel the world, know places, meet people . . . all doing what you like! Some of the important races I've been to are: Desafio de Los Volcanes (Patagonia), Tierra Viva (Patagonia), Portugal XPD Race (Portugal), Supertravessia Transfootball (Portugal), Xterra World Championship (Maui), 7 Cerros Medellin (Colombia), and Wulong Mountain Quest (China).

It is with great joy that I announce my partnership with Hammer Nutrition, the best brand supplements in Brazil now! Hammer Gel can now be found bike shops and others in Rio de Janeiro, my hometown! With the help of my sponsors, this year I am dedicating myself a lot to the Xterra circuit. There are 11 races in Brazil and I also plan to go to the World Championship in Maui. I will also race adventure races, and one of the most important ones was in June in Costa Rica where I raced with a team from Argentina. I also plan to go to some multisport races (maybe one in Brasilia July 30). There is also a possibility to race the world championship adventure race in Tasmania. I have some friends in Big Bear (Hammer athletes Paul Romero and Karen Lundgren) and I visit them every year to train with them. Maybe I'll try to visit them if I go to Xterra Maui.

I'm a nature lover, and what I search for in sports is to learn respect for and to have a closer contact with the environment. My biggest pleasure is to travel the world, know people and cultures, doing what I most like. I think it is very important to learn, so I try to learn something different every day. I believe life is short, so I try to make the best out of it!”

HN
Switzerland

Simon Ruff–World Champion in Ultra Marathon Cycling

Simon Ruff, 28, took the title of World Champion in Ultra Marathon Cycling in Austria Graz on June 4, 2011.

The 1,010 kilometers and 15,000 meter elevation difference were conquered through hard training, determination, an excellent crew, and Perpetuem, in 38 hours and 45 minutes.

Here are some interesting Q&A’s with a local paper from Simon’s city of Wallis, Switzerland, as well as a few questions asked by our Swiss distributor, Kerri Lanfranconi.

Walliser Bote: Simon, how did you prepare yourself for this race?

Simon: Such extreme distances cannot be mastered naturally just like that. I’ve been cycling since I was 8 years old, and ultra-cycling for the last three years. In November I trained in a fitness center and in January in South Africa in a cycling camp for one week. In February, thanks to good weather, I could train outdoors on the streets of Wallis; however, I never left the fitness center out of my program.

Walliser Bote: When you look back on your past races, which ones were the most challenging physically?

Simon: Ultra cycling races are always hard; the ups and downs during the race belong surely to the most difficult challenges! Here mental strength is required. 24 hour races like 1010 in Austria Griesskrichen with 36 grad temperature are very hard. Also the Tortour (Swiss RAAM qualification race) which is held in August, belongs to the toughest races in Europe.

Walliser Bote: An athlete always has goals. What are your plans Simon?

Simon: On August 11-13 I will participate in the Tortour, a nonstop race around Switzerland with 1,001K and 16,000 meter elevation distance. If I continue with ultra racing I cannot say, but what is clear is the Race Across America remains an unfulfilled dream—who knows!

Hammer Nutrition: Simon, you switched to Hammer Nutrition this spring. Have you felt a difference in your performance?

Simon: Through Hammer products, I raced my first long distance ultra race without stomach problems! For me as an ultra cyclist holding down and digesting the product is extremely important.

Hammer Nutrition: How does Perpetuem perform in hard core race situations like the Glockner Man?

Simon: For me Perpetuem is my most important meal during a race. During the whole race I did not have hunger pains. Perpetuem delivers an even energy flow–results without swings. For example: no sugar overloads.

Hammer Nutrition: Digestion remains a theme with endurance athletes. How well were you able to digest Perpetuem under excruciating race pressure?

Simon: With Hammer I have found an optimal product that agrees with my stomach.

Hammer Nutrition: Can you recommend Hammer Nutrition products?

Simon: Based on my experience up to now with Perpetuem and other Hammer products, it is a delight to recommend Hammer Nutrition! HN

"Hammer Gel rocks and keeps me going." - Chad J.
Adrian Brennwald—World Champion Double Ironman triathlete

Hammer Nutrition-sponsored, 36-year-old Züricher triathlete, Adrian Brennwald, defended his World Championship title in Neulengbach, Austria in the Double Ironman and set a new world record of 19 hours, 50 minutes, 12 seconds.

Get to know Adrian in this interview that he did for the Tages Anzeiger paper with reporter, Kai Müller. Our Swiss distributor, Kerri Lanfranconi, also asked him a few fueling-specific questions.

Tages: You successfully defended your world champion title for 7.6K swimming, 360K cycling, 84.4K running, and on top of that, set a world record; how were you prepared for your race program?

Adrian: The short races I did prepared me and gave me room for the longer training distances required, as I know that I need a very short recovery. In this regard it helped me mentally that I improved my speed in the shorter distances. I knew that after a long distance with high speed on the bike, I could still run with a fast tempo.

Tages: How many hours do you train in the week?

Adrian: The 3rd and 4th week before the race, about 70 hours a week. The last weeks before the race, 8, sometimes 4.

Tages: At which point in the race came the confidence that you were in top form?

Adrian: Already during the swim as it went so well. On the bike I felt myself being pushed and I went faster. I thought I will just try it and see. After 5 hours I had a rate of 36 km an hour, and I hoped it would go well in the night; with the darkness one becomes automatically slower.

Tages: What does breaking the record mean to you?

Adrian: It is very special, in fact spectacular! I had a time under 20 hours, less than 10 hours for an Ironman times 3, and I thought this was not possible!

Tages: Until now you have competed in six double Ironmans and won all of them, and to this you are the actual triple and double Ironman world champion. Why are you the world’s best ultra triathlete?

Adrian: I can prepare myself well, focus on this, and blend everything else out!

Tages: Do you have any other extreme ultra races planned?

Adrian: In September I will compete in a 330K nonstop alpine run with 24,000 meter elevation difference. This will be a completely new challenge.

I’ve also wanted to do the Ultra Alpine race in Italy for years now, so in 2012 I will do that and then I will really take a break.

Hammer Nutrition: Adrian, you competed in the Double Ironman with Perpetuem. It was the first time you used Perpetuem. Did you feel a difference?

Adrian: Yes, thanks to Perpetuem I did not have to stress my stomach with eating solid food, and I was able to avoid stomach problems. I fueled 4-5 scoops of Perpetuem in 5 deciliter bottles.

Hammer Nutrition: Can you recommend Hammer Nutrition to other endurance athletes?

Adrian: Absolutely! Yes, but they should always train with it and test the portions and get it right.

Hammer Nutrition: What is your favorite gel?

Adrian: Espresso and Apple-Cinnamon. I mix it 1:1 with water.

Hammer Nutrition: How often do you take one in a race?

Adrian: During the run, every 30 minutes. HN
South Africa

Over the course of the last three years, Ryan Sandes has come from relative obscurity to South African hero. This trajectory of success, which developed so quickly for a lot of reasons, was solidified when Ryan not only won but dominated each of the 4Desert Challenge races, placing second only once. He showed up at the first race, the Gobi Desert Challenge, as an unknown, and left as the makings of a legend.

Since that first race in 2008, this Hammer Nutrition-sponsored athlete participated in the remaining three desert races and ultimately secured his record in a fifth 4Desert race in Antarctica. Ryan was named 4 Deserts Champion for being the ONLY person to ever win all four desert races and the only person ever to win every single stage in each of the desert races.

He has since expanded his interest by testing his mettle against some of the best ultra runners in the world. Ryan has participated in Trans Alps run and most recently The North Face 100K in Australia where he placed a very respectable 3rd against the likes of Kilian Jornet and Francois D’Haene.

Now Ryan has his sights set on tackling one of the most well-known ultra runs in the world. On August 20 Ryan will toe the start line at Leadville 100, where he’ll be taking on the current legends of the sport.

The Sandman, Ryan Sandes, has done it again. In June Ryan won the 22K Old Fisherman’s Trail Challenge from Hout Bay to Fish Hoek Beach over the mountains. Ryan not only won in a time of 1hr, 39min, 42seconds, but also beat the previous records set by Nicolas Rupanga (1hr, 44min, 20seconds) in 2009. Hammer Nutrition South Africa was proud to sponsor this scenic, challenging race.

“In being only 22km, I have always considered the Fisherman’s Trail Challenge to be too short for me, but it must be one of the most beautiful trail races in the country. So this year I decided to give it abash! I felt really comfortable throughout the race and loved every second of the technical route, which suited my style of running. I was super happy to get the win today and it will be a great confidence booster for me before I head to the Zugspitz Ultra 101K in Germany (two weeks time) and the Leadville 100-miler in the States (August). Thanks to everyone for your support and well done to all the other runners out there today - you guys rocked!”

From Hammer Nutrition, we wish you luck Ryan! HN

Record-setting Ryan at the Old Fisherman’s Trail Challenge. Photo: courtesy of Kelly Burke
Chris Ferrell flies Hammer!

In April, I was proud to fly the Hammer Nutrition colors at Canada’s spring cycling classic, the Paris to Ancaster bike race, and wanted tell you how great it was to be fueled by Hammer Nutrition. I was using Montana Huckleberry Gel and Lemon-Lime HEED. I felt great the entire race; no cramping or feeling depleted. It was an epic ride with snow, rain, 30 mph winds, and all the mud you can imagine. The only problem I had was dropping one of my Hammer Nutrition bottles at the bottom of the finishing hill. After the race I was too cold to ride back and retrieve it, so hopefully someone will get a souvenir! HN

See you at the (Canadian) races!

If you have any Canadian events on your race calendar for 2011, chances are that you’ll see Hammer Nutrition Canada there. The event staff has been busy and on the road almost every weekend in July, and August looks just as fun, with more sponsored events added to the summer schedule weekly through September. The Hammer Big Rig and U.S. event staffers made a few stops north of the border this summer as well, including the Furious 3 in Fernie, BC and Ironman Canada in Penticton, BC.

Recapping the summer thus far, we kicked it off with Legend Camp Penticton in May. This training camp has become a successful early season launching point for many triathletes. We also had a positive, successful expo at the Oliver Half Iron triathlon in Oliver, BC, followed by the Chinook Half/Olympic Ironman triathlon in Calgary in June. When temperatures heat up in the Southeastern and Southwestern United States, head north! Mark your 2012 calendars for great Hammer-sponsored Canadian events like BC Bike Race (7-day singletrack mountain bike journey), Osoyoos Half Iron in Osoyoos, BC, and Gran Fondo Penticton, all typically in July.

Happy racing in Canada!
Darren Thompson & Greg Bradley, Hammer Nutrition Canada

IronLegs 50-miler Ultra Run
August 13
Kananaskis Country, Alberta
www.ironlegs.ca

Apple Olympic Tri
August 19-21
Kelowna, BC
www.appletriathlon.com

Ironman Canada
August 24-28
Penticton, BC
www.ironman.ca

Element Women’s Tri
September 4
Leduc, Alberta

www.ironman.ca

A grand adventure
Record-breaking Arizona perimeter ride

BY JESSICA PRAH
Paramount Public Relations

Phoenix, Arizona born and raised Mark Mandel (54) completed the Perimeter Bicycle Association of America (Perimeter Bicycling) ride around the perimeter of Arizona on May 8, 2011. After 8 days, 11 hours, and 3 minutes, Mark bested the previously established world record cycling record by almost 24 hours, set in April 1998 by the then 40-year-old Jim Kemper of Tucson, Arizona. Jim held the record of 9 days, 10 hours, and 43 minutes.

The perimeter ride took Mark along the entire scenic state border and into Nevada, Utah, and New Mexico when there wasn’t sufficient perimeter state road to ride. Like Jim, Mark had a support crew with him the entire 1,753 miles and averaged 195 miles per day.

“This ride has been on my bucket list for some time”, said Mark. “I’m excited that I was finally able to make it happen.” Mark was riding to raise funds for The El Grupo Cycling organization, a non-profit youth cycling team based in Tucson.

The training for the ride consisted of 12 months of solo, group, and cycle camp riding, totaling approximately 14,000 miles. The later portion of the training had Mark riding multiple 200-mile training days with his wife Laura as his lone support crew. Fueling for the ride included Perpetuem, HEED, and Recoverite. “A 20-ounce Strawberry Recoverite drink was readied as soon as I dismounted for the day. I can’t tell you how refreshing it tasted and within an hour or so, I was feeling much better. Of course, a shower helped as well,” Mark said.

FROM OUR ATHLETES

FINISHING 2ND IN SPAIN

Just want to say THANKS heaps for my athlete sponsorship this year. My husband Brian and I are loving our Hammer Nutrition. Fueled by Hammer, Brian won the Growler endurance mtn bike race (64 miles) in Gunnison, Colorado, smashing the old record and winning the race by 20 minutes. For me it was a tougher day. My Perpetuem bottle got nagged at the Growler feed station in the first lap, and I cramped during the 2nd, so from now on there will be Perpetuem Solids in my pocket! The Growler was honestly really harder than I had anticipated, so I am super proud of my race: 2nd place in 6 hours, 17 minutes.

This spring my teammate Kathy and I raced the Andalucía bike race in Spain. We paid careful attention to our race nutrition and recovery, and both feel it played dividends in overcoming our 6-second deficit to 2nd on the last day, and bringing us home in 2nd overall! I am a fan of Hammer Nutrition products; I have used them for years.

HN

ABOVE and RIGHT: Kathy Sherwin and Jenny Smith place 2nd overall at the Andalucía stage race in Southern Spain. Photos: courtesy of Andalucía Bike Race
EARTH: Conquered

NEXT UP: The Moon

Thoroughly tested and proven in the world's toughest endurance events, Perpetuem is the world's finest endurance fuel specifically formulated for multi-hour to multi-day events. No matter how long or extreme (or in which galaxy) your exercise regimen or races may be, Perpetuem is always up to the task.

- Consistent, stable energy
- Easy to digest
- Minimize lean muscle tissue cannibalization

SPECIAL OFFER!
Purchase a 32-serving container of Perpetuem or a 90-count container of Perpetuem Solids and receive a FREE Hammer towel.

Ad Code EN76P. Expires 9/30/11

ORDER TODAY!
1.800.336.1977
www.hammernutrition.com
FROM OUR JUNIOR ATHLETES

My name is Andrea Forsberg; I am a 14-year-old diabetic athlete and I live in Buda, Texas. I began competitive swimming last year with the Hays Swim Club during their summer league. During our summer break it was something to do for exercise, but I enjoyed it so much that I decided to join the year-round team last September. I began using Hammer Nutrition products after my grandfather (David Forsberg) explained to me how they were the healthier choice. My grandfather is employed at a bicycle shop and has the pleasure of helping many athletes and just normal day-to-day cyclists and runners achieve their full potential by using Hammer products and making good nutritional choices in their daily diets. When comparing other sport/energy products on the market, Hammer wins hands down, because there are no simple sugars and they contain more natural ingredients, complex carbohydrates, and necessary proteins and minerals. Hammer Nutrition has now become a part of my daily nutrition/exercise plan and has helped me to stabilize my blood glucose as well as heighten my energy level; overall it has helped me perform better during practice and at swim meets.

I was diagnosed with Type 1 (insulin-dependent) diabetes almost ten years ago when I was only four. My parents have been able to help me manage my blood glucose (BG) levels pretty well since then, but as I am now going through many physical changes since becoming a teenager, the challenge has become much greater. As you know, a good exercise regimen is an important factor for anyone’s good health, but for diabetics it is also one of the best natural ways to manage BG levels and to prevent long-term complications that can stem from bad BG control. I have always enjoyed playing a variety of sports, but after trying out swimming during the summer, I found the sport I love...best of all it is going to help me have a better quality of life in my future. Of course every athlete needs nutritional supplementation, and when I’m going for 2 ½+ hours of training at a time, there is a definite need for some kind of quality fueling.

I’m writing this to express how grateful I am to have found a product that works for me. Hammer Nutrition has been key in helping me to level out that blood glucose rollercoaster ride and keep it stabilized, thus feeling more energized for each practice and competition I encounter.

With the help of Hammer Nutrition’s products I made my way all the way up to the A championship level meets in just my first year of swimming. With the aid of HEED, Perpetuem, Recoverite, Hammer Gel, Whey, Hammer Bars, and other Hammer Nutrition supplements, I can be sure that I will be at peak performance anytime, anywhere! HN
These socks are the Perpetuem of foot performance. There’s no simpler way to put it. When we were introduced to Swiftwick’s Performance line of compression socks, we were anxious to proudly put the Hammer Nutrition logo on them, expressing our endorsement of this ultra-smart, ultra-comfortable technology. We’ve been watching the compression trend for a couple of years now and have chosen this brand for its superior quality and value, as well as its “Made in the USA” origin.

Swiftwick is different than any other sock out there. Some of the key elements that set Swiftwick apart and make them the “BEST sock you will ever wear . . . GUARANTEED” are, as described by our friends at Swiftwick:

**Needle Count:** Swiftwick socks are made at 200 Needle construction, while competitors typically range from 108-144 needles. This means that Swiftwick socks will outlast the competition while having a soft, comfortable finish. Moreover, this high thread count results in a tighter knit, which makes the sock fit more snug while keeping debris and foreign materials out.

**Sock Fabrics:** Swiftwick socks are the only socks that contain the synthetic fiber olefin. Olefin is the only Nobel Prize-winning synthetic fiber, retaining just .01% of its weight in water. This property allows Swiftwick socks to rapidly wick moisture and offer super fast drying without the use of chemicals. In addition, the antimicrobial fibers in the sock construction resist deterioration from chemicals and perspiration.

**Made in the USA:** Every pair of Swiftwick socks are manufactured here in the USA, with the company headquartered and socks constructed in Tennessee. This also allows Swiftwick to heavily scrutinize their finished goods to ensure greater quality control.

**Compression:** Every single pair of Swiftwick socks features a full compression foot bed and cuff created by multiple knit patterns, 200-needle count, and fine grade materials. This culminates into the most formfitting sock on the market that prevents unnecessary movement, increases circulation, and reduces leg fatigue, which speeds recovery.

**Sustainable Approach:**
Both locally and nationally, Swiftwick supports eco-friendly programs. From the materials used to minimal packaging, Swiftwick strives to be carbon neutral by creating products that are environmentally friendly. The olefin leaves very little waste; therefore, it has less environmental impact than most polymers and is easier to recycle.

**The Swiftwick Guarantee:**
Lastly, the socks are guaranteed. As seen on every package, Swiftwick guarantees that their socks will be the best that you have ever worn. Whether a defect is present or you’re simply just not satisfied, they’ll replace the pair of socks.

Of all the modern technology, gear, and gadgets available to endurance athletes, there are admittedly plenty of gimmicks out there. These socks are not one of them. Backed by Swiftwick’s guarantee, Performance compression socks are an extremely worthy addition to your training and racing strategy this year!

---

**BY VANESSA GAILEY**
Thanks to Hammer Nutrition, my 2010 Seattle Cyclocross season went from "crashing and burning" to "placing and winning"!

This was my first year racing cyclocross. I had no idea what I was getting into, but soon figured out how intense and demanding cyclocross is on the human body! I have run marathons and done Olympic-distance triathlons, but in my opinion, cyclocross is much more physically demanding on the body.

I did not use any fuel during or after my first cyclocross race of the season, and I definitely paid the price. My body was sore for several days, and I could hardly get back on my bike for another race the following weekend.

Thanks to my neighbor Jon (Ironman & ultra runner), I tried HEED during my training workouts and before races, and I used Recoverite immediately after my cyclocross races and training sessions. These two products made a HUGE difference in both my training and recovery. I continued to race cyclocross for the rest of the season, and went on to WIN the Cat 4 Women Division in the Seattle Cyclocross Series!

Thanks to Hammer Nutrition for helping me be a champion in my first year of cyclocross!

Andrea Weymiller
Buckley, WA
Where does all that energy **really** come from?
(Okay, not really . . . but you get the point!)

With Hammer Gel you’ll give your body the clean, healthy fuel it craves.

- Rock-solid energy
- Made with real fruit and wholesome ingredients
- Versatile and economical

**SPECIAL OFFER!**
Purchase a jug of Hammer Gel and receive a FREE 0.3 oz. tube of Pelle Eccellente. Ad code EN76G. Offer expires 9/30/11

**ORDER TODAY!** 1.800.336.1977 / www.hammernutrition.com
Just because Hammer Nutrition triathletes Devon Troop and Kathie Krieger are excelling at their sports doesn’t mean they are leaving their fellow female athletes behind. To the contrary, they are sharing their time, motivation, and training know-how with women in the Baltimore, Maryland area through their newly formed support group, A Little Chicked – A Lot of Tri*Umph.

We all know how difficult it can be to fit work, family, nutrition, training, and adequate sleep into a 24-hour day. That’s why, when the staff at Hammer Nutrition headquarters heard about A Little Chicked, we were intrigued to find out what led Devon and Kathie, two competitive triathletes with a full race schedule for 2011, to donate their time to aspiring female athletes of all ability levels.

The tough chicks behind A Little Chicked

With a little more than two years of triathlon under her belt, Devon Troop has completed one Full Ironman, eight Half Ironmans, two 140.4 Aqua Velos, ten sprint triathlons, and five Olympic distance triathlons, plus an impressive list of many other assorted endurance events. She describes herself as someone who showed up at the pool for her first day of swim training “in a bikini, with no goggles and no swim cap. I could hardly put my face in the water and blow bubbles.”

Kathie Krieger ran her first half marathon with her sister, who was celebrating her recent victory over breast cancer. From that event, Kathie was hooked on endurance training and racing. Even after suffering the devastating setback of being hit by a car on a training run, she was not deterred. In the three years since, she has completed three sprint triathlons, an Olympic distance tri, the New York Marathon, and three half marathons, and will move up to the half iron distance this year.

Tri*umphing by example

Where did you get the idea to start A Little Chicked?

Devon: I feel that there is a real need in our area for a group that is friendlier for the beginner. There are many clubs for competitive athletes, but we just wanted a place where everyone is welcome and will get support no matter what their goals. A Little Chicked is not about meeting to train; it’s about making connections with other women like us for support and mentorship. We provide info on how to get started. Can’t swim, but want to try a triathlon? Don’t own a bike? Sneakers hurt when you walk? There are many resources to help, and we show them where to find them. The bottom line is that Kathie and I are excited to welcome all ability levels.

What is your personal motivation for organizing and participating in this group?

Kathie: Devon and I have both found our passion and now we want to help others find theirs. Exercise has changed my life; I have been able to overcome so much through a healthy lifestyle. When things get crazy for me, I no longer stress eat or drink. Instead, I say, “Let me go for a run and think about this.” I have been able to figure out the right balance of the right nutrition and the right exercise. It has not happened overnight and has taken a lot of commitment, but the day I knew I had reached my personal goal was when my son showed one of his friends a photo of me at a triathlon and said, “That’s my mom!” I want to help others know that feeling. Everyone is entitled to that!

What activities/functions do you plan on doing as a group?

Kathie: We plan to have a speaker or be at a different location for every monthly meeting. For example, our June meeting was hosted by Charm City Run, a great running store where they talked about the importance of proper shoe fitting and how to choose the right sports bra (every woman’s nightmare!). And of course, Charm City is well-stocked with Hammer Nutrition products.

We made little shooters of Citrus Recoverite and Hammer Whey at our May meeting to hand out. (We are huge believers in Hammer Nutrition products. I truly believe I would never be doing what I am without them, and it’s our pleasure to spread the Hammer Nutrition word.) Nutrition is such a key part of the journey, and we are stressing that. We both completely understand...
How do you Hammer?  

Early Morning Sundae  
Levi Hoch - Hammer Nutrition staffer  

Pour one Espresso Gel over a banana and enjoy!  

Other events will include group bike rides, runs/walks, and some open water swim practicing. Devon is getting us A Little Chicked logo tent so we can be at as many events as possible to support our members. We may not race all of them, but we will try to go cheer people on wherever we can. I am so pumped up by crowds when I race, and I want to be there for people, especially first-timers. We are also picking some 5K and sprint triathlons to do as a group for those just starting out. There are several great races such as Baltimore Women’s Classic, Race for the Cure, and Iron Girl (tri). All-female races are a great way to start you off because they are so empowering. Once you cross that finish line, you are hooked!

Are you concerned that you'll create competitors for your sport/age group in your area? You are sharing your secrets!  

Devon: I really hope we do. We are not so much about the competition, even though that is really healthy because it pushes you to better yourself and continue to grow in the sport, but more just to have great training partners. People are drawn to other people who are happy and reaching their goals and that’s what we want people to get from our group.

For more information on A Little Chicked, they have a Facebook page for those who can’t attend meetings, which will provide as many resources as possible. HN

Pina Colada Post-Workout Smoothie  
Karen Stoychoff Inman - Client  

1/2 cup coconut milk  
1/4 cup fresh strawberries, sliced  
1/2 medium banana  
1/4 cup pineapple in unsweetened pineapple juice  
1 level scoop Vanilla Hammer Whey  
3/4 cup club soda  

Blend all ingredients and enjoy!
Back in the saddle (and on the podium) again!

I finished 3rd out of 20 in my age group at Calvin’s Challenge 12 Hour 2011. I was 23rd out of 132 men overall. I am in my third year of training after several years away from the bicycle, and in that short time I already find myself on the podium! This is further proof that Hammer Nutrition fueling products and supplements work. The effects are noticeable and measurable. Thank you Hammer Nutrition for your excellent products. Another thank you for all of the support; the information and forums are a treasure trove. Simply put, Hammer Nutrition products work!

- Scott Davis

How do you Hammer?

A secret weapon

I raced the 12-hour option at the Lewis & Clark Ultra (a Hammer Nutrition-sponsored event), on Saturday, May 28, while keeping well-fueled with Hammer Nutrition products along the way. At about mile 85, I hit a very defined expansion joint going onto a bridge and ripped a hole in my tire. I didn’t have anything to boot the tire with, so when I got my second flat tire, I remembered I had saved my Hammer Bar wrapper (to dispose of properly!) and put that between tire and tube. Not only did that get me the 40+ miles back to my car, it lasted all the way to the end of the race, which I won with a total of 204 miles. I’ve sent a photo of the offending tire, and just thought I should thank Hammer Nutrition for helping me win the race in more ways than one :-)!

Mick Walsh, Seattle, WA

A well-deserved treat

I found a new recipe for Hammer Gel: the High Country Snow Cone. It’s simple and a great treat after a long hike or trail run. Take an ambitious size ball of clean, high country snow and add a single serving of your favorite Hammer Gel. Serve and enjoy! It combines hydration and nutrition, and puts it into a rewarding treat for getting up to where there’s still snow in July.

Happy Trails, Zachary Adams

How do you Hammer? Send your stories/ideas/recipes to Vanessa at vgailey@hammernutrition.com
**Kibbeh**

2 lb finely ground beef or lamb, lean, divided
1/2 lb bulgur cracked wheat (medium or #2), or cooked quinoa
1 1/2 teaspoons salt
1 1/2 teaspoons pepper
1 teaspoon allspice
1 teaspoon cumin seeds
2 medium onions, finely chopped
1/2 cup toasted pine nuts (optional)
1/2 cup raisins (I like golden, presoaked in water one hour.)
2 tablespoons olive oil

Combine ingredients in a large bowl and mix thoroughly. Form into a meatloaf shape. Place in a 13” x 9” Pyrex baking pan and press flat, leaving some space between the loaf and the edge of the pan. Bake at 375°F until done. Serves 6-8 people.

**Baba Ganoosh**

1 large eggplant
1/4 cup tahini (plus more as needed)
3 cloves garlic, minced
1/4 cup fresh squeezed lemon juice (plus more as needed)
1 pinch ground cumin
Salt to taste
1 tablespoon virgin olive oil
1 tablespoon chopped flat leaf parsley
1/4 cup Kalamata black olives

Roast eggplant over stove flame or on grill until skin is slightly charred on all sides. Wrap in aluminum foil and bake at 350°F degrees until soft. Blend eggplant and remaining ingredients in food processor until smooth and creamy. I love this dish served with Kibbeh.
FROM OUR ATHLETES

Team Hammer Nutrition takes Wente by storm

On April 30, Team Hammer Nutrition raced at the Wente Vineyards Classic RR. This race is known for its multiple climbs and strong winds. The unique thing about this year’s race was that Hammer Nutrition sponsored a 65+ category. We just wanted to prove that there are racers 65 and over that want to race in their own category in local races. Sixteen racers started the race, three laps and four times up the climb to the finish. Team Hammer Nutrition showed very well, taking 2nd thru 5th place. Thanks to Valley Spokes Men Racing/Ken Hernandez and Hammer Nutrition for stepping out of the box and letting this category have their age group race.

1st John Elgart Alto Velo Racing
2nd Jim Fox Hammer Nutrition
3rd Mike Freeman Hammer Nutrition
4th Jack Kelso Hammer Nutrition
5th Richard Shields Hammer Nutrition
6th Mickey Bloom Unattached


I recently completed my first ultra marathon swim, the 24 Mile Tampa Bay Marathon Swim, and I just wanted to thank you for your assistance on my fueling formulas, and to let you know we were successful. I was the 3rd overall woman at 11 hours, 51 min. I felt good energy and mental alertness, and maintained a consistent stroke count for the entire swim. My arms were like lead upon completion on Saturday, and I focused next on Recoverite followed by Endurance Amino and Greek yogurt. By Monday morning I was fine, except for the massive jellyfish and sea lice jobs on my body—jellyfish and sea lice are not fun at all! I was pleased with my overall mental focus and energy level throughout the race, and my body’s ability to recover quickly, which tells me my commitment to training and nutrition was rewarded. In addition to eating healthier, I’ve maintained a Hammer Nutrition plan which includes, but isn’t limited to, HEED, Hammer Gel, Recoverite, Xobaline, Endurolytes, and Endurance Amino.

Thank you so much for your assistance! I’m a Hammer Nutrition girl all of the way (along with a bit of rice protein).

- Bridgette Hobart Janeczko

Photos : Joanie Kelso
We’ve had an increasing number of requests from our clients, sponsored athletes, sponsored teams and clubs, and Hammer Nutrition retailers, all of whom want us to make our oh-so-cool-looking, durable, 10’x10’ tent canopies available. Well, you asked and we listened!

We now offer two options, both of which we’ll drop-ship directly to your door.

Each 10’x10’ tent is screen printed on 600 denier polyester and includes a powder-coated steel frame, four stakes and ropes, and carry bag. Assembly is quick and simple, with patented pull pins for easy setup and height adjustment.

Styling underneath a Hammer Nutrition canopy . . . does it get any cooler than that? **HN**

**Tent 1: Racing Team**

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

**Tent 2: 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 four weeks for production and shipping.

$795.00 + shipping

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

---

**Professional product advice is just a phone call away!**

Not sure which products are right for you? Have a few questions that you’d like answered? Call today for your free consultation with a Hammer Nutrition Client Service Advisor.

**Call today! 1.800.336.1977**

Monday-Friday, 9-5 MST
Coast to Coast

Thought you might want to know what I am doing with my Hammer Nutrition supplements! I just rode from San Diego, Cali., to St. Simons Island, Ga., to raise money and awareness for the Wounded Warrior Project. Our military men and women have given so much, and I believe it is my duty to try to give something back. I followed the Southern Tier, a bicycle route that goes through southern Arizona, the southwest corner of New Mexico, across Texas and southern Louisiana, though the coastal counties of Mississippi and Alabama and across the Florida Panhandle. The route usually ends in St. Augustine, but I veered left in the Panhandle for Georgia to go through my hometown of Waycross.

I love Hammer Nutrition products; they are a must-have for me. I love the low sugar “good for you” aspect of the products. I used HEED every day with Hammer Gel on occasion while on the ride plus Recoverite after to sustain me, and they definitely did the job. I gave myself 28 days and finished in 23 . . . so I was definitely happy with the results, 2,725 miles. Next up, I am doing Ironman Florida in November and I’m already thinking about another coast to coast ride! HN

*For more information or to donate to the Wounded Warrior Project, visit Jason Roger’s website: www.coast2coastwarriorride.com.

JASON ROGERS

FROM OUR ATHLETES
Jane and Sam Tullis

Our two kids raced in their brand-new Hammer Nutrition youth tri outfits at IronKids Orlando (May 14, 2011) and produced what I believe is the first national-stage win in one.

Jane Tullis finished 5th in the 10-year-old girls division. With a top 5 finish, she qualified for the invitation-only IronKids National Championship in September. This is her third year in a row qualifying for the IronKids championship.

Sam Tullis finished 1st in the 8-year-old boys division. In that race, he defeated the defending 2010 IronKids national champion.

Millie Tanner

The Individual Time Trial portion of this year’s USA Cycling 2011 Junior, U23 Elite Road Nationals took place on June 23 in Augusta, GA. Competing in the Women’s Junior 13-14 division, longtime Hammer Nutrition product user Amelia (Millie) Tanner finished in 2nd place in a field of 25 riders. Her time of 15:16.8 was a whopping 11.7 seconds faster than the bronze medalist, but a mere 1.3 seconds from gold. Congratulations, Millie!

“A big part to our success is picking the proper fueling for the race. Since Milliegoat is a junior and her distances are not that long, we choose HEED. Milliegoat has tried all the different flavors, and her favorite is Strawberry—perfect for her 30-minute to 1-hour races.”
-Jet Tanner, father and coach

The ideal beverage for youth athletics

With HEED, your young athlete can replenish with high-quality complex carbohydrates (no refined sugar), sweetened with the safe, healthy sweeteners xylitol and stevia, and without the stimulants or questionable ingredients in other drinks.

ORDER TODAY!
1.800.336.1977
www.hammernutrition.com

<table>
<thead>
<tr>
<th>SKU</th>
<th>MSRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>H 1</td>
<td>$1.80</td>
</tr>
<tr>
<td>H 3</td>
<td>$24.85</td>
</tr>
<tr>
<td>H 20</td>
<td>$46.95</td>
</tr>
</tbody>
</table>

= flavors: Lemon-Lime (L), Mandarin Orange (O), Melon (M), Strawberry (S), Unflavored (P)

Unflavored available in 20 servings only
From our athletes
Catching up with the stars of tomorrow

Annaka and Tobin Reed (left)
Here is a picture of Annaka and Tobin with their Hammer Nutrition outfits on. They had a ball at the Sierra Kids Triathlon and did well, 3rd for Tobin and 5th for Annaka. Look out in a couple of years. We look forward to many years of good racing with the kids and Hammer Nutrition.

- Faron and Heleen Reed

Cameron Castro (right)
Here is a picture of my son Cameron and myself, Sal. We did the Redondo Beach Triathlon. I took 12th overall and 2nd in my age group, and my son did the Mini Sprint and took 1st in his age group and 2nd overall. After the race we were walking around and there were vendors trying to hand my son some drinks. The first thing he asked was “What’s in it?” They would reply with some of the ingredients and one would be caffeine. My son said, “No thank you, I drink HEED.” It brought a smile to my face. Thanks for all of the support, and my son can’t wait to be sponsored by Hammer Nutrition.

- Sal Castro

ACA Junior Road Camp
Thank you for providing the water bottles and Hammer Nutrition products, and for helping to make ACA Junior Road Camp 2011 a huge success. The participants ranged in age from eight to 18 years old, and were such a great group of kids. Everyone kept commenting that the swag went over so well that the kids will expect it again next year!

BELOW: May’s spring snow didn’t deter junior cyclists from enjoying the 2011 ACA Junior Road Camp near Empire, Colo.

“...amazed at the quality of people at Hammer Nutrition.” - Jenny P.
AAA Youth Tri Team

The AAA Tri Youth Team is going great. We are currently the most successful youth team in the 2011 Florida State Championship, with only two more races to go. The kids love being supported by Hammer Nutrition and are always talking about, and using, your products. Thank you for your ongoing support of this great bunch of kids!

- John Hovius

Kameron Coffey

 Probably not eligible for Hammerbuck$, but I thought you guys (and gals) would appreciate a photo. Kameron is eight years old and took 1st place for girls and 2nd place overall sportin’ your new tri suit. Everybody was checking her out all day long, and when it came race time she didn’t disappoint! This was Kameron’s fifth triathlon. (She has also run some 5Ks, 1- and 2-mile kids’ runs, and other local events.) She has been near the top in her previous triathlons, but this was her first outright victory. There were 85 kids in her age group. Anyway, keep turning out top-quality products for people like us. Oh yeah, Kam’s favorites are the Melon HEED, Chocolate Chip Hammer Bars, and Chocolate Hammer Gel.

Thanks again!
Jim and Kameron Coffey
(Santa Rosa, California)

Jay Hooker

You have one proud papa here! My son Jay wore his Hammer Nutrition gear and was the fastest 7-year-old boy and the 5th fastest in the 6-9 year old boys division at the Frederick Kids Triathlon. He said he had fun and wants to do another one. He’s also a fan of the Montana Huckleberry Gel, which he had stowed in the transition area in a flask mixed with water.

- John Hooker

From left to right: John Hooker, Will Hooker (5), and Jay Hooker (7)

Luke Raymond (right)

A big day for the little guy! This picture is from the kid’s 4-mile Little Rock race at Ore To Shore Mountain Bike Epic in Marquette, Michigan. I rode beside Luke after completing the 48-mile Hard Rock, with an 8th place age group finish. This was a big event for 8-year-old Luke; he was completely crestfallen until he saw the finish line, had Raspberry Hammer Gel and some water, and only then did he magically start this sprint. Now he is ten, and he goes on 10-mile training rides with me!

- Ron Raymond

Even more talented, junior athletes on the next page!
I just wanted to tell you about the great results I am seeing. My 15-year-old son, Hiram Carter, plays varsity high school and summer travel team lacrosse in Florida, as well as fall and spring football. The summer travel team is the real “ironman” team because they play four to five games on Saturday and Sunday in the Florida heat. This is where the Hammer Nutrition products really come into play. I have been making Hammer Whey protein smoothies and using Endurolytes on weekday mornings, but for the summer travel season I upped the products to include HEED and Perpetuem during tournament weekends. The Perpetuem worked out well because it is hard to eat enough solid food when you are hot and overexerted with games all day long. I include a HEED water bottle between games. He said he felt strong on both days and the products helped!

- Joe Carter
Our future looks bright!
(and it’s not just because of the green clothes!)

Designed with the same quality construction and durable fabrics as Voler’s adult clothing, “Hammer Kids” clothes are a new addition to the Hammer Nutrition clothing line. These youth sizes are the “perfect fit” for young athletes who are taking it to the next level in endurance sports.

SKUs
- JSSK (short sleeve jersey) $25.95
- SCK (cycling shorts) $26.95
- TTK (tri top) $26.95
- STK (tri shorts) $22.95

Annsa and Tobin Reed sport the new “Hammer Kids” outfit at the Sierra Kids Triathlon. They made us proud with a 3rd place finish for Tobin and 5th for Annasa. Great job you two! Photo: Faron and Helen Reed

SPECIAL OFFER!
Purchase a kids kit (jersey and shorts) and receive a FREE Headsweats® visor.
Ad Code EN76K. Expires 9/30/11

ORDER TODAY!
1.800.336.1977
www.hammernutrition.com
**Turn race day into payday!**

Over $40,000 in cash and credit given out in 2010; you could be next.

---

**Bob Strand**
$1250 in cash
USMS Spring Nationals (Short Course Nationals). 1st in the 100 Breast and 1st in the 100 IM.

**Monica Obsitos**
$125 in cash
EagleMan 70.3. 2nd place in 20-25 age group.

**Matt Galluza**
$250 in cash
Mooseman 70.3. 3rd place in 18-24 age group.

**Steven Bland**
$500 in cash
New Orleans 70.3. 2nd place in 45-49 age group.

**Richard Abrahams**
$1250 in cash
USMS Spring Nationals (Short Course Nationals). 1st in the 50 Freestyle and 1st in the 50 Fly.

**AJ Baucco**
$1000 in cash
Florida 70.3. 1st place in 25-29 age group.
Susan Endsley
$1000 in cash
Boise 70.3.1st place in 45-49 age group.

I thought I would send an image of my finish at Hawaii IM 70.3 last weekend. While not making a podium finish, I believe I was one of only two or three Hammer kit-wearing competitors. Unfortunately, one of these crashed out in the first cycling aid station.

Conditions were windy and very hot as usual. I generally train and race in the Seattle and Washington State area, so competing in this heat was very challenging. I found myself overheating and dealing with heat-related issues at about mile 45 in the bike. For the first time ever, I was dealing with severe cramping of my quadriceps. I made the mistake of not carrying Endurolytes during the ride, but as soon as I hit the bike-to-run transition I started popping Endurolytes, as well as each aid station through the run. By mile five or six, my cramping was manageable and continued to reduce, allowing me to run strong through the finish. I swear by Hammer Nutrition’s Endurolytes. Without them, I would probably be laying somewhere on the run course!

Thanks for your great products, Hammer!

FROM OUR ATHLETES

Jim McElroy
As I start this article in the first week of June, we already have close to 450 events on our master calendar for August and September. Needless to say, these are two of our busiest months event sponsorship-wise so that 450 figure will most likely have increased by the time you read this. Still, even if it holds at 450 events, that’s an average of around 56 events per weekend in the eight weekend period that makes up August and September. Now that’s a lot of events! In fact, there are so many triathlons/duathlons happening during these two months that we could easily fill several pages just listing all of those particular events that we’re sponsoring.

Here’s but a sliver of the events we’re sponsoring, and remember to keep checking our website (www.hammernutrition.com/calendar/events/index.php) to see where we’ll be next.

ULTRARUNNING

8/5 – Wild Idaho Endurance Runs
Idaho – www.runwildidaho.com
8/6 – Kattcina Mosa 100K Mountain Run
Utah – www.squawpeak50.com/100kmstr.htm
8/6 – HURL Elkhorn 50 Mile/50K Ultramarathons
Montana – www.vigilanterunning.org/elkhorn/home
8/13 – Mahlon Mayhem
New Jersey – www.njtrailseries.com
8/14 – Capt’n Karl’s Night Trail Run Races
Texas – www.teajstrails.com
8/27 – Lean Horse Hundred
South Dakota – www.leanhorsehundred.com
8/27 – Aspen Back Country Marathon
Colorado – www.aspenbackcountrymarathon.com
8/28 – Parsippany 12 Hour
New Jersey – www.njtrailseries.com
8/28 – Green Lakes Endurance Runs
New York — www.gleruns.org
9/3 – Woods Ferry 24 Hour Run
South Carolina — www.ultrasontrails.com
9/4 – Roots Rock 50K/25K
Washington — www.rootsrockrun.com
9/9 – Fall Superior Trail Races
Minnesota — www.superiortrailrace.com/fall/index
9/10 – Lake of the Sky Trail Runs
California — www.ultrarunner.net/raceseries/index
9/10 – Plain 100 Endurance Run
Washington — www.castaderrunningclub.com
9/17 – YUT-C 50K & 25K
Ohio — www.neotrail.org/yutc.html
9/17, 18 – Rock Cut HOB 50K/25K Trail Ultra
Illinois — www.rockfordroadrunners.org
9/18 – Lead King Loop 25K & Quary Climb 12.5K
Colorado — www.leadkingloop25k.com
9/24 – Sundance Trail Runs
Wyoming — www.sundancetrailrun.org
9/24 – Priest Lake 50K Ultra Marathon
Idaho — www.priestlakerace.com
9/24 – FlatRock 25/25 K’s
Kansas — www.flatrock50.org
9/25 – Vermont 50 MT Bike or Ultra Run
Vermont — www.vermont50.com

MOUNTAIN BIKING

8/6 – Pierre’s Hole 100
Wyoming — www.ph100.org
8/6 – Cedro Peak MTB State Championship
New Mexico — www.mountainbicycling.com/cedro-race
8/6 – Big Bear Lake MTB Ultra & Ultra Light
West Virginia — www.bigbearwav.com
8/7 – Danzien and Quigley Summer Sizzler
New Jersey — www.masuperseries.com
8/13 – Tahoe Sierra 100
California — www.globalbiorhythmevents.com
8/13 – 24 Hours of Great Glen
New Hampshire — www.24hoursbigmeetglen.com
8/13 – Six Hour Race to Sunset
Georgia — www.mountaingoatadventures.com
8/14 – Alsea Switchback XC “OBRA State XC Championships”
Oregon — www.mudslingerevents.com
8/20 – Kirkwood Challenge
California — www.teambigfoot.net
8/20 – Blue Mound Enduro
Wisconsin — www.wemseries.com
8/21 – Hampshire 100
New Hampshire — www.hampshire100.com
8/27 – 24 Hours of Kirkwood/ Kirkwood Nine to Five
California — www.teambigfoot.net
9/3 – PV Cycle Derby
Colorado — www.warriorscycling.com
9/3 – 6 & 12 Hours of Drummond Island
Michigan — www.funpromotions.com
9/3 – 12 Hours of Pitch Black Singletrack
Wisconsin — www.wemseries.com
9/4 – 8 Hours of Labor
Florida — www.gonenridings.com
9/4 – Skool of Hard Nox 50
Mississippi — www.theskoolofhardnox50.com
9/4 – Shenandoah Mountain 100
Virginia — www.mtn4biking.com
9/4 – Dakota Five-O
South Dakota — www.dakotafiveo.com
9/10 – Vapor Trail 125
Colorado — www.vaportrail125.com
9/10 – 12 Hours of Snowmass
Colorado — www.12hoursfmsnowmass.com
9/17 – 12 Hours of Dauset
Georgia — www.gonenridings.com
9/17 – 12 & 24 Hours of Hanson Hills
Michigan — www.funpromotions.com
9/17 – 12 Hours of Bradbury Mountain
Maine — www.cascobayevents.com/bradburytwelve
9/18 – Bearlodge Mountain Classic
Wyoming — www.scgmba.org
9/24 – Sugar Pine 50 & 8hr MTB Endurance Race
California — www.globalbiorhythmevents.com
9/24 – 12 & 6 Hours of Capitol Punishment
Washington — www.12hoursbigmeetcolumbus.com
9/25 – Vermont 50 MT Bike or Ultra Run
Vermont — www.vermont50.com
ROAD CYCLING/ULTRA CYCLING
8/5 – Montreal Double Double
8/6 – Gear Up for Lyme
8/6 – Metamora 4x50
Illinois – www.ultramidwest.net/umw/mm/home.aspx
8/7 – Indiana State Road Race Championship
Indiana – www.menofsteelracing.com/races.html
8/13 – Dairyland Dare Gran Fondo
Wisconsin – www.dairylanddare.com
8/13 – Lamoille Hill Climb
8/14 – Cherry Roubaix
Michigan – www.cherry-roubaix.com
8/14 – Tokeneke Classic Road Race (New England Regional Championship Road Race)
Connecticut – www.tokenekeclassic.com
8/20 – Mount Washington Auto Road Bicycle Hillclimb
New Hampshire – www.mtwashingtonbicyclehillclimb.org
8/20 – The Big Wild Ride, Alaska’s 1200K Grand Randonnée
Alaska – www.alaskarandonneurs.org/
BigWildRide1200k
8/26 – Hoodoo 500
Utah – www.planetultra.com
9/3 – Ultra Midwest Weekend of Racing
Illinois – www.ultramidwest.net
9/10 – Tour of Trinidad
California – www.teambigfoot.net
9/11-17 – Tour of Southern Utah
Utah – www.planetultra.com
9/12-16 – Park-2-Park
Montana – www.park2parkmontana.org
9/16 – Adirondack 540 RAAM Qualifier
9/18 – Portsmouth Criterium
New Hampshire – www.portsmouthcriterium.com
9/24 – Everest Challenge
California – www.everestchallenge.com
9/24 – Absolute Bikes Taylor House Benefit Century Ride
Arizona – www.absolutesbikes.net/taylor
9/24 – Knoxville Fall Classic Double Century
California – www.quackcyclists.com

TRIATHLON/DUATHLON
8/6 – River Rampage Triathlon
Utah – www.triutah.com
8/6 – Fronhofer Tool Triathlon
8/7 – Oshkosh Triathlon
Wisconsin – www.midwestsportsevents.com
8/7 – Troika Half Iron Triathlon
Washington – www.troikatriathlon.com
8/13 – RailSplitter Triathlon
Illinois – www.abeastrieries.com
8/13, 14 – Folsom Sprint, Olympic, and Long Course Triathlons – www.usaproductions.org
8/14 – Sylvania Triathlon/Duathlon
Ohio – www.eliteendeavors.com
8/14 – Kupari Jarsi Half IronTriathlon
Michigan – www.kuparitri.com
8/20 – Minnesota BackwardsMan Triathlon
Minnesota – www.backwardsmantri.com
8/20, 21 – Finish Strong multisport Weekend
Washington – www.finishstrongevents.com
8/20 – TriGreen Half Iron & Olympic Triathlons
Illinois – www.racemaker.org
8/21 – Portland Triathlon
Oregon – www.portlandtri.com
8/21 – North East Triathlon
Maryland – www.ckiracing.com
8/27 – Cranberry Trifest
Massachusetts – www.sun multisport events.com
8/27 – The TBF HIT IV Half Iron Triathlon
California – www.tbfracing.com/events/tbfhit.html
8/27 – Clear Lake International Triathlon
Texas – www.out-loud.org
8/27 – The Utah Half
Utah – www.racetri.com
8/28 – Steamboat Springs Triathlon
Colorado – www.withoutlimbs.co
8/28 – Rocketman Triathlon
Alabama – www.rocketmantri.com
9/3 – Lake George Triathlon Festival
New York – www.lgturism.com
9/3 – North Bend Multicross
9/4 – Barefoot Triathlons
Michigan – www.3disciplines.com
9/5 – South Davis Labor Day Triathlon
Utah – www.southdavisraces.com
9/5 – Blackland Triathlon & Little Buggy Kids Triathlon
Texas – www.blacklandtri.com
9/10 – Pumpkinman Triathlon Festival
Maine – www.pumpkinmantriathlon.com
9/10 – Patriot's Weekend Triathlon
Virginia – www.setup events.com
9/10 – VikingMan Triathlon
Idaho – www.vikingman.org
9/11 – Finger Lakes Triathlon
New York – www.fingerlakes triathlon.com
9/11 – FirmMan Half Iron Triathlon
Rhode Island – www.firm-racing.com
9/11 – Delaware Diamondman Triathlon
Delaware – www.piranha-sports.com
9/17 – Grand Columbian Super Triathlon
9/17 – Bassman Fall Sprint & Half Distance Triathlons
New Jersey – www.citytri.com
9/18 – Angels Race Triathlon
North Carolina – www.setup events.com
9/18 – Key Biscayne Triathlon Trilogy
Florida – www.triathlontrilogy.com
9/24 – Redman Triathlon
Oklahoma – www.redmantri.com
9/25 – Atomic Man Half Iron Distance Triathlon
Tennessee – www.raceday events.net
9/25 – Las Vegas Triathlon
Nevada – www.mountainmanevents.com

MISCELLANEOUS
8/3-6 – 2011 USMS Summer Nationals
Alabama – www.usms.org
8/6 – USMS 3-6 Mile National Championship
New York – www.usms.org
8/8-12 – FCA Motocross: Round Lake Christian
Camp Motocross Camp
Ohio – www.fcamx.com
8/13 – USMS 2 Mile Cable National Championship
New York – www.usms.org
8/13 – Quest Adventure Race
Michigan – www.infiterrasports.com
8/13 – Nocturnal Challenge Adventure Race
Florida – www.pangeaadventureracing.com/
8/20 – USMS 1-3 Mile National Championships
Wisconsin – www.usms.org
8/27 – Warren Adventures Race 24 Hour (WAR 24)
Pennsylvania – www.rootsrace.com
8/27 – Adventure Xstream Glenwood Springs
Colorado – www.gravityplay.com
8/27 – Montana XC (Motocross) Series Round 6:
Big Sky – Montana – www.montanaxc.com
9/3 – Racing Underground Open Water Swim
Colorado – www.racingunderground.com
9/10 – Indianapolis Adventure Race (Indy AR)
Indiana – www.indyar.com
9/16 – Infiterra Sports 28 Hour Adventure Race
Michigan – www.infiterrasports.com
9/17 – Arizona Open Water Swim Series
Arizona – www.dc badventures.com
9/18 – Montana XC Series Round 7: Billings
Montana – www.montanaxc.com
9/24 – Pain & Punishment AR
Ohio – www.race-coar.com
9/25 – Gilmore Adventure Race
Arizona – www.gilmoreadventurerace.com
FROM OUR ATHLETES

Christian Byar
Photo is from Michigan Mountain Mayhem, a ride you sponsor (130 miles and 10,000 ft of climbing). I finished 10th and this photo is taken about 125 miles into the ride, up a hill called “the Wall.” I’ve been using your products as I have gotten back in shape to do rides like this, along with 100-mile MTB races, ski marathons, etc. It’s amazing how much easier and even more fun these events are with Hammer Nutrition products doing the fueling. Training is definitely a key factor, but following your guidelines and using your products is indispensable to making sure I finish strong and enjoy the experiences even more. You also have some of the best gear and clothing around, at the best prices. I’m happy to show off that I am a Hammer Nutrition athlete. Thanks!

Clif Cassidy
Texas State Senior Games 2011 5K TT - 1st place
Texas State Senior Games 2011 10K TT - 1st place
National Senior Games 2011 20K RR - 4th place
National Senior Games 2011 40K RR - 5th place
National Senior Games 2011 5K TT - 4th place
National Senior Games 2011 10K TT - 4th place

I use Race Caps Supreme on a daily basis, Hammer Gel pre-race, Recoverite after hard training and racing, and Hammer Whey protein at night. Thanks so much for helping me make it all happen!

We can’t promise, but this could be you!
What we can promise is high-quality, U.S.-made clothing at unbeatable prices!

ORDER TODAY!
1-800-336-1977
www.hammernutrition.com
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 service advisors help you select the correct Hammer Nutrition fuels and supplements to meet your needs and goals. We then ship your products every 90 days (free shipping!) without you ever having to pick up the phone again.

We’ll 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 cycling or triathlon 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 shipping on all automatic shipments and fill in orders.**

Real Athletes, Real Results!
“Thanks so much for the extras you include in my autoship orders. It’s always exciting to see what will come next. You guys go the extra mile to not only make sure I’m getting my money’s worth, but that I’m getting more and it’s definitely appreciated.” - Billy S.

“I wanted to share my appreciation for your very generous gifts on all my autoshipments. I have t-shirts, jerseys, water bottles, etc. and wear the clothing to my competitions. Thank you, Hammer, for your generosity.” - Mark B.

“I am very pleased with both the products and the autoship pricing. I meet new people all the time who are using Hammer Nutrition for the first time and are amazed by the results. Thank you for outstanding prices and products!” - Tim L.

“Thank you so much! I really appreciate a company with such great products and customer service.” - Bill M.

“Schwag or no schwag, it isn’t the free stuff that keeps me (and probably thousands of others) coming back, it’s the products and the service. The fact that the products are so good would make me keep buying even if the service weren’t so great. But somebody in your organization’s management apparently knows that better service makes better products.” - JHS

Don’t wait any longer, become a VIP today!
Call 1.800.336.1977
FROM OUR ATHLETES

Guillermo Medina
Thank you for the comp to Santa Ynez Half Marathon. It was a good run in preparation for my 100-mile race. Last weekend in the half I ran slow and comfortable 1:38.30 7:30 per mile, and a week after I ran the Born To Run 100 miles (B2R). I won the race with a time of 18:58.30. Thank you so much again!

Aubrey Cook
My results from St. Anthonys Triathlon qualify me to race at the 5150 U.S. Championship Age Group Elite on September 4 in Iowa. Super exciting! Here’s to peace, progress, and whey protein!

Bruce Balch
Congratulations to Bruce Balch on his 2nd place age group and 9th overall finish at the USAT Duathlon National Championships in Tucson, AZ.

Pax Garth, Brian Bier, and Jackie Garth take a break during the Head for the Hills Rally in Cedar Hills, TX.

Melanie Mociun
Melanie Mociun heads out on the bike leg at Black Butte Sprint Tri toward a 1st place age group finish.

Steve Spiers
North Face Endurance 50 Miler results: 12th overall and 1st in age group (40-49) in a time of 7 hours, 34 minutes. Fueled by Perpetuem, Sustained Energy, Espresso Hammer Gel, and Endurolytes.

Photo: Noble Sports

Bev Enslow finishes 1st in her age group at the Extremadura ITU Cross Tri World Championships.

Photo: Noble Sports

ATHLETES . . .
Send your latest news to: athleteupdates@hammernutrition.com.
Connie Inks

Connie Inks podiums after a 2nd place overall age group finish at the Joe Martin Stage Race in May!
"I fueled with Raspberry Hammer Gel, Strawberry HEED, and Strawberry Perpetuem. As an Iowa flatlander, I had concerns about scampering around in the Ozark Mountains of Northern Arkansas, but had good legs for the events. I hit the Recoverite immediately after the road race on Saturday and had no soreness going into the Criterium on Sunday morning. I finished three seconds behind 1st place after all three stages (time trial, road race, and criterium)."

Ed Burgess

Holding the 1st place award for winning the 40-49 age group at the 2011 Harriman State Park Duathlon. Fueled by Race Day Boost, HEED, and Race Caps Supreme.

Amanda Carey

I came in 1st at the first NUE series race, the Cohutta 100, followed by another 1st place at the second NUE race, Syllamo's Revenge, two weeks later. This one was extra special for me, as I flatted two hours in, lost ten minutes, and was able to catch back on and win by 15 minutes.

Last week, I won the 7-day stage race, the Trans-Sylvania Epic in State College, PA. This was a HUGE win for me as it was a stacked field, and I beat some of my biggest competitors in the endurance field.

Christine Julien

I came in 3rd overall elite female masters (out of 2,707) at the 2011 Bloomsday Race. This race has over 50,000 entrants! Other details about my placing are: 45th out of 30,568 females; 1st out of 560 42-year-old females; finish time of 47:50 which is a 6:24/mile pace average.

Laura Bergmann

I have qualified again (hopefully no flat tire this year) for Duathlon World Championship with a 5th place finish! Pretty tough since it was 50 degrees and raining here, and 95 degrees with 0% humidity there (AZ). HEED and Endurolytes saved me!

Raf Adame

My coworker Julie Vaccari and I competed in the Las Vegas Corporate Challenge bike race at the LV Motor Speedway and placed in our division and age group. I received a bronze medal, and Julie got 2nd in her division!
FROM OUR ATHLETES

Richie Hahn
I raced the St. George Triathlon 2011 Olympic distance and defended my title as 40-and-over Clydesdale. Maybe next year Hammer Nutrition will let me drive their RV? HEED Lemon-Lime and Raspberry Hammer Gel got me to the finish line.

Brian Hickey
Here is a “podium” shot from my race this morning, the Philadelphia (PA) Time Trials (1st place Men 35+). That is the race promoter Ron Ruggiero with me in the pic. First race with Hammer Nutrition products, first win with Hammer Nutrition products!

Todd Hine
Over the weekend I completed my first 50-mile run, the Juniper Ranch 50 Miler. I injured my left knee at mile seven so my time was not what it should have been, but completing it on Hammer Nutrition I am looking forward to my next already. Thanks very much!

Mike Freudenthal
Thanks, Hammer Nutrition, for the fantastic products you provide! I recently competed in the 2-person 24 Hours Round the Clock in Spokane. My teammate, Jess Kruchoski, and I finished in 1st place with 23 laps. We were fortunate to have Steve Born as our “tent neighbor” and we relied heavily on his advice throughout the race. I used the following products to help me make it through the 24 hours (I took Race Day Boost the days leading up to the race): Perpetuem, Endurolytes, AO Booster, Race Cap Supreme, Endurance Amino, Tissue Rejuvenator, HEED, Huckleberry Gel, Perpetuem Solids (helped break the monotony), and Recoverite. There is no question that these products helped my body recover after each lap, helped me from cramping, and helped me sustain a consistent energy and strength level throughout the race. Thank you!

Chris Daniels
Here is a picture of me after riding this year’s Kansas 70.3 bike course as re-con for my friend who would be racing the next day. My nutrition for the ride was Strawberry-Vanilla Perpetuem. Love that stuff! I also love the Endurolytes Fizz to add in my water bottles. I’m a big guy and my sweat rate is a little high, so this new product really helps me manage my electrolyte intake without taking so many capsules.

Ed Jerdonek
Cheesin’ it up crossing the Ohio River on the Second Street Bridge in Louisville on my way to a 1st place M50-54 finish at the inaugural Race the Bridge Southern Indiana Olympic Distance Triathlon—looking racey sporting a Hammer Nutrition tri top . . . an awesome day!

We want to know what you’re up to! Send your news . . . athleteupdates@hammernutrition.com
Catherine LaCrosse

I just did one tough course, at the Revolution3 Knoxville Triathlon. I placed 2nd in my age group and 11th overall. I loved rocking in my Hammer Nutrition gear.

Lincoln Murdoch (right)

NEAR RIGHT: Hammer Nutrition products should be illegal they work so good. I had a huge advantage due to your products and won the solo division of the 173-mile Race to Recycle (Omaha, Nebraska to Rock Port, Missouri). Hammer Nutrition was the sole source of my nutrition all day. Race Day Boost loading for four days leading up to the race, then HEED, Hammer Gel, Hammer Bars, and Perpetuem Solids.

Plus, at the top of every hour I took a pill cluster of Endurolytes, Race Caps Supreme, Mito Caps, Endurance Amino, and Anti-Fatigue Caps. NO energy let downs all day, no bonks, no cramping, no problems! I believe in Hammer Nutrition products more than ever.

FAR RIGHT: Hey Hammer Nutrition! I scored another 1st place overall in the Blair (NE) Cycling Club Time Trial last evening. Warm night, so HEED and a Hammer Gel just before the start was the ticket on this 10-mile TT. Thanks for making such great products!

Mike Hemman (left)

Thank you, Hammer Nutrition! Here’s a photo of me and my cycling partner, Rick, at the top of Kaiser Pass during the 2011 Climb to Kaiser cycling event. Completing this grueling event has been a goal of mine for the past few years. With your help I completed 14,419 feet of climbing over 155 miles. I couldn’t have done it without my Race Day Boost, Endurolytes, and Anti-Fatigue Caps. The Hammer Seat Saver helped too! Your generous sponsorship of this event insured all rest stops were well-stocked with HEED, Perpetueum, Hammer Gel, and Sustained Energy. Thanks for all your support and for putting together a great product line.

Susy Garcia

Today I ran my first half marathon, Jog for Jugs 2011. I was surprised and amazed; I got 1st place in my age group and 6th woman overall! Hard, hilly course finishing in 1hour, 51minutes! Perpetuum was enough to get there!

Catherine LaCrosse

I just did one tough course, at the Revolution3 Knoxville Triathlon. I placed 2nd in my age group and 11th overall. I loved rocking in my Hammer Nutrition gear.
Build a strong foundation

We believe that with the consistent use of Premium Insurance Caps, Race Caps Supreme, and Mito Caps, exceptional benefits for both athletic performance and overall health can be derived.

**Race Caps Supreme**
- Reduce fatigue
- Enhance energy
- Increase endurance

**The Daily Essentials Kit**
<table>
<thead>
<tr>
<th>SKU</th>
<th>MSRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEK</td>
<td>$94.50</td>
</tr>
</tbody>
</table>

**Mito Caps**
- Improve energy production
- Antioxidant support
- Potential increase in longevity

**Premium Insurance Caps**
- More energy all day
- Enjoy superior health
- Fill nutrient gaps in diet

**SPECIAL OFFER!**
Mention ad code EN76
Purchase a 1-month Daily Essentials Kit before 9/30/11 and receive a FREE bottle of Phytomax!
That's a $22.95 value!
Limit one free gift per customer. Offer good while supplies last.

ORDER TODAY!
1.800.336.1977 / www.hammernutrition.com