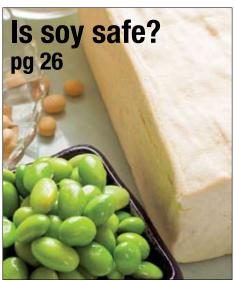


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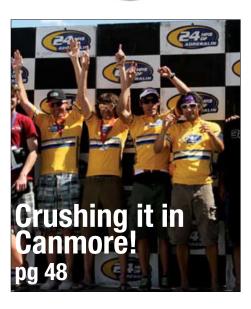


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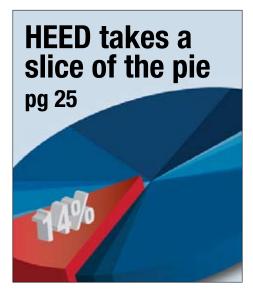
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ON THE COVER

Tom Miller celebrates reaching the summit of Hudson Divide some 70 miles into the 136mile Highline Hammer. To see more photos, go to www.hammernutrition.smugmug.com. Photo: Angela Nock

Lattere



ENDURANCE NEWS

STAFF

Brian Frank, Steve Born, Angela Nock

EDITORIAL CONTRIBUTORS

Jim Bruskewitz, Amy Dantzler, Shane Eversfield, Mike Freeman, Phil Grove, Chris Kostman, Laura Labelle, Brad Lamson, Nate Llerandi, Al Lyman, Bill Misner Ph.D., Dustin Phillips, Oscar Rodriguez, Angelo Roman, Tony Schiller, Anya Wechsler, Willy Zellmer

Articles submitted by non-staff authors are not edited.

EDITING

Kadidja Sierra

Our Mission

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

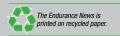
Endurance News features insightful articles on diet, nutrition, training, and other topics of interest for endurance athletes - written by our staff as well as professional and elite amateur athletes and other experts in the area of nutrition and exercise.

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

Back issues available at www.hammernutrition.com

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4952 Whitefish Stage Road Whitefish, Montana 59937

1.800.336.1977 www.hammernutrition.com



LETTERS

HELMET SAFETY

In the last issue of Endurance News we ran a story from Chris Kostman that was accompanied by a picture showing a helmetless cyclist. We received some feedback and wanted to share it, as well as Chris's own response, here.

From a client who called our office - Jim (who didn't want to give his full name) called in to say he loves Endurance News and reads it cover to cover, but he had a problem with our photo on page 52 of the most recent issue, July 2010. The article is about "The Classic Cyclist" and the knowledge which makes up the foundation of the classic cyclists' repertoire . . . and one of the gentlemen in the photo isn't wearing a helmet. Jim hopes we are more careful in our photo selection in the future, and that we strongly support the use of helmets on all rides.

Chris Kostman's response - Helmet-wearing is not, actually, a slam dunk in terms of being safer. For example, consider the shape and design of a helmet; as compared to a motorcycle helmet, it covers only a small percentage of the head. In many accidents or falls, a bicycle helmet will not offer comprehensive protection. In the case of getting hit or run over by a car, injuries to the rest of the body may be the overwhelming

Some excellent resources regarding this very complex issue include cyclehelmets.org, cyclehelmets.com and http://injuryprevention.bmj.com/content/9/3/205.abstract

Just as important, I believe firmly in the principle of "Freedom of Choice." Just like I don't follow people home to see if they are practicing safe sex or cheating on their tax return, I don't think it's anybody's business whether an adult is choosing, or not, to wear a bicycle helmet.

HAMMERING STRONG

"I just wanted to let you know that your supplements are not only used by "endurance" athletes, but by "strength" athletes as well. I am a powerlifter and have been stealing my girlfriends (who is a runner) gel packs for heavy squat/deadlift training sessions. It definitely helps with my energy levels at the end of the workout. I guess I'll need to start buying them for myself."

Drew Billing 2010 AAPF 181 lbs. Illinois State Champ Illinois State Sub-Masters Deadlift Record Holder

A CALL FOR SUBMISSIONS

For all of you east of the MIssissippi, read this letter and send us your submissions! We want to know what you're doing.

Absolutely, positively, 1000% love the new layout of Endurance News! I like the magazine look and feel, the individual and inspirational stories, tips on using Hammer products, everything. Give us more, more, more!!

Although I truly enjoy reading about all of the action that takes place on your side of the country, how do we get stories on the action east of the Mississippi?

THANKS-A-BILLION for great products and a super great magazine!

Joe Lyle

Do you have something that you'd like to say? Send your thoughts to letters@hammernutrition.com



elcome to the 71st issue of Endurance News

Does it seem like a new issue of Endurance News is landing in your mailbox every few weeks? This is already the fifth issue with our new magazine format and I don't know about you, but it reminds me of the tag line on those old Virginia Slims commercials - "you've come a long way, baby." It seems rather amusing now that some were concerned that we'd not have enough content to do six issues per year. Every issue this year has had more pages than we anticipated and several articles had to be held for the next issue due to lack of space (sorry to Suzv and other contributors whose articles didn't make the cut this issue).

The amount of work that we all put into each issue of Endurance News is hard to calculate, but it's certainly more than you'd expect. Probably a couple of hundred man hours at least, and that's just me and my staff's time. Add to that

the time put in by our contributors and the magnitude of this undertaking just begins to come into focus. The thing is, we have so much fun doing it and get such a rush from all of the great stories we receive from you, that it doesn't seem like the daunting task that it is. Thank you for all of the encouragement and assistance in making this the magazine that it is.

Who would have ever thought that putting on a little 100-mile trail run (44 entrants) would raise the ire of a local environmental activist? Normally, he's suing the Forest Service to stop access into the Swan Range by those on motorcycles, ATVs, snowmobiles, and of course, those evil mountain bikes. However, he evidently believes that having 75 people (that includes participants, crew, and volunteers) out in the forest for 36 hours is a terrible thing that will scare the grizzly bears and cause irreparable damage to the ecosystem. He tried to stop Brad (longtime friend, talented sign maker, and now full-time staff member) from putting on the Swan Crest 100 with legal tactics

but was stymied. He is now planning to sue the Forest Service for allowing it to take place. He was at numerous aid stations with his cameras, taking down everyone's license plate numbers and so on. Mind you, this is national forest, not wilderness like we have a bit further south in the Bob Marshall or up north in the Yak. Theoretically, national forests are public lands set aside for the enjoyment of the public. What better way to get the public into a remote, roadless forest, without motors, than to let them run through it? In case you are wondering, this was a "leave no trace" event meaning that Brad and his friends went back over the entire course picking up every single trail marker (the runners and aid station workers already made sure there was no litter). No grizzly bears were spotted (just a little black bear trundling across a road near Swan Lake), let alone harmed. during the 36-hour event. We are proud to have supported the first ever 100mile "adventure" trail run in the state of Montana and look forward to supporting it in 2011 and beyond as well.

- continued on page 5

New Products -

We continue to make good progress here and will have two brand new products on the shelves by early October, even though they are really slated as 2011 products. I described them before on these pages, so I'll save the details for the next issue when they are actually in stock.

New Flavors -

I know some of you are already tiring of the Caffé Latte Perpetuem. That's why we've got Strawberry-Vanilla in the pipeline for 2011, although we do expect to begin shipping it in early October as well.

Amazing Athletes-

As is the case with every issue, this one is chalk full of amazing athletes doing amazing things. I could go on for many pages about each of the athletes we feature in this issue, starting with Tom Miller, our "cover boy" - like so many of our clients, he's just the nicest, most humble guy you'll ever have the good fortune to meet - drives out to the Highline Hammer solo from Colorado, sleeps in a tent, hammers at the front every day, packs it up before we've even finished lunch and splits on Saturday 'cause he's got to be in the office Monday morning. He was just one of the many clients we all had the pleasure of getting to know during the epic rides and feasts that typify this annual event. Again, hundreds and hundreds of man hours in the making, but well worth it. Dustin and the rest of our crew put in 18 hour days with smiles on their faces. Kudos to all of my staff for their tireless service during the event. Kudos also to each and every one of you who sent in results, photos, and stories - keep up the awesome work and keep telling us all about it. We never get tired of hearing about your accomplishments.

Perhaps it's my strong bias, or just the proximity, but I am so impressed by our local talent here in Montana. Scott Gaiser is the first person who comes to mind - the guy is just phenomenal. To finish a 100-mile trail race is an amazing feat. To do it on one of the toughest, if not THE toughest, courses in the country is even more impressive. But, to do all that, never having run more than 26.2 miles in your life-that's superhuman! The thing is, he's the most mild-mannered, humble guy you will ever meet. He's always telling me he doesn't deserve the free clothing and product we give him each year, and I just have to laugh. He is definitely worthy of everything we've ever given him and a lot more. I'm looking forward to our next lunch date.

The second athlete that comes to mind in Anya Wechsler. She's from Wyoming, but she's got that same easy going, humble, capable, conquer anything demeanor that we love so much about our Montana crew (see Dustin's article). When Owen (long-time protege and owner of The Cycling House) started telling me about her last year, I knew she was an amazing athlete, but when you look at what she's done this year, it's just crazy. She'd never run a marathon before, so we signed her up for Two Bear in Whitefish last September. It's a tough 1/2 trail, 1/2 road event - not exactly ideal for a rookie. So she goes out and wins it. Never done a triathlon before. . . goes to Wildflower and wins her age group. Never done a 50K before . . . goes to Big Horn and wins, again! Amazing. You'll be seeing more of this young lady in upcoming issues of Endurance News, that's for sure. When she gets the fueling and hydration routine figured out, she'll be even more amazing, if that's possible. Those of you who are signed up for one of our 2011 Tucson training camps (hurry, there's still a few spaces left in our January camp) will have the distinct pleasure of meeting and getting to know Owen and Anya since she'll be helping him run TCH this year.

Ben Parsons is another amazing athlete who saves lives, literally, in his spare time. In the winter, he's a top ski mountaineer who traveled to Europe for the world championships this year, and in the summer he's screaming on his mountain bike. Congratulations to him for his win in the Butte 100 - third time was the charm. Hammer-sponsored athlete, Cary Smith, also deserves mention in the 100-mile category for winning not one, but two of the toughest 100's in the country - Cream Puff and High Cascades! Thanks for flying our colors, Cary, and everyone else too!

Of course I'm super stoked on our "working man" race team and their stellar performance in Canmore! That's two for two in 24-hour relays this year, but the big one is Moab in October. However, these guys are not hired guns; they all work full time at Hammer HQ in Whitefish, and that's the part that I think is really cool. You could say that they practice what we preach! My hat is off to Jason and Phil for sure-those

guys know how to suffer. I have to give extra credit to Dustin and Matty because besides being working men, they are also family men with two kids each. Juggling work, family, and training to compete at the level they are is awe inspiring and something that many of you know all about. My hat is off to each and every one of you as well.

Enjoy the remainder of your summer and I'll see you on these pages in November. In the meantime, remember that every calorie counts and what you put in your body is a lot more important than what you put on it.

Enjoy the read,

Brin Frank Brian Frank





FROM THE SADDLE OF STEVE BORN

BY STEVE BORN

elcome to the late summer/early autumn edition of Endurance News! Although it's been a somewhat abbreviated summer—in 10+ years of living in the Flathead Valley of northwest Montana I can't remember this many days of rain—that doesn't mean we haven't had a fairly good share of decent whether in which to enjoy the great outdoors. We always want more, of course, but what we have enjoyed thus far reminds us why we live in such a beautiful part of the country.

In my column for this issue, I recap the four days of the 9th edition of the Highline Hammer. That wasn't very easy to do in just a few paragraphs but I think I've covered the highlights of this annual "cycling in paradise" event pretty well. I've also included an article about soy protein that, along with the other two in this issue of EN, I think you will find interesting and useful. Lastly, I've gone on a bit of a rant—which I hope you'll indulge me in—about something that's always kind of irked me that I had to get off my chest.

I hope that your summer's been a great one and, on behalf of all of us at Hammer Nutrition, thank you for being a part of our family!

What's the point?

Having been in the nutrition/supplement field for over two decades, I've seen (and still do check out) my fair share of products. May I share with you one of my peeves? Why do some companies put inconsequential amounts of ingredients in their products? I mean, some of these nutrients are really beneficial, no question about that, but not so if they're in such small amounts that they provide minimal-to-no benefits.

For example, I know of one product that contains Coenzyme Q10 (CoQ10), as well as a smidgen of vitamin C and vitamin E. These are all fantastic nutrients; some of the best things you can put in your body for both athletic performance and overall health. But if the product only contains a measly one milligram (as is the case with CoQ10), then what's the point of it being in there?

Sadly, this is the case with far too many companies - they include a long laundry list of ingredients in their products and yes, it makes for an impressive and slick-looking label ("Wow! Look at all of those fabulous nutrients!"). However, upon closer inspection, the amounts that are in there are usually so minuscule that they won't have a noticeable effect on your performance and health . . . the only thing you'll notice is that you're out a few extra bucks. Additionally, if they're using artificial colors, flavors, or sweeteners in their products, what good will "salt and pepper shaker" amounts of any beneficial nutrient do? One would think that the focus should be on the removal of these unwanted artificial ingredients, not the inclusion of insignificant amounts of beneficial nutrients. Wouldn't you

We've always been very particular about not only what goes into our products but how much as well. It takes a long time for a potential Hammer Nutrition product to go from "drawing board" to actual product. This is because there is a fine line that we have to walk between:

- Putting in the nutrients that we want to include in a product
- Being able to fit as much as a capsule (or scoopful) will allow
- · How much the product will cost you

We're committed to making sure all three of these factors complement each other so that you get the finest product possible—one that really will elicit noticeably beneficial effects—at the best possible price. That's how we've been doing things since the beginning and that's how we'll keep on doing them! **HN**

Soy protein

Without consciously doing it, soy protein appears to be a focal point of sorts in this issue, with two articles included in this issue, one courtesy of the Life Extension Foundation and the other by Dr. Bill Misner. I recently received some additional information (great stuff!) on soy protein so, in keeping with the "soy protein theme" of this issue, I wanted to include a portion of the article "Myths and Misconceptions about Soy Protein for the Performance Nutrition Audience."

Myth: Soy protein is not a complete protein.

Fact: Soy protein is, in fact, a complete protein. Soy protein meets or exceeds the essential amino acid requirements for ages two years and older including children, adolescents, and adults.

For individuals exercising, training and building muscle, soy protein can be used as a source of high quality protein to help satisfy the higher need for protein during muscle-building, and provide

the necessary essential
amino acids for physical
and muscular
development.

People may be

confused

because many vegetable

proteins are considered to be

incomplete proteins - meaning that some

key essential amino acids are missing or

occur in levels too low to meet the body's needs. Without adequate amounts of all of the essential amino acids, the quality of a protein is limited.

This, however, is not the case for soy protein. Soy protein has the essential amino acid profile which meets or exceeds that required for human growth, development and maintenance as recognized by the Food and Agriculture Organization of the United Nations (FAO)/World Health Organization (WHO) – the scientific agencies on human nutrition and health worldwide.

Myth: Soy protein is an inferior protein because its Protein Efficiency Ratio (PER) or Biological Value (BV) values are not as high as in whey.

Fact: Soy protein is a high-quality protein equal to whey, egg, or beef protein.

PER, BV, and even NPU (Net Protein Utilization) are old measures of determining protein quality for humans. Alternatively, PDCAAS (Protein Digestibility Corrected Amino Acid Score) is the method recognized and implemented by many agencies, including the U.S. Food and Drug Administration (FDA) and the FAO/WHO, to determine protein quality of foods for human consumption.

PDCAAS is based on human essential amino acids

requirements. Measures such as PER are based on rodent requirements for essential amino acids, which differ from human amino acid requirements. PER measures the ability of a protein to support the growth of young growing rats, not humans.

In the past, the results of PER protein quality testing have been extrapolated to humans. Alternatively, PDCAAS is based on the content of essential (or indispensable) amino acids, protein digestibility, and the ability of the protein to meet human essential amino acid requirements. The standard, essential amino acid profile used in PDCAAS is for young growing children, two to five years of age, as determined by FAO/WHO/UNU (United Nations University). Why? Next to infancy, it is the most demanding period of human growth and development.

The highest possible PDCAAS a protein can receive is 1.0, which means the protein provides all of the essential or indispensable amino acids in the correct amounts and proportions for a two- to five-year old. Isolated soy protein, casein, whey, and egg white all achieve the PDCAAS of 1.0 (beef receives a 0.92 because it is limited in tryptophan). Why do people continue to cite old methods and measurements? Perhaps it's due to lack of knowledge in the protein metabolism field. As it relates to performance nutrition, progressive exercise physiologists, nutritionists and coaches are aware of the PDCAAS method to determine protein quality of a food. This has helped create a better understanding of soy protein quality and the benefits of soy protein.

Myth: Soy protein has feminine hormones and will detract from the hormonal balance of testosterone.

Fact: No body of research exists linking the consumption of isoflavones (compounds in soy protein that often are labeled as phytoestrogens) to an altered testosterone level in men. A

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series of studies of Olympic athletes who consumed soy protein showed blood biochemistries, blood hormone levels (including serum testosterone), estrogen and thyroid hormones to remain within normal limits. And the large numbers of children and adults who have consumed soy-based infant formula, as well as Asian males who eat sizeable quantities of soy protein, have normal hormonal balance, normal sexual development, and normal virility.

Additionally, preliminary research suggests that a diet rich in soy protein, with naturally occurring isoflavones, may have several health benefits for men. Studies suggest that soy protein may be helpful in promoting healthy weight loss when individuals are consuming a reduced calorie intake

Numerous studies also reveal that eating a diet rich in soy protein has several heart. health benefits. The body of evidence led the Food and Drug Administration to approve a heart health claim around soy protein in 1999. And preliminary research links regular consumption of sov protein to a reduction in the risk of prostate health issues, including prostate cancer. Clinical studies currently are underway to further explore the effects of soy protein as it relates to prostate health.

Myth: Soy protein causes excess flatulence and disrupts the stomach.

Fact: Soy protein isolate is gentle on the stomach and is formulated to not cause the flatulence associated with whole bean soy foods.

Soy protein isolate is processed into a highly digestible form. It has a

digestibility value of 97% or higher. Soy protein isolate is used to feed infants (soy-based infant formula) and is found in foods eaten by young children.

In some cases, soy protein processing technology may produce products that cause flatulence and stomach distress. Specific soy forms (e.g., soy flours) contain a significant amount of carbohydrates similar to those in other beans, which can cause gas. Such carbohydrates are relatively hard to digest and can cause gas and stomach issues. However, other soy products such as isolated soy protein have very little carbohydrate (less than 3%). Therefore, they do not disrupt the digestive system.

It also is important to note that not all soy ingredients are created equal. Soy flours contain 50% protein, soy

concentrates contain 70% protein, and isolated soy proteins contain more than 90% protein on a dry weight basis. Therefore, soy flours generally contain

approximately
40-45%

carbohydrates, soy concentrates 18-20% carbohydrates, and isolated soy proteins around 3% carbohydrates.

It makes sense to investigate the source and ensure that you use a form of soy (such as isolated soy proteins) that promotes easy digestion.

Myth: Soy protein does not have the muscle recovery power of whey.

Fact: Recent studies have demonstrated that SuproSoy® brand soy protein (The Solae Company) with higher levels of isoflavones has stronger recovery benefits compared to whey in exercising adult males.

In a recently published study. Dr. DiSilvestro showed, in young males undergoing strenuous aerobic exercise to the point of exhaustion, soy protein with higher levels of isoflavones provided increased overall antioxidant status and a lower rise in plasma creatine kinase and myeloperoxidase versus whey protein. The enzymes are indications of muscle tissue breakdown and inflammatory oxidant stress, respectively. The results indicate that soy protein with higher levels of isoflavones may produce stronger antioxidant effects than whey, particularly with exercise-induced oxidant stress.

Additionally, Dr. DiSilvestro has conducted two additional recovery studies in male and female weight lifters eating soy protein versus whey. The initial findings suggest similar results – soy protein with higher levels of isoflavones provided an increased antioxidant status, reduced plasma creatine kinase, and lower levels of plasma myeloperoxidase versus whey. Plasma creatine kinase may be used as an indicator of muscle breakdown after exercise. Plasma myloperoxidase may be used as a measure or marker of muscle inflammation.

Other human performance studies support soy protein's potential muscle recovery benefits compared to their typical diets.

These findings may help athletes in diversifying their protein intake to include soy protein before and after exercise as part of their training program.

STEVE'S NOTE: While we certainly don't discount this information in the slightest, we believe that the amino acid profile of whey protein isolate—plus the inclusion of substantial amounts of glutamine in both Hammer Whey and Recoverite—make it the ideal protein source for enhancing recovery. That said, the benefits of soy protein, as mentioned earlier, may very well "kick start" the recovery process when used during exercise. The antioxidant benefits of soy protein is one of many reasons it is included in our long-duration exercise fuels, Sustained Energy and Perpetuem.



Myth:
Soy protein is not as quickly digested as whey and, therefore, is not as rapidly/quickly absorbed into the blood stream to help in the process of building muscle.

Fact: Soy protein is a highly digestible protein, and is readily absorbed. Isolated soy protein is 97 to 99% digestible. And soy protein has the highest PDCAAS (1.0) for a protein, which measures digestibility and availability of essential amino acids. Muscle and recovery benefits were demonstrated in studies with male and female Olympic athletes consuming soy protein as a supplement in the daily diet compared to their typical diets. Adding the performance beverages to diets resulted in a potential for decreased fatigue and faster recovery. In addition, the recent series of oxidative stress and recovery studies at Ohio State University with recreational male and female athletes in both the strength and

endurance categories showed isolated soy protein to be more effective than whey.

Myth: Soy protein negatively affects those who have breast cancer.

Fact: Actually, research suggests a link may exist between consumption of soy protein and a reduction in the risk of breast cancer. An epidemiological—or population-study of Asian-American women (high soy consumers) shows a lower risk of breast cancer compared with those who were low soy consumers. A number of laboratory studies found that feeding animals a diet rich in soy protein inhibits cancerous tumor development. Other studies indicate consuming soy during adolescence may reduce the incidence of breast cancer later in life.

Research is ongoing to further determine the specific effects of soy protein as it relates to breast cancer.

Myth: Soy protein negatively impacts thyroid function.

Fact: Available data from many intervention studies reveal that soy intake does not adversely affect thyroid function in humans. In fact, a series of studies of Olympic athletes who consumed soy protein showed blood biochemistries, blood hormone levels, estrogen and thyroid hormones all remained within normal limits. Interestingly, a recent populationbased study conducted by the Northern California Cancer Center with the University of California School of Medicine found that consumption of traditional and nontraditional soy-based foods was associated with a reduced risk of thyroid cancer.

References available upon request. HN



9th Annual Highline Hammer

The weather was arguably at its best during the 9th Annual Highline Hammer, which took place from July 14th – 18th. With the exception of the extraordinary, never-before-experienced winds we encountered during a portion of the actual Highline ride, everyone was treated to wonderful Montana summer weather, great riding, excellent company, and awesome food.

Once again, we enjoyed the company of a nice blend of veterans and newcomers. A short meet-and-greet at Hammer headquarters on Wednesday afternoon kicked off this year's event, followed by a superb dinner at local restaurant, Ciao Mambo. Thursday was a scenic, easy-paced (by most anyway), three-hour "Tour of the Flathead" ride, followed by lunch and fueling seminars at the host hotel. Lunch and that night's dinner– the first two of many superb meals provided by local "chef supreme" Truby Voisin-were thoroughly enjoyed by all. A plethora of conversations filled the air during dinner; however, the primary subject certainly seemed to be about the next day's big ride – the 136-mile, mega-climbing, breathtakingly-beautiful loop through Glacier National Park that begins and ends at West Glacier. As is so appropriately stated on the Highline Hammer page on the website, "With 15,000 feet of climbing, four mountain passes, and two trips over the Continental Divide, this ride is truly one of a kind."

After a pleasant roll out from West Glacier early Friday morning, the climb up Logan Pass (a.k.a. "The Going to the Sun Road") began in earnest with the group splintering within the first couple of miles. This really is a beautiful climb and that's what helps take your mind off of the fact that (A) its gradient, while not terribly steep, is fairly relentless, and (B) it's about 16 miles long, which means you're going to be on it for quite awhile. Once the summit is reached, it's usually a screaming downhill—for the most part anyway—to the small town of St. Mary on the eastern side of the pass. Unfortunately, ongoing work on the road shortly after the summit meant a

lengthy section of dirt, mud, and rocks, which made for slower-than-normal descending. Still, the weather was warm and the scenery beautiful, which more than made up for the short-lived inconvenience.

Participants of the 2010 Highline Hammer.

St. Mary is the first of a few primary regrouping/ refueling stations of the ride (though we had lots of sag vehicles ready to service us all day long . . . thanks everyone!). Right after St. Mary is Hudson Divide. a real brute, not so much for its steepness, but rather for the fact that it just goes on and on and on (how many false summits are there?!?). This was also the first

time I truly noticed just how windy it was and that it wasn't a favorable wind. The faster riders cruised on up the road ahead, while Brian—though able to ride at or near the front group—hung back to ride a good portion of the climb with me. I enjoyed his company while working my way up the climb and it made the time to the summit seem not quite as long as it

is when I'm out there on my own.

From the summit, a series of wonderful descents—plus a couple of "I may not be on the official Highline map but I'm definitely still a climb" ascents—are navigated. The scenery, while not

as dramatic as when overlooking Logan Pass, is still spectacular. After a right turn at Kiowa Junction you're immediately on **Looking Glass** Pass, my favorite of the entire Highline route. It's always at least a little windy on this climb, but the beauty of the wide open surroundings and the lack of auto traffic more than makes up for it. This year, however, the wind was howling, and I mean with a capital "H"! In fact, the wind was so harsh that a couple riders had to sag in to the lunch/rest stop at East Glacier: they and their bikes were getting blown all over the road!

At East Glacier I noticed, as I suspect everyone did, that most-

to-all of the route back to West Glacier on Highway 2 was going to have to be negotiated in the strongest cross/head wind I'd ever seen in all nine Highline Hammer events I've done. I have to admit that this section of the ride is my least favorite and the severe winds in the 50+ mile section home didn't help one bit

Brian Frank climbs Looking Glass Pass.

Photos : Angela Nock

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in changing my perspective.

Still, I stubbornly decided to give it a go, thankful that I no longer use a bike computer (I personally don't need to know how fast or slow or far I'm going). The first 17-or-so miles are a gradual uphill to Marias Pass, which marks the Continental Divide, and boy was I moving along at what seemed to be a glacial pace. Apparently though, a couple of the riders thought my pace (and my perfect-to-draft-behind body composition) was just fine; we grinded up Marias Pass—which is more of a nuisance than a real climb—to the sign marking the Continental Divide.

Interestingly, as the route gradually made its way back to West Glacier, the winds shifted, first to a tailwind and—at a most inopportune time—back into a cross/headwind. Plus, it seemed to be

After getting worked for much of the 9 - 10 hours that it took to complete the previous day's Highline loop, this is always such a great follow-up ride. The scenery along the east side of this massive lake (the largest natural freshwater lake in the western part of the contiguous United States) is strikingly beautiful, especially the view of the lake appearing through orchards of cherry trees.

The town of Polson is typically where we regroup to fuel up for the majority of the rest of the ride. What makes this part of the ride more difficult is the "strategic" placement of long, semi-steep rollers, the kind that you tend to think, "You know, I could big ring it up this bad boy." Most of the time, however, you usually have to drop it back in the small chain ring and spin the rest of the way to the top, hoping you didn't go too hard in the initial part of the climb. No doubt the view is beautiful and the riding good, but no matter how many times I've done this ride there are always more of these climbs waiting for me than I recall. The end of the ride, however, is fabulous. After 136 miles the day before, and 70+ miles this day, both of which had morethan-sufficient amounts of climbing, it sure felt good to kick it on the grassy park right on the bay near Somers and eat lots of great food. The amount of endorphins cruising through everyone's blood stream had to be at record levels! Dinner that evening was at The

Dirk Zikeu (a.k.a Jan) leads the pack toward the

town of St. Mary. Photo : Kelly Pris

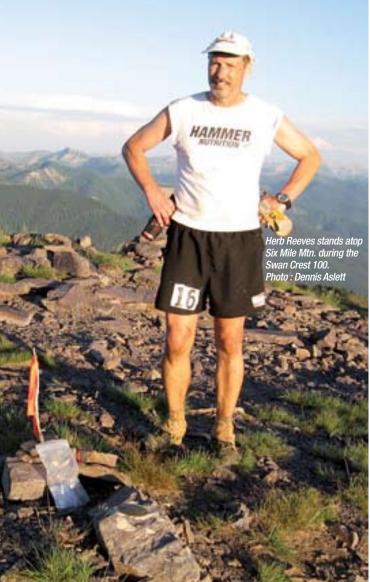


Monterra Clubhouse, where Truby had yet another sumptuous feast prepared for us

Sunday means "Star Meadow Ride" day and the weather couldn't have been more perfect for this spectacular ride, the first one I did when I moved to Montana, and still my favorite of them all. Oftentimes, simply because we're all pretty hosed after the Highline + Flathead Lake ride combination, not everyone chooses to do the Star Meadow ride, opting instead for a different and shorter route. Not so for the overwhelming majority of this year's attendees; many of them did the entire route, one that includes an appropriately named climb called "The Wall." Some of us simply did the ride on Farm to Market Road—which is downright pleasant and mellow, an excellent recovery ride—and a small portion of the mostly uphill Star Meadow ride. My excuse for not doing the whole thing? First, I admit that I was pretty tired and wasn't psyched to do anymore climbing. Secondly, I've done the Star Meadow ride dozens and dozens of times so I already knew what it was like.

Upon returning to Hammer headquarters, we enjoyed one final and fabulous meal together, reveling in each other's company and swapping stories of what had been an epic four days of riding. It's a lot of hard work to make the Highline Hammer happen, no doubt about it, but when the riding, the company, the food, and the weather (sans extreme winds) are "hitting on all cylinders" it is most definitely worth it. That was certainly the case this year.

Thanks to everyone who attended the 9th edition of the Highline Hammer. We enjoyed your company immensely and hope to see you next year! **HN**



n the late 50's, Walter Mertz, a US research scientist and doctor, discovered that certain natural substances in brewer's yeast lowered blood glucose levels. Dr. Mertz called this substance "glucose tolerance factor" or GTF. Chromium forms part of the GTF compound, which plays an important role in supporting proper insulin function, maintenance of healthy blood sugar and cholesterol levels, normal energy production, and promotion of healthy body weight. Needless to say, though this mineral is classified as "trace," its multi-beneficial effects on

The necessity of supplementation

health are anything but.

Because chromium is critically involved in insulin function, activating enzymes used in glucose metabolism and protein synthesis, and in maintaining optimal blood sugar and cholesterol levels, it has profound effects on both general health and athletic performance. Regarding

PRODUCT SPOTLIGHT

Chromemate

BY STEVE BORN

the latter, Dr. Bill Misner writes, "Since all carbohydrates are eventually reduced in the body to simple glucose (the body's primary source of energy), a go-between for "plugging" simple glucose from the bloodstream into the cell is supplied in the presence of naturallyoccurring, niacinbound GTF chromium substrate (chromium polynicotinate).

Unfortunately, this trace mineral appears to be deficient in most diets. Richard Anderson of the USDA states, "90 percent of Americans are deficient in chromium." Athletes are at an even greater risk of being chromium

deficient. Citing Kamen's 1990 research [Kamen, B. The Chromium Diet Supplement & Exercise Strategy. Nutrition Encounter Inc., Novato, CA; 1990; pp.11-13.], Dr. Misner adds, "Most diets do not contain adequate amounts of this GTF chromium to support prolonged endurance activities. Chromium rapidly depletes via perspiration, urination, stress, pollution, and extreme temperatures." In fact, it is suggested that following a strenuous workout, chromium losses are five times that of the normal rate. Is supplementation necessary? Absolutely!

Why chromium polynicotinate?

ChromeMate® (generically called chromium nicotinate, chromium polynicotinate, or niacin-bound chromium) is a unique and patented chromium complex that significantly increases the bioavailability and biological activity of chromium. Two studies (Kamen 1992)(Cooper 1984)

show the superiority of chromium polynicotinate (ChromeMate®). One hour after ingestion, chromium polynicotinate was observed to have a 311% better absorption rate than chromium picolinate and a 672% better absorption rate than chromium chloride. This is because unlike the other forms, chromium polynicotinate is 100% available to the body when ingested; it does not require this time consuming conversion.

The best benefit of all? Maybe!

At the 46th Annual Meeting of the American College of Nutrition, September 22-25, 2005, in Kiawah Island, South Carolina, some eyeopening research on chromium supplementation was presented. In this particular study, ChromeMate® demonstrated its ability to prolong the life span of test animals by more than 22%. According to the study, which was conducted by researchers at Georgetown University Medical Center (Washington, DC) and Creighton University Medical Center (Omaha, NE), rats prone to aging were fed diets containing ChromeMate®, which increased their average life span by +22% compared to rats fed the same diet without ChromeMate®.

Rats fed ChromeMate® also experienced:

- 1. Lower systolic blood pressure
- 2. Lower circulating glucose levels
- 3. Lower, normalized hemoglobin levels, a long-term indicator of blood sugar status
- 4. No abnormalities in blood chemistry, kidney or liver function

Exciting stuff, indeed! So in addition to all of the benefits chromium polynicotinate already provides, it may very well prove to be a key nutrient for life extension!

Toxicity

A number of studies have been conducted - continued on page 17

The trace mineral with BIG benefits

Benefits attributed to chromium

- May improve the body's metabolism of glucose due to its incorporation into the GTF molecule. This may improve the uptake of glucose into the body's cells so that it can be metabolized to produce energy via adenosine triphosphate (ATP).
- Regulates the body's blood sugar levels – chromium supplementation may decrease blood sugar in people with high blood sugar levels and raises blood sugar in people with low blood sugar levels.
- May reduce total serum cholesterol levels by up to 15%.
- May be useful for the treatment of diabetes mellitus (chromium deficiency may be an underlying cause of some cases of diabetes mellitus).
- Hypoglycemia may occur as a result of chromium deficiency and supplemental chromium may alleviate the symptoms of hypoglycemia.
- May help to prevent obesity (by improving the body's utilization of glucose) and may stimulate weight loss in people afflicted with obesity.
- Normalizes the body's production of insulin and increases the number of insulin receptors.
- May inhibit the ability of sucrose to cause hypertension.
- May reduce the body's levels of triglycerides.

- Essential for the proper metabolism of dietary carbohydrates.
- May reduce appetite, anxiety, depression, carbohydrate cravings, and acne.
- Some cardiovascular diseases may occur as a result of chromium deficiency due to chromium's ability to increase HDL ("good") cholesterol.
- May lower LDL ("bad") cholesterol levels.
- Chromium concentrates in the adrenal glands and may exert (presently unknown) protective effective in the adrenal glands.
- May help to reverse atherosclerosis damage and atherosclerosis may occur as a result of chromium deficiency.
- May help to regulate blood pressure.
- May improve blood circulation.
- May be beneficial for the treatment of congestive heart failure.
- May help to prevent heart attacks.
- May help to prevent diabetic nephropathy.

What athletes are saying about Chromemate

"I started training this season weighing 218 pounds (6'3), with the goal of dropping 20-25 pounds. I took on a healthier, more natural diet and started taking Chromemate to improve my insulin efficiency. Since I started a regimen of Chromemate, I now have stable energy levels, no 3 p.m. fade at the office, better results from training, and I'm 18 pounds lighter after two months! Thank you, Hammer!"

- Jon Anderson

"Chromemate has helped me stay motivated while training. I take a Chromemate capsule with Recoverite after each workout and before lunch. Chromemate has provided me with a great abundance of energy. I do not have that late afternoon crash and I have the energy for my evening training sessions. The product is as described. If you are looking for that edge to stay motivated and have enough energy for training, Chromemate is your answer. Thank you!"

- Chris Armoreda

"I am amazed how the Chromemate really works by keeping my sweet tooth at bay. Usually I am always

jonesing for some Swedish
Fish or other related junk food.
Taking one of these pills three
times a day with meals has
really made this sweet tooth
disappear! I am absolutely
amazed with the result of this
product."

- Eric Model



Take 1-3 capsules daily with food.

From the archives of

Bill Misner, Ph.D.

ASK DR. BILL

Q: I see that fructose is in Energy Surge. This surprises me with that ingredient having a negative effect of athletes. Did I read this correctly?

A: ATP (adenosine triphosphate) is extremely acidic. In fact, its pH is around 1.8 - 2.4 so taking it sublingually (under the tongue) would be very similar to consuming lemon or lime juice; it would very possibly cause a burning sensation in the mouth and throat. The manufacturer for our ATP product, Energy Surge, uses a miniscule amount of fructose—which has a pH up to 9.3 (very alkaline)—to help offset the extreme acidity of the pure ATP.

Please note that we are talking about a very, very fractional amount of fruit-derived fructose, somewhere between 2-9 milligrams (.002 to .009 of a gram), per tablet, an amount that is literally several hundred-to-thousand times less than what many companies use in their sports drinks and fuels. Just by comparison, a 600 ml serving of a typical soft drink contains a whopping 32.6 grams (32,600 mg) of fructose.

It is my opinion that the fructose used in the Energy Surge product is so tiny—so minute—that its impact on performance and health is nil. **HN**



- continued from page 14

to provide the foundation of chromium polynicotinate's GRAS (Generally Recognized As Safe) status. These same tests validate the overwhelming safety of ChromeMate®. Acute oral toxicity testing revealed no oral toxicity at levels up to 5,000 mg/kg of body weight and the median lethal dose (LD 50) was greater than 5,000 mg/kg (note: that's milligrams, not micrograms, which is what is used for chromium supplements).

To put that in perspective, 5,000mg is equal to 5,000,000 mcg. For a 170-pound/77-kilogram athlete, an intake of 385,000,000 mcg of chromium would be necessary to achieve the LD50 level. Needless to say, chromium is very, very safe.

Dosage suggestions and summary

The Optimum Daily Intake (ODI) of chromium is 200-600 mcg, with higher amounts—up to 1000 mcg daily—suggested as being highly beneficial for weight loss and for relieving many of the symptoms of type 2 diabetes. Premium Insurance Caps contains 200 mcg of ChromeMate® per 7-capsules, so consider taking additional ChromeMate® with meals and especially with your post-workout recovery fuel to enhance glycogen synthesis and storage capabilities. Regarding the latter, Dr. Bill Misner writes, "Within two hours of exercise, taking two grams of carbohydrates for each 2.2 pounds of body weight with GTF Chromium (ChromeMate®) will result in a 300% increase in the rate of glycogen synthesis compared to no supplementation. The two-hour post-exercise window is needed for conversion of carbohydrates to muscle glycogen through the insulin (IGF) mechanism. This anabolic response will not completely take place in the absence of GTF chromium. If only a minute amount of GTF chromium is available. only a third of the amount of muscle cell refueling will occur."

There's no doubt about it, taking additional ChromeMate® capsules at key times during your day, augmenting the 200 mcg contained in 7 capsules of Premium Insurance Caps, is a wise strategy for optimal recovery and optimal health! $\mbox{\it HN}$

Put an end to the 3 p.m. fade! • Enhance glycogen synthesis for superior





I discussed this with Dr. Bill asking, "How can this possibly be, given everything we know about the health dangers of High Fructose Corn Syrup (HFCS)?" Dr. Bill

replied:

There are a number of pathways that result in improved endurance performance, but unfortunately, several of them also impose harmful side effects with use. Dr. Mirkin's suggestion that HFCS enhances endurance performance demonstrates no concern for the harmful, profound rise in blood sugar-to-insulin ratio. We know that insulin excess over time can contribute to numerous health issues such as Insulin Resistance Syndrome, obesity, and type 2 diabetes. This sort of nutritional heresy is based on an adage, "The ends justify the means." Following this sort of reasoning to improve performance, why not schedule a physician-administered injection of anabolic steroids, EPO, or amphetamines prior to or during your next event? Makes no

Dr. Bill followed this up with a short article . . .

e were naturally intrigued by a recent article by Dr. Gabe Mirkin entitled "Sodas with HFCS and Caffeine May Be Best Drinks for Endurance." In one of the sentences in the brief article he states, "The limiting factor in endurance racing is the time that it takes to get enough oxygen into muscles to burn food for energy. Anything that reduces oxygen requirements allows you to race faster. Sugar stored in muscles, called glycogen, requires less oxygen than fat or protein. Anything that helps you keep sugar in muscles longer gives you greater endurance. A study from Georgia State University shows that drinks that contain both glucose and fructose burn more carbohydrates than those containing only glucose, and allow

HFCS Now Equals Problems Later

sense whatsoever.

High fructose corn syrup's (HFCS) molecular structure is metabolized very differently than common sucrose. Table sugar (sucrose) has a bound fructose molecule and a bound glucose molecule; once unbound in digestion, the fructose molecule heads off to the liver and the glucose molecule goes to the blood stream. HFCS contains unbound glucose and fructose molecules that enter the blood stream as reactive carbonyls. Reactive carbonyls are associated with weight gain, insulin resistance, leptin resistance, and type 2 diabetes. Other problems with HFCS, according to Richard Bowen's teaching page at the University of Colorado, are flatulence, diarrhea, fructose malabsorption, cirrhosis, obesity, cardiovascular pathology, and deficiencies

of iron, magnesium, calcium, and zinc. Elliot et al concluded that increased consumption of fructose (due to an increase in dietary simple sugars or to the higher fructose content of HFCS) results in obesity and insulin resistance. Stanhope et al show that HFCS is at least equivalent to the effects of sucrose. Bray concluded that HFCS is the cause of the current obesity epidemic. These structural properties of HFCS cause it to block insulin receptor sites. This makes more insulin available to throw into a tizzy the metabolic cellular fats and sugars that could impose more harm than good. My point is that the immediate gains, if any, may mean harmful, unwanted problems later.

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By permission, courtesy of Professor R. A. Bowen Department of Biomedical Sciences, Colorado State University, Fort Collins, CO 80523 Pathophysiology of the Endocrine System @: http://www.vivo.colostate. edu/hbooks/pathphys/endocrine/index.htmlbowen



cyclists to ride much faster over 60 miles

(International Journal of Sport Nutrition



A late-season reminder:

Don't skip your warm up!

BY COACH AL LYMAN, CSCS, FMS

ncluding a smart warm up at the beginning of every training session is critically important to both prepare your body for that session and to minimize risk of injury. When I am observing others, I notice that many tend to blow-off their warm up periods and then end up starting their sessions too hard or fast. If you are rushed for time, that tendency to make this mistake is even greater. One factor which many athletes forget to consider, especially at this mid-season time of year, is that the more fit and strong you become, the more important a progressive warm up period is. And when it comes to racing, a proper warm up is crucial if you want to have a great race, regardless of the distance.

Make It More Dynamic, Not Static!

A high quality structured dynamic warm-up of at least 5 to 15 minutes at the beginning of training sessions and races will accomplish several important things:

- It will raise body temperature. When you begin to sweat, it means that your muscles are getting warm, loose, and relaxed. There's some evidence that higher body temperatures thin bodily fluid, which lessens strain on joints and on the heart.
- It reduces initial levels of muscular stress. Anyone who has ever tried to keep up with an "overzealous" training

partner who sprints out of the parking lot at the beginning of a ride, knows how your legs burn because you are not warmed up.

- It conserves muscle glycogen. "Fast from the gun" workouts and races dip more deeply into your precious supplies of glycogen the fuel your body needs and prefers to burn for endurance efforts. A slower start with adequate warm up allows you to burn a greater percentage of fat, conserving reserves of glycogen.
- It opens capillaries. A warm up dilates the vessels that allow blood to bathe muscle cells with oxygen and nutrients. More blood flow means more fuel and a better performance.
- It activates your nervous system. Your nervous system controls your movements and is integral in how efficient that movement is. Warming up effectively improves the activation and efficiency of your muscular contractions, which in turns improves coordination. Dynamic activities that "wake up" and activate your nervous system make you more efficient and effective in any movement which follows the warm up.
- It compensates for aging! Let's face it, the older you get the more you need a warm up. When I was a kid, I could go full speed right off the couch and into the back yard. Not anymore!

What are some examples of a dynamic warm up for running?

At the start of your run, insert a few minutes of toe and heel walking, small arc lateral squats and walking lunges, hip circles, leg swings, and some hopping and skipping. Make it progressive and dynamic, starting out with a smaller range of motion and a lower intensity at first, and building to a more intense, more dynamic movement as you feel more loose and pliable.

Active Isolated Stretching: "AIS" can be a great way to dynamically warm up prior to almost any activity. The principles behind AIS are based upon "reciprocal inhibition," which is how our bodies move and function. Simply put, the idea is to actively fire a certain muscle in order to "open up" and help relax the opposing muscle. This works great for both strengthening and

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[&]quot;I appreciate all of your help, expertise, and accessibility!" - Ritt D.



ometimes—OK, maybe most of the time, especially in sports like triathlon—race start times are dreadfully early. Even for those of us who are used to getting up early to train, they seem dreadfully early. Once we are awake, the body is still waking up for quite awhile. Studies show the body hits two natural peaks during the day — one about four hours after waking and the next in the evening.

But who wants to get up four hours before a 7 a.m. race start? You may feel fine an hour or two after you wake and you may be accustomed to training only 30 minutes after rolling out of bed at 4:45 am. And those workouts may go just fine. But I guarantee they would go better if you were awake longer before heading out the door. The body waking up is like throwing a series of switches, not one big switch. It's not simply "Off" and then "On." If you question this, then try stretching right out of bed. How flexible are you compared to your normal ranges of flexibility? The answer is, not very. Personally, I feel like a piece of plywood.

So what is one to do? Studies also show that taking a hot shower for 10-15 minutes upon waking speeds up the waking up process of the body. As part of my race day ritual, I always hop in the shower. I definitely feel looser when I get out. My goal is always to get to the race site an hour before start time

so I can be relaxed as I go through final preparations. So, I get up as early as necessary to accommodate this. Usually, I wake up two hours before an early race start. The shower helps expand those two hours closer to the natural four, so my race performance stands the chance for maximum output.

Let's say one of your races is going to be in the evening. Even though the body hits another peak in the evening, you may not be allowing yourself to take advantage of that second peak. Your body gets into a day-to-day rhythm that goes deeper than you might think. If you do not train in the evenings, then you run the risk of not racing as well as you otherwise could (given an evening race start time). If you mix your training up, so some of it is done in the a.m. and the rest is done in the p.m.—even if it is only one day per week that you train in the evening—then your body will respond in kind. "Oh, yeah, I know what this feels like. Let's go!"

Getting as much sleep as possible the night before a race is important (though sleep two nights before is the crucial night, given the natural lag in the body). If you can squeeze in an extra 30 minutes or more, and then hop in the shower to really wake your body up, you'll hit the start line of those early morning races more awake and better prepared to hit your PR. **HN**

Hammer Nutrition: White hot on Facebook!

BY PHIL GROVE



As Hammer's fan base reaches 7,000 and beyond, our Facebook page is becoming a hot spot for all things Hammer Nutrition. We

are very excited to average 20 new fans every day and see this as confirmation by you that we are on the right track with our products and commitment. We've been keeping our fingers on the keys all summer with status updates on the Big Rig, photos of the "Working Men" race ream (see Steve's article "Crushing it in Canmore), product knowledge, and specials. The page, however, is not meant to be a one-way street where we're providing all the content. We welcome and enjoy posts regarding our customer's adventures, success stories, questions, and feedback. One of the company's main tenants, "Real Athlete's, Real Results," is especially true on our Facebook page. You won't see too much in the way of highdollar pro athletes who can win races on PBJ's, but you will read about quite a few folks who fuel right to perform their best. If you're still in the dark about Hammer



Ooh, ooh that smell. Can't you smell that smell?

BY STEVE BORN

With apologies to Lynyrd Skynyrd, that song was one of the first things that came to my mind—and perhaps yours as well—when taking a whiff from a bottle of the recently updated formula of Premium Insurance Caps. Gone was the barely noticeable smell of previous incarnations of this product; now the smell is quite strong, medicinal-like to an almost fish-like odor. So where exactly is that smell coming from?

My belief was/is that it was primarily due to the B vitamins, which have a naturally strong, medicinal-like smell (open a bottle of a "stress formula" product, which is basically a combination of all of the B vitamins and some vitamin C, and you'll most likely notice a similar smell). When we removed some of the "super food" nutrients and the amino acids from the original Premium Insurance Caps formula, this allowed the naturally-occurring smell of the B vitamins to become even more pronounced.

Our manufacturer confirmed my hypothesis while adding that one of the substances in the product, Betaine Hydrochloride (Betaine HCL), also has a naturally strong odor, one that can very much be described as "fish-like." When the minimal-to-non-existent smelling "super food" nutrients and the amino acids where taken out of the formula, this allowed the naturally strong smell of Betaine HCL to become even more pronounced, just as is the case with the B vitamins.

Betaine HCL is included in the Premium Insurance Caps formula to aid in the absorption of protein and certain vitamins and minerals such as vitamin B12 and calcium. Again, the medicinal-to-fish-like smell that comes from this particular nutrient—as well as the B vitamins—is completely natural and normal. The updated version of Premium Insurance Caps may smell a bit "different" but we promise that it is completely safe, potent, and effective, just like you'd expect! **HN**

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flexibility, and can be part of a great warm up for swimming (the shoulders, arms, and back muscular), running, or any other sport activity.

What About Prior to a Race?

An effective warm up prior to a race involves both physical and mental components. The actual structure of your warm up can vary and is highly individual. Shorter is usually better than longer, as long as you accomplish what you need to, to prepare to race well. For a triathlon, I like to reverse the order of my warm up, starting with running, then going to the bike and then the swim.

THE RUN: Begin with some light functional warm up exercises such as was outlined earlier. After 3-5 minutes of easy running, throw in a few strides to open up a little bit and get the blood flowing, then shut it down and head over to grab your bike.

THE BIKE: Jump on and head out of transition, spinning the legs and confirming everything's working as

it should be. Depending on race distance and intensity, the warm up might be very short and easy, or longer and more progressive. That is, the shorter and more intense the race from the gun, the more you need to warm up prior to it. After a few short JUMPS to get the blood flowing, spin on in and re-rack your rig. Be sure you put everything back where it was originally, and pull your stuff together for the swim.

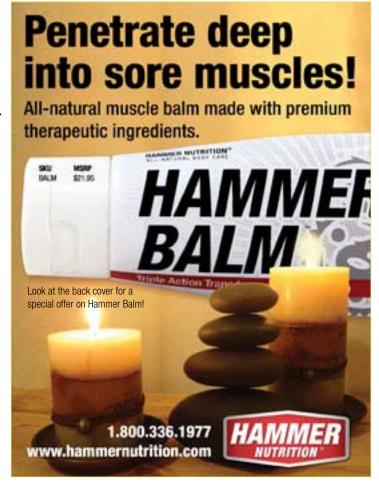
THE SWIM:

Assuming you've left yourself enough time, at this point I like to get into the water and swim for 3-8 minutes, just to get used to the

water and the environment and get a sense of visibility and siting. Ideally, you should have enough time to do this short warm up in the water now, and then get out and have a few minutes to sit down and relax and compose and reaffirm your POSITIVE thoughts about what will be a great day for you!

As a general rule, for all warm ups, the closer you make the warm up to the actual start, the better off you are. Long gaps between warm up and the start of a race make the warm up largely ineffective for what it is primarily intended for, which is to get you warm, activated, and ready to go!

Lastly, as I said earlier, the better and more fit you become, the longer it takes to warm up your body and be ready to go. When we don't take the amount of time we need to warm up and prepare our bodies for more intense training, the quality of our workout can be adversely affected, and we also place ourselves at much higher risk of injury. When the gun goes off, pace yourself, stay in the moment, and build in intensity so you can finish strong! Best of luck! **HN**



"I love your products. I've been sold on 'em for the past two years." - Michael T.

E-STIM

Incorporating Globus into your training



Active Recovery -It's the new racing edge

EMS - Electrical Muscle Stimulation

BY JIM BRUSKFWITZ

aximum and Explosive Strength, Resistive Strength, Endurance and Ultraendurance-these E-stim programs are all part of a periodized approach to building the kind of strength that spills over to enhanced performance. All the while, Active Recovery addresses the ability to consistently train without feeling beat up, without the loss of a sharp edge needed to absorb quality training. At this time of year, traditional training is occupying the vast majority of training time. Having built strength throughout the season, there comes a time when it's necessary to focus our time on training specific to the intended performance at hand, and to build to a performance peak. The time for heavy training and the fatigue that accompanies it is over. Removing strength training completely can increase the rate of muscle degradation (catabolism) that reverses the gains made while strength training. Increased levels of sodium and chloride ions in the muscles also contributes to

the breakdown of muscle fiber. Natural testosterone levels can fall. Slow twitch muscle fibers are the first to lose their force generating capabilities, and these are certainly necessary for endurance sports. Motor units (a motor nerve cell and the tens to hundreds of muscle fibers it controls) rate of recruitment can drop. Another way to state this is that neural inhibition increases with disuse. No doubt some of these degradations are held at bay because traditional training continues during this period. It certainly would be nice to maintain as many of these adaptations as possible while "resting", backing off, from the high training volumes.

What is emotionally difficult is backing off on any of the training that delivered a noticeable improvement. Those strength building with E-stim definitely feel and measure the improvement. How can the gains be maintained while the energies are focused on the specifics of the performance at hand? E-stim delivers options.

Certainly the Active Recovery is the most used E-stim program and it's for a good reason. There is an advantage to using this program each training day to prepare for the next workout. The strength training programs deliver workouts that also require recovery. They can't be done daily. They require 36-48 hours of recovery to avoid overtraining. These programs aren't appropriate when there are only a few weeks of season remaining.

Active Recovery is a key component to tapering (training at a reduced load to enhance recovery) while maintaining the ability to recruit motor units at a high level. If that is accomplished, strength will be maintained. The Active Recovery program helps move blood out of the muscle's capillary beds and along with it, the waste products and toxins that must be dealt with before resuming training. The program also stimulates the production of the body's natural endorphins that ease the discomfort felt post-exercise. Those two benefits are reason enough to use the Active Recovery program, but it does more. Motor unit recruitment can be maintained at the high levels achieved with the strength building programs. Since the Active Recovery can and should be done after any training bout, a daily dose will keep all of the cylinders firing at peak levels. That's race ready, and one more reason to use E-stim on a daily basis to keep performing in top form. Power up. HN

Mick Walsh -

2010 Race Across Oregon Champion!

BY STEVE BORN

In the realm of ultracycling races, they don't come much tougher than the Race Across Oregon, or RAO as it's commonly referred to. When a 535-mile race starts with a 35-mile, 4,700 foot climb after only a one-mile neutral start, you have to believe the course is going to be a difficult one!

Mick Walsh of Seattle, WA, proved to be the toughest of the tough in this year's RAO, taking the title in a time of 39 hours, 20 minutes, and 51 seconds. Mick emailed me recently and discussed his 2010 race . . .

The Race Across Oregon was a focal point of my 2010 racing season. Although I have decades of road racing experience, I have never finished a solo ultra event of this distance and knew I'd need detailed training and nutrition programs to get me to the finish line. My stated goal was simply to finish, but I'm competitive and knew I really wanted to win. I started incorporating Hammer products, especially Perpetuem, during my winter training so I would know how best to make them work for me on race day and help me meet that goal.

RAO is always epic. This year's route—which started and finished in Hood River—was 535 miles long with an estimated 40,000 feet of elevation gain; afternoon temperatures soared above 100 degrees. Staying ahead

of the game in terms of calories and hydration is critical from the earliest stages of a race like this. With HEED, Perpetuem, several flavors of Hammer Gel, Endurolytes, Anti-Fatigue Caps, and Endurance Amino, my crew and I worked out a plan to make sure I got each of these at appropriate intervals throughout the race. The combination of Hammer Gel, Heed, and Perpetuem gave me consistent strength and performance from the earliest miles, and I was able to take the lead shortly after Moro, the second time station, at mile 124. I never looked back.

I overcame the usual challenges of ultra racing with a strong mind and Hammer products to finish this challenging event. Many factors have to come together for success in an event like this: luck, determination, experience, support, and a nutrition plan that is familiar and proven. Hammer products not only sustained me on race day, they were a key part of the training that allowed me to be the first solo finisher at the 2010 Race Across Oregon.

From all of us at Hammer Nutrition, "Job well done, Mick! Congratulations on a superb race!" HN

Hammer Nutrition has been an enthusiastic sponsor of the Race Across Oregon for many years; it really is an epic race. Results, comments, and photos can be found at www.raceacrossoregon.com



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From Laura's Kitchen

Laura Labelle, a professional chef in the Los Angeles area, provided these quick and healthy low-sodium recipes. Try one today!

Lean Herbed Chicken

4 boneless skinless organic chicken breasts halves
1/2 large onion diced
1/2 lemon
1 sprig rosemary
pinch of salt (to taste, or optional)

In a 4 quart sauce pan, add all ingredients and bring to a rapid boil. Let boil 10 to 15 minutes depending on the size of your breasts (chicken that is!). Remove from the heat and let stand 10 minutes. Strain to keep broth. Remove chicken breasts and serve over steamed veggies or chill and use for salads, sandwiches, or as a yummy lean source of protein with egg whites.

Breakfast Quinoa

2 cups water
1 cup quinoa
pinch of salt (optional)
1/3 cup raisins (or other dried fruit)
1/4 tsp cinnamon

In a sauce pan, boil 2 cups water with raisins, pinch of salt, and cinnamon. Once it is at a rolling boil, add quinoa, stir, and reduce to a simmer until water is absorbed (approximately 5 minutes, every stove is different). Remove from heat and let stand 5 minutes. I like to garnish with rice milk and agave nectar. Enjoy!

Zucchini Soup

6 medium zucchini
1 large onion
1 quart chicken broth
1 tsp pure (not virgin) olive oil, Ghee, or coconut oil
2 sprigs fresh dill

Optional for a creamy version: 1/2 cup organic raw cream or 1/4 cup cashews

Wash zucchini and cut into 1 inch round slices, peel onion and cut into large slices (size or shape not important). Saute veggies lightly in oil. Add chicken broth and dill, bring to a rapid boil for 10 minutes. Remove from heat and let cool for 20 minutes. Puree with a hand mixer or in a blender, salt to taste, and enjoy! My children and husband usually will not eat zucchini, but they LOVE this soup; a great way to get a portion of an unpopular vegetable in.

*Tor a vegan version, substitute chicken broth for veggie broth.

HEED "podiums" in recent RoadBikeRider.com poll!

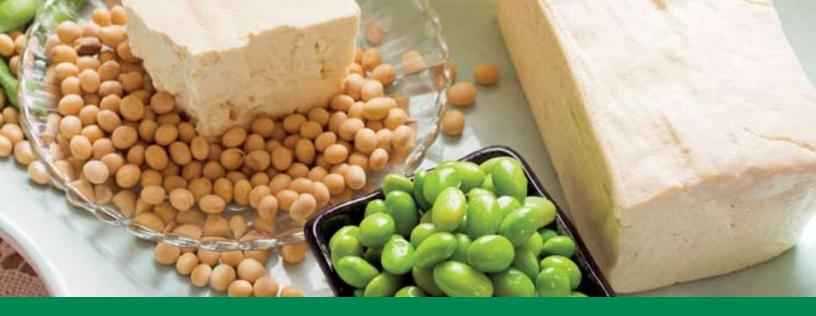
In one of the most recent polls on the popular RoadBikeRider.com website, the question was posed, "Which commercial sports drink is your favorite during rides?" After over 2100 votes were cast, three fluids-one of which was waterstood head and shoulders above the rest, with HEED (14% of the votes) taking a solid 3rd place. Without question, HEED is already in the top tier of sports drinks preferred by road cyclists (and no doubt other endurance athletes as well).

As more athletes discover the benefits of HEED-rock-solid energy (no simple sugars), a fullspectrum electrolyte profile, and only

POLL RESULTS (2121 total votes)

- Gatorade 26%
- Just water, thanks 17%
- Hammer Nutrition HEED 14%
- Something else 10%
- Accelerade, Cytomax Energy 8% ea.
- Powerade 5%
- Nuun (tablets) 3%
- Clif Shot Electrolyte, GU Brew Electrolyte, PowerBar Endurance 2% ea.
- Camelbak Elixir (tablets), First Endurance EFS 1% ea.
- Accelerade Hydro, Amino Vital Endurance, CarbBoom Electrolyte. Enervit G Electrolyte, RapidAde, Zym (tablets) - 0% ea.





Is Soy Safe? Busting the myths of a nutritional powerhouse

BY OSCAR RODRIGUEZ

Reprinted with permission from the Life Extension Foundation. This article appears in both the Life Extension magazine (July, 2010; pages 57-67) and on the Life Extension Foundation website at:

www.lef.org/magazine/mag2010/jul2010_ls-Soy-Safe_01.htm www.lef.org/magazine/mag2010/jul2010 ls-Soy-Safe 02.htm

Prefatory Notes by Steve Born: Soy protein is one of those nutrients/food sources that seems to generate a lot of debate. As we state in the article "Soy Protein – Friend or Foe?" (Endurance News #54), "Some tout soy as being a super healthy protein source while others decry it as being responsible for a variety of undesirable effects."

Not everyone agrees, but we obviously believe soy protein is a healthy food source. That's why we recommend the consumption of soy-containing foods, it's why we produce a soy protein product (Hammer Soy), and include soy protein in our long distance fuels, Sustained Energy and Perpetuem. The following article—along with some follow-up thoughts and information from Dr. Bill Misner—provides the rationale for our pro-soy protein stance.

One of the most interesting bits of information that I uncovered from this particular article was that soy protein "regulates expression of numerous genes, including those involved in efficient utilization of adenosine triphosphate or ATP, the body's fundamental unit of energy 'currency." At Hammer Nutrition we've long touted soy as being the ideal protein source for long-duration exercise for a number of reasons, primarily because of its amino acid profile as well as the antioxidant properties of soy's naturally occurring isoflavones. The fact that soy plays a role in assisting the genes that are involved in the efficient utilization of ATP is yet another reason why this particular protein source is ideal for use during prolonged bouts of exercise.

I hope you will find this article, and Dr. Misner's as well, to be informative and helpful to you.

arely has a nutritional source gained such rapid acceptance and drawn the kind of hostile scrutiny focused on soy. No sooner did the FDA take the highly unusual step of allowing a health claim to be made for soy as a food in 1999, than it came under attack by a vocal minority of "concerned citizens"—some of whom were found to represent a narrow segment of the food industry threatened by soy's profits.

Thanks to their efforts, considerable misinformation now contaminates the discussion of soy's real impact on health. Instead of enjoying the broad range of benefits, many aging individuals are unnecessarily fearful of consuming soy products.

The good news is that the popularity and "controversy" surrounding soy have resulted in considerable clinical study and research, giving rise to a wealth of scientific literature that validates soy's health-promoting potential.

In this article, you will find out how soy became the subject of controversy—and why it shouldn't be. You will discover the latest findings on soy and its components, including isoflavones and soy protein. You will also learn how just 15-20 grams of soy per day, (or 50-90

mg of soy isoflavones) can operate at the cellular level to provide a formidable defense against cardiovascular disease, numerous forms of cancer, osteoporosis, and menopausal symptoms.

Soy and Estrogen: The Real Story

At the center of the controversy surrounding soy is the "estrogen-like" molecular profile of some soy-based compounds—and whether they increase the risk of certain hormone-dependent cancers and other adverse effects associated with hormonal imbalance.

Soy contains antioxidant polyphenols (plant-based compounds) known as isoflavones. Isoflavones are considered "phytoestrogens" or "dietary estrogens" because of their molecular similarity to estrogen as estradiol (17-estradiol), the female sex hormone. The ability of isoflavones to "mimic" some of estrogen's effects has led many doctors and scientists to characterize isoflavones as "weak estrogens."

This is incorrect, according to Dr. Mark F. McCarty, an internationally recognized expert in soy isoflavones. Advances in our understanding of how the body responds to estrogen (and estrogen-like compounds) explains why.

Estrogen exerts its influence upon cells directly through the presence of estrogen receptors. Until relatively recently, only one receptor was known to exist, now called the estrogen receptor alpha or ERalpha. Overexpression of ER-alpha has been implicated in a variety of cancers in humans, including breast cancer, ovarian cancer, endometrial cancer, and colon cancer.

In the late 1990s, a second estrogen receptor was discovered, now known as ER-beta. Expression of this receptor appears to counteract many of the cancer-causing activities of ER-alpha.

As Dr. McCarty points out, genistein, one of the most abundant isoflavones in soy, is a highly potent activator of ER-beta. Critics of soy regard isoflavones' action on estrogen receptors as the source of concern, without recognizing there is more than one type of estrogen receptor in the body, and that they exert very different effects.

This highly selective mode of action explains why soy isoflavones promote beneficial estrogen-like effects in

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The Soy "Controversy": Separating Myth from Fact

A relatively small group of outspoken critics have fueled the debate over the safety of soy products, many of whom have links to industries threatened by soy's widespread acceptance. Here in a nutshell are their specious claims—and why they don't hold up:

Myth #1 - "Soybeans contain 'anti-nutrients."

In raw, unprocessed form, this is true of soybeans. In fact all raw, unprocessed beans contain a variety of enzymes and other biomolecules that can interfere with digestion and absorption of other nutrients. Soybeans are no different. Growers and processors are acutely aware of this as they develop the most nutritional cultivars of this universal food source. The way around the "problem" of anti-nutrients is simple: don't eat raw soybeans, and be sure to eat a diet with varied sources of protein (good common sense). In fact, soy protein has been used successfully in treating mild and moderate protein-energy malnutrition in some of the world's sickest children.

Myth #2 - "Soybeans cause thyroid dysfunction."

Based on a 1960 article describing the occurrence of goiter (thyroid swelling) in a single infant on a pure soy diet, soy opponents extrapolated—and exaggerated—this risk to the entire population. Isoflavone molecules in soy do inhibit an enzyme involved in thyroid hormone synthesis, but that has not translated into poor thyroid function in otherwise healthy individuals (those without pre-existing thyroid disease and who have adequate iodine intake). Again, the bottom line here is not to get all your nutrition from soybeans (or any other single source), and if you have a known or suspected thyroid disorder, get frequent thyroid function tests.

Myth #3 - "Isoflavones disrupt sex hormones."

Phytoestrogens by their very nature influence sex hormones, but those in soy chiefly affect ER-beta estrogen receptors, which have been shown to inhibit the detrimental effects associated with hormonal imbalance. Frightening tales of accelerated puberty in children caused by soy are largely based on a single, small 1986 study showing a weak correlation between exposure to soy infant formula and premature breast development in girls. That study's own authors questioned the validity of the relationship, and the medical establishment's own American Academy of Pediatrics has determined there is "no conclusive evidence from animal, adult human, or infant populations that dietary soy isoflavones may adversely affect human development, reproduction, or endocrine function."

Myth #4 - "Soy causes cancer."

Again, the effects of isoflavones on hormonal function are clear. It made scientific sense early on to raise the question of whether they might adversely affect hormone-dependent cancers. A handful of studies from the mid-1990s showed cellular changes of the kind that can precede cancer—though none showed an actual increase or production of new cancers. Since then, the discovery of ER-beta estrogen receptors, their cancer-inhibiting effects, and the preferential influence of isoflavones on these receptors—in addition to extensive human epidemiological and clinical studies—provide an extremely favorable profile for soy isoflavones with regard to cancer.

What **YOU** Need to Know

Soy proteins and isoflavones offer comprehensive health benefits through multimodal and complementary mechanisms.

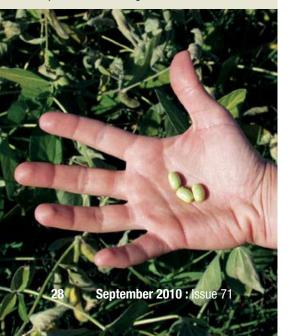
They act by diverse pathways to block oxidation, reduce inflammation, and favorably regulate gene expression.

Soy isoflavones in particular function as estrogen-like compounds in myriad tissues, chiefly upregulating the recently-discovered estrogen beta receptors associated with healthy outcomes such as cancer inhibition and improved cardiovascular function.

These effects provide multimodal protection against cardiovascular disease, cancer, obesity, diabetes, osteoporosis, and many other conditions associated with aging or poor dietary habits.

A flurry of "anti-soy" publicity in the late 1990s drew increased scientific scrutiny that has since uncovered still greater health benefits from soy than originally thought.

A diet with varied protein sources, including substantial amounts of soy and soy isoflavones, is both safe and preventive of degenerative disease.



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tissues where the ER-beta receptor predominates, but do not provoke the harmful effects of conventional estrogen replacement therapy in tissues where the ER-alpha receptor predominates.

For example, soy isoflavones have been shown to exert positive effects in tissues such as bone, vascular endothelium (blood vessel lining), and breast cells without the negative effects in those and other tissues such as liver and uterus, where side effects of estrogen therapy have been observed. In fact, in breast tissue possessing both estrogen receptor types, ER-beta is now known to exert a restraining influence on cell proliferation stimulated by estrogen at ER-alpha sites, reducing the risk of breast cancer. This balance helps to explain why soy isoflavones do not increase breast cancer risk despite their estrogen-like activity.

Dozens of epidemiological (populationlevel) studies document the broad array of health benefits associated with a highsoy diet. Diets rich in soy isoflavones are associated with lower rates of cardiovascular disease, osteoporosis, cancer, and obesity-related complications such as type 2 diabetes.

Soy isoflavones have relaxing effects on blood vessels, mediated by their influence on nitric oxide synthase (NOS), as well as powerful antioxidant effects, which together explain their potential for treatment and prevention of hypertension and stroke. Acting via yet another distinct mechanism, the isoflavones modulate signaling in pathways that control the interaction of oxidant stress with inflammation, leading to upregulation of detoxifying and antioxidant defense genes.

The cumulative weight of the evidence for sov's health benefits led to the remarkable decision by the FDA to approve a food-labeling health claim for products containing 2 grams of soy proteins in the prevention of coronary heart disease in 1999. This claim was based on a wealth of clinical trials as well as epidemiological data showing that high soy isoflavone intake could reduce LDL cholesterol, inhibit proinflammatory cytokines, reduce cell adhesion proteins, inhibit platelet aggregation, and improve blood vessel reactivity. Many nations throughout the world have now similarly endorsed soy products based on these data.

Dr. Mark Messina, a noted soy expert at the Department of Nutrition at the Loma Linda University School of Public Health, has summarized soy's remarkable benefits and provides specific recommendations on optimal soy intake. Messina suggests, based on the totality of available data and practical dietary standards, that aging individuals should ingest 15-20 grams of soy per day, including 50-90 mg of isoflavones -recommendations that have been echoed by other researchers worldwide. He adds that an intake of 25 grams per day of soy protein can be specifically used for cholesterol reduction.

Protection from Cardiovascular Disease Soy products, both soy protein isolates and soy isoflavones, induce profoundly beneficial effects on the human cardiovascular system. Early human studies showed that long-term intake of soy protein rich in isoflavones could improve blood lipid profiles, at least in part by increasing expression of receptor molecules that take up LDL cholesterol. In fact, soy protein and isoflavones have universally been shown to lower LDL cholesterol and triglycerides, while some studies have also documented increases in beneficial HDL cholesterol as well. Along with phytic acid, another soy component, soy isoflavones significantly lower homocysteine levels and positively influence other biomarkers of cardiovascular disease risk.

These benefits are obtained through multiple mechanisms of action. The various constituents of soy favorably regulate expression of numerous genes, including those involved in:

- Processing cholesterol and other lipids
- Synthesis and degradation of the cholesterol molecule
- Efficient utilization of adenosine triphosphate or ATP, the body's fundamental unit of energy "currency."

These effects appear to be universal, benefiting young and the old, male and female, normal weight and obese.

As the central role of inflammation in cardiovascular disease emerged, scientists became interested in how soy consumption might affect the inflammatory process. They found that short-term soy consumption reduces some markers of inflammation while increasing plasma levels of vessel-relaxing nitric oxide in postmenopausal

women with metabolic syndrome, and improves signs of the metabolic syndrome in general. Soy protein also increases the activity of paraoxonase 1 (PON1), the natural antioxidant compound found in HDL cholesterol that prevents the inflammatory oxidation of cholesterol. In a preclinical model, genistein inhibited the inflammatory control complex called nuclear factor-kappaB (NF-kB) and reduced expression of a molecule essential to production of atherosclerotic plaques.

Another factor that contributes to the risk of a cardiovascular event such as heart attack or stroke is the tendency of platelets to aggregate, or clump together, forming clots that can obstruct blood flow. Platelet aggregation is a complex, multi-step process involving a number of signaling molecules—and soy isoflavones act to reduce the density of vital receptors for one such molecule, thromboxane A2, in direct proportion to the isoflavone concentration in blood. Thromboxane plays a central role in potentially lethal blood clot formation.

Short peptides (protein fragments) in soy proteins are among those recently shown to act against angiotensin-converting enzyme (ACE), thereby helping to safely lower blood pressure. Genistein inhibits the release of calcium within vascular smooth muscle cells, and helps to block constriction. These effects directly mimic those of many prescription blood pressure medications and, along with their direct influence on nitric oxide synthesis and other endothelial health factors, account for the additional vascular benefits conferred by soy products.

Several nutritional intervention studies in both animals and humans further indicate that consumption of soy protein reduces body weight and fat mass, in addition to the beneficial effects on lipid profiles. The effect on blood lipid profile was recently shown to be dramatically enhanced by the addition of a prebiotic mixture to soy. This study, conducted among a group of adults with high lipid levels, capitalized on the fact that intestinal bacteria can metabolize soy components to produce equal, a powerful lipid-lowering compound that many adults have trouble producing. The people on the prebiotic plus soy branch of the study experienced significant improvements in their lipid profiles not seen when either prebiotic or soy was taken alone.

Combating Metabolic Syndrome
The current epidemic of obesity and
type 2 diabetes increases overall risk
for cardiovascular disease and other
metabolic complications. Soy components
have direct benefits on several of
the parameters that go awry in the
development of metabolic syndrome.
For example, soy proteins lower lipids,
improve kidney function, and reduce
urinary protein losses in type 2 diabetics
with kidney disease.

Soy protein combined with isoflavones improves blood sugar control, reduces insulin resistance, and lowers serum lipids in diabetic patients, and can also reduce serum CRP levels and restore lipid profiles towards normal. These effects may account for the observation that including soy in the diet can improve features of the metabolic syndrome in adults.

In a group of obese type 2 diabetics, replacement of animal-derived protein with soy protein helped improve hemoglobin A1c (a measure of long-term blood sugar control), reduced dependence on glucose-lowering drugs, lowered CRP levels, and triggered significant weight loss. And soy isoflavones, particularly daidzein, can enhance gene expression of the vital metabolic regulatory protein PPARgamma, which helps cells absorb and use glucose.

Replacing animal-derived proteins with soy-based meals can lower body weight and fat mass, while reducing LDL cholesterol even more than would be expected from weight loss alone, and can improve body composition, increasing the ratio of lean body mass to fat. Even more exciting, soy product and isoflavone intakes were directly associated with a lower risk of developing type 2 diabetes in a group of overweight women!

Strength for Aging Bones

The intimate relationship between osteoporosis, which involves the loss of calcium from aging bones, and atherosclerosis, which involves the deposition of calcium into aging blood vessels, is growing rapidly clearer, and the connection involves the cellular signaling molecules known as inflammatory mediators.

Since soy products have proven value in reducing markers of inflammation and preventing atherosclerosis, it follows that they should help prevent osteoporosis. For example, soy isoflavones have the ability to interfere with production of the "all-purpose" inflammatory cytokine interleukin-6 (IL-6). IL-6 levels rise with advancing age, particularly after menopause and andropause, corresponding to a drop in sex hormone levels. This rise in IL-6 is associated with many of the chronic conditions of aging, including osteoporosis.

By blocking IL-6 production, along with numerous other pathways, soy protects against age-related bone loss (resorption). Animal studies show that soy extracts and purified genistein act via different mechanisms to modulate gene expression in bone tissue, resulting in beneficial three-dimensional changes in bone structure through reduced activity of multiple inflammatory pathways.

In humans, the effects are no less dramatic. Soy isoflavone supplementation decreases bone resorption in postmenopausal women. One year of supplementation with soy protein also increased bone formation. The combination of enhanced new bone formation and reduced bone resorption may contribute to benefits in preserving bone mineral density, the chief marker of the progress of osteoporosis. Notably, this effect is not limited to post-menopausal women: a 2008 study demonstrated a positive change in bone mineral density even in younger women, implying a powerful preventive effect.

Many of these effects can be traced to the isoflavones' estrogen-like qualities and are borne out in multiple large epidemiological studies as well as in smaller clinical trials and laboratory research. Contrary to fears expressed by some early researchers and vocal critics (See SIDEBAR), soy isoflavones do not produce breast tissue changes or modify breast density on mammography. In fact, they may actually help reduce fibrocystic disease of the breast.

Soy Protein and Isoflavones: Potent Cancer Prevention

Despite the early and isolated concerns regarding a possible link between soy products and cancer, there is now strong evidence that soy provides powerful cancer prevention. Isoflavones' powerful multitargeted modes of action operate across numerous pathways to fight cancer on multiple fronts simultaneously. This allows reduction in cancer risk at every phase of its

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progression. Favorable modulation of gene expression is especially important in achieving this comprehensive effect. Exciting recent work shows that equal, the intestinal metabolite of soy isoflavones, has potent anti-cancer effects as well.

Breast Cancer

Early studies from Japan showed that frequent consumption of soy-based miso soup and isoflavones was associated with a reduced risk of breast cancer. A recent prospective study in 5,042 female breast cancer survivors in China, who were followed for a median of 3.9 years, found that consumption of isoflavone-rich soy foods was significantly associated with a 29% lower risk of death and a 32% lower risk of cancer recurrence. Additional evidence from epidemiological, animal, cell culture, and human studies has accumulated showing that isoflavones are promising agents for breast cancer chemoprevention. Daidzein, a soy isoflavone, adds protective effect to the chemotherapy agent tamoxifen in animal studies of mammary cancer. Some of this effect may be explained by soy protein's ability to alter signaling pathways involving the hormone receptors, and some by its ability to inhibit cell growth. Genistein is unique among flavonoids of interest in cancer prevention in that it has both potent estrogen-like and growth inhibitory effects on breast cancer cells.

Increased isoflavone intake also directly influences sex hormone concentrations and menstrual cycle length in women, effects with the potential for reducing breast cancer risk.80,81 And recent exciting work demonstrates that genistein interacts directly with the notorious HER2 cancer-causing gene, inhibiting its activation by cellular machinery and preventing cancer promotion.

Prostate Cancer

Prostate cancer, like breast and uterine cancer, may be stimulated or worsened by sex hormones. Soy isoflavones, with their partial stimulatory/partial inhibitory effects, act by multiple pathways to reduce prostate cancer risk. Genistein from soy reduces signaling between early prostate cancer cells and helps prevent their progression. Genistein sensitizes cancer cells to apoptosis induced by chemotherapy drugs, and blocks activation of NF-kappaB, which is responsible for the

connection between inflammation and cancer development. Related studies show that isoflavone supplementation may decrease prostate cancer risk both by reducing NF-kappaB activation and by decreasing levels of damaged DNA strands, an early step in cancer development. Several soy protein components protect against chemically-induced prostate cancer in rats, and isoflavones specifically inhibit synthesis of inflammatory prostaglandins in human prostate cancer cells and in living patients.

An entirely different mechanism of genistein in prostate cancer is the downregulation of sex hormone receptors in prostate tissue, making the cells less responsive to stimulation and cancerous growth. Other cellular signaling systems are also disrupted by genistein, further reducing cancer risk. And in men already diagnosed with prostate cancer, highdose soy supplements produced an overall decrease in the tumor marker prostate-specific antigen (PSA), which rose alarmingly in control patients. Similarly, genistein alone is known to arrest the cell cycle and induce cell death by apoptosis, as well as preventing metastatic spread of already-established prostate cancers.

Colon Cancer

Soy derivatives reduce aberrant crypt foci, the early abnormal changes in intestinal lining cells that may herald the onset of colon cancer. And the combination of genistein with indole-3-carbinol, derived from cruciferous vegetables, dramatically enhanced cell death by apoptosis in human colon cancer cells.96 A prospective study published in 2009 demonstrated that consumption of soy foods may reduce the risk of colorectal cancer in postmenopausal women.

As with the other cancers, colon cancer prevention by soy is accomplished through multiple pathways. Genistein, for example, inhibits intercellular signaling by insulin-like growth factor-1 (IGF-1), with the end result of blocking cancer cell proliferation and inducing apoptosis.

Slowing Menopause with Soy

Menopause produces a host of changes in a woman's body as her natural estrogen levels subside—changes that may be, at least to some extent, more safely slowed by soy isoflavones than estrogen replacement therapy. The decline in cardiovascular function that has its onset at menopause is one such change. Soy protein and isoflavones exert favorable effects on endothelial function in postmenopausal women. A low-glycemic index diet fortified with soy protein and phytosterols has been shown to reduce total and LDL cholesterol and triglycerides, and improve HDL ratios, while tending to normalize blood pressure, in a group of postmenopausal women.

Body composition changes after menopause include increase in fat below the skin and in the abdomen, as the normal effects of estrogen fade. These changes were prevented by a daily soy protein supplement over a three-month period in a group of postmenopausal women. A similar study showed that six months of supplementation with soy protein plus isoflavones produced modest favorable effects on body composition in postmenopausal women. And many of the uncomfortable physical effects of menopause, such as hot flushes, respond well to daily doses of isoflavones, particularly genistein.

Summary

Soy derivatives, particularly soy proteins and the isoflavones, exert powerfully beneficial effects across multiple systems of the body. Despite popular misconception at the hands of a vocal group of detractors, soy protein's action on estrogen receptors gives them unique capabilities not found in drugs or other natural compounds. By preferentially acting upon estrogen receptors associated with cancer suppression, soy isoflavones can reduce cancer risk. Soy isoflavones demonstrate remarkable abilities to improve cardiovascular function through multiple pathways in cardiac tissue and in blood vessel linings. Soy proteins and isoflavones also act as powerful antioxidants that modulate cellular function through control of gene expression and cell signaling pathways. These effects in turn allow them to help quench inflammatory stimuli that both contribute to and result from modern scourges such as obesity, type 2 diabetes, and metabolic syndrome.

References available upon request. HN

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f you ask scientists what they think, you might hear a few say, "Since soy is consumed by 3/4th of the world population on a regular basis, where are the health problems associated with dose?" If you polled scientists in the field of soy nutrition research, the good outweigh the not-so-good reports. Most of the not-so-good is associated with excessive soy consumption. This is a brief review of the literature on soy's Good versus Not-So-Good sides:

Sov's Good. Healthful Side

- 1) Soybeans are reported to prevent many forms of cancer by preventing the formation of those blood vessels that feed cancer cells.
- 2) Soybeans reduce the incidence of breast cancer. Societies with high consumption of soybeans especially in the form of fermented soybean foods have only 25% of the incidence of breast cancer as the populations of Western countries; further double blind studies have confirmed the protective effects of isoflavonoids and lignans as the chemicals responsible for these benefits.
- 3) Soybeans effectively reduce the incidence of prostate cancer.
- 4) Soybeans lower total serum cholesterol levels and may inhibit the absorption of dietary cholesterol, LDL cholesterol, and triglycerides.

- 5) Soybeans have been reported to prevent osteoporosis by increasing bone density (due to the soy protein content of soybeans).
- 6) Soybeans reduce many of the side effects (including hot flashes) associated with female menopause.
- 7) Soybeans inhibit the ability of ultraviolet radiation to cause wrinkles (the isoflavonoids (especially genistein and daidzein) content of soybeans may help to prevent photoaging of the skin).

Soy's Not-So-Good, Less-Than-Healthful Side

Soybeans are difficult to digest and may cause flatulence (due to trypsin inhibitors - raffinose and stachyose). It is recommended that cultured or cooked soybean products be consumed instead of soybeans themselves. Soy may cause indigestion due to their protease inhibitors content inhibiting endogenous enzymes such as trypsin that facilitate the digestion of proteins. Much of the protease inhibitors content of soybeans (which can cause indigestion and flatulence) can removed by soaking the raw soybeans overnight and discarding the soak water which contains much of these water-soluble protease inhibitors. Cooking soybeans thoroughly then discarding cooking water eliminate protease inhibitors.

1) Excessive consumption of soybeans

may increase the risk of hypothyroidism.

- 2) Excessive consumption of soybeans may increase the risk of goiter.
- 3) Soybeans inhibit the production of thyroid hormones thyroxine and triiodothyronine

Conclusion

The nutrient profile of whole soybeans is impressive. Research reporting good effects from eating fermented and/or soaked, thoroughly-cooked soybeans far exceeds the not-so-good reports, which are typically associated with "excessive consumption of soybeans." Interestingly, the worst "not-so-good" report I have received is gastrointestinal issues or flatulence. By disclosure I consume some soy in my diet with no deleterious effects determined (I am hypothyroid).

Eating soy is a very healthful whole food source enjoyed by third world nations. While any nutrient can react in anyone at any time, if soy is "not-so-good," emphasis on "If," why are we not hearing more about the health problems in the billions of people who consume soy as part of their regular menu? If consuming soy is "not-so-good" for you, you should begin to sense reaction within 36-hours after meals.

References available upon request. HN









Embracing the fears of racing by shane eversfield

was living in Kona when I joined "The Church of Triathlon". My first race was an unofficial (no permits, no applications, no insurance) Thanksgiving Day Peaman Triathlon in 1998. We started and finished right there at the pier on Ali'i drive, just like Hawaii Ironman. I rode my rusty Stumpjumper MTB, tattered panniers flapping in the breeze. But heck, I was good to go - I had some clip-on aero bars! Eleven months later I was there again at the pier on Ali'i Drive. This time, I was lined up with the world's best for Hawaii Ironman.

Just 35 days before that first Ironman, I woke up on a Sunday morning feeling as if I was going to die - really. Blessed with excellent biomechanics, I had succeeded in taking my body well beyond the point of over-training. Despite the absence of overuse injuries, my endocrine system was fried. In that final five weeks before race-day, I tediously balanced on a very fine line between staying alive to make it to the starting line and training enough to make it to the finish line. It was an experience of absolute terror and intimidation.

Hammer Nutrition fuels and supplements, and a comprehension of the principles of sound and sensible training would certainly have diminished my catastrophe, but fear and anxiety were the true dragons I faced. I promised God and myself that if I survived this ordeal, I would write a book to heal the discrepancy between the glorious athlete and the ordinary human being. (I kept that promise, publishing Zendurance four years later.)

Our greatest challenge in racing is often fear. Once we embrace our fear, racing is transformed from dangerous to

joyful. The two most common sources of fear are uncertainty and pain. As we gain familiarity with uncertainty and pain – as we befriend them – we can choose another more empowering response than fear.

Training and racing: What distinguishes one from the other? Training is like a rehearsal; while racing is akin to performance. In rehearsal, we stop and start, repeat certain sections, break things down into smaller, simpler increments. We practice drills and conduct interval sessions. We can pause to rest and examine, then repeat. Rehearsals and training sessions are unencumbered by audience and expectations. However, in races and performances, we strive for uninterrupted continuity and perfection while in the presence of others. For this, we must eschew the security and familiarity we enjoy while training.

On race day, our energy and anticipation are piqued after months – perhaps years – of preparation and rehearsal for the big event. Like the moth drawn to the flame, we are drawn to racing by one of the very same elements that elicit our fear – uncertainty. For those of us attempting a triathlon for the first time – or a longer distance than ever before – we are uncertain of enduring to the finish line. Toeing the starting line or entering the water for the swim feels like the start of a death march. And there is a part of us that will die today – the part that doubts we can do this. Seasoned vets at this race distance are facing the uncertainty of producing a personal record. Despite all the preparation, we just do not know how our race will turn out.

Yet, uncertainty is the sweet nectar that sparks our aliveness – both in athletic performance and in our mundane everyday lives. We may invest lots of money, energy and time attempting to eliminate uncertainty from our lives, grasping for security, but ultimately all of these attempts fail. Change is inevitable. Everything is impermanent - including our human lives. Without uncertainty, without mystery and change in our lives, we stagnate - we're as good as dead. If we knew ahead of time exactly how the race will turn out, or how our lives will progress and end, we probably would not bother training let alone get out of bed each day.

If we choose to welcome and embrace the mysteries of change and uncertainty, we are like children gathered around the Christmas tree strewn with wrapped gifts that spark intense curiosity and anticipation. Like children filled with hope and promise, we are drawn to racing – at least in part – by the wonderful elements of mystery and uncertainty. We seek to discover the promise hidden within. Whether we judge the results as good or bad, there is always the promise of growth and discovery, of learning from the experience.

We cannot – nor should we – eliminate mystery and uncertainty from our lives. Rather, let us learn to welcome uncertainty, to use it as a powerful tool for growth in athletic performance and everyday life. Let's explore this athletic opportunity, and then consider how it may carry over into other areas of our lives.

As we train our bodies to function efficiently and gracefully for the duration of our goal races, so we can train our minds to function efficiently and gracefully in the presence of uncertainty and to curb our fear response. We first build a foundation of aerobic base. We strengthen our metabolic and muscular function by increasing capillary and mitochondrial density. We train our bodies to burn fat more efficiently and at higher levels of intensity while conserving glycogen. This metabolic training requires patience and consistency as we morph our bodies. This metamorphosis empowers us with the physical capacity to endure the distance. Building aerobic base also builds psychological confidence and familiarity, alleviating some of that uncertainty.

There is however a fine line between building adequate aerobic base appropriate for the distance of our racing goals - and enslaving ourselves to endure massive quantities of base miles and hours in a vain attempt to quell the ego's fear of uncertainty. Riding 112 miles every Saturday morning rain or shine, fatigue-be-damned - for months on end just to assure oneself, "Yeah, I can still this" is not an efficient and effective way to train for the irondistance. (I know this from experience!) This kind of obsession leads to long-term burnout, family and occupational neglect and overall misery - not to mention a slow bike split.

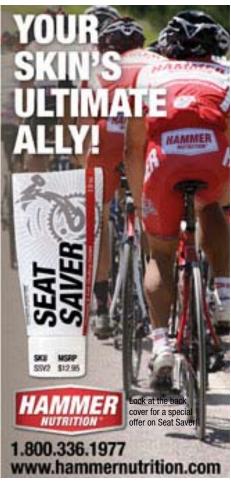
Effective, intelligent athletic training is not a panacea for the fear of uncertainty. There is no panacea! Security is an illusion. Just as health insurance does not assure us of good health, we cannot eliminate uncertainty. Instead, when the fear arises, we welcome and embrace uncertainty; we marvel at the mystery of what we don't know. Uncertainty stimulates our curiosity and heightens our sensitivity and awareness. As racing athletes, we make the conscious choice in our lives to seek out uncertainty — especially when we choose unfamiliar races, new distances and new formats.

With experience and self-honesty, we learn to discern intelligent training from fear-driven training. We train with clear intention and strong desire – however, we must also train without attachment to our future results. Detachment empowers us with accurate discernment. One of the greatest benefits of a good coach is the detachment that allows her/him to accurately discern the effectiveness of our training regime.

As we train, we will experience fears, doubts and anxieties. The most effective way to deal with them is to disengage from them. Fears, doubts and anxieties are simply byproducts of our mental training - just as lactic acid is a byproduct of physical training. In both cases, we strengthen our ability to process the byproducts and eliminate them at progressively higher levels of intensity. During interval training, we push our limits then pause for recovery. Similarly, when we recognize our fear response, we can pause, disengage, and relax with conscious breathing reminding ourselves that uncertainty is

- continued on page 37







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Thanks, Ron Ganz (proud father)



- continued from page 35

a wonderful element in our lives, one that heightens our senses and our mental clarity.

On race day, a great asset for transforming fear into acceptance and peace is gratitude. As we arrive and prepare for each race, we affirm all that we are grateful for – family, health, home, athletic equipment, this day, safe and successful training that has delivered us to the starting line, the nutrition we enjoy each day and the divine guidance we receive in our training and in day-to-day life. We triathletes are so very, very fortunate. Less than one-tenth of one percent of the world's population enjoys the health, wealth and freedom, or the cultural and family support that enables us to pursue our athletic dreams. (Yes, I've written this same statement in past articles.) We are fortunate for the opportunity to push beyond our perceived limits and boundaries – as athletes and as ordinary human beings.

As we prepare for the race and set up our transition, we can gratefully acknowledge our competitors in this race with smiles and greetings, offering support and encouragement to all. Humor and kindness can go a long way to melt the ice of fear for all of us. Enjoy the embrace of companionship as you gather together for the start – especially at large venue races, with thousands of athletes. Are these folks your opponents or our companions? If they are your opponents, the odds are stacked high against you. If they are our companions, we are bathing in a sea of support that will carry us through effortlessly.

Our other common fear in racing is pain. We are conditioned to avoid pain and to pursue pleasure. Both are neurological stimuli, but we judge one as good, the other as bad. As we let go of these judgments, we begin to examine the true essence of our neural stimuli. Effective training is a balanced cycle of stress, recovery and adaptation. Each of these three elements is necessary if we want to gain strength and endurance. Pain informs us of the location, degree and quality of stress we are encountering. If we perceive the pain stimulus clearly and accurately – without avoidance, judgment or fear – we can accurately discern whether this pain is caused by "healthy" or truly detrimental stress. This is a valuable asset for effective training.

As athletes, we have numerous opportunities to disengage from our judgments and fears, to explore the true nature of pain. Part of our training is the physical and mental conditioning to be present with pain and not resist it. As you perform hard-driving hill intervals on the bike or endure a long run, you will certainly experience pain. Notice your physical response: Do you tense other parts of your body, or contort your face into a grimace? Consciously strive to relax all the muscles of your body that are not required for the task of pushing up the hill or running the distance.

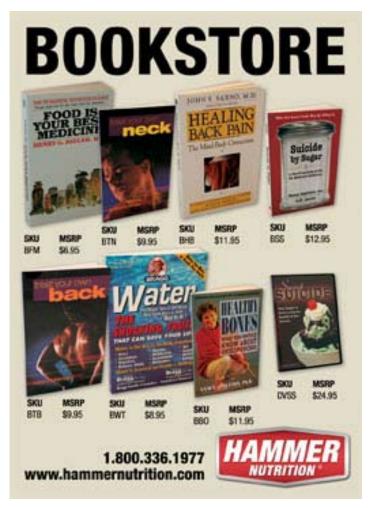
Responding to pain with muscular and joint tension is far more likely to cause injury than the actual hill interval or long run. It is an inefficient use of energy that is detrimental to your efficient and graceful form. Races are performances. "Performance" can be defined as the perfection of form. If we respond to pain with physical tension and mental disassociation, then the grace, efficiency, economy and speed of our swim, bike or run form deteriorates.

Training is a rehearsal – our opportunity to relax and recompose

ourselves as the pain of our stress builds, to recondition our response to pain. We train our bodies to let go of physical tensions and resistance as we train our minds to accurately and intimately observe pain without disassociating and running away. We remain physically and mentally calm and relaxed in the presence of pain, without complicating it. It is a powerful asset for our most challenging races, and for the most challenging and painful moments of our lives, when we experience great physical, mental and emotional pain. As athletes we learn to respond appropriately, rather than complicating our experiences with fear, judgment and avoidance.

Our athletic "training-rehearsals" and "racing-performances" are empowering opportunities in our lives. As athletes, we clearly choose to create and orchestrate the cycle of stress, recovery and adaptation in order to gain fitness. We can clearly see our choice in this athletic process, so we can begin to see the same choice in our everyday lives. When we encounter stressful situations in our daily lives, we are less likely to judge them negatively, to blame others or to victimize ourselves. We are empowered to accept and embrace these stressful situations as opportunities for building spiritual fitness. Without the encumbrance of fear and judgment, we can masterfully orchestrate these life situations as successful cycles of stress, recovery and adaptation and truly enjoy genuine spiritual fitness. **HN**

Shane Eversfield, Total Immersion Master Coach and author of Zendurance, is currently producing a DVD "Tai Chi For Athletes", and a "vook" (e-book with embedded video) on triathlon cycling technique. Both will be distributed through Total Immersion. He is available to lead workshops: Shane@totalimmersion.net



ATHLETE SPOTLIGHT:

ADAM BRADLEY

INTERVIEW BY DUSTIN PHILLIPS



ur athlete spotlight this issue is Adam Bradley. While I haven't met Adam personally, we have spent some time on the phone, and his recent adventures were intriguing to me. I have friends and acquaintances that have done the Pacific Crest Trail or at least portions of it. Each of them had returned from the trip changed, like they had gone on a spiritual pilgrimage, awed by the beauty and wildness of the whole trip. Well last summer, Adam and a friend decided to do the entirety of the trail but not at some leisurely pace. They set out to break the self-supported speed record and in doing so averaged just over 40 miles a day for 65 days.

I became more interested in how he was able to pull this off, and then how he seemed to become eager for more. Hiking hundreds of miles self-supported for no other reason than just the pleasure of it. I get the sense that the speed record was just a positive by-product of their endeavour! Granted, working for Patagonia, where they allow/encourage their employees to take time off for adventures such as this, puts Adam in a unique position, but it does leave me asking myself, "what did I do for my summer vacation?"

I had the chance to ask Adam about his trip, the highs and lows of 65 days on the trail, self-supported. I found it to be inspiring and hope you do to. Please don't think that Adam is off resting on laurels as I had to fit this interview in just a few days before he left on his next adventure of Idaho Centennial Trail – 900 miles in 30 days. WOW!



Adam, you and I first started working together during your speed record of the Pacific Crest Trail. What is it that moved you to attempt something like this?

I got into it in a roundabout way. I met Scott Williamson in 2006, the year I first hiked the Pacific Crest Trail. I was inspired by his second attempt to "yo-yo" the PCT (walk from Mexico to Canada then back to Mexico in a season).

and I was eager to take my walking to another level. In 2007, I set a new unsupported record on the 800-mile long Arizona Trail, besting the previous record by five days. I never intended to attempt a speed record on the 2,700mile long Pacific Crest Trail, but in 2008 I set out to chase it down. That year, Scott Williamson and Tatu Joe Kisner started 12 days ahead of me; by the PCT midpoint I narrowed the gap to nine days. Unfortunately, I came down with a parasitic infection and was forced off the trail shortly after. It bruised my ego to fail. I heard that in 2009 Scott was intending to challenge David Horton's supported record, and I wanted to join him. With his permission I started planning during the winter of 2008-2009. I think the thing that really motivated me was having walked a few 50-mile days in 2008, I knew it was possible. I was also inspired by the fact that we had an opportunity to beat a supported runner's time, but in an unsupported fashion. We also upped the ante by never detouring from the true PCT and never riding in cars for the duration of the trip. This added an additional 20

miles to the overall distance of the PCT.

You and your partner ended up breaking the record (in 65 days, 9 hours and 58 min 47 sec, if we are going to be official about this). So what kind of planning goes into an attempt like this, when most people rarely go beyond five days?

Lots of logistics: this means spreadsheets, primarily two of them. One is an itinerary and the other is the mail drop schedule. We lived and breathed the itinerary every day and if we where behind it at all, it messed with us psychologically. I was in better shape when I started in 2009 than in 2008, and I was happy to have a solid base. I basically stormed out of the gate and never looked back. From that point on it was all about being consistent and damage control (managing aches and pains).

As I read some of the write ups on what you accomplished in 2,650 miles (completely unsupported), you had to have gone through some low points on the journey. How did you and your partner motivate each other through those times?

The low points for me were two places. One was just north of Tuolumne Meadows, where my knee was acting up. I could hardly lift my toes on my left foot while walking as my quad was sore. I tried not to dwell on it much and just hoped I wasn't falling apart. Having Scott ahead of me, charging while I wasn't feeling good, helped me just focus on keeping up. The other low point was Oregon. The bugs were fierce in that state and it seemed like the closer we got to Canada the farther away it was. Again, just pacing with Scott and shooting the breeze would help take my mind off of what we had to do. He has a story for every mile of the trail so hanging with him during the day was like trail TV.

I understand you two averaged 40.5 miles a day. How did you recover from day to day and what were you fueling on to stay light?

Recovery was huge and in my opinion it was very important to do it right. This is where my Hammer products served me well. Upon reaching camp, I got off my feet immediately and laid down. I would drink Recoverite with my dinner (which was always cold, rehydrated bean

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flakes). I also took Endurolytes while in camp. The minute I was done with dinner, it was time to sleep. I would almost be sleeping while eating since I also took melatonin each night in camp. This helped me to sleep soundly (I was out cold and wouldn't rouse until I heard my alarm). I slept with my feet propped up on my backpack, which was stuffed with my food. This helped to keep blood from pooling in my legs.

Would you consider this one of your greatest accomplishments, and, if not, what is?

Definitely. However, the sense of accomplishment may be different than you would think. I feel that to be successful on an attempt like this that the earth has to conspire with you. No wildfires, good weather. I can go out as hard as I want, but if I am not in tune with the natural world around me, I can't beat it into submission. It's the other way around; it will beat me into submission so I feel I was lucky to say the least. Walking like this is my way of expressing myself—it is who I am. I hope this is just the beginning though.

How do you train for this? You obviously cannot just come off the couch and accomplish this task?

I train pretty hard. I run on roads and trails. I also do Pilates and I use a foam roller to work out the kinks. I visited a massage therapist regularly before I left, in addition to a chiropractor and craniosacral therapist. Pedicure is important too. In 2009, I was much more relaxed and mentally sound than in 2008, and I think that's really important. In 2008, I rushed off to do this and had a bunch of loose ends. That can really drag you down when you are out all day by yourself with no distractions. You've got to get your head on straight before a push like this.

Things since the completion of PCT only seem to have gotten busier. What do you have on tap for this summer and fall?

Summer is time for more records. However, the amount of time I may take off from work is limited, so this year I am focusing on some shorter objectives. These excite me as I can really go out and blow up. I will be able to be home after three or five days to recover, unlike the PCT where I really had to manage my output to be consistent for over two months. The first is a self-supported record on the Tahoe Rim Trail. This has never been done before, so I won't be competing against an existing record, but I hope to set a record that is strong-under 72 hours for 165 miles. Then the 185-mile Tahoe-Yosemite Trail, hopefully in four days. The reason I say hopefully is that the Tahoe-Yosemite Trail has some route finding and trailless sections. Either way, I will drag myself into Tuolumne as late as possible to stop the clock. Then off to Idaho for a sub-30 day attempt at the 900-mile Idaho Centennial Trail. Again, this trail isn't marked, so route finding and the remote nature of the trail pose some issues. In the fall I hope to do some local trail races. I come home from walking with incredible endurance so it makes sense to move into trail running in the fall. Just local races and nothing long. I would rather race fast and furious than go grind out some long distance run. Plus, the entry fees kill me.

What lead you to Hammer Nutrition as your primary fuel?

I first used HEED on the PCT in 2006. I liked it and was aware of the fact that it outperformed other brands of electrolytes that I used. I also used Endurolytes on that trip and was amazed at how well they worked in the Mojave. In 2009 before the PCT speed record attempt, I put in an order for more HEED and Endurolytes. Hammer sent me some samples with the order and Steve Born's book "The Endurance Athlete's GUIDE to SUCCESS". What a blessing the book was! The take away from the book is that it isn't possible to put in as much as we expend, and attempting to do so is a recipe for disaster. Here Hammer was trying to sell me on less of their

product versus more. This is a novel concept as consuming more would mean more sales, but Hammer puts athlete performance ahead of their sales goals. I could respect that, so I followed the fueling guidelines in the book which helped me be successful on the PCT. I also like that Hammer formulates all of their products from as many natural, unprocessed sources as possible. I can't think of any other brand of gel on the market which has banana puree or Montana huckleberries as ingredients. I especially notice the difference when running using Hammer products; I think stomach distress is more likely when running than when walking. I have never had any stomach distress when using Hammer products within the fueling guidelines.

Would you offer up any advice for anyone who would attempt similar endeavors?

Train, get to know the trail first by walking it, get mentally prepared, and have your fueling down to a "T". Most of all, keep it fun. You can't walk 40-50 miles a day if you don't like it. There is no fame or glory in this sport, so you really have to do it for yourself.

What do you do in your spare time, as little as that be?

I have been working on films and presentations of my speed records. I just finished a documentary of the 2009 record called *Fastpacking the Crest*. I also maintain a blog, FSTPKR, where I answer questions, discuss techniques, review gear, and post photos and journals of my trips. *HN*

Adam stands atop Baden Powell in Southern California. Photo: courtesy of Adam Bradley

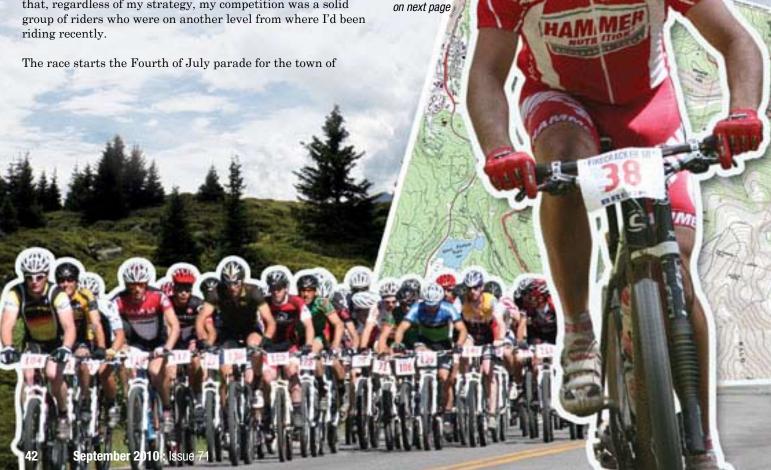
Firecracker 50 Down but not out

BY PHIL GROVE

Going into any endurance event, it is always important to have a plan of action. Ideally, things will unfold exactly as you have pictured in your mind, and the body will then follow the mind. However, oftentimes, especially in mountain bike racing, that plan goes out the window about two minutes into the race when you are already reduced to the most basic of mental function. This is exactly what happened to me at the Firecracker 50 Marathon Mountain Bike National Championships this past weekend in Breckenridge, Colorado.

In my own defense, after years of going out too hard and blowing up halfway through races, I have learned to race and fuel more intelligently. But in some races, you just need to put all your cards on the table and see where you stack up. For me, the Firecracker 50 was one of those races. With half of our Olympic hopefuls, some top-tier pro road riders, and basically all of the toughest mountain bikers in the country on the starting line, this was the perfect race to go for broke. I knew that, regardless of my strategy, my competition was a solid group of riders who were on another level from where I'd been riding recently.

Breckenridge, and the neutral roll through town was about as much peace as I would have for the next four and a half hours. From there, the war of attrition began on our first ascent up Boreas Pass. I kept in mind the advice of a friend who has reached these upper echelons of the sport. For years he would try to ride with the leaders until he eventually said he sacrificed became one of them. He numerous mediocre performances in the hunt for a breakout ride. The idea is that if you can ride with the best for an hour, maybe next time you can ride with them for an hour and a half, and eventually for the whole race. Needless



to say, I didn't

finish

- continued

anywhere close to the likes of JHK, Samuel Schultz, or Dave Wiens . . . but that's not exactly what I'm writing about.

After giving everything I had to stay with the first ten riders during the first 5,400 feet of climbing, I was falling apart very rapidly. The temperature was very hot, and I felt as if one of every ten breaths was eventually trickling down to my legs in the form of diluted oxygen. I didn't make any huge fueling mistakes, but on this particular day, I was only a mortal on a course that required more. My first of the two 25-mile laps was fairly respectable, and I was pleased to have ridden with the best, if only for a brief portion of the race. Yet I was starting to pay for this high altitude experiment in the currency of shredded legs and broken spirits. I'm sure this feeling enters the mind of any athlete who competes for fun and not for pay; soon the allconsuming question of "why do I do this" takes over the mind and body. For a brief moment, I was having no fun at all. But, on our nation's birthday, this was no time to lower the flag.

If you find yourself in a bad state during a race, take a minute to remember why friendly competition is so much fun. Sure, I was feeling like I should seek medical attention . . . but on a beautiful day high above Breckenridge, there was nothing else I would rather be doing. A friendly Hammer fan gave me some more HEED, I took more Endurolytes and Huckleberry gel, and I was back on my way. For the remainder of the race, I could only push at a fraction of my normal power. The elevation, heat, and intensity had taken their toll. It is rare for me to be in this state, and I prefer to use Hammer products to stay at my best rather than as a life preserver. But when the plan goes out the window, they will get you home in one piece. The endorphin rush of the last several-thousand-foot descent back to Breckenridge confirmed what I was feeling for the entire race—this has to be hurting other people just as much as it is hurting me. Sure enough, more than a third of the pros had crashed (usually due to fatigue), dropped out, or had otherwise fallen apart. My goal for the race was 20th and I wound up 35th—not too bad all things considered. So next time you're down and out, and up against the ropes, just think about what makes all of this so much fun; have some Hammer Gel and get it done! HN





o truly enjoy open water swimming one needs to have a sense of comfort and confidence in the water. To feel comfortable, you have to understand what the open water can do, what you can do in it, and have some confidence that you can handle whatever the situation brings.

Safety First

The biggest challenge to open water swimming (and especially ocean swimming) for most of us is the psychological one. Before you run into the waves and start swimming, whether in a race or for practice, it's a good idea to orient yourself to your surroundings. Stand on the shore and check out your course. If there's a lifeguard on duty and you're not familiar with the course, ask the lifeguard about the conditions. What are the waves doing? How frequently are the sets of waves coming in? Do you notice that the current is pulling strongly in one direction? Do you see any riptides? All of these are things you want to consider when you're entering the open water so you can adjust your swim accordingly. Understanding your surroundings, will give you more comfort and confidence in when you're in the water.

But even very experienced swimmers can occasionally feel nervous in open water. Many great pool swimmers I know are afraid of ocean swimming because they aren't comfortable with it. Maintaining composure in the open water may require taking a break and doing breaststroke, treading water or even floating. But a great thing about open water racing is that "anything goes" so you don't have to worry about being disqualified for switching strokes or even resting in the middle of a swim.

Having fun and being safe is more important than winning

the race. A good experience in your first race will mean you'll likely enter another open water race in the near future.

The Buddy System

Even if you're a great swimmer and you've tried to prepare for every potential problem, it is always possible that something unexpected will happen and you will find yourself needing help. So don't practice alone. If there are lifeguards, let them know your plans before you start on a long swim. And, as in SCUBA diving, use the "buddy" system. If you're in a group, be sure to have one other person who you will swim with so you can watch out specifically for one another. Even if there are lifeguards on shore, a partner will be able to get to you a lot sooner. When I swim with a group of swimmers in the ocean, we also commit to stopping at certain designated spots along the course so that we can all re-group, rest if necessary and account for one another.

Make yourself easy to see. Not only will a brightly colored cap help your buddy keep an eye on you, it may also help boats, paddlers and surfers see you. This is why they give out pink or yellow caps at open water races. Even guys, who never wear caps in the pool, will wear them in the ocean for safety reasons. They also help keep your head warm in chilly waters.

Keeping Comfortable

It is important to have properly fueled before a long swim so you will not be distracted by hunger or have digestive discomfort coming from over-eating or eating the wrong food. Hammer Gel is my fuel of preference before an ocean workout or race as my body will not have to waste energy digesting food, and I find I have abundant energy from the complex carbohydrates to carry me through my swim.

Another consideration is whether to wear a wet suit or not. Each individual has a different tolerance for the cold. In most "warm" water swim races wetsuits are not allowed. So, if those are the races you're considering, I recommend training without a wetsuit if you can tolerate it. In colder water races there is often a wetsuit division and, of course, triathlons are raced with wetsuits. Most people find that, in addition to keeping them warm, wetsuits make them faster due to the buoyancy. But I personally prefer swimming without a wetsuit because of the decreased mobility a wetsuit can cause.

Especially if you wear a wet suit, make sure to "lube" your areas of friction. I use Hammer's Seat Saver, an anti-chaffing agent. It's great at protecting any problem areas (especially around the neck) and isn't overly greasy like Vaseline.

Where Am I?

People often ask me about navigation in the open water. The common advice is to find a stationary object in the direction you need to swim (a pier, a building, a buoy) before you start and lift your head every few strokes to quickly "spot" that object. This is, of course, contrary to how you are taught to swim freestyle in a pool. And lifting your head does slow you down and tire you out more than swimming with your head down. It's a good idea to practice spotting in a pool to get comfortable with it. If you can stay on course with less spotting you will be faster; but, if you are swimming off course because you aren't spotting enough, any extra speed will be negated by the extra yardage you swim.

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The classic test to determine how straight you swim is to try swimming the length of the pool with your eyes closed. The lane lines will quickly make it apparent in which direction you naturally veer. You can work to straighten out your stroke but remember that in open water there are currents to account for so, even if you can swim in a pretty straight line, you still need to use the spotting technique.

When spotting, try not to keep your head up for too long. You just need to get a glimpse of your marker to know you're on course. If you don't spot your marker right away, take another stroke and look again. Sometimes surge can make spotting the marker impossible – you may be in a trough or the marker (if it's a buoy) may be but you'll probably be above the trough in another stroke or two.

If you are swimming with others, and they appear to be swimming in a straight line, follow them. But don't rely entirely on someone else's spotting – you should still spot for yourself.

Gasp! Gulp!

It's easy to swallow water when swimming in open water but there are ways to minimize it; lifting your head a little higher when you breathe than you usually do in the pool helps. But also, breathing away from the oncoming waves and toward the shore is definitely recommended. This is also helpful for spotting. Watching the shoreline is extremely helpful for straight swimming in the ocean as you can judge whether you are staying parallel to the shoreline.

Where Are The Lane Lines?

Racing in open water is not quite the same as just swimming in open water with a buddy and it is very different from pool racing. You will have physical contact with other swimmers in an open water race. If you don't want to be in the midst of a pack of hundreds of people flailing their arms and legs, move to the outside of the course where at least you'll have open water on one side of you.

Keep this in mind also on the turns, which in open water swims require the swimmers to go around the outside of a buoy. At turns, most swimmers get as close to the buoy as they can — cutting the course as short as possible. If you are on the inside, you will need to work your way within that group in order to swim around the buoy. If you are on the outside, you can remain just to the outside the pack as everybody else fights to get within touching distance of the buoy.

Ready, Set, Go!

One of the biggest challenges of open water races for me is the start. Everyone crowds onto a slice of beach that is generally much too small to hold all the competitors comfortably and, when the gun goes off, runs into the water and sprints to get out in front.

If you don't want to risk getting punched and kicked, don't start in the middle or the front. I made the mistake of starting the La Jolla Gatorman one year in the middle and the front next to Alex Kostich, one of the premier ocean swimmers in the country and frequent Gatorman champion, and ended up with a fat lip.

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is a distributor for a "network marketed" product, they are impressed by the big time athlete who is a part owner of the company, or some other reason that has nothing to do with the actual make up of the product or its efficacy. The first thing I do when queried in such a manner is to ask to see the list of ingredients. To me, it matters not who endorses the product, what type of supposed science they have behind it, or any other sales features until I read the ingredient list. In so many cases, the muchhyped product has all of the usual marks of a "mass market" product.

by the stuff or

The first thing to keep in mind is that ingredients are listed in descending order. The first listed constitutes the highest % of content, the second listed a bit less and so on. The first three ingredients

Beware of labels like this:

or quite a long time now, consumers have been admonished to "read labels" when they are shopping for food and I'm pretty sure that most of you reading this consider yourselves to be in this category. Considering the ever-growing list of ingredients found in packaged foods today, one must be very careful if they want to avoid excess sodium, sugar, chemical additives, and artificial ingredients. However, for many athletes, they seem to not read the labels when it comes to the products they select for use during training and racing. Eating organic and then using sugar/chemical laden products when training and racing? That's the point of this article - you need to be just as diligent in reading the labels of all performance foods, beverages, and supplements as you are in reading labels of packaged foods you buy at the supermarket and serve on the table.

The reason that I am writing this is that one of the most commonly asked questions I get from clients and athletes that I come in contact with is, "so what do you think of this or that product?" Usually, they have a friend who swears

Nutrition Facts Serving Size 1/2 packet (6g) Servinos Per Container 2 Amount Per Serving Calories 20 % Dailty Value* Sodium 100mg 4% Potassium 30mg 136 Total Carbohydrate 5g 2% Sugars 5g 'Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs. Impredients: Sucrose: offic acid, returnland artificial flavor, salt, sodium citrate, monopotassium phosphate, modified food starch, calcium silicate, sucraione, red 40, acasultame potassium.

listed usually comprise about 80-90% of the formulation, so these are key. However, it's not enough to just focus on the first three listed; you also have to be extremely careful of the ingredients listed last too as they tend to be the very nasty chemicals - artificial sweeteners, colors, and flavors. If any of the first three ingredients are sugar-sucrose, dextrose, fructose, HFCS-that should be a red flag. Next, go through the rest of the ingredients and see how many hard-to-pronounce chemicals are in it long ingredient lists are another red flag for me. Lastly, concentrate on the last several ingredients listed. If they contain artificial sweeteners such as sucralose, aspartame, acesulfame potassium, or other chemicals like polyethylene glycol or silicon dioxide, then steer clear. Finally, if the last ingredients listed are colors and numbers like FD&C Red 40, Yellow No. 5 Lake, Blue No. 1, etc., put the product down and run!

Unfortunately, companies and their marketing departments are getting more and more tricky as consumers continue to wisen up. Certain companies go on about how natural their product is because they don't use fructose or artificial sweeteners, for example. However, upon further inspection, one notes that they are using copious amounts of sucrose or dextrose and artificial colors! Somewhat less misleading are the "natural" products that are simply filled with sugar and salt. If you make it past the ingredient list without big red flags, the next thing to look at is total grams of carbs, sugar, and sodium per serving. Any product that has 20-30% or more of its carbs as sugar and 200mg or more of sodium per serving should also be avoided, in my opinion. Even if you are eating organic rice syrup-30, 40, 50 grams is still a lot of sugar. The same goes for the salt. It may not be sexy, but the lower the sugar and sodium content of the products you consume, the better you will perform and feel.

Even excluding Hammer products, there are enough products on the market that there is almost always a better alternative to swag-filled, overhyped products such as those that will remain unnamed here. So, the next time someone wants to turn you on to the latest, greatest, hottest new product to come out, just tell them to "show you the ingredients."

Further reading: www.red40.com and www.dorway.com/possible.html.

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Starting in the back will avoid the pushing and jockeying that occurs in the front. The problem with that is, however, that many people get tired after the initial sprint and you may have to navigate through them. Starting to the side of pack is often a better option. You may have to swim a little further but there won't be as many people to swim through after they tire from their sprint.

Cater to your own strengths. If you're fast and strong, starting in the middle and sprinting out in front may work best for you. If you're a strong distance swimmer but don't have a lot of speed or are nervous about the physical contact, you may be better off at the back or the side.

Once you get through the initial sprint, swimmers usually space out a bit and there is a lot less contact. However, realize that it is normal to have people cut you off or run you over throughout the course.

Wipe-Out

In all open water swims there is choppy water to contend with. In ocean swims, there are also waves.

When water is choppy, that finger-tip drill our coaches have us practice in the pool needs to be forgotten. If your hand is too close to the surface, a wave can knock your hand back. In choppy water or waves, swimmers need a much higher arm recovery.

Before entering an ocean race in California, it is a good idea to become comfortable with breaking waves. When you go to the beach to practice swimming in open water, don't forget about the entry and exit aspect of an ocean race. Just spending time playing in the waves can teach you a lot and help you gain confidence for your entry and exit.

When going out to sea, you will want to go under or through the breaking waves. Once you are in thigh deep water, the easiest way to get though waves is to "dolphin" or dive at a shallow angle into the water and, when you reach the bottom, grab it with your hands and pull your legs up under you. Use your hands and your feet to push off the bottom and forward, out of the water. You can dolphin through the waves until you get to deeper water. Even in deeper water, where you can't touch the bottom, if waves are still breaking, you will want to duck under the wave. The deeper you can go under a wave, the less likely the risk of getting knocked around by the force of the wave.

Getting back into shore is a lot quicker than getting out. And, if you are a good bodysurfer, you can use this to your advantage. As you are swimming into shore, be sure to look back over your shoulder occasionally or take a quick stroke on your back to get a sense of what the waves are doing. When you feel a wave begin to push you forward, take a couple of strong strokes, get in a streamlined position with one arm out front (like a spear), kick hard and let it take you. If you are on the top of a wave as it begins to break, you can stay right on the front of it and ride it all the way to shallow water.

Once you're in water that is shallow enough for you to touch the bottom with your fingers, you should be standing up and running. Again, you may want to use the dolphining technique to maneuver yourself through the waves. But you'll be faster running through shallow water than swimming through it. Strong runners definitely have an advantage here. Many an ocean race is won or lost based on the swimmer's ability to ride a wave into shore and then run up the beach to the finish line.

Get Ready To Race

After some practice, you will have increased your comfort level and you'll be ready to enter a race. There are many different lengths of open water races. So, if you're not sure about your abilities or it's your first race, you might want to you start out with some of the shorter local races, which are often in coves or lakes where the water is a bit calmer. For comprehensive lists of open water races this year, including lake and ocean races around the country, go to www.10kswim.com/oceanRaces.html, www.usopenwaterswimming.org/2010OWCalendar.htm or http://www.mortonsaltreport.org/raceschedule.html.

So get out of the pool and into the ocean. I'll be looking for you on the beach! <code>HN</code>



"The cycling shorts I ordered are the best! Thanks." - Rick A.

Crushing it in Canmore!

Team Hammer wins division and overall title!





Needless to say, the venue and surrounding landscape were breathtakingly beautiful (the elevation of nearly 4,600 feet probably had a little to do with the breathtaking aspect as well).

The event, as expected with all of the 24 Hour of Adrenaline races, was meticulously organized and exceptionally well run. And the course was spectacular. As the guys pre-rode the nearly 11-mile course late Friday afternoon, they all came in with big grins on their faces. As Matt would later say, "It was easily one of the most breathtaking backdrops to a mountain bike race that you'll find anywhere on the planet. The venue had that great Euro World Cup feel to it that only inspired the urge to go fast. My buddy, Todd Tanner, said it straight about the course: 'It's a mountain biker's course' and that was no joke. If you couldn't ride trail at least at an expert level, you were over your head. Rooty, steep, switchback climbing that turned into equally rooty, technical descents. Take that, and then turn the lights out . . not a lot of room for faking it out there. This is the best kind of course for a 24 – enough fun, challenging trail to keep your mind entertained the whole time. Even at 4 a.m. you can't help but have a good time."

The team was ready to race, no doubt about that, and the crew—Bryce Daviess (mechanic), Miles Frank (cook, photographer, all-around helper), and I (crew chief)—was equally ready to meet the challenge. All of us learned a lot from our experience in Spokane – the guys fine-tuned their fitness and got their equipment dialed in (having Bryce there was a definite plus), while we on the crew did some fine tuning of our own, taking even more steps to ensure that all the rider had to do was ride the bike while we, the crew, took care of everything else.

One of the things that I decided to do for this race was to provide each of the riders with a new water bottle for each lap. This would not only save me and Miles time in cleaning used bottles, it would prevent the possibility of germs and bacteria from being ingested by our riders (and who knows what's going to splatter onto your water bottle over a partially wet and muddy course). When racing hard and staying awake for basically the entire 24 hours, optimal immune system functioning will most likely be compromised. I'm no germ-a-

phobe, but I didn't want to take chances with anyone getting sick either, which is why I decided to use brand new water bottles for each and every lap. It may sound like a very minor thing but the "one and done" approach with the water bottles proved to be a real winner.

So too was having pre-made, "before your lap" and "after your lap" supplement-filled capsule dispensers ready for each of the guys. Working together, we determined what supplements were to go into each rider's capsule dispensers (clearly marked so that everyone knew whose capsule dispensers were whose). I kept that information in my race notebook and made sure everyone's capsule dispensers were ready to go well ahead of time, each filled with the appropriate amount of specific supplements. This may also seem like a very minor thing but (A) it kept me busy, which I need to do if I'm going to go without sleep for 24+ hours, and (B) it ensured that the guys were taking supplements prior to and after each and every lap (I think I'm now referred to as "Drill Sergeant Steve" for my insistence that everyone take their supplements, even when they may not have felt like it).

The use of a large dry-erase board proved to be extremely helpful in knowing who was currently on the course, who was next to ride, and what time they needed to be at the start/finish line, based on the current rider doing either a 50-minute lap, a 55-minute lap, or a 60-minute lap. Having this information available "in writing" let us know how much rest each rider could take in between laps and what time they needed to be ready for their next one. Another little seemingly minor thing that paid huge dividends when all was said and done.

Lastly, we had the Hammer Big Rig, the ultimate advantage (besides the quality of our team), on our side and, as was the case in Spokane, this amazing rig/motor home proved to be worth its weight in gold. Having the team be able to get inside and away from the elements—to get some rest, take a shower, or do a Globus active recovery or warm up routine in the comfort of this spacious vehicle—was definitely beneficial, to say the least. And oh yeah, rolling up in the rig and having it be your "pit area" is the very definition of intimidating.

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Masters National Championships

Hammer "Super Seniors" excel

BY MIKE FREEMAN, Hammer Nutrition Ambassador

his year's Masters Cycling
National Championships recently
took place in Louisville, Kentucky
and another chapter of Team
Hammer Nutrition is in the
books. We, the team, accomplished quite
a goal – two National Championships, a
2nd place, a 4th place, and two 6th place
finishes rounded out our results.

It was exceptionally hot and humid for this time of year in Louisville. Temperature records were broken, with the hottest day being Wednesday the 4th – 86 degrees at 5:45 a.m., peaking at 104 degrees, with the heat index going as high as 117 degrees. If you don't like or perform well in that kind of heat and humidity, you just have to tough it out.

August 3rd – Time Trial Jim Fox – 2010 National Time Trial Champion, 65-69 age group!

Luckily, Jim Fox and Richard Shields had very early start times. Hot and humid, but not unbearable. Jim Fox, a time trial specialist, had the second best time of all of the 20k starters. He was the only 65-69 starter to complete the 20k in close to 30 minutes. Richard Shields had a very respectful 6th place, one spot off the podium. Good job, boys!

August 4th – Road Race Richard Shields – 2nd place, Jim Fox – 4th place, Mike Freeman – 6th place

Again, thank goodness for an early start -8:00 a.m. Still very hot and humid. A lot of water and Endurolytes consumed.

The race started off quickly with me attacking from the gun but I was quickly

caught. Richard counter-attacked and got away with one other rider in tow. Within a lap and a half, Richard's two-up break became a one-man effort. With Jim and me controlling the field, the lead grew to 40 seconds. The course was demanding but not selective. Richard stayed out for four laps (resulting in him receiving "most aggressive rider" of the race) and decided that he would not attempt to stay out on his own when his lead dropped to 25 seconds. Keeping some in the tank for the finish, Richard attacked in the feed zone the last time up that climb with Jim hot on his wheel. I missed the attack and had to chase . . . my bad. Richard led it out of the final corner and just got nipped at the line by two or three hundredths of a second. Arrgghh! Jim was 4th and I got back up to 6th. No podium for me . . . Grrr!

August 8th – Criterium Richard Shields – 2010 National Criterium Champion, 65-69 age group!

10:30 a.m. start. Cooler, with less humidity. Richard, the definite strong man of the day, made numerous attempts to get a break up the road but all failed. It accomplished dropping a third of the field. I was to lead Richard out and attempt to get a gap out of the final corner. My attack started about two-thirds of the way down the back straightaway. I had the gap but ran out of steam about half way down the finish straight. Richard, who was on my wheel, accelerated around and won the sprint easily. I had a sure podium but 30 meters from the line I was hit from behind and taken out of the final order.

Jim placed 2nd in 65-69 for B.A.R. and Richard placed first in 65-69 B.A.R. (Beast All-Around Rider).





Jim Fox and Richard Shields on the Road Race podium.



Team Hammer Nutrition's Jack Kelso had intended on competing at this year's Masters National Championships but was sidelined because of a crash during a training race in June. Jack, a former podium finisher at the National event, had trained diligently for the TT and was going to be a definite threat in that event. Jack, we wish you a speedy recover from your surgery and hope to see you back in action, on the road soon!



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As far as the race was concerned, while "it ain't over 'til it's over" still applied, the drama ended up happening very early and being short-lived. As he did in Spokane, Dustin took the first lap, which started off Le Mans style, meaning he and all of the other competitors had to run a fairly lengthy distance before mounting their bikes. Dustin was at the front of the pack when he finished the run and got on his bike so we knew, barring misfortune, that he would be at or near the front of the pack when his lap was completed.

Unfortunately, misfortune did happen. Dustin, following another rider, inadvertently went off course. We figured he would come in around an hour's time, but as the post-hour minutes rolled by I thought, "Oh no, here we go again . . . another mechanical" (we were plagued by far too many of them in Spokane). An even worse thought crept into my mind, which was that he had crashed and was hurt. Fortunately, 11 minutes past the hour, Dustin rolled in unscathed and explained what had happened. We didn't know it at the time, but this was the worst of the problems we would experience for the remainder of the race.

Space doesn't permit me to give a "blow by blow" account of the race but it was clear that the riders were absolutely in top form and that the interaction/chemistry between the team and us on the crew was spot on. With fast-to-wicked-fast times being posted by each member of the team hour after hour, it became evident that we were not only running away with the 4-person team division, we had a real shot at winning the overall title, meaning we'd beat every rider and every team, including the powerful 5-person teams. After seven laps I had calculated that we were at least an hour ahead of the second place 4-person team and had a 10-minute lead over the first place 5-person team. Things were looking good.

The temperatures were quite warm during the day but our team, consuming adequate amounts of Endurolytes and liquids before, during, and after each lap, had no cramping issues whatsoever. The warm temperatures and the higher-than-we're-used-to altitude didn't slow the team down one bit; Team Hammer Nutrition recorded seven of the fastest 20 daytime laps. Nighttime was simply awesome, with moderate temperatures as well as a full moon booming out its light across the sky. In fact, the weather was so pleasant that I wore shorts, a t-shirt, and sandals all night long . . . definitely not the case at the Spokane race. The team obviously enjoyed the night as well, posting the three fastest nighttime laps of the entire field.

Throughout the night, the team kept the pressure on, clicking off fast lap after fast lap, and distancing themselves from all of the competition in the 4-person division . . . to the point where it really made little sense for me to keep tabs on those teams any longer. Our goal now was to put some distance on the 5-person teams in the hopes of winning the overall title. A bit after 11 hours into the race (not quite the halfway mark), we had built a 25+ minute lead and by 15 hours the lead had grown to over 30 minutes. It was abundantly clear that all of the guys were crushing it on each and every lap and that mechanical issues were minimal. Phil and Matt put the final "nails in the coffin," each blitzing a sub-54 minute lap, far

faster than anyone—even the crew—was expecting after nearly 20 hours.

With three hours left in the race, Team Hammer Nutrition had built a 50+ minute lead over the fastest 5-person team. Barring a severe mishap, the victory was well within our grasp. Jason rode a solid lap, one that he called a "recreational lap" (but which was still faster than what most of the other riders were doing all race long), Phil cranked out another 55-minute-or-so lap, and Dustin sealed the victory with yet another strong lap.

In the end, Team Hammer Nutrition had completed 25 laps, winning both the 4-person division and the overall title. Team Jasper Source for Sports, the first place team in the 5-person division, was the only other team to do as many laps; however, it took them 53 minutes longer to do so. Team Equipo Sierra took second place in the 4-person division, four laps and over four hours behind Team Hammer Nutrition.

When you have a group of well-trained riders, a solid and devoted support crew, superb equipment, and a little bit of luck—and, of course, when the finest supplements and fuels are used consistently—great things usually happen. This was most definitely the case in Canmore . . . a most impressive effort indeed!

Once again the team relied on Race Caps Supreme, Mito Caps, Super Antioxidant, AO Booster, Endurance Amino, Anti-Fatigue Caps, Energy Surge, and Xobaline. Jason, as he did in Spokane, took two Race Day Boost capsules prior to each lap. Fuels used were HEED, Hammer Gel, Endurolytes, and Recoverite. After every lap the Globus "Active Recovery" program was used by each team member, and prior to each lap everyone on the team used the "Warm Up" program. The results of all these supplements, fuels, and the Globus? They speak for themselves! **HN**



"Thanks for the great products and great customer service/support. You guys are top notch in my book!" - Susan S.



Le Tour de l'Abitibi

Rich with racing history

BY WILLY ZELLMER & ANGELO ROMAN

Dustin's Note: I received a text message from Willy Zellmer (one of our CMG boys) right before Nationals, saying that he and two of his teammates were invited to Abitibi. For those of you who don't know, this is probably the most important junior race in North America since it is the only North American stop for the International Cycling Union Jr. World Cup. To say our riders were excited would be an understatement!

This would give our CMG team riders a chance to sample international style racing and European talent. This race is the future peleton, with former winners like Michael Zanoli and Laurent Jalabert. With the timing of the race and junior worlds looming around the corner, you know the racers will be at their best!

I was sent their perspective of Abitibi; I hope you enjoy!

Willy Zellmer Race 1

I put in a few hard efforts and was able

to stay off for a while with Tanner Putt we were joined by Paul Lynch shortly after and was caught a few minutes later. Back in the peloton of 156 I was able to sit in and recover and drink some HEED and have some Huckleberry Hammer Gel. I was then caught behind a huge crash and had to chase back through the caravan. I ended up finishing 14 seconds down on the first stage.

Race 2

Today was a day to sit in and relax. The race was relatively easy until the 3k finishing circuit we did three times. Again I was unfortunately caught behind a large crash and chased back with a dude from a Canadian team. When I was back with the group I looked to the front and saw a huge split and realized it was a make or break situation. There were a few of my teammates in the back of the split. I went to the front and towed it back to the main group. In the race there is a KOM jersey and sprint points jersey . . . I was able to lead out teammate Nick Roeder to get a few points. I was able to

stay in the main group and finish in the main group and not lose much time.

Race 3 - Time Trial

The time trial started 850 feet in an underground mine. We were only allowed 7 minutes to warm up. We had 5 minutes on stationary trainer and then we were able to warm up on our TT bikes for 2 minutes then hit the start line. We went off in heats. There were 6 heats with a person from each team in each heat. We started in reverse order of GC. I was in the 3rd to last heat. The person with the fastest heat time had to wait and do rollout at the end of the heat. I was in this situation and ended up finishing 7th of 140. I was very pleased with this result. After the TT I was 16th overall.

Race 4

The 4th race was on the same day as the TT in the evening. It was a short and flat race. The race was 52.2k and flat as a pancake. It was fast from the gun. The race was won in a break 20 secs in front of us. After the race I was bumped back to 20th overall 1:41 back from the leader. The race was extreme in the last 10k. Two large crashes happened. One was right next to me. The person who went down first hit me going over 50k an hour. The second one a rider hit a car that was parked on the road causing a massive pile up.

Race 5

Today was the longest day of the tour with a distance of a little over 115k. At the start it was drizzling rain but by the time we had started to roll out it was pouring. It continued to dump rain off and on throughout the race. The race was full of crashes but only in the last 20k. I unfortunately crashed today. There was a section of pavement that had a ton of oil spilled on the road. Riders slid across the road, fortunately I was able to avoid this crash but not more than 2 minutes later two riders right in front of me went down and I had nowhere to go. I ran into them and did an endo. I hit my head pretty hard and cracked my helmet. I was hit by numerous riders coming into the pile up. My chain was jammed in my frame. I waited for my mechanic from the team car to come and help me get it fixed. Once I was back up and going again I looked at my bars which were 50 degrees of center. I chased through the team cars and rejoined the field. We were about 5k from entering the finishing circuit and I

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wasn't sure if I should fix my bars or not. I went back and talked to the team car and decided to just finish with them how they were. I finished in the middle of the peloton and didn't lose any time and moved up to 17th on GC.

Race 6

Today was a circuit race held on a 12k circuit that was moderately hilly. It looked like a good course for a large break. Unfortunately it never got away. It was a 2 man break that stuck for most of the race. The race was very fast from the gun, luckily it wasn't raining today only spitting a little the road was dry. Again there were plenty of crashes today, I had no problems today though. I finished in the group 9 secs back from the break. I am now 2 min down from the brown jersey and moved up to 16th overall.

Race 7

Today was our final stage of 114k. It was a mostly flat race finishing on a tough 5k circuit that we did 9 times. Very early in the race a break of 23 riders went. I was in this break with all of the contenders. We proceeded to enter the finishing circuit with a lead of over 5 minutes on the main field. By the last lap I was doing all I could to hang on. It had been a very windy day with mostly a head cross wind. I was very happy with my performance today. I moved from 16th overall to 14th overall.

The Tour de l'Abitibi was a very good experience for me. It opened my eyes to international level racing and showed that I can compete with people from all over the world. I came into the race with 2 goals: top ten in the TT and top 15 overall. I met both of these goals and am satisfied with my performance. I will definitely be going back next year.

Angelo Roman Race 1

I didn't know what to expect prior to the start of the first day of the l'Abitibi. Having raced within the United States and Belize, most of my competition had consisted of US cyclists. I wasn't sure how fast we would race or how fit the racers would be. At the start of the race, the first thing that struck me was the size of the field. New Zealand, Japanese, American, Canadian and Belizean teams combined to create a field of approximately 150 racers. I learned a lot about international competition in the first day of the race. Unlike races in the United States, the speed was very

high. I spent much of the day in my hardest gear - a 52/14. Racers were also really aggressive - there were numerous attacks and staying at the front of the pack often required physically pushing other riders out of the way. The end of the race was so fast that it was difficult to be competitive in the sprint unless you were at the front at the start of the three-lap circuit. I crossed the line in 29th position.

Race 2

The course during Tuesday was very similar to Monday. Both courses were extremely flat and very fast. It was easy to stay in the pack because there were so many riders blocking the wind. To ride away from the pack was very difficult because the speed was very high. A few times during the day I got into small breakaways, but was pulled back to the pack very quickly. It was surprising that mid-way into the race, a breakaway of about 5-6 riders managed to ride away from the pack. All of the riders but two were caught by the end of the race. Since the race finished at the same place as the race on Tuesday finished, I worked hard to not repeat the same mistakes I had made before. I was very aggressive in moving to the front of the pack, but ultimately finished 28th in the sprint.

Race 3 & 4 - Time Trial and Road Race

Thursday was the most exhausting stage of l'Abitibi. It consisted of two stages - a time trial where we rode out of a mine and a short 50-kilometer road race. Beginning early in the morning, I was carted into the mine where I warmed up on a trainer hundreds of feet underground. I was impressed by how technical the time trial course was. Not only was the steep climb out of the mine very difficult, but the course featured over 20 sharp turns, which tested bike-handling skills. In front of me, a motorcycle guided me through the course, and behind me, my team director and a mechanic honked their horn in encouragement. I finished the course in 30th place.

The 50 kilometer road race started in the late afternoon and was definitely the fastest and one of the most dangerous races in l'Abitibi. Like many of the other races, riders constantly attacked and were pulled back by the field. Surprisingly, a small breakaway managed to get away from the pack and ultimately win the race. National teams got into pace lines in an effort to pull back the breakaway. While this occurred,

riders fought for position. During one incident, I was behind a Japanese rider who ducked his head and barely missed hitting a truck mirror. A number of large crashes towards the end of the race slowed down the pack and allowed the breakaway to get away. I was at the front of the pack as the pack approached the flat finish, and managed to finish 6th in the field sprint but 18th behind the breakaway of 12 riders.

Race 5

Friday's road race was flat like all of the other stages. I spent much of the day towards the front of the pack trying to get into breakaways, but the pack was aggressive and no riders could get away. There were few crashes until about 70 to 90-kilometers into the race, when the intermittent rain combined with oil on the road made the road very slippery. Much of the field slid out and the racers, in protest of the dangerous conditions, neutralized the field. It wasn't until less than 5-kilometers to the finish, when most of the fallen riders had rejoined the field that racers began to once again attack. I was very aggressive in an effort to do well at the end of the race, and finished 11th in the field sprint.

Race 6

The circuit on Saturday was short and fast. Riders completed 7 12-kilometer laps around Val d'Or. Each lap had two short climbs. The race was uneventful until the last lap when race leader Lachlan Morton managed to solo away from the field and win by 9 seconds. A small breakaway group formed to catch him but it was caught by the pack. I finished 28th with the pack.

Race 7

The final race at l'Abitibi was a windy 115-kilometer road race finishing with 9 5-kilometer laps around Val d'Or. Almost instantly, a breakaway of about twenty strong riders managed to breakaway from the field. Having missed the break, I was very aggressive in an effort to get into breakaways. However, by the time the pack reached Val d'Or, the breakaway had over 4 minutes on the field. I finished mid pack.

A sound nutritional strategy was especially important because l'Abitibi was so much longer than any race I had competed in before. Consuming Endurolytes, HEED, and Recoverite during and after races provided me with sustainable energy and helped me to recover after stages. **HN**



How to succeed WITHOUT a base

BY TONY SCHILLER

adly, I've become somewhat of an expert on this subject. Am I recommending it as the way to go or even a good idea? No, but if you're like me and life circumstances (or a lack of motivation) have put a crimp in your training routine, well, you can still pull the rabbit out of the hat.

Since 2004, I've had the most inconsistent and lowest volume training of my life. That was the year I launched the MiracleKids Triathlon and became consumed with growing it into the extravaganza it is today (over 1000 kids racing and raising \$300,000 for our charity). The project has given me new respect for race directors and new insight on racing without a base. If you find yourself trying to do the same, here are 10 keys on how to make the more out of less.

Above: Stephen Szoradi shows off his metal at the Leadville Silver Rush 50-Miler. Here's what he had to say about it, "I entered on a whim with a 16.5 mile training run the week prior. It was pretty hot, kind of dirty, I was pretty much unprepared, but I think the Hammer stuff kept me somewhat mentally stable. I hope I represented well, although no podium time. 45th overall / 38th men / and 6th in the 40 age group. I'm pleased and also pleased it's over." Photo: Mary Frances Griffith

Adjust Your Expectations
You won't be as good, get over
it. Shift your measure of success
from how you've always done
against those you compared yourself
to, to some realistic goals based on the
benchmarks determined by your current
fitness level.

Longer is Out
Don't be stubborn and foolish about racing long. Consider taking a rain check on that favorite fall marathon or the 70.3 you signed up for last spring. Racing long when you don't have a base isn't fun and potentially is hazardous to your health. Suffering through a low fitness bonk is not the stuff of legend; it's just plain silly as it increases the risk of injury, and arguably, could even shorten your life.

Speed Rules the Day
The good news about having shorter average training sessions that you experience lower general training fatigue so speed play can be introduced in more sessions.
This means that while you won't have that desired sustainable power, you can have more snappiness. Translation: the marathon is out but you can still turn in a great 5k/10k.

Duration Still Matters More than ever you will benefit from some duration training but be really smart about it. For instance, if you're focusing on an Olympic distance tri, forget going out for a pounding 50 mile ride. Instead, prioritize into every 2 weeks these 3 duration sessions in each sport (on different days): a session of 3000+ yards in the pool plus very easy sessions of 40 miles on the bike and 8-10 miles on the run. By getting these sessions in every 2 weeks over the 4-6 weeks leading up to your final race, you'll still have outstanding endurance for the race.

Go Camping
A triathlete can especially benefit from a 3-day training camp 3-4 weeks before your event. Again using the Olympic distance example, I would have 3 consecutive days of training as follows: Friday, AM swim shorter with intervals, PM ride

- continued on page 55

15 miles with a 15 minute TT and a 5 mile transition run. On Saturday AM, swim a 1000 yard race-paced time trial followed by the easy duration ride of 40 miles noted above, and that evening run an up-tempo 5k. Sunday AM would be an easy open water swim of 30-45 minutes, followed by the duration run of 8-10 miles, and that evening an easy spin for 25 miles. Note: it's important to prepare pre-event meals Thursday-Saturday and use Recoverite after each session to top off the tank. If you practice E-stim, mix in recovery sessions all weekend long and on Monday. Monday and Tuesday can be off days with light walking to quickly bounce back.

Get Cut
One of the biggest challenges for most undertrained athletes is weight gain. This kills performance more than just about anything, makes you feel lousy and increases the risk of injury. You can't race well carrying extra weight, so cut out carbs, sugars, and alcohol for a quick loss of 5-10 pounds. This will do more for you than just about anything.

Eliminate Useless Miles Not in general, but within workouts. You don't have the base to go steady for long periods so mix in sections geared to fully recover within your workout. This will allow you to do more up-tempo training. For instance, instead of another slow and methodical 45 minute plod, I'd suggest 45 minutes repeating 3 minutes of up-tempo (not intervals) running or riding followed by a 2 minute walk or resistance free spin. You'll cover slightly less distance but you'll improve during the session instead of simply logging useless miles.

Add Frequency
Undertrained athletes will get
more out of doing 2 sessions of
15-30 minutes each, 3 days in a
row, than doing one 60 minute session
every other day. As you close in on
the final weeks of your racing season,
frequency becomes even more important.
It allows you to recover quicker and have
the up-tempo sessions needed to turn in
a good racing performance.

Race Less
This is critical. It's fine to use weekly races as speed training when you have an outstanding base. But you don't have one so weekly races will only wipe out even more days you need to be training. So skip a race or two and focus in on your training camp and duration sessions. As you wind down toward your final races, you want to be feeling as good on a daily basis as you have all year long. This will buoy your confidence at the right time.

Expect to Do Great
This is the final piece of the total package as you need to purge your tongue of the "I'm so undertrained" excuses. No one cares why you aren't ready to do well. It's time to be an athlete who is passionate and purposeful, so bring it on. Have some fun and race like you're capable of racing. Finish off the year with a flurry and commit to an off season where you build up a base and aren't in this situation again in 2011. HN



"Thank you for obtaining CRC kosher certification for your products - I couldn't consume them without it!" - Charles G.



s I explained in part one of this article, Road Cyclists entering the sport over the past fifteen or so years tend to come in by way of mountain biking, triathlon, or fitness, rather than pure road cycling. As a result, most of these "cyclists" lack the knowledge which makes up the foundation of the classic cyclists' repertoire and which builds upon the backbone of the sport. Continuing with the theme initiated in part one of this article (EN#70), here are some more things the classic cyclist knows and does:

*For the love of the sport*The classic cyclist rides first and foremost for the pure love of cycling, for the fun and enjoyment that comes from bonding with a simple, beautiful, and ingenious mechanical device and ranging the world. This cyclist rides for the wind in the hair, for the sensation of hot, cold, humid, wet, or dry on the skin, for carving up rolling terrain like riding a roller coaster, for the sensations of a pounding heart, sweaty brow, and heaving chest. The pursuit of adventure, camaraderie, and well-being astride a wheel are the primary driving forces behind every ride. "Training" is reserved only for preparing for specific competitive, or personal challenge, efforts; it is but rarely the motive for heading out onto the road.

Mentorship

The classic cyclist learned skills and etiquette from other classic cyclists, usually one or two masters in particular who took the time to encourage and enlighten the neophyte. Over time, the neophyte also becomes a mentor, passing along knowledge, wisdom, and specific tricks of the trade through specific instructions and by example. Cyclists are not born knowing how to trim a front derailleur, how to quickly clip in while starting on a steep grade, how to scan through the back windows of cars for drivers about to open their doors, or how to ride deep in the drops with a straight spine and relaxed shoulders. Mentors imbue new cyclists with these and many other pearls of wisdom, coaxing them along their journey to mastery.

Embraces mother nature

The classic cyclist embraces the whole panorama of weather that Mother Nature provides and doesn't shirk from riding in less-than-ideal conditions, nor cut a ride short just because the weather takes a turn for "the worse." Au contraire, the classic cyclist relishes the opportunity to feel more alive and at one with the environment because of dramatic weather. Whether rain, cold, snow, heat, or headwinds, it is all respected without judgment as "just weather being weather." Riding only on sunny weekend mornings in the same matching "kit" on the same route every week is the antithesis of classic cycling.

Clean steed, self-serviced The classic cyclist keeps her steed clean and free of

unnecessary add-ons. No more than one gadget is attached to the bike, the handlebar tape is clean (and preferably white), there are no garish colors nor logos, and the entire "ensemble" of the bike itself is understated, simple, and stylish.

The classic cyclist also maintains the steed herself, keeps it finely tuned, and knows how to make adjustments on the road.

For example, she routinely amazes other cyclists by reaching down to make a rear derailleur adjustment on another's bike while stopped at a light: a quick flick of the wrist restores that bike's drivetrain to purring perfection. This deep understanding of the workings of the bicycle allow the classic cyclist to repair, or make work-arounds, for any mechanical mishap encountered on the road. As well, a proper seat pack with a comprehensive multi-tool, two tubes, patch kit, and a small but specific selection of "ride-savers" keeps the show on the road for her and others. Phoning for a ride home is anathema to the classic cyclist.

Rides to the vide

The classic cyclist acknowledges that the point of cycling is to cycle, and specifically not to pollute nor clog the roads with a motor vehicle. Thusly, driving to a ride start is avoided whenever possible. Tacking an extra ten or thirty miles onto any given ride, in order to transit to and from the ride meetup spot, is a given; these "bonus miles" are appreciated as an opportunity to warm up properly, find a groove, and start or finish any given outing with the proper classic style and mindset.

Stay tuned to the next edition of Endurance News for Part Three of The Classic Cyclist! HN

Chris Kostman has been a classic cyclist since 1982. Besides competing in races as diverse as the Race Across America, the Iditabike Mountain Bike Race, and the 24 Hours of Canaan, he also organizes the Badwater Ultramarathon and Furnace Creek 508 races, a series of four century rides, and the Rough Riders Rally. This is his sixteenth article for Endurance News. Learn more at his blog, www.XO-1.org, and at www.adventurecorps.com.



A big day at Big Horn

BY ANYA WECHSLER

A first-time ultra runner recounts her experience at the 2010 Big Horn 50K

t 4:45 a.m., my eyes snapped open to the sound of my alarm clock. On any other day, I would reach for the snooze button, wishing to eek out a few more minutes of precious sleep. But the morning of June 19th was different. I was ready. Not just ready to wake up, but ready to run. Despite my lack of hunger, I forced myself to eat an egg, a piece of toast, and one of my mom's homemade bran muffins.

As the bus came to a stop on the side of a random gravel road, a few racers began to point to a two-track jeep road that climbed straight up the ridge to our left. Wow! I knew it started with a long ascent, but this looked brutal! Sure enough, within two minutes of the gun, nearly all of the 160 racers were walking. Although I knew that running the hill would save me hardly any time, and could possibly ruin the next 30 miles, I was inclined to run for at least five minutes just to get my head in the game. This being my first ultra marathon, I had no idea how I would handle the distance or the terrain. I felt that I had put in the proper mileage to possibly have a decent time, but I was going to have to run when possible and walk only as a last resort to save my legs.

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Anya Wechsler begins the first big climb at the Big Horn 50k. Photo : Owen Gue After an hour, I had topped out on the 3,000 ft. ascent to Riley Point. The incline began to back off enough for me to relax and remind myself to sip on my bottle of Strawberry HEED and down a Huckleberry Hammer Gel. Before long, the course took a drastic turn down a steep single track. For the next half hour, I danced with the mountain as gravity led and my legs followed, losing all of the elevation that I had gained and then some. As I bottomed out at the first aid station I had a feeling that the woman whom I had passed a few miles back was still hot on my heals. Exhilarated by the incredible views and kick-ass trail, I blasted through and began the ascent back to the start to complete the first 14 miles.

After only a few minutes of the gradual incline, I checked in with the true status of my body: wet, sore feet, and a mild pang of hunger. Otherwise, pretty darn good. I stuffed a bit of a chocolate chip Hammer Bar into my mouth and was surprised to feel my stomach begging for more. Within the next 10 minutes I had eaten the whole thing and washed it down with the rest of my HEED. Shoot, I had only started with half a bottle in order to avoid carrying extra weight up the hill. I had forgotten that part of my plan was to refill at that first aid station. No big deal I thought, only 30 minutes of climbing until I would make it to the Dry Fork aid station. However the sun had really started to beat down and I was feeling parched.

As I approached the aid station, I was enthusiastically greeted by my good friend and training partner. Megan Gaskill, and my boyfriend, Owen Gue. I declined the option to access my dry bag and stopped briefly to let a friendly volunteer re-fill my water bottle with a half-and-half mix of HEED and water. Meg and Owen met me on the other side of the tent and I paused to re-tie my shoes and confiscate a Hammer Bar and Hammer Gel that I had asked Owen to have handy. "Holy cow Anya, there are only 3 dudes ahead of you. GO!" Until this update, I had no idea that I was currently the first place female and contending for top three overall. I took off up the road, sipping on my precious liquid, and trying to catch up on hydration.

Knowing that the last 18 miles of

the course included over 3,000 ft of descending, and only a few short climbs, I began to believe that I might be able to accomplish my super secret goal of finishing in under five hours. But before I knew it, I was three hours into the race and I had forgotten to eat or drink much since the Hammer Bar way back before Dry Fork. Unfortunately, my stomach wasn't in the mood for food or beverage now. As I crested the last steep climb before the final decent down Tong River Canyon, a wave of nausea slapped me hard and I was disappointed that I wasn't chomping at the bit to fly down as I had been in the first descents of the race. I remembered the Hammer Bar, Gel, and Endurolytes that I had carried all this way in the back pocket of my jersey and considered trying to consume them. Although I had constantly been sipping on HEED, I knew my energy levels could really use a boost. Just then I heard footsteps behind me and my attention shifted back to the race. For the previous seven miles I had been picking my way through the field of 30kers and crazy 100-mile racers, and I knew that these footsteps had to be those of another 50ker. My slightly competitive side kicked in a bit. Oh man, I thought, I hate being passed on a downhill! "You want by?" I asked. He replied with a mild grunt which I barely made out as a "not now." So, for a couple of miles, I turned it up a notch, feeling the pressure from behind. Finally, he made a move around me. I was too concerned about my sideache and nausea to care much but managed to stay on his heels.

Growing up in Sheridan, Wyoming at the base of the Big Horns, I spent a lot of time exploring the canyon. I had originally hoped that I would be feeling good enough to really enjoy the scenery and rush from this wild descent through this amazing terrain but ended up fixing my attention on my fellow racer's heels and the rocky trail ahead, wishing I could remember how far it was to the trailhead. Finally, we passed a bridge that I remembered as being within a mile of the trailhead and just over five miles from the finish. With this knowledge. I checked in with the body again and realized that the stomachache was nearly gone, and the legs actually felt pretty good. I advanced around my racing partner, and cut loose for the final aid station.

Only five miles to go! I felt like stopping

now would be pointless and the thought of food made bile rise in my throat. I dumped a full cup of cold water on my head and pounded on. After a mile a cheering woman informed me that I was about five minutes behind the two lead guys. I briefly entertained the idea of catching them and winning the whole darn race, but after some quick figuring I decided that running over a minute per mile faster than them at this point was highly unlikely. I pushed on at what I felt was my threshold.

In retrospect, I couldn't have hoped for a better race. The views and terrain were magnificent, and I was lucky to have felt pretty good for most of the 4 hours and 53 minutes that I was out there. Needless to say. I think I could have done better if I had stuck to my plan of fueling with a gel and half a bar every hour, but I fell off the back with hydration early on, and never caught up. I think the HEED is what saved me. Although I could only manage a few sips every now and then, the mild sweetness kept me wanting more, and it allowed me to sneak in a few more calories and electrolytes to push me to the finish.

Finally, I crested over the bridge that leads to the small town of Dayton. This was it. I rounded the corner to enter the park where the finish line awaited me and was immediately greeted by a lineup of my entire family (Parents, stepparents, brothers, and a sister) as well as my support crew (Meg and Owen). I crossed the line . . . and stopped running.

What a funny way to spend a beautiful Saturday in June. But I loved it! I'll definitely be back next year for another dance party with the Big Horn Mountains! **HN**



[&]quot;Thank you for supporting our armed forces and for being patriots!" - John S.

Above: Ben Parsons. Below: The Butte 100 gets underway. Photos: Phil Grove



Heavy Mettle

A tale of true grit above the old mining town of Butte, Montana. BY PHIL GROVE

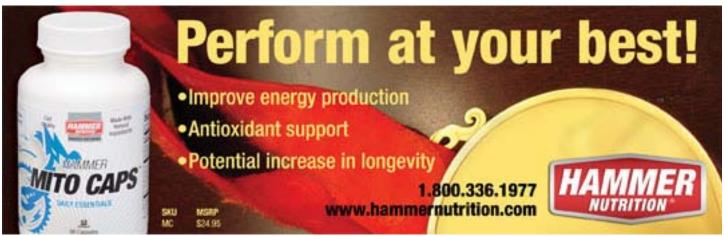
'm no quitter, but sometimes I know it's best to pack it up and save it for another day. Ben Parsons has no such logic. He just rides his mountain bike. This is the only way to win a race like the Butte 100. You can't give in to the ever-present urge to throw in the towel. Ben stuck to his guns and bagged his first 100-mile victory after a ridiculous ten hours and 40 minutes this past weekend at the Butte 100.

Ben's big win did not come easy or without a little luck. After getting lost in the previous two editions of the race, Ben was due for a little good fortune. His persistence paid off around mile 80 where he took the lead from slightly off-course legend, Tinker Juarez. Not to discount Ben's performance, keeping a head on your shoulders is part of endurance racing, and staying on course is part of that. Here's what Ben had to say about his dogged performance:

"Two days and a professional massage later and I still feel thoroughly worked from the Butte 100. In agreement with a legend (Tinker Juarez), I have deemed it the hardest 100-miler I've ever done, and hope ever to do! The heat, the climbing, the blistering pace set by Hammer staffers Phil Grove and Matt Butterfield, and well, the endless miles of singletrack made for an epic adventure. My hat goes off to every finisher; that race chewed us

all up and spit us out for the ravens to clean up! As with all endurance races, I went through the highs and lows, the near-cramp phases, and the middle three hours where you want to just guit so badly! Fortunately, Endurance Amino, Mito Caps, and well over 70 Endurolytes kept the cramps at bay and pulled me through to the finish. My pace was actually strongest in my last few hours of racing, but part of that was from the excitement of riding into first place after suffering a time consuming flat earlier in the race. Props to Hammer Nutrition for supporting what was hopefully the hardest endurance race I will ever finish. There were smiles and worked over faces from all over to celebrate the victory of finishing! Nutrition was key, and a lot of mettle!"

A lot of mettle for sure, Ben! After getting lost in the first fifty miles, Matt and I said that enough was enough after six weeks of racing. We manned the Big Rig and had Recoverite, Hammer Bars, and other snacks while we waited for all of the finishers. We were so excited to see our friend roll in victorious, and couldn't believe the others who refused to quit. It was such a hard day out there, very fitting for a town famous for hard living. This just goes to show that when you fuel right, there is nothing stopping you from sitting in the "hurt box" as long as you like! **HN**





Jesse takes the shot while Austin anticipates. Photo : Karen Roehl



There is the cliché –

"There is a first time for everything

BY BRAD LAMSON

his was the inaugural year for The Swan Crest 100 Adventure Run, and for Scott Gaiser, his first 100-mile trail run. When Scott first asked if he could run the Swan Crest despite not having run a 100-miler before (or even a 50-miler for that matter), I was a bit hesitant to say ves. I had only met Scott a few times on some local bike rides and he had told me that he was training for a marathon but was still considering a 100-miler. After discussing it a bit, I said "You'll do fine, just as long as you know what you are getting yourself into and realize that you are donating \$225.00 of your own money to participate, go ahead and sign up." So there you have it, Scott was signed up and for some reason I had little worries. It was also inspiring to know that there were several local Montana residents that were participating in the SC100, nothing like that hometown motivation factor.

The SC100 traverses almost 100 miles of the Swan Range in Northwest Montana, much of it along the ridge tops following the Alpine Trail #7. The SC100 is unique in the fact that there are no roads that bisect the mountain range. The race has three 20+ mile sections that are unsupported with no aid stations, 23,000' of elevation gain/loss, and then there is the running at night through Grizzly Bear country . . . throw in a mile of obliterated trail covered in avalanche debris from the previous winter, stinging nettle, and some downed timber from the previous weeks wind storm. I thought the run would be tough but never imagined that only 20 out of the 44 starters would finish. Dan Barger of California won with a time of 24:36. Scott pulled into the finish at 9:19 a.m. for a 2nd place finish in 26:21, in his first ever 100-miler.

After seeing the participants off at the

start in the town of Swan Lake, driving around to set up and captain one of the aid stations, I had the opportunity to run with Scott for several miles on each side of the Quintonkon

aid station at mile 52. It was crazy how good Scott looked and better yet, mentally, he was on top of it. We pulled Scott heads out into the aid station, helped him of the Montana Conservation Corps, Kalispell chapter replenish his fueling needs, and we were off in a few minutes. I continued on for a couple of miles before I had to turn around and get back to my duties at the aid station. The next time I would see Scott would be almost 15 hours later when he crossed the finish line in Columbia Falls

courtesy

I didn't really have a chance to talk to Scott much after the run and when I called his

house a couple of days later, he was out backpacking with his son; obviously Scott had recovered well. Somewhere along the line I did hear that Scott used Hammer Nutrition products for his entire run. By the next issue of EN I will have had a

station. Photos : courtesy of the Montana Conservation Corps chance to sit down and talk to Scott about his strategies on training, fueling, and preparing himself mentally for the SC100. Until then,

ott refills and shares a story

with Brad at the Quintonkon aid



if you would like to find out more about the SC100, visit http://swancrest100.com

Brad Lamson is a part of the Hammer Nutrition Dealer Services Team as well as the SC100 Race Director.

AUGUST IN MONTANA

TEAM HAMMER/CMG ALUMNI, AUSTIN ARGUELLO, DROVE UP FROM PORTLAND TO HANG OUT IN WHITEFISH FOR A FEW DAYS OF EASY RIDING AND SIGHTSEEING. MILES AND I MET UP WITH HIM AND MARSHALL OPEL, TEAM WASTE MANAGEMENT AND CMG ALUMNI, FOR A NICE MORNING SPIN AROUND THE WEST VALLEY, FINISHING AT HAMMER HEADQUARTERS FOR THE NICKEL TOUR. BEHIND US IS ONE OF THE BRAND NEW 2010 DODGE

GRAND CARAVAN RACE SUPPORT VEHICLES.

L to R: Marshall, Austin, Miles, and Brian. Photo: Dustin Phillips

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Hammertime at Kona Brewing Co.



Special promotion and party for Hammer athletes going to Kona!

BY BRIAN FRANK

n years past, we have done a few different things to represent our brand a bit in October during the biggest, at least from a prestige standpoint, triathlon in the world. We've done hospitality houses on Ali'i drive and off-site expos at various retailers around Kailua.

This year we decided to do something totally different and hopefully a lot of fun—a promotion with our friends at Kona Brewing Company that will include a raffle drawing for a one-year supply of select Hammer fuels and supplements, as well as a full set of tri clothing. To sign up for the raffle, valued at \$2,500, go to the brewery to sign up any time between October 4th-8th.

For our clients, ambassadors, and friends who will be in Kona for the big race, we will host a "Hammer Happy Hour" from 3 p.m. to 6 p.m. on Wednesday, October 6th, at the Kona Brewing Company location in Kailua, Kona. Plenty of their delicious beer and "Pupu's" (hors d'oeurves) will be provided in a separate banquet room at the brewery. I will be hosting the event and look forward to visiting with you. My close friend and #1 Ambassador Mike Freeman will also be

in attendance. For more details, go to the link below.

If you will be in Kona on October 6th and would like to attend this meet and greet, please RSVP to the address below. You will be sent an email with an invitation for one or two people, according to your preference. For planning purposes and fire regulations, only those who RSVP in advance and present their invite at the door will be able to attend. Of course. you are welcome to come to the brewery and buy as much beer and food as you like any time that they are open.

Grand Prize includes:

Hammer Tri kit - top, bottoms,0 and visor 12-month supply of the Daily Essentials (Premium Insurance Caps, Race Caps Supreme, Mito Caps)

- 12 containers of HEED or Hammer Gel jugs
- 12 bottles of Endurolytes
- 12 containers of Recoverite
- 4 24-ounce Water Bottles
- 2 Blender Bottles
- 4 Capsule Dispensers
- 4 Hammer Flasks

Prize valued at \$2,500!

Prize Details: Men's or women's kit to be determined by winner. Flavors



Sign up to win at www.hammernutrition.com/hnt/konaparty/

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Donaldson does it again!

Hammer-sponsored athlete smashes record

BY STEVE BORN

amie Donaldson once again proved that she has no equal in the Badwater Ultramarathon, winning the Women's division for the third year in a row, placing third overall, and setting an astonishingly fast new course record of 26:16:12, about 35 minutes faster than her existing record. In correspondence with her, she said, "I had the most amazing race with absolutely NO stomach issues; fueled the entire way with Perpetuem, Hammer Gel, and Endurolytes! This is the first year I had really no problems at all either! I had energy and was never hungry the entire way!"

Other Hammer athletes excelled in this most-difficult race, one that is appropriately described as "the world's toughest foot race." Long-time Hammer Nutrition-sponsored ultra runner, Connie Gardner, placed second in the Women's division and ninth overall. This is especially impressive given that this is her first Badwater and her time of 30:35:08 is exceptional for a first-time entrant (or any entrant for that matter).

Jimmy Dean Freeman once again showed why he's among the best ultra runners in the country (and a highly sought-after coach/speaker as well) with a solid Top 20 finish. Out of 80 entrants, Jimmie placed 16th overall in a time of 34:22:40. Outstanding!

Sixty-eight-year-old Arthur "The Grinder" Webb (our "spotlight" athlete in EN #66) continues to amaze, finishing his 13th consecutive Badwater in 47:31:20 and fulfilling his goal to post a sub-50 hour time. Arthur and I correspond via email with some frequency, mainly because we're friends but also because he's the race director of the Santa Rosa Marathon, a Hammer Nutrition-sponsored event. In a post-Badwater email to me he wrote:

This Badwater was my toughest. Searing and wicked heat around the Stovepipe Wells area and gale force, super-heated thermal headwinds up Towne Pass (at night!) were almost unbearable.

Fortunately, I was using your products (HEED, Endurolytes, and Perpetuem) and had little intake problems, but the heat was devastating. It was brutal and I suffered through several overheating bouts. [Steve's Note: Overheating doesn't come as much of a surprise, given that temperatures were near or above 110 F, with pavement temperatures at or above 140 F... now that's hot!]

I probably took more than a bottle of Endurolytes (another bottle for my crew) along the way, which helped keep the cramping at bay, though there was one minor episode at mile 30 for a few minutes.

My biggest problem was Day Two when I had to deal with a rather large and painful hernia that had surfaced during the night. I had to keep bending over to push it back inside in order to keep moving forward. The last 30 miles was a lean to the left to protect the area and the 13 miles up Mt. Whitney was torture. The last half mile was a painful sideways shuffle to the finish. I did it, but it was really, really, really tough. Under the extreme conditions and medical issue I had to face I gave it the "Tough Test" and somehow managed to finish in buckle time. This age thing really sucks.

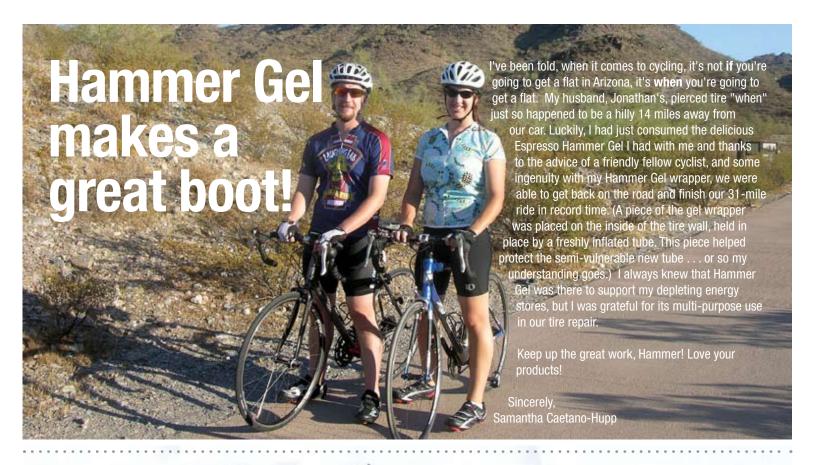
Jamie Donaldson was incredible. She passed me at mile 37 (she started at 10:00 a.m.; mine was at 6:00 am) looking very strong. A stellar performance by a genuine, humble, and super-champion sweetheart.

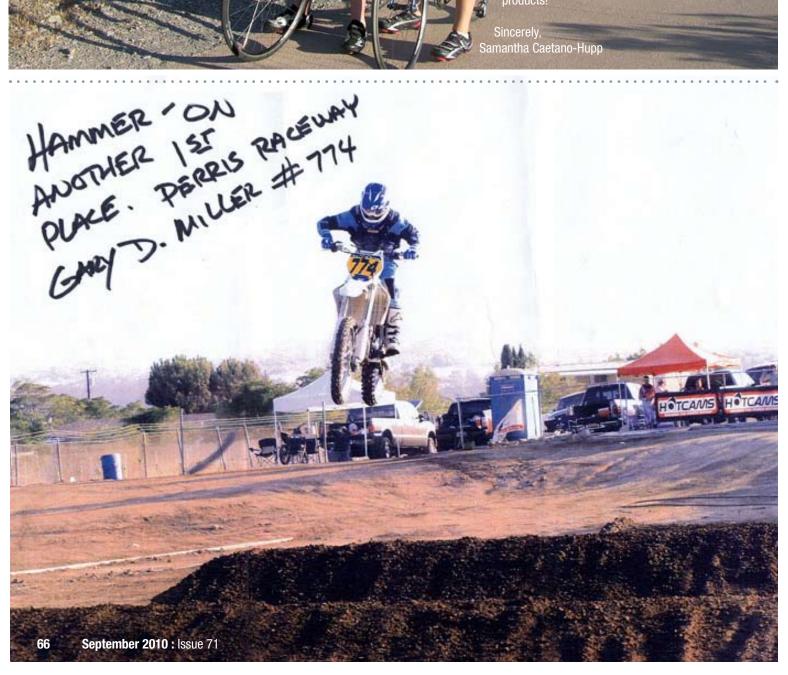
Thank you for the incredible Hammer products that help keep this old geezer going.

OK, if you're not impressed by that—come on, the guy's 68 and did a portion of the race with a hernia—then you're not easily impressed!

Last, but certainly not least, is Ray Sanchez. Ray, our "spotlight" athlete in EN #69, finished Badwater in the top half of the field, posting a time of 38:59:07. In doing so, Ray successfully became the only person in history to complete three of the hardest 135-mile foot races on the planet—Brazil, Arrowhead, and Badwater—in a single calendar year. Perhaps just as impressively, if not more so, only a few days after finishing Badwater, Ray took seventh place in the Vermont 100 (miles) in a time of 18:30:25. Incredible!

All of us at Hammer Nutrition want to congratulate these amazing athletes. What you accomplished is simply incredible . . . well done! **HN**





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Join the HAMMER AUTOSHIP program today! 🧐



What is it?

The HAMMER AUTOSHIP program is for our clients wanting the ultimate in convenience and super VIP treatment.

FREE clothing!



Receive a FREE* cycling or triathlon kit with your first order. That's up to a \$96.00 value!

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.

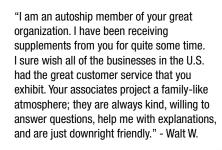
We'll also call or email you ten days before your scheduled ship date to see if you'd like to add anything to your order to take further advantage of the free shipping.

Call today to become a VIP!

What do you get?

- **1** A personal advisor 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 get 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!

WHAT ATHLETES ARE SAYING ABOUT THE AUTOSHIP PROGRAM



"Thanks for being so easy to work with and producing such great products. I fly the "Hammer" flag at all of my races!" - Brent G.

"I want to tell you how ecstatic I am with Hammer Nutrition. Your products are superior to anything I have ever used. My first IM

training is going extremely well; I always feel very recovered and strong and I can only attribute that to your products because I use them exclusively. I would also like to comment on your customer service as well. I spoke with Max yesterday and he was excellent to deal with and I must say that this is par for the course at your company with everyone I have dealt with. Not only was the service excellent, but your prices and quality can't be beat (even on your clothing). I ordered a few softgoods on Monday morning and received them Tuesday (with my one-free-shipment option because of the autoship program, not express!) and I live on the East Coast! Excellent stuff! Thank you all so much." - Angela C.





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

* If you cancel the autoship program before taking delivery of four consecutive shipments, we will bill your credit card for the cost of the clothing. If you discontinue the program and rejoin within one year, you are not eligible for more free clothing until your 4th consecutive shipment after resuming Aside from this stipulation, you are free to cancel your participation in this program at any time. Quarterly shipments must total \$150 each.









initially, I don't think that they are now. In his first Ironman he placed 12th in the men's pro field (are you kidding me?) with a 3:17 marathon, which was his first ever! It looks like all of the sacrifice was worth it.

Next on the list is Ben Parsons, a local Montana hard man. I dread getting calls to go for rides and skis with this guy because no matter what, they are going to be hard. Funny thing is, I still manage to get talked into them. I guess doing things the hard way is paying off for Ben as he just came back from one of the hardest 100-mile mountain bike races where he placed 3rd overall! Watch out for Ben at other 100-mile MTB races as I don't see him softening anytime soon.

While I am on the 100-mile subject I would like to bring up another Montana tough guy. He hasn't even been running all that long and he shows up to what is legitimately proclaimed as the hardest 100-miler in the country, the Hard Rock. For our boy, Mike Foote, to come out and get 3rd overall on his first attempt at this race is a testament to his ability. While Montanans were doing work at the Hard Rock, Margaret Heaphy (former female overall winner of Hard Rock) set out to finish her 10th edition. Finish indeed! Not only was it her 10th edition but she finished with ease (if that can be said about Hard Rock).

The last tribute is to the Montana contingent at the Breckenridge Firecracker 50. I was there to witness the difficulty of this event first hand this year. I would liken it to riding through molasses while breathing through a straw. Hmm, yeah, that hard. While I wish I could say I had a good race, I just didn't, but other Montana racers didn't disappoint. Frank Gonzalas and John Curry carried the responsibilities well. Both, who are full-time working men, managed to leave an impression on a national-caliber field. Frank landed himself on the podium with a 3rd in the 40+ division and could have challenged for the stripes were it not for a long mechanical, but that's racing. John, riding as a pro amongst the elite endurance riders who get paid to ride, rolled across the line in 16th overall, edging out the likes of Ryan Trebon. With riders like this at the weekend mountain bike races, it makes a

win hard to come to by.

Lastly, I have to make mention of Sam Shultz. He frequently comes up to visit while he is in his home state. I think beating up on us makes him feel good! Anyway, he won his first U.S. Cup mountain bike race this past June in Wisconsin. This was a big step because at 24 years old, he has a lot of racing ahead of him. I also have to mention that Sam started breathing down the neck of his Jedi master, JHK, at the Firecracker and placed second in his first attempt at the race. Congrats Sam!

Ahhh Montana . . . while it doesn't have the reputation of a pro-athlete mecca like Boulder or Tucson, it is the home of some pretty heavy hitters and I know that Hammer Nutrition is proud of all of these athletes and their dedication to the sport. *HN*







EVENT CALENDAR

As I write this article in mid-July, we currently have nearly 2,450 events listed on our 2010 calendar. With more event sponsorship requests coming in regularly, we're definitely on pace to break our record of 2,611 sponsored events, set in 2009. We'll be able to determine that more accurately prior to the next issue of Endurance News, which should arrive to you in early November. For now, here are some of the great events that we're sponsoring in September and October.

We're constantly adding more events to our calendar and updating our website, so make sure to check out the current list of 2010 Hammer Nutrition-sponsored events at www.hammernutrition.com/events/

MOUNTAIN BIKING

9/4 - Twelve Hours of Pitch Black Singletrack

Wisconsin - www.wemseries.com

9/4 - 8 Hours of Labor

Montana - www.tripleringprod.com

9/5 - Shenandoah Mountain 100

Virginia – www.mtntouring.com

9/5 – Dakota Five-0

South Dakota - www.dakota5o.com

9/11 - Tahoe-Sierra 50/100

California - www.globalbiorhythmevents.com

9/11 – 12 Hours of Snowmass

Colorado – www.12hoursofsnowmass.com

9/18 – 12 Hours of Dauset

Georgia - www.goneriding.com

9/18 - 12/24 Hours of Mohican

Ohio - www.mohican.net

9/18 - 12 & 24 Hours of Hanson Hills

Michigan - www.funpromotions.com

9/25 - Revolution's Single-Track Escape

Minnesota – www.mnmtbseries.com

9/26 - Vermont 50 MTB Race or Ultra Run

Vermont – www.vermont50.com

10/2 - SoCal Fat Tire Epic 50

California – www.12hrsoftemecula.com

10/2 – Bayer Crop Science 12 Hrs Creek to Peak

West Virginia – www.wvmba.com

10/3 – Show Low Bluff Tour of the White Mountains

Arizona - www.epicrides.com

10/9 - 6 & 12 Hours of Addison Oaks

Michigan - www.funpromotions.com

10/10 - Devil's Backbone Challenge

Virginia - www.hmt.cycleva.com/dbc.htm

10/16 - Knickerbocker 50 Mile & 8 Hour

California – www.globalbiorhythmevents.com

10/23 - 12 Hours of Old El Paso

Texas - www.the-bicycle-company.net/events.html

10/23 - Piney Hills Classic XVIII

Louisiana - www.dltmultisport.com

10/24 - Osage Hills MTB Race

Oklahoma - www.krazycycles.com

10/30 - Ride of the Living Dead

Florida – omba.org/index.php/Latest/2010-OMBA/OGT-Ride-of-the-Living-Dead.html

TRIATHLON

9/4 - The Great Illini Challenge Triathlon

Illinois - www.mattoonmultisport.com

9/5 – Atomic Man Triathlon

Tennessee – www.racedayevents.net

9/11 - Lake Stevens Triathlon

Washington - www.buduracing.com

9/11 - Camp Yuba Triathlons

Utah - http://racetri.com

9/11 - Vikingman Triathlon

ldaho – www.vikingman.org

9/12 – Delaware Diamondman Triathlon

Delaware - www.piranha-sports.com

9/12 - Pacific Coast Triathlon

California – www.octriseries.com

9/12 – Westchester Toughman Triathlon

New York - www.westchestertoughman.com

9/12 – Firmman Triathlon

Rhode Island – www.firm-racing.com

9/18 – Plutonium Man Triathlon

Washington - www.3rrr.org

9/18 - The Grand Columbian Triathlon

Washington-www.the grand columbian.com

9/19 - Finger Lakes Triathlon

New York - www.score-this.com

9/19 – Nutmegman Eco-Friendly Charity Triathlon

Connecticut – www.endureitmultisports.com

9/25 - ChesapeakeMan Endurance Festival

Maryland -www.tricolumbia.org/ChesapeakeMan

9/25 - Redman Triathlon

Oklahoma -www.redmantriathlon.com

9/25 – 9/26 – USA Triathlon Age Group, Elite,

U23, and Sprint National Championship

Alabama – www.usatriathlon.org/events/tag/3671

9/26 - Las Vegas Triathlon

Nevada - www.mountainmanevents.com

10/2 – Myrtle Beach Triathlon/TriSports.com Halfmax National Championship

South Carolina – www.halfmaxchampionship.com

10/2 - Powerman Muncie

Indiana – www.munciemultisport.com/powerman

10/3 - Mission Bay Triathlon

California – www.kozenterprises.com

10/3 - Bassman Fall Triathlon/Duathlon

New Jersey - www.citytri.com/index.html

10/8 - 10/10 - American Triple T

North Carolina - www.hfpracing.com

10/9 – Mighty Magnolia Triathlon

Mississippi – mightymagnolia.racesonline.com

10/17 – Miami Equalizer Triathlon/Duathlon

Florida – www.multirace.com

10/17 – Atlantic Coast Triathlon & Ameliaman

Olympic Distance Triathlon

Florida – www.drcsports.com

10/23 – Great Floridian Triathlon

Florida - www.greatfloridian.com

10/30 - Washington Half

North Carolina – www.fsseries.com

10/31 - Marin County Triathlon

California – www.marintriathlon.com

RUNNING/ULTRA RUNNING

9/4 - Capt'n Karl's Run Endurance Race

Texas - www.tejastrails.com

9/5 - Roots Rock 50K/25K

Washington - www.rootsrockrun.com

9/10-11 - Fall Superior Trail Races

www.superiortrailrace.com

9/11 – Lake of the Sky Trail Runs

California – www.lakeoftheskytrailruns.com

9/18 - Youngstown Ultra Trail Classic 50K & 25K

Ohio - www.neotrail.org/yutc.html

9/18 - Salmon Marathon

ldaho - www.salmonmarathon.com

9/19 - Montana Governor's Cup Marathon

Montana – www.montanagovernorscupmarathon.org

9/25 - Virgil Crest Ultras

New York - http://www.virgilcrestultras.com

9/25 - Flagline 50K

Oregon - www.superfitproductions.com

10/2 - Gold Country 34M/21M/25K/8M

California - www.ultrarunner.net

10/2 - Rock/Creek StumpJump 50K

Tennessee – www.rockcreek.com/stumpjump

10/3 - Run Crazy Horse

South Dakota – www.runcrazyhorse.com

10/9 - Can Lake 50

New York - www.canlake50.org

10/10 - Wine Country Marathon/Half Marathon

California - www.eventswithsole.com

10/15 - Pony Express Trail 100

Utah – www. ponyexpress100.org

10/16 – Oil Creek 100 Trail Runs Pennsylvania – www.oilcreek100.org

10/16 – 24 Hours of Boulder...the Run

Colorado - www.geminiadventures.com

10/22 - Syllamo 100

Arkansas - www.syllamo.org/Syllamo100

10/23 - Whiskeytown Trail Runs

California - www.sweatrc.com

10/24 - Bimblers Bluff 50K

Connecticut – www.mrbimble.com/WordPress/bluff

10/30 - Cactus Rose 100M/50M

Texas - www.tejastrails.com

10/30 - Boggs Mountain Trail Races

California – www. boggs50.wordpress.com

10/30 - Autumn Leaves Run 10K/50K/50M

Oregon – www.orrc.net/races/autumnleaves/autumnleaves_tba.htm

CYCLING/ ULTRA CYCLING/CYCLOCROSS

9/4 - Annapolis Bay County Century

 ${\bf Maryland-www.abrtcycling.com}$

9/6 – 9/10 – Park-2-Park (Glacier to Yellowstone)

Montana - www.park2parkmontana.org

9/10, 9/11, 9/19, 10/3, 10/17, 10/31 – Kisscross Cyclocross Series

Michigan - www.kisscross.com

9/12 - TriStates 100

Alabama - www.tristates100.com

9/17 - Adirondack 540 RAAM Qualifier

New York - www.adkultracvcling.com

9/18 - Tour des Lacs

Washington/Idaho - www.roundandround.com

9/18 - Appalachian Time Trial Championships

West Virginia – www.abraracing.com

9/18, 9/19, 9/25, 9/25, 10/9, 10/10, 10/16, 10/24 Oregon Junior Cyclocross Series

Oregon -www.obra.org/junior_cyclocross_series

9/19 - Portsmouth Criterium

New Hampshire - www.portsmouthcrit.com

9/23 - The Texas Time Trials

Texas - www.tt24tt.com

9/25 - Big Dam Bridge 100

Arkansas - www.bigdambridge.org

9/25 - 9/26 - Everest Challenge

California – www.everestchallenge.com

9/26 - Six Gap Century & Three Gap Fifty

Georgia – www.cyclenorthgeorgia.com

10/2 - 10/4 - Furnace Creek 508

California - www.the508.com

10/3 – American Heritage CriteriumTexas – www. americanheritageclassic.com

10/9 - Harvest Century

Oregon - www.harvestcentury.org

10/9 - RTC Viva Bike Vegas

Nevada - www.rtcsnv.com/vivabikevegas

10/16 - Solvang Autumn Double Century

California - www.planetultra.com

10/16 - Bikeman.com Casco Bay Cyclocross Race

Maine - www.cascobaycross.com

ADVENTURE RACING

9/4 - Big Bison Butt Adventure Race

Tennessee – www.bigbisonbutt.racesonline.com

9/11 - Kearney Adventure Race

Nebraska – www.angrycowadventures.com

9/11 - Lake Charles Adventure Race

Louisiana – www.gulfcoastadventure.com

9/11 - Adventure Xstream Glenwood Springs

Colorado – www.gravityplay.com

9/17 - Fall 24 Hour Adventure Race

Minnesota - wildadventurerace.com

9/18 - Desert Winds Expedition Race

Nevada – www.desertwindsexpeditionrace.com

9/19 - The CRUSHER 8 Hour Adventure Race

Florida - www.wecefar.com

9/25 - Tyler Adventure Sprint Race

Texas - www.steelsports.net

9/25 - Hamlin Blast

Michigan – www.phastadventures.com

9/30-10/3 - Florida Coast to Coast

Florida – www.adventurousconcepts.com

10/3 - Deckers Creek Adventure Race

West Virginia – www.cpass.wvu.edu/mass 10/9 – Moosejaw Fall Adventure Challenge

Michigan – www.graar.org

10/9 – No Skirts Allowed Women's Adventure Race

Indiana – www. planetadventurerace.com

10/10 - Point to Point 24 Hour Race

Pennsylvania – www.rootsrace.com

10/16 – Odyssey Fall Finale 24 Hour & Sprint Adventure Race

 $\label{lem:virginia} \textit{--} www.oarevents.com$

10/23 – Greater New Orleans Northshore Adventure Weekend

Louisiana - www.gulfcoastadventure.com

10/23 – Gunter's Grunt and Grind Adventure Race

Alabama – www.gruntandgrind.com

10/24 - The Edge Adventure Sprint

Pennsylvania – www.goalsara.org
10/28 – Checkpoint Tracker National

Championships

Utah - www.gravityplay.com

Dear Steve & Co.,

Thank you again for your 6th year of generous support of the Wakely Dam Ultra. We had a record crowd and record mud this year yet our top finisher nearly broke the course record despite the conditions. I know the COLD HEED was a welcome treat for the runners. It's amazing how after eight hours on warm liquids, the cool and not-so-sweet taste of HEED goes down so well. I ended up drinking it all night at camp.

I suppose I should inform you that after ten years of being the RD for Wakely, I've announced that I'll be retiring from the post. Wakely was my creation and I was pretty much a one man show so it's not clear what the future holds for the Wakely franchise. My plans are to organize less formal adventure tours in the Adirondacks so I can keep my schedule more flexible to accommodate my real job (don't you hate when work interferes with your fun?).

There will always be Hammer products in my pack and I hope we'll get a chance to work together in the future.

Be safe, Jim Houghtaling



HAMMERBUCK\$

Amy Rappaport

Hello Hammer,

I took 1st place in the 50-54 women at Ironman Florida 70.3 last weekend! I was very surprised to win. Like always, my supply of Hammer fuels helped me power by 13 women on the run to win by just 40 seconds as I passed the last of my competition within the last 1/4 mile. (I had no idea at the time, I was just running as fast as I could!). I had Perpetuem in my bottle during the bike and pounded the Hammer Gel, Endurance Amino, and Endurolytes on both the bike and the run. As usual in FL, it was hot, but I didn't feel it and was able to hold my eight minute pace on the run while many of the other competitors faded in the heat. Once again, I was lucky to have all of the great Hammer fuels to get me to the finish line in style and take home the hardware!



Amy has had a BIG season!
Along with the above-mentioned race, she's also collected
Hammerbuck\$ for the following . . .

Ironman Lake Placid 5th in 50-55 age group

Draper Lake Duathlon 1st in 50+ age group

EagleMan Ironman 70.3 2nd in 50-54 age group





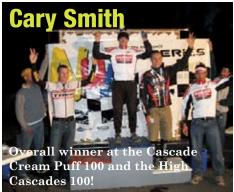
I placed 5th in W45-49 at Whirlpool Steelhead 70.3 on 7/31/10. It was a great day in Benton Harbor, Michigan. The race was well organized, the course was challenging, the competition was tough, and there was lots of food!





I normally do not take fuel supplements while participating in my events, just water. Last week I participated in the Long Course Duathlon Championships in Oklahoma City, OK. After the first run I began cramping very badly. With 42 miles to go I knew I needed something quickly. I actively perused the fuel stops on each lap of the bike and subsequently the 10k run to the finish. I have never experienced the added energy and removal of cramps as I had that day. I just wanted to say thanks to you and one of your sponsored athletes, Amy Rappaport. She allowed me to utilize a Hammer race jersey which was very comfortable through the whole race and proudly displayed as I received the Age Group National Championship plaque for the 45 - 49 age group! Thanks Hammer!







Monica Obsitos

This photo was taken at the awards ceremony for the Ironman 70.3 in Rhode Island in which I placed 1st in my Age Group 18-24.



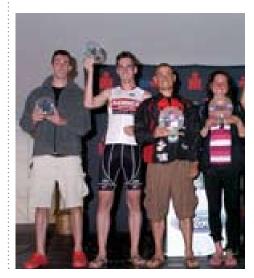


Suzanne Endsley

2nd in her division at Ironman Coeur d'Alene and Kona bound!

Will Flanagan

I got 2/50 in the M18-24 category at Ironman Lake Placid. It also got me a ticket to Kona!



FROM OUR ATHLETES

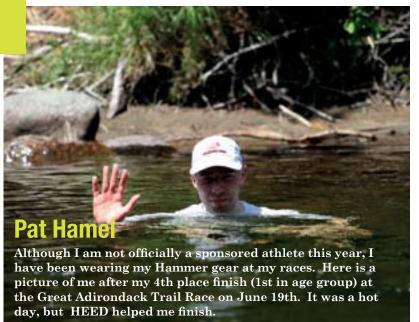


Dan Black

I came in first, men's 55-59, at the Sylvan Beach Tri in La Porte (south of Houston). TX, thanks to Hammer! 23rd overall.



Kim McKnight, the catcher for the Kirtland Central Broncos, in Kirtland, New Mexico, called to tell us that our products have had amazing results both in energy levels and recovery.





Here is a picture of 3 of our junior team members from Feedback Sports who swept the JM 17-18 Omnium podium at the recent Superior Morgul Classic Omnium (the resurgence of the famous Morgul Bismark race). Photo: Keith Bobo.

William Penning

I completed the Western States 100 in 28:28:05. I had two Endurolytes and Anti-Fatigue Caps every hour. I drank a bottle of Perpetuem every hour, supplementing with a little solid food at the aid stations to keep my stomach from growling. I was never at a loss of energy. Hammer customer for LIFE. Thanks for the advice!



Adam Brown

Triple T was a very successful start to my tri season. My teammate and I won the overall team division. In three days and four triathlons, we won by 55 minutes over the next team. The first day in the sprint I was 16th overall out of 450 athletes after a transition malfunction cost me some time. In the 2nd race (olympic individual race) I was 3rd overall out of 450 athletes, and my teammate was 4th overall. Our combined team time was clearly in the lead. Doing the same race later that day, my teammate and I won the team competition by six minutes and our lead improved. Having Hammer Whey in between the races was key. I wasn't sure how my body would respond to the second race infive hours time, but I recovered fast. The 4th race of the weekend (1/2 Ironman) my teammate and I had a solid race and won the team competition by 16 minutes. The win was ours. HEED and Hammer Gel were on the course all weekend. That was great. I didn't have to carry anything on the runs because it is product I always use. Thank you for sponsoring the event, and I was excited to take home the win. Thanks Hammer, your products gave me a huge edge!

Scott Heselwood

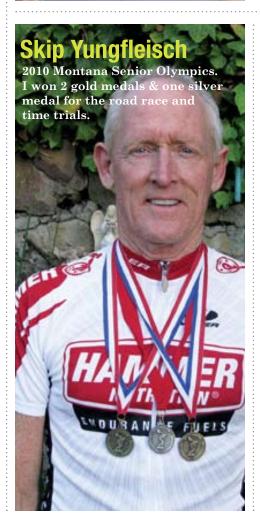
Just wanted to drop you a thank you for making such a great product. I just completed the Seattle to Portland bike ride in one day (204 miles). I felt great the whole way and could have gone farther if I had to.



Sam Kavanaugh

Here is a photo from the 2010 USA Cycling Elite Road National Championships held this past week in Bend, OR. During the week I raced in three events wearing and representing Hammer Nutrition. Thanks to hard work, great support, and optimal fueling provided by Hammer, I was honored to leave competition having won two National Champion Jersey/Medals in the Paracycling Road and Crit divisions, as well as bronze for my 3rd place in the time trial. In addition, thanks to my results, I have been selected as one of five male cyclists to represent the USA at this year's UCI Paracycling World Championships.

ATHLETES . . . Send your latest news to athleteupdates@ hammernutrition.com and we'll try to include it in the next issue.





I am an ultrarunner from Canada, currently living in Australia. I raced the Sri Chinmoy 24 hour track race (and Australian National Championship) on 19-20 June. I used Perpetuem as my sole fuel for 24 hours, along with Endurolytes. I finished in 1st place with 200.8864 km (124.8 miles). I was 1st overal beating all of the males. I am the first female to win the event since its inception. I also broke a Canadian W40-44 age group record which was 186.361 km (115.78 miles).

FROM OUR ATHLETES



I want to thank you for your excellent sports nutrition products. I primarily use Caffé Latte Perpetuem and Hammer Gel (love that Montana Huckleberry) but, on a recent trip to climb Mt. Fuji, I added Endurolytes and Hammer Bars to my food sack. I had none of the headache or wiped out feeling that I have had on other high altitude hikes. The improvement was apparent even before I left the top! I will definitely add Endurolytes to my supplements soon. Keep up the good work.

Chris Gibb, US Navy, Okinawa, Japan

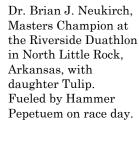




Hoosiers

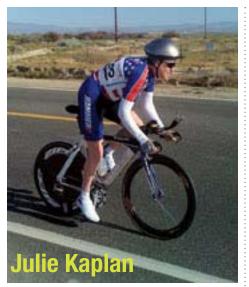
Congratulations to Dick Rupp, Drew Clark, Steve Gerbig, and Joel Sothern on the 2010 RAAM finish! The Hoosiers (4-man 60+) team did indeed perform well. They had previously set their age-group record in 2007 and that record was subsequently broken by 5 hours by another team. They broke that record by another five hours! Hoosiers now owns the speed record AND fastest time record (6 days 16 hours 4 minutes) for their age-group.







Send your news to athleteupdates@ .com and we'll try next issue.



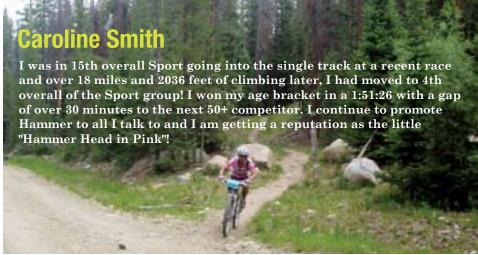
I have been a Hammer user for over 15 years and have used just about every product. I have a new favorite, Hammer Balm. I had two shoulder sugeries within 18 months and have used it as I got back into training & racing. Not only does it help warm up the area at the beginning of a workout, but it greatly reduces the pain. Another quality product from the Hammer folks. Thank you!

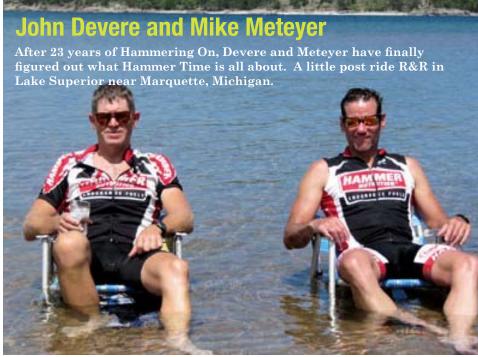


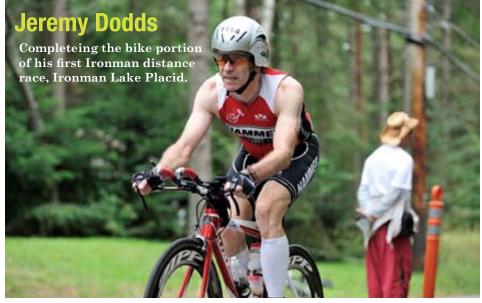
Congratulations to the Chicago Lions rugby team for winning the Midwest 7's championship. This was the fourth championship win for the Lions who will now travel to San Francisco for Nationals!



State TT Champion, 65-69, USA Cycling District TT Championships







FROM OUR ATHLETES





three-day load of Race Day

Boost prior to the Bridgeland sprint triathlon in Houston the past weekend. Had a Hammer Gel before the race and fueled on the bike with HEED. I finished 6th in age group out of 90+ competitors and had the 12th fastest bike split out of 849 finishers. It was Hammer Time!



Stansbury Park, Utah, July 2010: This was a great day for me. I started triathlon two years ago. This venue/ race marked my "upping the mileage" so to speak. It was a year ago that I completed my first olympic distance race at this same venue/race. So, going back to this race, I really wanted to beat my last year's time as some indicator that the hard work was paying off and I was getting better and faster...I would've been thrilled with a couple seconds off, however, the powers that be had a

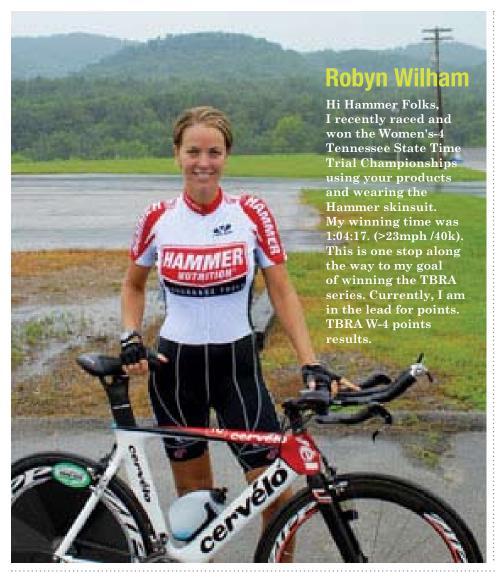
different plan for me. EVERYTHING went right this day and I ended up CRUSHING my last year's time. 2:06:00 versus 2:28:00!!! The entire race was fueled by Hammer (as they normally are). Perpetuem pre-race meal, Chocolate Hammer Gel 6-10 minutes before the start of the swim, one large Hammer water bottle filled with a double scoop of Lemon-Lime HEED for the bike, and a Vanilla Hammer Gel during the bike and just before the run.

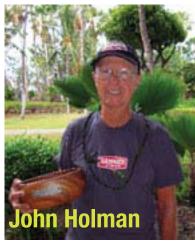
John Foster

I just completed the Mountain Mama 2010 road bike challenge. which is a 100 mile ride over nine mountains with 13,720 feet of climbing. I used Perpeteum and Endurolytes during the ride and felt great! I did not suffer any cramping. I just started using Hammer products this riding season and there is no doubt in my mind that they allowed me to excel on this ride. Thanks again.

Team Waste Management -Stevie Cullinan

At this summer's Cross Country Nationals, Stevie ended up taking 2nd in the cross country race and 3rd in the short track event. He was really excited to finish the year with Gold, Silver, and Bronze at Nationals. Not bad for his first vear back on the mountain bike.





Thanks to Hammer products and God's grace, my husband, John, won the M70-74 age group in the Hawaii 70.3. In doing so, he qualified for the IM World Championships this October.

He had been using some Hammer products for a while, but at the ICTN Camp in Phoenix three years ago met Steve Born. It was from spending time with Steve that he really understood the depth of your product line. It was a delight to travel to the ITU Long Course Championships in Perth, Australia last year where he finished 3rd in his age group, and to other races seeing some beautiful places.

Thanks for helping him do his best. Mahalo, Diana Holman



ENDURANCE NEWS

4952 Whitefish Stage Road, Whitefish, Montana 59937 **1.800.336.1977 / www.hammernutrition.com**

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